CITY OF RANCHO CORDOVA

CITY COUNCIL MEETING
Monday, April 4, 2022

5:30 PM – Regular Meeting
David B. Roberts Council Chambers

City Hall
2729 Prospect Park Drive, Rancho Cordova

Pursuant to California Assembly Bill 361 amending the Ralph M. Brown Act (Govt. Code 54950-54963), the City has declared a state of emergency relating to COVID-19 and imposed measures to promote social distancing.

Join the Meeting Via Zoom Link:
https://cityofranchocordova.zoom.us/j/87893173301?pwd=aDNOYzFLN2FIZ0tOckxTdWVRNWd2Zz09

Join the Meeting via the Zoom Phone Number
Zoom Phone Number: +1 669 900 6833, +1 253 215 8782
Webinar ID: 878 9317 3301
Password: 578969

Instructions to Make Public Comment

Submitting Public Comment via Email

Members of the public who wish to provide public comment via email will need to submit comments to CityClerk@cityofranchocordova.org no later than 3:00 p.m. on Monday, April 4, 2022. All comments submitted later than 3:00 p.m. will be sent to the City Council for their review and may not be read during the meeting.

Listening to a Zoom Meeting by Zoom Video Conference

To make a public comment using the Zoom platform, please use the “raise hand” feature at the bottom center of the screen. Please make sure to enable audio controls once access has been given by the City Clerk’s office to speak. Please wait to be called upon by the City Clerk.

Listening to a Zoom Meeting by Phone Only

You can join a Zoom meeting via teleconferencing/audio conferencing using a cell phone or traditional landline phone. To request to make a public comment by phone press *9 to raise your hand. Please wait to be called upon by the City Clerk.

All public comments will be limited to three-minutes.

If you have questions related to the City Council Meeting or the use of Zoom, please contact the City Clerk's Office at (916) 851-8720 Monday, April 4, 2022, before 3:00 p.m.

AGENDA

1. REGULAR MEETING - CALL TO ORDER/ROLL CALL

Council Members Linda Budge, Garrett Gatewood, Siri Pulipati, David Sander, and Mayor Donald Terry

2. METRO CABLE TV TELEVISION ANNOUNCEMENT

The Clerk will announce the meetings video recording and playback schedules.

3. PLEDGE OF ALLEGIANCE

The Mayor will call on someone in attendance to lead the Pledge.

4. INVOCATION

Jennifer Laret with The Church of Jesus Christ of Latter-day Saints will give the invocation.

5. PRESENTATIONS

5.1. Presentation of Proclamation in Recognition of Fair Housing Month.

5.2. Presentation by the California Capital Airshow.

5.3. New Employee Introductions: Rob Nunley, Information Technology Manager by Kim Juran-Karageorgiou and Farzana Kausar, Administrative Assistant I by Stacy Leitner, City Clerk.

5.4. Vice Mayor LInda Budge's Birthday on April 10, 2022.

6. PUBLIC COMMENT

Citizens wishing to address the Council for any matter not on the agenda may do so at this time via teleconference or by completing and submitting a Speaker Card to the City Clerk.

If you want to make a public comment via teleconference, please use the "raise hand" feature at the bottom center of the screen. If you are participating by telephone and you want to make a public comment, please press *9 to raise your hand. For those participating by Zoom or telephone, please wait to be called upon by the City Clerk.

For items on the agenda, speakers will be called by the Mayor at the point on the agenda when the item will be heard. Speakers are encouraged to keep comments to three minutes or

less and to state name and community of residence.

Under the provisions of the California Government Code, the City Council is prohibited from discussing or taking immediate action on any item not on the agenda unless it can be demonstrated to be of an emergency nature or the need to take immediate action arose after the posting of the agenda

7. COUNCIL REPORTS

8. CITY MANAGER'S REPORT

9. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

9.1. **Subject:** Meeting Minutes from the Regular City Council Meeting of March 21, 2022 and the Special City Council Meeting of March 29, 2022.
Recommendation: Adopt the minutes.

9.2. **Subject:** A Resolution Authorizing the City Manager to Execute Contract Amendment No. 53-2019-1 for General Services with MCE Corporation to Extend the Contract Term to June 30, 2024, which will Result in an Increase to the Contract Amount from $2,750,000 to an Amount not to Exceed $4,475,000 for Citywide Operations and Maintenance Support Services.
Recommendation: Adopt the Resolution.

9.3. **Subject:** A Resolution Approving the Interim Management Plan for White Rock/Rio Del Oro, CA Mine ID No. 91-34-0048, Operated by Granite Construction Company.
Recommendation: Adopt the Resolution approving the Interim Management Plan for White Rock / Rio Del Oro, CA Mine ID No. 91-34-0048.

9.4. **Subject:** A Resolution of the City Council of the City of Rancho Cordova and on Behalf of Commissions and Committees Created by the City Council Pursuant to Government Code Section 54952(b) Confirming the State of Emergency Under Government Code Section 8625, Recognizing Continued Measures to Promote Social Distancing, and Re-authorizing Remote Teleconference Meetings of the City for the Period from April 7, 2022 to May 7, 2022.
Recommendation: Adopt the Resolution.

9.5. **Subject:** Planning Commission Nomination and Selection.
Recommendation: Continue the Planning Commission Member nomination and selection to the April 18, 2022 Regular City Council meeting.

10. CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE

10.1. **Subject:** A Resolution Creating Special Tax Area Zone 33 and Introducing and Waiving the First Reading of an Ordinance Establishing a Special Tax for Transit-Related Services for the Grantline 220 Project.
Recommendation: Adopt the Resolution creating special transit tax area Zone 33; and to introduce and waive the first reading of the Ordinance, establishing a special tax for transit-related services for the Grantline 220 project.

10.2. **Subject:** A Resolution Declaring a Protest Hearing and Authorizing the Mailing of Property Owner Ballot Relating to the Imposition of the Annual Stormwater Utility Fee for the Grantline 220 Project.

Recommendation: Adopt the Resolution.

11. PUBLIC HEARING ITEMS

11.1. **Subject:** General Plan Amendments to the Safety Element for the Multi-Jurisdictional Local Hazard Mitigation Plan and the Land Use and Circulation Element for The Preserve Project; Certification of an Environmental Impact Report, a Rezone, Development Agreement, and Tentative Subdivision Map for The Preserve Project DD9835.
Recommendation: 1. Adopt a Resolution Certifying The Preserve Environmental Impact Report and adopt the Findings of Fact and Statement of Overriding Considerations and Mitigation Monitoring Report Program; 2. Adopt a Resolution approving a General Plan Amendment with associated exhibits, subject to the findings contained in the Resolution; and 3. Introduce and waive first reading of an Ordinance adopting the Rezone with associated exhibit, subject to the findings contained in the Ordinance; and 4. Adopt a Resolution approving a Tentative Subdivision Map with associated exhibits, subject to the findings contained in the Resolution; and 5. Introduce and waive first reading of an Ordinance adopting the Development Agreement for The Preserve Project, subject to the findings contained in the Ordinance.

12. REGULAR CALENDAR ITEMS

12.1. **Subject:** Update on Fiscal Year 2022/23 Community Enhancement & Investment Fund Applications Received for Council Consideration.
Recommendation: Staff to introduce and provide an update on the Fiscal Year 2022/23 Community Enhancement & Investment Fund grant applications received for Council consideration.

12.2. **Subject:** Arts Strategic Plan Update and Discussion on the Upcoming Call for Public Art Proposals.
Recommendation: Staff to provide an update on the first two years of accomplishments (near-term actions) related to the Arts Strategic Plan, review the objectives for years three to five (mid-term actions), and receive feedback and discuss the focus of the current fiscal year's funding allocation for public art.

13. COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS

14. ADJOURNMENT

ADDITIONAL INFORMATION

SPECIAL MEETINGS LISTED BELOW ARE SUBJECT TO CHANGE/CANCELLATION WITHOUT FURTHER NOTICE.

UNLESS THE COUNCIL ADOPTS A MOTION TO EXTEND THE MEETING, ANY ITEM THAT IS NOT INITIATED BEFORE 11:00 PM WILL BE CONTINUED TO THE NEXT DAY AT 5:30 PM OR SCHEDULED ON THE NEXT REGULAR MEETING AGENDA OF THE COUNCIL.

Public documents related to items on the open session portion of this agenda, which are distributed to the City Council less than 72 hours prior to the meeting, shall be available for public inspection at the time the documents are distributed to the Council. Documents are available for inspection at the City Clerk's office located in Rancho Cordova City Hall.

The agenda items are accessible on the City's website at www.cityofranchocordova.org on Thursdays or Fridays prior to the Regular City Council Meeting.

UPCOMING MEETINGS

April 18, 2022	5:30 PM Regular Meeting
April 26, 2022	5:30 PM Special Meeting/Work Session
May 2, 2022	4;00 PM Special Meeting/Regular Meeting
May 16, 2022	5:30 PM Regular Meeting
May 24, 2022	5:30 PM Special Meeting/Work Session
June 6, 2022	4:00 PM Special Meeting/Regular Meeting
June 20, 2022	5:30 PM Regular Meeting
June 28, 2022	5:30 PM Special Meeting/Work Session

If you have any technical questions related to the agenda items, please contact City Hall at (916) 851-8700.

The Rancho Cordova City Council meeting will be videotaped in its entirety and will be cablecast without interruption on Metro Cable 14, the Government Affairs Channel on the Comcast, Consolidated Communications and AT&T U-Verse Systems. Closed Captioning will be available on the playback cablecast. A DVD copy is available from the City Clerk's Department and a webcast of this meeting will be available for viewing via video streaming from the City's website within 48 hours of adjournment of this meeting.

In compliance with the Americans with Disabilities Act, if you need a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, please contact the City Clerk's Office at (916) 851-8720 at least 48 hours prior to the meeting.

CERTIFICATION OF POSTING OF AGENDA

I, Stacy Leitner, City Clerk for the City of Rancho Cordova, declare that the foregoing agenda for the April 4, 2022 Regular Meeting of the Rancho Cordova City Council was posted and available for review on April 1, 2022 at City Hall of the City of Rancho Cordova, 2729 Prospect Park Drive, Rancho Cordova, California, 95670. The agenda is also available on the city website at www.cityofranchocordova.org.

Signed April 1, 2022 at Rancho Cordova, California.

Stacy Leitner

Stacy Leitner, CMC
City Clerk

CITY OF RANCHO CORDOVA

CITY COUNCIL MEETING
Monday, March 21, 2022

5:30 PM – Regular Meeting
David B. Roberts Council Chambers

City Hall
2729 Prospect Park Drive, Rancho Cordova

Pursuant to California Assembly Bill 361 amending the Ralph M. Brown Act (Govt. Code 54950-54963), the City has declared a state of emergency relating to COVID-19 and imposed measures to promote social distancing.

DRAFT MINUTES

1. REGULAR MEETING - CALL TO ORDER/ROLL CALL

Mayor Terry called the Regular meeting to order in the David B. Roberts Council Chambers at 5:33 p.m.

Council Members Present: Linda Budge, Garrett Gatewood, Siri Pulipati, David Sander, and Mayor Donald Terry

Council Members Absent: None

Staff Members Present: Cyrus Abhar, Adam Lindgren, Stacy Leitner and Persephonie Riley

2. METRO CABLE TV TELEVISION ANNOUNCEMENT

The City Clerk read the meetings recordings and playback schedule.

3. PLEDGE OF ALLEGIANCE

Sheryl Longsworth led the pledge.

4. INVOCATION

Council Member Garrett Gatewood gave the invocation.

5. PRESENTATIONS

5.1. Proclamation Presentation in Recognition of Women's History Month.

6. PUBLIC COMMENT

Mayor Terry opened the public comment period. The following individuals addressed the Council or submitted public comment via email:

1. Rakesh Sehgal
2. Harry Khara
3. Joey Pennaman
4. Mandeep Singh
5. Fayzah Mughal
6. Helen Whelan-Bashaw
7. Anil Reddy

Mayor Terry closed the public comment period.

7. COUNCIL REPORTS

Council reported on events since the last meeting.

8. CITY MANAGER'S REPORT

City Manager Cyrus Abhar gave his report.

9. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

Mayor Terry stated that Item 9.2 and Item 9.14 would be pulled for separate discussion.

ACTION: Motion to approve item 9.1 and item 9.3 through 9.13 by Budge second by Pulipati;
Motion passed with a 5:0 vote.

9.1. **Subject:** Meeting Minutes from the Regular City Council Meeting of March 7, 2022.
Recommendation: Adopt the Minutes.

9.2. **Subject:** A Resolution of the City Council of the City of Rancho Cordova, State of California, Expressing Support and Solidarity with the People of Ukraine.
Recommendation: Adopt the Resolution.

Mayor Terry opened the public comment period. Seeing no speakers. Mayor Terry closed the public comment period.

ACTION: Motion to approve item 9.2 by Gatewood second by Sander;
Motion passed with a 5:0 vote.

9.3. **Subject:** A Resolution Authorizing the City Manager to Execute Contract Amendment No. 56-2017-1 with Allied Waste Services of North America (DBA Republic Services) for the Implementation of the Residential Food Waste Collection Program.
Recommendation: Adopt the Resolution.

9.4. **Subject:** Approval of a Grant Application and Local Match Requirement for the Potential Health and Wellness Center at the Mills Crossing Civic Center.
Recommendation: Provide direction and approve the Resolution authorizing an application for, local match commitment to, and receipt of, Behavior Health Continuum

Infrastructure Program (BHCIP) grant funds.

9.5. **Subject:** A Resolution Authorizing the City Manager to Execute Contract Amendment No. 174-2019-1 with R.E.Y. Engineers, Inc. Extending the Term to December 31, 2023, Increasing the Contract Amount from $739,649 to an Amount not to Exceed $764,649 and Adding Services for the Cordova Vineyards/Lane Neighborhood Street Rehabilitation Project.
Recommendation: Adopt the Resolution.

9.6. **Subject:** A Resolution Authorizing the City Manager to Execute Contract Amendment No. 2020-183-1 with Mark Thomas & Company, Inc. to Increase the Contract Amount from $206,800.00 to an Amount not to Exceed $319,235 and Extend the Contract Term to June 30, 2023 for the Soil Born Farms Parking Lot and Driveway Improvements Project at the American River Ranch to Increase Safety and Promote Livability.
Recommendation: Adopt the Resolution.

9.7. **Subject:** 2021 General Plan Annual Report to include the Housing Element and Multi-Jurisdictional Hazard Mitigation Plan Annual Report.
Recommendation: Receive the 2021 General Plan and Housing Element Annual Report to include the Multi-Jurisdictional Hazard Mitigation Plan as required by State law.

9.8. **Subject:** A Resolution Increasing the Annual Stormwater Utility Fee for Fiscal Year 2022-2023.
Recommendation: Adopt the Resolution.

9.9. **Subject:** A Resolution Approving the Final Map of the Ranch Village 8 Subdivision No. FM-2021-002-05 and Authorizing the City Manager to Execute the Subdivision Improvement Agreement Contract No. 2022-21 with K. Hovnanian at Jaeger Ranch LLC.
Recommendation: Adopt the Resolution.

9.10. **Subject:** A Resolution Declaring the City's intention to Impose an Annual Stormwater Utility Fee For the Maintenance of Storm Drainage and Flood Protection Systems for the Grantline 220 Project.
Recommendation: Adopt the Resolution designating a time and place for hearing protests in connection with the annual Stormwater Utility Fee for the Grantline 220 project.

9.11. **Subject:** A Resolution Approving the Annexation of the Grantline 220 project to the City of Rancho Cordova Community Facilities District No. 2014-2 (Street, Lighting and Landscape Maintenance).
Recommendation: Adopt the Resolution.

9.12. **Subject:** A Resolution Approving the Annexation of the Grantline 220 project into the City of Rancho Cordova Community Facilities District No. 2013-2 (Police Services).
Recommendation: Adopt the Resolution.

9.13. **Subject:** A Resolution Approving the Annexation of the Grantline 220 Project to the City of Rancho Cordova Community Facilities District No. 2018-2 (Community Places and Neighborhood Greens.
Recommendation: Adoption of the Resolution would approve Annexation Boundary

Map No. 4 for the Grantline 220 project to Community Facilities District No. 2018-2 (Community Places and Neighborhood Greens) and approves the recording of the Annexation Boundary Map and the Notice of Special Tax Lien.

9.14. **Subject:** Planning Commission Member Nomination and Selection.
Recommendation: Continue the Planning Commission Member nomination and selection to the April 4, 2022 Regular City Council meeting.

Mayor Terry opened the public comment period. The following individuals addressed the Council or submitted public comment via email:

1. Brenda K. Gustin
2. Ken Green
3. Anil Reddy

Mayor Terry closed the public comment period.

ACTION: Motion to approve item 9.14 by Gatewood second by Pulipati; Motion passed with a 5:0 vote.

10. CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE

Mayor Terry stated that item 10.1, 10.3, and 10.6 would be pulled for separate discussion.

Mayor Terry opened the public comment period. Seeing no speakers. Mayor Terry closed the public comment period.

ACTION: Motion to approve item 10.2, 10.4, and 10.5 by Budge second by Pulipati; Motion passed with a 5:0 vote.

10.1. **Subject:** A Resolution Approving the 2021 Community Development Block Grant (CDBG) Consolidated Annual Performance Evaluation Report for Submittal to the US Department of Housing and Urban Development.
Recommendation: Adopt the Resolution of the City Council of the City of Rancho Cordova submitting the 2021 CDBG Consolidated Annual Performance and Evaluation Report (CAPER) to the US Department of Housing and Urban Development (HUD).

Mayor Terry opened the public comment period. The following individuals addressed the Council or submitted public comment via email:

1. Fayzah Mughal
2. Fayzah Mughal
3. Conrad Mayer

Mayor Terry closed the public comment period.

ACTION: Motion to approve item 10.1. by Gatewood second by Pulipati; Motion passed with a 5:0 vote.

10.2. **Subject:** A Resolution Approving the Rio Del Oro Specific Plan, Implementation Plan for Elliott Homes, Inc. which Ensures that Elliott Homes, Inc. will Construct and Pay the Full Cost of Infrastructure Needed to Serve their Portion of the Plan Area.
Recommendation: Adopt the Resolution.

10.3. **Subject:** Goddard School - Tentative Parcel Map & Major Design Review - Project No. PLND-0921-0008 & PLND-1121-0018 – Located at 3370 Zinfandel Drive; APN: 072-2360-041-0000.

Recommendation: Determine the project exempt per Section 15315 (Minor Land Divisions) and Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning) of the CEQA Guidelines; and Adopt the Resolution for a Tentative Parcel Map and Major Design Review.

Mayor Terry opened the public comment period. Seeing no speakers. Mayor Terry closed the public comment period.

ACTION: Motion to approve item 10.3 by None second by None;
Motion passed with a 5:0 vote.

10.4. **Subject:** A Resolution Approving the City of Rancho Cordova's Adjusted Storm Drainage Impact Fee Schedule for 2022.

Recommendation: Adopt the Resolution approving the attached Storm Drainage Impact Fee Schedule.

10.5. **Subject:** Resolutions and an Ordinance Related to the Formation of the City of Rancho Cordova Arista Del Sol Community Facilities District No. 2022-1.

Recommendation: Continue the public hearing to the May 16, 2022 City Council Meeting.

10.6. **Subject:** Dutch Bros. Coffee - Conditional Use Permit and Minor Design Review - Project No. PLND-1021-0013 - Located at the Southeast Corner of Sunrise Boulevard and Douglas Road in Anatolia Marketplace.

Recommendation: Adopt the Resolution.

Council Member Gatewood and Mayor Terry recused themselves due to a conflict of interest related to the proximity of their residences to the project location.

Vice Mayor Budge opened the public comment period. Seeing no speakers. Vice Mayor Budge closed the public comment period.

ACTION: Motion to approve item 10.6. by Sander second by Pulipati;
Motion passed with a 3:0 vote.
AYES: Pulipati, Sander, and Budge
NOES: None
ABSENT: None
RECUSED: Gatewood and Terry

11. PUBLIC HEARING ITEMS

11.1. **Subject:** Project Sunrise Major Design Review and Rio Del Oro Phase 5 Final Map - Project No. PLND-0821-0001: Located within Rio Del Oro Specific Plan Parcel 71.

Recommendation: Adopt the Resolution for the Rio Del Ordo Phase 5 Final Map, Determine the Project Sunrise project Exempt from CEQA per Section 15183, consistent with the Community Plan, General Plan or Zoning for which an EIR was certified; and Adopt the Resolution for Project Sunrise Major Design Review.

Mayor Terry opened the public comment period. Seeing no speakers, Mayor Terry closed the public comment period.

ACTION: Motion to approve item 11.1. by Sander second by Gatewood;
Motion passed with a 5:0 vote.

12. REGULAR CALENDAR ITEMS

12.1. **Subject:** A Resolution Adopting the Urban Forest Master Plan.
Recommendation: Adopt the Resolution.

Mayor Terry opened the public comment period. The following individuals addressed the Council or submitted public comment via email:

1. Fayzah Mughal
2. Fayzah Mughal
3. Angel Ball

Mayor Terry closed the public comment period.

ACTION: Motion to approve item 12.1. by Budge second by Pulipati;
Motion passed with a 5:0 vote.

12.2. **Subject:** Discussion Regarding Mobile Home Park Subcommittee Members.
Recommendation: Reappoint subcommittee members.

Mayor Terry opened the public comment period. Seeing no speakers, Mayor Terry Closed the public comment period.

ACTION: Motion to appoint Council Member Gatewood and Mayor Terry to the Mobile Home Park Subcommittee Gatewood second by Pulipati;
Motion passed with a 3:2 vote.
AYES: Gatewood, Pulipati, and Terry
NOES: Sander
ABSENT: None
ABSTAIN: Budge

13. COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS

None.

14. ADJOURN TO CLOSED SESSION

Mayor Terry adjourned the meeting to closed session at 8:41 p.m.

15. CLOSED SESSION - CALL TO ORDER/ROLL CALL

Mayor Terry called the closed session to order at 8:41 p.m.

Council Members Present: Linda Budge, Garrett Gatewood, Siri Pulipati, David Sander, and Donald Terry

Council Members Absent: None

Staff Members Present: Cyrus Abhar, Adam Lindgren, Stacy Leitner and Persephonie

Riley

16. CLOSED SESSION

Council will meet in closed session to discuss the following items:

1. CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION: Significant Exposure to Litigation Pursuant to Government Code Section 54956.9(d)(2) (One Case).

Council Member Gatewood recused himself from Item 2 due to a conflict of interest related to a business interest.

2. CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION (pursuant to California Government Code Section 54956.9(d)(1) Cordova Recreation and Park District v. City of Rancho Cordova, Sacramento Superior Court Case No. 34-2021-80003705.

17. OPEN SESSION - REPORT OUT FROM CLOSED SESSION

City Attorney reported that staff was given direction and no reportable action was taken in closed session.

18. ADJOURNMENT

Mayor Terry adjourned the meeting in memory of Gene Humphrey at 9:09 p.m.

_____
Stacy Leitner, CMC
City Clerk

CITY OF RANCHO CORDOVA

CITY COUNCIL MEETING
Tuesday, March 29, 2022

5:30 PM Special Meeting/Work Session

City Hall
2729 Prospect Park Drive, Rancho Cordova

DRAFT MINUTES

1. SPECIAL MEETING - CALL TO ORDER/ROLL CALL

Mayor Terry called the Regular meeting to order in the David B. Roberts Council Chambers at 5:35 p.m.

Council Members Present: Linda Budge, Garrett Gatewood, Siri Pulipati, David Sander, and Mayor Donald Terry

Council Members Absent: None

Staff Members Present: Cyrus Abhar, Adam Lindgren, Stacy Leitner and Persephonie Riley

2. PUBLIC COMMENT

Mayor Terry opened the public comment period. Seeing no speakers. Mayor Terry closed the public comment period.

3. SPECIAL MEETING ITEMS

3.1. **Subject:** Discussion of Proposed Projects/Programs for American Rescue Plan Act (ARPA) and Fiscal Year 2022/23 Measure R Funds.
Recommendation: Receive presentation and provide direction.

Mayor Terry opened the public comment period. The following individuals addressed the Council or submitted public comment via email:

1. Kayla Lopez
2. Brenda Gustin
3. Mark Berry

4. Sergio Diaz
5. Helen Whelan-Bashaw
6. Cathy Birch
7. Fayzah Mughal
8. Angel Ball

Mayor Terry closed the public comment period.

ACTION: Input was received regarding the Discussion of Proposed Project/Programs for American Rescue Act (ARPA) and Fiscal Year 2022/23 Measure R Funds.

3.2. **Subject:** Rancho Cordova Youth Center Branding Discussion.
Recommendation: Council discussion and direction to staff.

Mayor Terry opened the public comment period. Seeing no speakers. Mayor Terry closed the public comment period.

ACTION: Council requested that this item be brought back at the April 18, 2022 City Council Meeting for further discussion.

4. ADJOURNMENT

Mayor Terry adjourned the meeting at 7:50 p.m.

_____
Stacy Leitner, CMC
City Clerk

MEMORANDUM

ITEM 9.2.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director
Steve Harriman, Public Works Division Manager

SUBJECT: **A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE CONTRACT AMENDMENT NO. 53-2019-1 FOR GENERAL SERVICES WITH MCE CORPORATION TO EXTEND THE CONTRACT TERM TO JUNE 30, 2024, WHICH WILL RESULT IN AN INCREASE TO THE CONTRACT AMOUNT FROM $2,750,000 TO AN AMOUNT NOT TO EXCEED $4,475,000 FOR CITYWIDE OPERATIONS AND MAINTENANCE SUPPORT SERVICES**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution would authorize the City Manager to execute Contract Amendment No. 53-2019-1 with MCE Corporation for citywide operations and maintenance services. The amendment would extend the contract term from June 30, 2022 to June 30, 2024, resulting in an increase to the contract amount from $2,750,000 to an amount not to exceed $4,475,000 for continued maintenance services.

BACKGROUND

The city currently contracts with MCE Corporation to provide a variety of Public Works operations and maintenance support services, including litter abatement and graffiti removal, pothole and sidewalk repair, weed abatement, storm response, street sign maintenance and replacement, homeless camp cleanup with the City's Homeless Outreach Team, shopping cart retrieval, weed abatement, and after-hours emergency response for various issues. The work scope also includes daily maintenance and cleaning of the four light-rail stations in Rancho Cordova, which is provided by the City under an agreement with the Sacramento Regional Transit District. The proposed contract amendment is necessary to continue providing ongoing operations and maintenance support services.

FISCAL IMPACT AND FUNDING SOURCE

The Contract Amendment would be funded through a combination of special districts, Measure A, Gas Tax, Stormwater funds, Community Enhancement funds, operating budget, and the Sacramento Regional Transit District.

ATTACHMENT(S)

1. Resolution
2. Contract Amendment No. 53-2019-1

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, AUTHORIZING THE CITY MANAGER TO EXECUTE CONTRACT AMENDMENT 53-2019-1 WITH MCE CORPORATION TO EXTEND THE CONTRACT TERM TO JUNE 30, 2024, THAT RESULTS IN INCREASING THE CONTRACT AMOUNT FROM $2,750,000 TO AN AMOUNT NOT TO EXCEED $4,475,000 FOR CITYWIDE OPERATIONS AND MAINTENANCE SUPPORT SERVICES

WHEREAS, the parties entered into a General Services Agreement (Contract No. 53-2019) dated July 1, 2019, in the amount of $2,750,000 for citywide operations and maintenance support services; and

WHEREAS, adoption of this Resolution will authorize the City Manager to execute contract amendment no. 53-2019-1 with MCE to extend the contract term to June 30, 2024, resulting in an increase to the contract amount from $2,750,000 to an amount not to exceed $4,475,000; and

WHEREAS, these services will exceed the maximum amount the City Manager is authorized to approve; and

WHEREAS, funding for the contract amendment will be from a combination of special district funds, Measure A, Gas Tax, stormwater funds, Community Enhancement, operating funds, and the Sacramento Regional Transit District.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does authorize the City Manager to execute Contract No. 53-2019-1 with MCE to extend the contract term to June 30, 2024, and increase the contract amount from $2,750,000 to an amount not to exceed $4,475,000 for citywide operations and maintenance services in a form approved by the City Attorney.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 4th day of April 2022 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

_____
Donald Terry, Mayor

_____
Stacy Leitner, CMC
City Clerk

FIRST AMENDMENT TO THE GENERAL SERVICES AGREEMENT BETWEEN THE CITY OF RANCHO CORDOVA AND MCE CORPORATION FOR CITYWIDE OPERATIONS AND MAINTENANCE SUPPORT SERVICES

This First Amendment to the General Services Agreement ("Amendment") is made by and between the City of Rancho Cordova ("City") and MCE Corporation ("Contractor") as of July 1, 2022. City and Contractor are hereinafter collectively referred to as the "Parties."

RECITALS

WHEREAS, the Parties entered into a General Services Agreement ("GSA") dated July 1, 2019 for the purpose of citywide operations and maintenance services; and

WHEREAS, this Amendment will extend the term of the agreement from June 30, 2022 to June 30, 2024 and increase the contract amount from $2,750,000 to $4,475,000; and

WHEREAS, the Parties agree that changes to the term provided for in the GSA are necessary in order for the City to continue receiving services by Contractor.

NOW, THEREFORE, the Parties hereto agree as follows:

AGREEMENT

1. The Parties agree to modify the end date of the GSA from June 30, 2022, to June 30, 2024. The first sentence of Section 2 of the GSA, "Term," is amended to read as follows:

   "The term of this Agreement shall begin on the date first noted above and shall end on June 30, 2024, unless the term of the Agreement is otherwise terminated as provided for in Section 10."

2. Section 4 of the GSA, "Compensation of Contractor," provides for the City to pay Contractor $2,750,000. The Parties agree to amend Section 2 of the GSA in order to increase the compensation amount to pay Contractor for additional services. The first sentence of Section 4 of the GSA is amended to read as follows:

   "The Contractor shall be paid $4,475,000 for the performance of the Services pursuant to this Agreement."

3. The document entitled "Rate Schedule," attached hereto as **Exhibit A**, shall replace and supersede the GSA's **Exhibit A – Rate Schedule**.

4. All other terms and conditions in the GSA shall remain in full force and effect to the extent they are not in conflict with this Amendment.

5. The signatures of the Parties to this Amendment may be executed and acknowledged on separate pages or in counterparts which, when attached to this Amendment, shall constitute one complete Amendment.

IN WITNESS WHEREOF, the Parties have executed this Amendment on the day and year first above written.

CITY OF RANCHO CORDOVA

_____
Cyrus Abhar, City Manager

Date:_____

Attest:

_____
Stacy Leitner, CMC, City Clerk

Date:_____

Approved as to Form:

_____
Adam U. Lindgren, City Attorney

Date:_____

CONTRACTOR

_____
Steve Loweree, Sr. Vice-President
Maintenance Division

Date:_____

Updated August 9, 2012

1948568.1

EXHIBIT A
RATE SCHEDULE

City of Rancho Cordova
Streets Maintenance
Labor and Equipment Rates
July 1, 2022 to June 30, 2023

Labor Classification	REGULAR TIME	OVERTIME	SUNDAY & HOLIDAY
Superintendent	$68.29	$99.02	$130.71
Foreman	$49.75	$72.14	$95.22
Laborer 1	$40.38	$58.55	$77.29
Laborer 2	$37.16	$53.88	$71.12
Laborer 3	$30.13	$43.69	$57.67
Prevailing Wage			
Construction Laborer	$67.91	$87.60	$108.63
Sign Work	$64.19	$82.81	$102.68
Paint/Stripe	$69.76	$89.99	$111.59
Carpentry	$84.19	$108.61	$134.67

Equipment	
1 Ton Truck	$10.72
Utility 3/4 Ton Truck	$9.74
Standard 1/2 Ton Truck	$7.14
Trailer	$1.63
High Weed Mower	$3.25
Chainsaw	$2.16
Weed eater	$2.16
Blower	$2.16

Materials - Markup 15%
Sub-contractor - Markup 10%

MEMORANDUM

ITEM 9.3.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: June Cowles, Senior Planner

SUBJECT: **A RESOLUTION APPROVING THE INTERIM MANAGEMENT PLAN FOR WHITE ROCK / RIO DEL ORO, CA MINE ID NO. 91-34-0048, OPERATED BY GRANITE CONSTRUCTION COMPANY**

PROPERTY OWNER:	**APPLICANT/DEVELOPER:**
Aerojet General Corp. 620 Coolidge Drive, Suite 100 Folsom, CA 95630	Granite Construction Company P.O. Box 15287 Sacramento, CA 95851

PROJECT:	Interim Management Plan for White Rock / Rio Del Oro, CA Mine ID No. 91-34-0048, operated by Granite Construction Company
FILE:	RC 06-224
LOCATION:	North and South of White Rock Road, east of Sunrise Blvd.
APN:	072-0370-105, 072-0370-104, and 072-0370-103
PLANNER:	June Cowles, Senior Planner

RECOMMENDATION:

Adopt the Resolution approving the Interim Management Plan for White Rock / Rio Del Oro, CA Mine ID No. 91-34-0048.

RESULT OF RECOMMENDED ACTION:

Adoption of the Resolution would authorize staff to notify the State Department of Conservation of the approval of the Interim Management Plan.

BACKGROUND:

The status of the White Rock / Rio Del Oro mine operated by Granite Construction Company officially became "idle," as defined by California's Surface Mining and Reclamation Act ("SMARA") (Public Resources Code section 2721.1) and Rancho Cordova Municipal Code ("City Code") section 20.04.110. On February 2, 2022, the City received an Interim Management Plan (IMP) for the White Rock/Rio Del Oro site CA Mine ID #91-34-0048 (Attachment 2). The applicant stated that the Interim Management Plan is due to a decrease in market demand for the materials produced at the site.

The City Code definition of “idle” parallels the definition in SMARA, and provides as follows:

> “‘Idle’ means surface mining operations curtailed for a period of one year or more by more than 90 percent of the operation’s previous maximum annual mineral production, with the intent to resume those surface mining operations at a future date.”

Granite intends to resume active operations at the site as soon as market conditions will allow it. As such, Granite filed an Interim Management Plan with the City of Rancho Cordova on February 2, 2022, as required by SMARA and City Code.

ANALYSIS:

RCMC Section 20.04.020: Interim Management Plan Administrative Procedure

Administrative procedures for the processing of an interim management plan (“IMP”) are outlined in the SMARA statutes at Public Resources Code section 2770(h) and in City Code 20.04.110 as follows:

- The operator is required to submit an IMP to the City for approval within 90 days of its surface mining operation becoming idle.
- By statute, review and approval of an IMP is considered an amendment to an approved reclamation plan, but not a project for purposes of environmental review or CEQA.
- The key purpose for an IMP is to provide measures that the operator will implement to maintain the site in a safe and stable condition pursuant to SMARA and its permit conditions.
- Another important tenant of an IMP is that the operator’s financial assurances (i.e., mechanism posted to ensure implementation of reclamation in accordance with the approved plan) is maintained as though the operation were still active.

The City is required to submit the IMP to the State Department of Conservation for review at least 30 days prior to approval by the City, RCMC Section 20.04.110(C). City staff complied with this requirement on February 21, 2022, see Attachment 3. The Division of Mine Reclamation reviewed the submitted IMP and had no comments, see Attachment 4. In addition, the City is required to approve or deny approval of an IMP within 60 days of receipt, unless a longer period is mutually agreed by the lead agency and operator, RCMC Title 23.Cordova Municipal Code section 20.04.110(D). If, prior to taking action on the IMP, the City feels the plan does not meet the requirements of SMARA, then the City shall notify the operator in writing of any deficiencies in the plan and the operator shall generally have 30 days to submit a revised plan for review and approval. Once a plan is approved, there is no formal process necessary to return from idle to active status. The operator would simply notify the City and report the site as active in its subsequent mine operator annual report (filed with the State and City).

The City has reviewed the IMP submitted by Granite and has determined that it meets requirements of SMARA and City Code and recommends approval by the City Council.

RECOMMENDED MOTION:

Staff recommends that the City Council adopt the Resolution to approve the Interim Management Plan for White Rock / Rio Del Oro, CA Mine ID No. 91-34-0048, operated by Granite Construction Company.

ATTACHMENT(S)

1. Resolution
2. Exhibit A to the Resolution - Interim Management Plan
3. City Staff letter to Division of Mine Reclamation February 21, 2022
4. Office of Mine Reclamation Letter March 18, 2022

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING AN INTERIM MANAGEMENT PLAN FOR WHITE ROCK/RIO DEL ORO, CA MINE ID NO. 91-34-0048, OPERATED BY GRANITE CONSTRUCTION COMPANY

WHEREAS, Granite Construction (hereinafter referred to as Applicant) filed an Interim Management Plan (IMP) for review by the City of Rancho Cordova (hereinafter referred to as City) to approve, according to the attached Exhibit A, and

WHEREAS, as stated in Rancho Cordova Municipal Code (RCMC) Section 20.04.110 by statute, the review and approval of an IMP is considered an amendment to an approved reclamation plan, but not a project for purposes of environmental review or California Environmental Quality Act (CEQA); and

WHEREAS, the submitted IMP meets the Surface Mining and Reclamation Act (SMARA) requirements; and

WHEREAS, the City Council is the appropriate authority to take action on the Interim Management Plan; and

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does approve the Interim Management Plan accompanying diagrams (Exhibit A) as attached, and based on the following finding:

A. SMARA requirements

Finding: The IMP must meet the SMARA requirements;

Evidence: The IMP meets the SMARA requirements in that the project includes an approved Reclamation Plan and is annually inspected by the City and will continue to be inspected on an annual basis throughout the “idle” period. In addition, the operator’s financial assurances will be maintained throughout the “idle” period.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 4th day of April 2022 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Donald Terry, Mayor

ATTEST:

_____
Stacy Leitner, CMC
City Clerk

White Rock/ Rio Del Oro
Interim Management Plan

The Surface Mining and Reclamation Act of 1975, Public Resources Code Section 2710 *et seq.* (SMARA) requires mining operations to submit an Interim Management Plan when an operation becomes idle. The following Interim Management Plan is prepared in accordance with Section 2770 (h) of the Public Resources Code. The mining status of the White Rock/Rio Del Oro site became "idle" on January 1, 2022, as defined in PRC Section 2721.1. Granite Construction Company ("Granite") is requesting "idle" status because there was no production in 2021 and there is no anticipated production in 2022. However, surface mining activities are anticipated to occur at the site in the future. Granite is pursuing a 5-year extension of CUP RC-06-224A which expires in 2022. Upon an increase in demand for aggregates in the area and subsequent increase in production/sales at the White Rock site, Granite will notify the City of Ranch Cordova of the change in mine status from idle to active.

The surface mining activities at the site that will continue while the mine site is "idle" include the mining of sand and gravel, production and sale of aggregate and construction materials, and stockpile management (See attached Mining and Reclamation Map).

Site Information

Site Name: White Rock/Rio Del Oro

CA Mine ID Number: 91-34-0048

Lead Agency: City of Rancho Cordova

Site Location/Description: The White Rock site is located North and South of White Rock Road, east of Sunrise Blvd. Operations at White Rock include sand and gravel mining, stockpile management and reclamation on approximately 1,300 acres of land (see attached map).

Mining and Reclamation Plan: #RC-06-224A, Approved on December 5, 2016

Previous Maximum Annual Production: 27,746 tons (2020 Reporting Year)

Production While Idle: None currently anticipated.

Financial Assurance: $1,066,032.00 approved by the Lead Agency on 3/30/2021

Owner/Operator Information

Operator Name: Granite Construction Company

Mailing Address: P.O. Box 15287, Sacramento, CA 95851

Operator Telephone Number: (916) 855-4400

Contact Person: Courtney DePorto

Interim Management Plan

1. Financial Assurances will remain in effect for the duration of the IMP and will be increased or decreased as required based on the annual update to the Financial Assurance Cost Estimate (FACE).

2. Reclamation activities, including grading and revegetation will occur per the approved Reclamation Plan once mining at the site have ceased indefinitely. Revegetation via natural recruitment will be ongoing.

3. The following equipment and facilities will remain on-site while the site is in "idle" status: scales, scale house building, portable crushing and screening equipment, and off-road equipment.

4. Stormwater drains internally and does not run off-site. Protective BMP's and the general site area are inspected quarterly as required by the CUP (See attached Quarterly Routine BMP Inspection Form). Maintenance and repairs will be conducted on an as needed basis. Erosion and sediment control issues are not anticipated to occur while the site is idle.

5. Noxious weed management within the mine site will be addressed concurrent with final site revegetation, where necessary.

6. All perimeter fences, gates, and landscaping will be maintained and inspected regularly. All gates will remain locked when the site is unoccupied, and a "No Trespassing" sign will be maintained at the entrance.

7. This IMP will be reviewed and updated annually and will remain in effect for as long as the mining status of the site is "idle".

Attachments:

A. Mining and Reclamation Map
B. Approved Financial Assurance Mechanism
C. Approved Financial Assurance Cost Estimate
D. Approved Mining and Reclamation Plan Permit
E. Quarterly Routine BMP Inspection Form

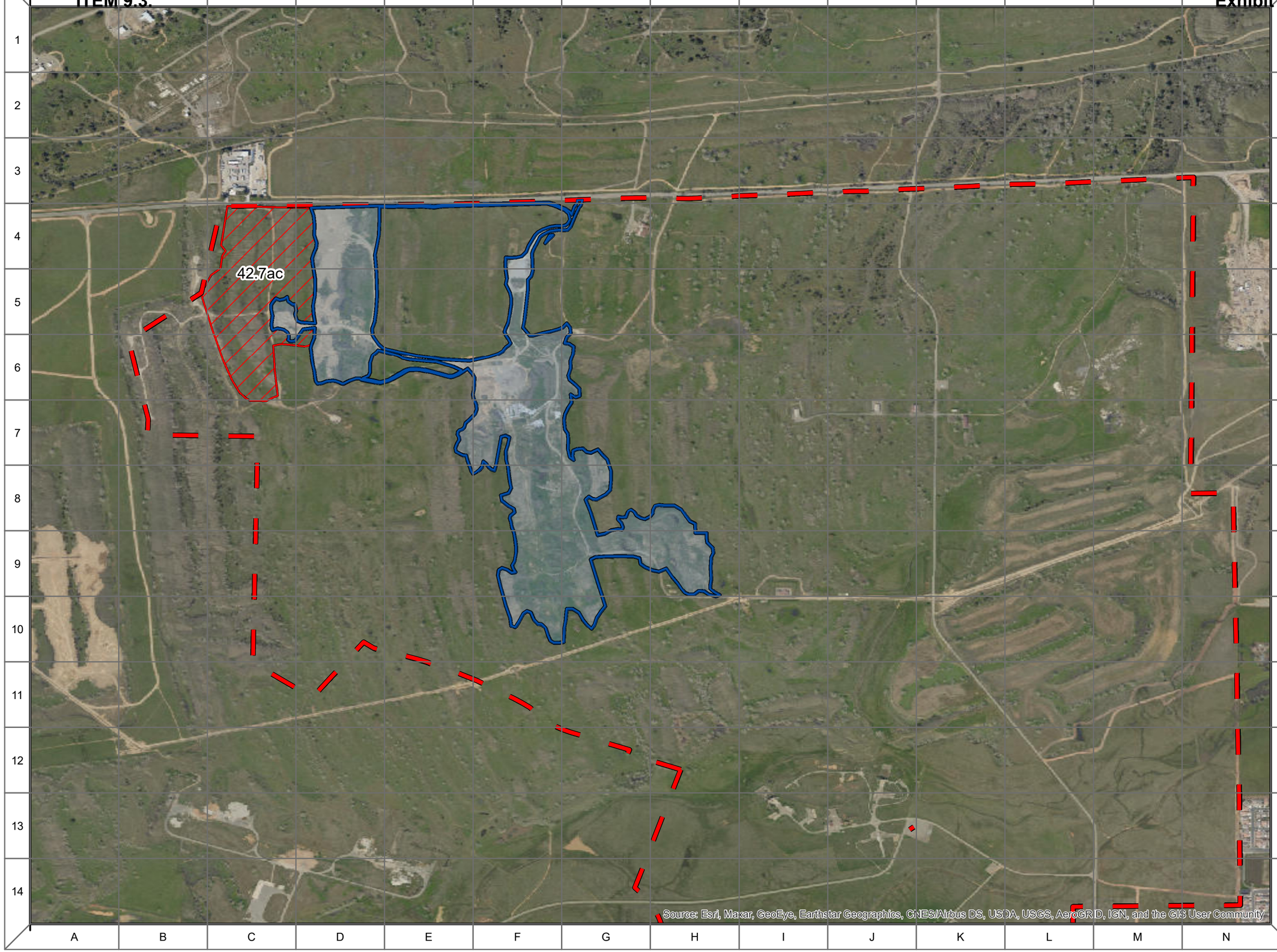
Attachment A
Mining and Reclamation Map

Rio Del Oro

Mining & Reclamation

8/26/2021

GRANITE™



Disturbed Area

Property Boundary

Proposed Mine Area in 2022

Total Area Disturbed: 134 ac
Total Area Reclaimed: 0 ac
Total Area Subject to RP: 1,300 ac

N

0 1,000 2,000 Feet

Brett Wong - Market Research Analyst
D:\. . .Environmental\NorCal_Enviro_Mining_Rec11x17.mxd

Attachment B
Approved Financial Assurance Mechanism

a fresh take.
RANCHO CORDOVA
CALIFORNIA

January 4, 2021

Department of Conservation
Office of Mine Reclamation
Reporting and Compliance Unit
801 K Street, MS 09-06
Sacramento, CA 95814

Subject: Rio Del Oro Mining Project Site ID #91-34-0048

Dear Ms. Byrnes,

In accordance with Public Resources Code Section 2773.1 and California Code of Regulations, Title 14, Section 3805, enclosed is a copy of the proposed financial assurance cost estimate for the Rio Del Oro Mining Project Site ID #91-34-0048. The City of Rancho Cordova has reviewed the cost estimate and believes that the amount is adequate for the City or the Department of Conservation to conduct and complete reclamation on the mined lands in accordance with the approved reclamation plan.

If you have any question regarding the submitted documents, please contact me at (916) 851-8863.

Sincerely,

Quoc Nham, PE
Associate Civil Engineer

State of California
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BETA Excel Version of the FACE-1 Financial Assurance Cost Estimate Form.
Please contact DMR if errors are found in this document.

FINANCIAL ASSURANCE COST ESTIMATE

FOR

White Rock
(Mine Name)

CA Mine ID # 91- 34-0048

Reclmation Plan #/Name RC-06-224

Prepared by: *(Name & Affiliation)*	This financial assurance cost estimate prepared and submitted pursuant to *(choose one)*:
Granite Construction Company Suzanne Collins, Assistant Plant Manager Date: 9/28/2020	☐ A new or amended reclamation plan approved on (Date): ☒ An annual mine inspection performed on (Date): 08/28/2020 ☐ Other: Please Specify:

Most Recent Approved Financial Assurance Cost Estimate

Date: 10/29/2019

Amount: $ 877,639.00

Amount of existing Financial Assurance Mechansim(s)

Date: 2/5/2020

Amount: $ 877,639.00

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I. SUPPORTING DOCUMENTS

This estimate represents the cost of conducting and completing reclamation in accordance with the Surface Mining and Reclamation Act (SMARA) and the following supporting documents:

Reclamation Plan Approval Date and Number

- RC-06-224 approved on 07/26/07. Renewal approved on 12/05/16. (includes MMRP, Mining Plan, Rec Plan

Permits and/or Environmental Documents Approved as, or Conditional upon, the Reclamation Plan

- Mitigation Monioring and Reporting Program (MMRP) and Conditions of Approval_022508
  Revegetation and Grazing Management Plan_040106
  Oak Tree Mitigation Plan_041306
  Special Species Avoidance Plan_080207

Other Agency Financial Assurances Securing Reclamation of Disturbed Lands

- NA

Wage Rates used in Cost Estimate* *(cost estimates are required to use current 'General prevailing wage determinations made by the director of industrial relations' where applicable (http://www.dir.ca.gov/OPRL/PWD/index.htm) with employer labor surcharge added, or greater)*

- CA General Prevailing Wage Determination

Equipment Rates used in Cost Estimates* *(use current 'Labor Surchage and Equipment Rental Rates (Cost of Equipment Ownership)' equipment rates published by Caltrans (http://www.dot.ca.gov/hq/construc/equipmnt.html) or other publicly available and verifiable local rates)*

- Caltrans Labor Surcharge and Equipment Rental Rates

Equipment Production Rates used in Cost Estimate *(Use of current Caterpillar Performance Handbook or equivalent published production rates is required)*

- Caterpillar Performance Handbook and Professional Experience

**Many mine sites are remote projects that require hours of travel (to and from) and sometimes require additional time to prepare for even the simplest of tasks. In accordance with labor Code Sections 1773.1 and 1773.9, contractors are required to make travel and/or subsistence (per diem) payments to each worker to execute the work. These arrangements can be quite variable and site specific.*

Attachments:

- NA

(add additional pages as needed)

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II. Description of Current Site Conditions

(i.e., disturbed acres, slope conditions, excavation depths, topsoil and overburden stockpiles, equipment and facilities, reclamation in progress, erosion control status, required corrective actions, etc.)

Currently, 133 acres have been disturbed and reclamation has not begun. Typically, tailings stockpiles are harvested back to original grade. Generally the material has been moved to a central processing site, but some stockpiles exist near the excavated areas. On-site stockpiles include material from previous excavations and waste fines. Equipment stored on-site includes portable scale house, truck weigh scale equipment, and fencing. If operations commence in 2020-2021, portable processing equipment will be stored on-site. No erosion on-site.

III. Description of Anticipated Site Conditions (12 months from date of estimate)

(i.e., increase of disturbed acres, increase of depth, increases in amount of equipment and/or facilities, required corrective actions, etc.)

There are currently no plans to process material, however, if the need arises, approximately 42.7 additional acres will be disturbed in the next 12 months. Portable equipment will be brought on-site to process material.

IV. Description/Justification of Cost Increase/Decrease

The cost estimate has increase from $877,639.00 to $1,065,404.00. The increase is due to an increase in anticipated disturbed acreage and changes in equipment and labor rates.

(add additional pages as needed)

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V. PLANT STRUCTURES AND EQUIPMENT REMOVAL *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Current Site Condition:

- Current structures and equipment include approximately 1200' of chain link fence and barb wire surrounding the scale house pad, one rented scale house module, and truck weigh scales equipment and portable processing equipment.

Reclamation Plan Performance Standard (End Use):

- Undeveloped open space used for seasonal grazing.

Describe tasks:

- Removal of approximately 1200' of chain link fence and barb wire including tear down, removal of posts and transporting materials off-site. Removal of one scale house trailer by rental company (no charge). Excavation and removal of truck scales and concrete footings.

Equipment on site wholly owned by operator?: ☐ YES ☒ NO
(if no, please provide the name/s and contact information for any lien holder)

- N/A; Processing equipment owned and operated by a subcontractor.

(add additional pages as needed)

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V. PLANT STRUCTURES & EQUIPMENT REMOVAL

Remove Fence
(↑ Describe Reclamation Activity Being Estimated)

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation jobs, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
Full Size Pickup [00-06]	HR	$27.42	16.0	$439
330BL Excavator [0345]	HR	$154.07	16.0	$2,465
3 Axel Dump Truck [3AXL]	HR	$71.55	16.0	$1,145
		$0.00	0.0	$0
		$0.00	0.0	$0

Total Equipment Cost for this Task = $4,049

B. Labor - List all labor categories to complete identified task

Labor Category	$/Hour (prevailing wage)	Labor Surcharge/Hr (where applicable) (enter % of wage) 0.0%	# of Hours	Cost ($)
Foreman [GRP1-A1]	$83.05	$0.00	16.0	$1,329
Excavator Operator [GRP2-A1]	$81.52	$0.00	16.0	$1,304
Laborer [GRP3-A2]	$57.34	$0.00	16.0	$917
Teamster [GRP3]	$64.92	$0.00	16.0	$1,039
	$0.00	$0.00	0.0	$0

Total Labor Cost for this Task = $4,589

C. Demolition - List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost ($)
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0

Total Materials Cost for this Task = $0

D. Total Direct Cost of Structure and Equipment Removal (Total A+B+C)

Equipment Cost + Labor Cost + Demolition Cost = $8,638

E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation)

Net Salvage Value = $ **0.00**

F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = **$8,638**

NOTE: Above **Total Cost** will display $0.00 if net of entered removal costs and salvage value is negative.

*Note: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

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V. PLANT STRUCTURES & EQUIPMENT REMOVAL

Removal of Scales and Footings
(↑ Describe Reclamation Activity Being Estimated)

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation jobs, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
Full Size Pickup [00-06]	HR	$27.42	8.0	$219
330 BL Excavator [0345]	HR	$154.07	8.0	$1,233
Omega T-450 Crane [5669]	HR	$143.02	8.0	$1,144
Flatbed [T&TT 60]	HR	$79.48	8.0	$636
3 Axles Side Dump Truck [3AXL]	HR	$71.55	16.0	$1,145

Total Equipment Cost for this Task = $4,377

B. Labor - List all labor categories to complete identified task

Labor Category	$/Hour (prevailing wage)	Labor Surcharge/Hr *(where applicable)* (enter % of wage) 0.0%	# of Hours	Cost ($)
Foreman [GRP1 - A1]	$83.05	$0.00	8.0	$664
Excavator Operator [GRP 2 - A1]	$81.52	$0.00	8.0	$652
Crane Operator [GRP3A -A1]	$80.04	$0.00	8.0	$640
Teamster [GRP 3]	$64.92	$0.00	24.0	$1,558
Laborer [GRP3 - A2]	$57.34	$0.00	8.0	$459

Total Labor Cost for this Task = $3,974

C. Demolition - List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost ($)
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0

Total Materials Cost for this Task = $0

D. Total Direct Cost of Structure and Equipment Removal (Total A+B+C)

Equipment Cost + Labor Cost + Demolition Cost = $8,350

E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation)

Net Salvage Value = $ **0.00**

F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = **$8,350**

NOTE: Above **Total Cost** will display $0.00 if net of entered removal costs and salvage value is negative.

*Note: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

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VI. PRIMARY RECLAMATION ACTIVITY

Use multiple sheets as necessary to estimate the cost of each activity required. Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department if necessary.

Current Site Conditions:

- Currently 133 acres are disturbed with a potentail of an additional 42.7 acres anticipated over the next 12 months.

Reclamation Plan Performance Standard (End Use):

- Undeveloped open space used for seasonal grazing.

Describe tasks, methods, equipment, etc:
Decompaction, cut, fill, haul, slope reduction, compaction, grading, topsoil placement, drainage work, soil amendment, special requirements, etc. Separate sheets may be used for each task if necessary.

- Grade approximately 175.7 acres of stockpiles and excavated area with dozer and grader to ensure gentle contours.

Provide Quantities:
Overburden and topsoil, cut and fill, import or export (cubic yards), area (acres), haul distance (feet), equipment production rates (cubic yards/hour, or as applicable), etc.

- Grading of 175.7 acres. Estimate of 6.5 acres of grading per day for a total of 27 days of grading.

(add additional pages as needed)

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VI. PRIMARY RECLAMATION ACTIVITY

General Grading
(↑ Describe Reclamation Activity Being Estimated)

Acres:	175.7	Overburden (cy):	NA
Haul Distance (ft):	NA	Topsoil (cy):	NA
Production Rate (cy/hr):	NA	(NOTE: no automatic calculations occur to data in this upper table)	

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation jobs, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
CAT D9R Dozer [5175]	HR	$257.30	216.0	$55,577
CAT 14G Motor Grader [3180]	HR	$119.99	216.0	$25,918
Full Size Pickup [00-06]	HR	$27.42	216.0	$5,923
Water Truck [36-48]	HR	$64.07	216.0	$13,839
		$0.00	0.0	$0
		$0.00	0.0	$0

Total Equipment Cost for this Task = $101,256

B. Labor - List all labor categories to complete identified tasks

Labor Category	$/Hour (prevailing wage)	Labor Surcharge/Hr (where applicable) (enter % of wage) 0.0%	# of Hours	Cost ($)
Dozer Operator [GRP3 - A1]	$80.04	$0.00	216.0	$17,289
Blade Operator [GRP2 - A1]	$81.52	$0.00	216.0	$17,608
Teamster [GRP 3]	$64.92	$0.00	216.0	$14,023
Foreman [GRP1 -A1]	$83.05	$0.00	216.0	$17,939
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0

Total Labor Cost for this Task = $66,858

C. Materials - List all materials required to complete identified task

Item	$/Unit	Sales tax (enter local rate in %) 0.0%	Quantity	Cost ($)
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0

Total Materials Cost for this Task = $0

D. Total Direct Cost for this task

Equipment Cost + Labor Cost + Materials Cost = $168,115

VII. REVEGETATION *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department.

Current Site Condition:

- Currently 133 acres are disturbed with an additional 42.7 acres anticipated over the next 12 months. Reclamation has not begun.

Reclamation Plan Performance Standard (End Use):

- Undeveloped open space used for seasonal grazing.

Describe Tasks:

- Spread 6" of topsoil and broadcast seed 175.7 acres with non-invasive, weed-free seed mix.

(add additional pages as needed)

State of California
DEPARTMENT OF CONSERVATION
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VII. REVEGETATION *(use multiple sheets as needed)*

Spread 6" of Topsoil and Broadcast Seeding

(↑ Describe Revegetation Activity Being Estimated)

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation projects, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
CAT D9R Dozer [5175]	HR	$257.30	208.0	$53,518
CAT 14G Grader [3180]	HR	$119.99	208.0	$24,958
CAT 623F Scraper [1703]	HR	$211.56	416.0	$88,009
Water Truck [36-48]	HR	$64.07	208.0	$13,327
Full Size Pickup [00-06]	HR	$27.42	208.0	$5,703
		$0.00	0.0	$0
			Total Equipment Cost for this Task =	$185,515

B. Labor - List all labor categories to complete identified task.

Labor Category	$/Hour (prevailing wage)	Labor Surcharge /HR (where applicable) (enter % of wage) 0.0%	# of Hours	Cost ($)
Dozer & Scraper Operator [GRP3 - A1]	$80.04	$0.00	624.0	$49,945
Blade Operator [GRP2 - A1]	$81.52	$0.00	208.0	$16,956
Teamster [GRP3]	$64.92	$0.00	208.0	$13,503
Laborer [GRP3 -A2]	$57.34	$0.00	208.0	$11,927
Foreman [GRP1 - A1]	$83.05	$0.00	416.0	$34,549
			Total Labor Cost for this Task =	$126,880

C. Materials - List all materials required to complete identified task

Item/Plant Species	Unit of measure	$/Unit	Sales tax (enter local rate in %) 0.0%	Quantity	Cost ($)
Broadcast Seeding Native Weed-Free Mix	Acre	$1,530.00	$0.00	175.7	$268,821
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
			Total Materials Cost for this Task =		$268,821

D. Total Direct Cost for this task

Equipment Cost + Labor Cost + Materials Cost = $581,216

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VIII. MISCELLANEOUS COSTS *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Examples of this type of cost may include temporary storage of equipment and materials off site, special one-time permits (i.e. transportation permits for extra wide overweight loads, etc.), decommissioning a process mill (i.e. decontamination of equipment), disposal of warehouse inventories, well abandonnment, remediation of fueling and waste oil storage sites, septic system removal, costs to prepare closure and monitoring reports, site security, preserving potable water and maintaining utilities, etc.

Item/Task	Quantity	$/Unit	Cost ($)
Survey Crew	1.0	$500.00	$500
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0

Total Miscellaneous Costs = $500

IX. MONITORING COSTS

Monitoring Task	$/Visit	# of Visits/Year	# of Monitoring Years	Cost ($)
Foreman [GRP1-A1] QTY: 4HRS	$332.20	1.0	3.0	$997
Full Size Pickup [00-06] QTY:4 HRS	$109.68	1.0	3.0	$329
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0

Total Monitoring Costs = $1,326

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X. SUMMARY OF COSTS

This section shall be used to summarize all the cost sheets in one place.

(V) Total of all Plant Structures & Equipment Removal Costs	$	16,988
(VI) Total of all Primary Reclamation Activities Costs	$	168,115
(VII) Total of all Revegetation Costs	$	581,216
(VII) Total of all Miscellaneous Costs	$	500
(IX) Total of all Monitoring Costs	$	1,326
Total of Direct Costs	$	**768,145**

XI. SUPERVISION / PROFIT & OVERHEAD / CONTINGENCIES / MOBILIZATION

(A) Supervision (4.7 %)		$	36,368
(B) Profit/Overhead (9.4 %)		$	72,429
(C) Contingencies (7.0 %)		$	53,770
(D) Mobilization (5.0 %)		$	38,407
Total of Indirect Costs		$	**200,975**
Total of Direct and Indirect Costs		$	**969,120**
(E) Lead Agency and/or Dept. of Conservation Administrative Costs	10%	$	96,912

Total Estimated Cost of Reclamation $ **1,066,032**

Attachment C
Approved Financial Assurance Cost Estimate

California Mine ID No. 91-34-0048
Bond No. 8205-56-52
Permit No. #RC-06-224
Reclamation Plan Name/No. N/A

DEPARTMENT OF CONSERVATION
DIVISION OF MINE RECLAMATION
and

CITY OF RANCHO CORDOVA
(Name of LEAD AGENCY)

RECLAMATION PERFORMANCE BOND INCREASE/DECREASE RIDER

(Public Resources Code §2773.1)

To be attached to and form a part of Surety Company Bond number 8205-56-52, written by Federal Insurance Company as SURETY, on behalf of Granite Construction Company as PRINCIPAL, in the penal sum of Eight Hundred Seventy Seven Thousand Six Hundred Thirty Nine 00/100 DOLLARS ($ 877,639.00), in favor of CITY OF RANCHO CORDOVA (Name of LEAD AGENCY) and the Department of Conservation, Division of Mine Reclamation and executed on February 1, 2008 (Date).

Whereas, the above-named Principal has a permit of a surface mining operation, number #RC-06-224, approved by the City (*select one*) of CITY OF RANCHO CORDOVA dated on March 26, 1999, and renewals and revisions numbered and dated December 12, 2002 pursuant to the application of the Principal, and/or claims a vested right,

and/or

Whereas, the City of (*select one*) CITY OF RANCHO CORDOVA or, in the alternative, the State Mining and Geology Board approved reclamation plan number N/A, dated N/A, and renewals and amendments numbered and dated N/A pursuant to the application of the Principal;

and

Whereas, said bond and rider shall cover any and all mined lands affected or to be affected by the surface mining operation under the above-mentioned permit and/or the reclamation plan, and renewals and amendments respectively, since the date of the issuance of the permit and/or the reclamation plan,

Now, therefore, the amount of this bond is Increased (*select one*) by: One Hundred Eighty Eight Thousand Three Hundred Ninety Three 00/100 Dollars ($ 188,393.00), to a total penal sum of One Million Sixty Six Thousand Thirty Two 00/100 Dollars ($ 1,066,032.00), to cover the Additional (*select one*) cost of reclaiming all affected mined lands for the payment of which sum we hereby jointly and severally bind ourselves, our successors and assigns. It is further understood and agreed that all other terms and conditions of this bond shall remain unchanged.

California Mine ID No. 91-34-0048
Bond No. 8205-56-52
Permit No. #RC-06-224
Reclamation Plan Name/No. N/A

Reclamation Bond Increase/Decrease Rider

IN WITNESS THEREOF, the Principal and Surety have hereunto set their signatures and seals as of the dates set forth below.

PRINCIPAL

Date: 03/08/2021

Granite Construction Company
(Company - Permittee [Principal])

By: _____
(Corporate Officer/Partners/Sole Proprietor)

Kenneth B. Olson
Typed or Printed Name

Title: Vice President

SURETY

I declare, under penalty of perjury, under the laws of the State of California, that I have executed the foregoing rider under an unrevoked Power of Attorney.

Federal Insurance Company
(Surety Company)

By: _____
(Signature of Attorney-in-Fact for Surety)

Isabel Barron
Typed or Printed Name

Title: Attorney In Fact

Executed in Watsonville, CA on 03/08/2021
(City and State) (Date)
under the laws of the State of California.

Where one signs by virtue of a Power of Attorney for a Surety Company, such fully executed Power of Attorney must be filed with this bond.

Please identify the agent acting on behalf of the surety who will accept notices, papers, and other documents, if applicable.

Agent: Alliant Insurance Services, Inc. Title:
Address: 100 Pine Street, 11th Floor - San Francisco, CA 94111
Phone Number: 415-403-1427 Email Address: N/A

California Mine ID No. 91-34-0048
Bond No. 8205-56-52
Permit No. #RC-06-224
Reclamation Plan Name/No. N/A

COMPLETED NOTORIZED ACKNOWLEDGMENT OF PERMITTEE [PRINCIPAL]
[Attach loose notarial certificate]

COMPLETED NOTARIZED ACKNOWLEDGMENT OF SURETY
[Attach loose notarial certificate]

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

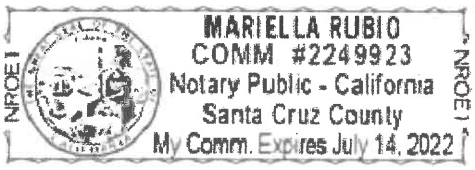
State of California
County of Santa Cruz)

On March 8, 2021 before me, Mariella Rubio, Notary Public
(insert name and title of the officer)

personally appeared Kenneth B. Olson,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature _____ (Seal)
Mariella Rubio, Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

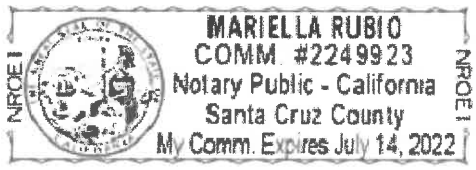
State of California
County of Santa Cruz)

On March 8, 2021 before me, Mariella Rubio, Notary Public
(insert name and title of the officer)

personally appeared Isabel Barron,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature _____ (Seal)
Mariella Rubio, Notary Public

CHUBB

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that **FEDERAL INSURANCE COMPANY,** an Indiana corporation, **VIGILANT INSURANCE COMPANY,** a New York corporation, **PACIFIC INDEMNITY COMPANY,** a Wisconsin corporation, **WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Isabel Barron, Jigisha Desai, John D. Gilliland, Maria Gomez, Roberto J. Rivera-Rodriquez, Mariela Rubio, Ashley Stinson and Tobi Stonich Telesco of Watsonville, California ----------

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business on behalf of GRANITE CONSTRUCTION INCORPORATED and all Subsidiaries alone or in joint venture as principal, in connection with bids, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation. And the execution of such bond or obligation by such Attorney-in-Fact in the Company's name and on its behalf as surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof, be valid and binding upon the Company.

In Witness Whereof, said **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** have each executed and attested these presents and affixed their corporate seals on this **10th** day of **December, 2020.**

Dawn M. Chloros, Assistant Secretary

Stephen M. Haney, Vice President

STATE OF NEW JERSEY
County of Hunterdon SS.

On this **10th** day of **December, 2020** before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal

KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 16, 2024

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

(1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.

(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.

(3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

(i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
(ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this March 8, 2021

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:
Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

Attachment D
Approved Mining and Reclamation Permit

CITY OF RANCHO CORDOVA

RESOLUTION NO. 137-2016

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING A RENEWAL OF THE SURFACE MINING AND RECLAMATION PLAN PERMIT FOR THE GRANITE CONSTRUCTION MINING OPERATION, PROJECT NO. RC-06-224A

WHEREAS, Granite Construction (hereinafter referred to as Applicant) operates a surface mining and reclamation operation in the City under an existing Surface Mining and Reclamation Plan Permit ("Existing Permit"); and

WHEREAS, The Existing Permit was for a term of 10 years; and

WHEREAS, the Applicant filed an application with the City of Rancho Cordova (hereinafter referred to as City) to approve a renewal of the Existing Permit (hereinafter, the "Permit Renewal" or the "Project") for a period of 5 years with optional 5 year renewal thereafter (subject to City review and approval) according to the attached exhibits, and

WHEREAS, under the Permit Renewal, (a) there would be no increase proposed in annual or total production levels, methods of mining, hours of operation, area subject to mining, truck traffic, transportation patterns or mining depths authorized under the Existing Permit; (b) the extension of time is for limited duration; and (c) the proposed extension of time will not affect the end use (undeveloped open space) or scope of reclamation under the Existing Permit; and

WHEREAS, the City Council is the appropriate authority to hear and take action on the Permit Renewal; and

WHEREAS, the City Council has considered the requirements of California Public Resources Code Section 2777, California Code of Regulations Section 2502(d), and Rancho Cordova Municipal Code, Title 20, Chapter 20.04; and

WHEREAS, the City Council considered the Applicant's request at a duly published public hearing on December 5, 2016 and received a staff report and public testimony at the public hearing.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA HEREBY RESOLVES AS FOLLOWS:

1. Approve the Permit Renewal with accompanying diagrams (**Exhibit 1A**) with Conditions of Approval/MMRP (**Exhibit 1B**) for the Granite Construction RC-06-224A as attached, and based on the following findings:

   A. California Environmental Quality Act

   Finding: No new environmental analysis is required for the Permit Renewal pursuant to California Environmental Quality Act (CEQA), Public Resources section 21166 and CEQA Guidelines Section 15162.

   Evidence: A Final Mitigated Negative Declaration (FMND) was prepared and adopted for the Existing Permit. The FMND mitigated measures are included within the

Mitigation Monitoring Report Plan for the Permit Renewal (**Exhibit 1B**). There are no changes proposed to the application for renewal of the permit, and there are no changes proposed for annual or total production levels, methods of mining, hours of operation, area subject to mining, truck traffic, transportation patterns, or mining depths authorized under the Existing Permit. On the basis of this evidence, the Final Mitigated Negative Declaration, the Conditions of Approval and Mitigation Measures, comments received, and the whole record, there is no substantial evidence that the Project will have a new or substantially more severe significant adverse impact on the environment.

B. Surface Mining and Reclamation Act

Finding: The following findings shall be made to approve surface mining operation, per Section 20.04.090 of the Municipal Code.

1) The Reclamation Plan complies with Surface Mining and Reclamation Act ("SMARA"), Public Resources Code §2772 and §2773, and any other applicable provisions.

Evidence: The plan was approved in 2007 and therefore is consistent with the City's Mining Ordinance, as certified by the State Mines and Geology Board.

2) The Reclamation Plan complies with applicable requirements of State regulations (CCR§§3500-3505, and §§3700-3713).

Evidence: The Reclamation Plan was specifically composed to meet the City's Surface Mining Ordinance certified by the State Mines and Geology Board on July 23, 2004. The standards and performance measures have been adhered to, and Conditions of Approval/Mitigation Monitoring Reporting Program have been developed to ensure compliance with the Surface Mining Ordinance.

3) The Reclamation Plan will restore the mined lands to a usable condition that is readily adaptable for alternative land uses that are consistent with this Chapter and either (i) the City's General Plan and any applicable resource plan or element or (ii) probable future uses anticipated by the City to be adopted in future amendments to the City's General Plan, which uses are identified in findings made on approval of the Reclamation Plan.

Evidence: The Reclamation Plan would restore the mined land in accordance with the standards in Ordinance 22-2004 and implemented by the Re-vegetation Management Plan adopted as part of the Mining Permit. The Management Plan provides for reseeding and re-vegetation of annual grasses and tree replanting characteristic to the surrounding area. Maintenance will be provided according to the specifications in the Management Plan on an on-going basis, until the mining operation is closed.

The General Plan of the City of Rancho Cordova anticipates the mining operation would produce lands capable of development and develop according to the proposed Rio Del Oro Specific Plan. Low density residential and support commercial are anticipated for the area, along with parks, schools and wetland preserves.

4) The approved Reclamation Plan was adopted pursuant SMARA based upon environmental review under CEQA and the City environmental review guidelines, and which concluded that any significant adverse impacts from reclamation of the surface mining operations would be mitigated to the extent feasible.

Evidence: A Final Mitigated Negative Declaration for the Existing Permit, including the Reclamation Plan, was approved according to the Guidelines of the California Environmental Quality Act.

5) The Reclamation Plan requires that land and/or resources to be reclaimed will be restored to a condition that is compatible with, and blends in with, the surrounding natural environment, topography, and other resources, or that suitable off-site development will compensate for related disturbance to resource values.

Evidence: The Reclamation Plan requires that reclaimed land will be left in a condition to support future urban development. The original condition of the site was severely impacted by gold dredging in the early part of this century. The dredged tailings will be flattened and left in a condition that would allow subsequent site grading to accommodate future development.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 5th day of December, 2016.

AYES: Budge, McGarvey, Sander, Skoglund, Terry

NOES: None

ABSENT: None

ABSTAIN: None

David M. Sander, Mayor

ATTEST:

Mindy Cuppy, MMC, City Clerk

~*RIO DEL ORO MINING PROJECT*~
MINING OPERATION & RECLAMATION PLAN

1.0 INTRODUCTION

Granite Construction Company ("Granite") is seeking entitlements for its *Rio Del Oro* Mining Project (the "Project"), which is situated within a parcel currently owned by Aerojet-General Corporation ("GenCorp"). This document, together with the referenced exhibits and appendices, constitutes the formal Reclamation Plan for the site. Approval of the Project is sought from the lead agency, the City of Rancho Cordova (the "City").

This Reclamation Plan was prepared in accordance with:

- The Surface Mining and Reclamation Act (SMARA) of 1975, as amended (Public Resources Code § 2772 et seq.);
- The State Mining and Geology Board regulations for surface mining and reclamation practice (California Code of Regulations (CCR) Title 14 Chapter 8, Article 14, Chapter 8, Article 1, § 3500 et seq.; and
- The City of Rancho Cordova City Code Chapter 20.04 (Surface Mining & Reclamation).

Reclamation, as defined by SMARA, is the combined process of land treatments that minimize adverse environmental effects on surface mining, so that mined lands are reclaimed to a beneficial end use that is readily adaptable to alternative end uses. This Reclamation Plan describes a process that will minimize environmental impacts during and resulting from mining, implementing reclamation activities as soon as possible, and return the mined lands to a condition suitable for grazing.

1.1 NAMES AND ADDRESSES OF OWNER, OPERATOR AND AGENT

Property Owner

Name:	Aerojet – General Corp
Contact:	Dave Hatch
Address:	620 Coolidge Drive, Ste. 100
City, Zip:	Folsom, CA 95630-3181
Phone:	916-351-8584

Operator / Applicant

Name:	Granite Construction Company
Contact:	Grant J. Williams
Address:	P.O. Box 15287
City, Zip:	Sacramento, CA 95851
Phone:	916-855-4400

Operator's Agent

Name:	Diepenbrock - Harrison
Contact:	Mark Harrison
Address:	400 Capitol Mall, Ste. 1800
City, Zip:	Sacramento, CA 95814
Phone:	916-492-5000

1.2 LOCATION

The 1,300 acre proposed Project site is situated within a 2,526 acre parcel owned by GenCorp. Approximately 600 acres of the mining area is planned to be disturbed as part of this application. The actual disturbed acreage may be more or less depending on market conditions and on-site aggregate availability. The site is fully located within the City of Rancho Cordova ("City") at 12300 White Rock Road, approximately 4,800 feet east of Sunrise Boulevard, and 5,100 feet north of Douglas Road. The Project site is bordered by Teichert's Grantline mining site to the west, vacant land owned by Aerojet to the south; Teichert Grantline's mining processing plant and Tsakopoulos-Bachman's industrial property to the east; and GenCorp's mining/industrial property to the north. The nearest designated residential area is located approximately 3,100 feet east of the proposed Project site. Exhibit A is a site location and vicinity map, depicting the location of the proposed mining operation.

1.2.1 Assessor's Parcel Number

The Project is located on a portion of Assessor's Parcel Number 072-0370-070-0000.

1.2.2 Township, Range, Section, Quadrangle

The Project site is located on the Buffalo Creek USGS 7.5 minute quadrangle map in Townships 8 North and 9 North, Range 7 East and Sections 3, 4, 5, 32, 33, and 34 MDBM. Please see Exhibit B, depicting the Project site and its vicinity.

1.2.3 Latitude, Longitude

The Project site is located at approximate Latitude 38.58 North and Longitude 121.22 West.

1.2.4 Claim Descriptions

The Project will get a California Mine ID number after approval of the Project by the City and State. An Aerojet SPA Implementation Permit will serve as the "Mining Permit" or "Site Approval."

2.0 DESCRIPTION OF ENVIRONMENTAL SETTING

Reclamation procedures must be designed within the constraints of the Project and the surrounding environment. The following sections describe the environmental elements that are pertinent to the design of an effective Reclamation Plan. Section 3.0 will describe the mining Project in relationship to the reclamation of the site.

2.1 SITE ACCESS

Access to the site is available most directly from White Rock Road. However, trucks may occasionally enter and leave the site onto Douglas Road.

2.2 TOPOGRAPHIC MAP

Exhibit B depicts the site's location on the 7.5-minute Buffalo Creek quadrangle map.

2.3 GEOLOGY, GENERAL

The site is located in the eastern portion of Sacramento County, an area covered with a significant number of cobble tailings as a result of early gold dredging activities conducted principally by the Natomas Company from about 1900 to 1960. Many of these tailings are visible above ground in large linear piles, although the dredgers had the capability to dig to depths of up to approximately 100 feet, and thus much of the tailings are underground as well.

2.3.1 Site-Specific Geology

Geology of the site consists of American River gravels that have been mined for gold and aggregate value during the late 1800's through the 1960's. Past dredging operations significantly disturbed the natural geologic state of the site, leaving linear mounds of cobble tailing throughout the property. These tailing

piles vary from 5 to 75 feet in height with typical base widths in the range of 100 to 300 feet and consist of approximately 60-70% rounded cobbles of varying geologic composition (metamorphic, volcanic) and 30-40% fine sediment and clay. Between the piles the geology consists of fine grained soils and clays known locally as "slickens."

The proposed mining operation will remove these mounds and the end result will be a site with ground configuration similar to the natural configuration of the site prior to gold dredging operations. A 1941 USGS topographic map shows that the natural terrain drained toward the southwest with elevations of approximately 200 feet along the eastern boundary of the site to elevations of approximately 150 feet within the southwestern area of the site. Thus, the natural terrain consisted of relatively flat grounds with slopes of approximately 1-2%.

2.3.2 Material Being Mined

The applicant proposes to mine dredge tailings, consisting of cobbles (up to approximately 12-inches in diameter) intermixed with sand and gravel. All material mined at the *Rio Del Oro* site will be screened and crushed into various products by a portable plant. Excess fine aggregate material may be used to reclaim the excavation areas to their proposed reclaimed elevations.

2.3.3 Geologic Cross-Section

Refer to Exhibit H for the Mining Plan which depicts a typical mining cross-section.

2.3.4 Slope Stability

Mining and reclamation slopes will be based on a slope evaluation performed by Wallace Kuhl and Associates, Inc. The slope evaluation has been included as part of the application package. The composition of the slope material will vary across the Project site. Slopes with an overall height of less than twenty (20) feet will be excavated to a maximum 1:1 (horizontal:vertical) inclination. To protect private property and existing improvement from possible damage caused by slope movement, slopes excavated to a 1:1 inclination will have a set back maintained equal to the height of the slope (from the top of the slope to the property line or improvement).

For worker and equipment safety, slopes greater than 20 feet in height will be excavated at no steeper than 1½:1 (horizontal: vertical) inclination to avoid potential rock falls.

Final reclamation slopes will be constructed at a maximum 2:1 inclination (horizontal:vertical). Any fills placed to achieve the reclaimed slopes will be compacted in accordance with prudent geotechnical engineering practice (i.e. 90% compaction relative to the ASTM D1557 maximum dry unit weight).

2.3.5 Seismicity

The site is not located within an area of active seismicity.

2.4 HYDROLOGY, GENERAL

2.4.1 Site Specific Hydrology

There are no major streams or creeks traversing the subject site. As mentioned above, past mining disturbed the natural state of the site and left linear mounds of cobble tailings throughout the property. Due to the creation of these mounds, the site's natural drainage patterns have been heavily modified. Because the site contains coarse dredge tailings, water infiltration is high, surface runoff is minimal and confined to the closed valleys between tailing mounds.

2.4.2 Groundwater Contamination

The subject site is located within the area known as the Inactive Rancho Cordova Test Site (IRCTS), which was historically used for aerospace and industrial activities by it previous owners, the Aerojet Corporation and the Douglas Aircraft Company (DAC), which became the McDonnell Douglas Corporation (MDC); and their tenants. Although the Department of Toxic Substances Control (DTSC) has issued an Imminent and Substantial Endangerment Determination and Consent Order for threat site in 1994, DTSC has expressly recognized that large portions of the proposed *Rio Del Oro* Project area were never used for aerospace or industrial activities due to quantity-distance requirements for energetic materials (rocket fuel). As such, the vast majority of the targeted aggregate was not impacted by these past activities and is not contaminated. This area is not included in the DTSC cleanup order.

Relevant agencies have agreed that aerospace and other industrial activities were not conducted on-site. However, some aerospace/ industrial activities did impact limited portions of the *Rio Del Oro* Project site, and these activities contaminated the soil, as discussed below. Also, DTSC and the Regional Water Quality Control Board (RWQCB) have detected contaminated groundwater beneath the IRCTS property and to the west near Mather Field and south of Douglas Road. The 1994 Order requires Aerojet and McDonnell Douglas to investigate the sources and extent of contaminated groundwater pollution

emanating from the eastern part of the IRCTS site, and to develop interim remedial measures to contain and prevent any groundwater contamination from migrating off-site.

It is important to note, however, that any contamination in the groundwater has no relationship to and will not impact the proposed mining operation activities or vice versa. During 2005, the average depth to groundwater was 114 feet below existing grade (beg), based on measurements from the uppermost well completion at 39 locations within the project site during April and October 2005. The depths to groundwater varied from 66 to 144 feet beg (median: 121 feet beg) across the site with shallowest groundwater in the northeastern corner and deepest groundwater along the western boundary. The seasonal depth fluctuations were less than 3.5 feet beg at 37 locations (average: 1.6 feet beg). The monitor well locations are being flagged appropriately and protected from damage by the mining operation. Aggregate around a well will be removed by a backhoe or by similarly small equipment. The protective casing around the well will be reset and the new top-of-casing (TOC) elevation determined by a licensed surveyor.

Mining and processing will only use water for dust suppression. Water will be supplied from one of two sources: 1) the County water line located north of White Rock Road; or 2) Boeing's EX-25 Facility (GET A water).

2.5 SOIL RESOURCES

2.5.1 Map and Units

Most of the surrounding area is mapped by the Natural Resources Conservation Service (NRCS) as Xerothents, dredge tailings, 2-50% slopes. The Xerothents unit contains three hydric inclusions: river wash and Xerofluents, associated with floodplain channels, and slickens associated with depressions.

Additionally, the mining operation will not be conducted on prime agricultural lands.

2.5.2 Soil Contamination

Soil contamination is not expected to be present in the coarse dredge tailings proposed for mining. Impacted (contaminated) areas will either be excluded from the mining operation, treated, or removed from the site. Eight environmental constraint areas have been identified, based on investigations by GenCorp and/or MDC, because of historical aerospace or industrial activities

that left residual chemicals of concern (COCs) in the soils. These impacted soils have not been found in this area.

Constraint Area A: GET F Sprayfield:

GET F Sprayfield is located in the northwestern corner of the project site and was operated by GenCorp from late 1984 through late 1990. The sprayfield was used as a discharge area for treated groundwater from the GET F South facility. Although the volatile organic chemicals (VOCs) were removed from the groundwater via air-stripping towers, perchlorate in the water was not affected by the treatment process. Previous sampling has detected perchlorate in the soil at concentrations below the residential remediation goal (7.8 milligrams per kilogram). GenCorp is currently investigating the extent of the perchlorate in the soil.

The RDO Mining Application does not currently contemplate mining of Constraint Area A. GenCorp will evaluate the feasibility of various remedial options after completion of the field investigation. Perchlorate is quite soluble in water and easily digested by indigenous bacteria under anoxic conditions.

Constraint Area B: Propellant Burn Area:

Propellant Burn Area (PBA) is located near the northwestern corner of the project site and was operated by GenCorp and DAC during the late 1950s and early 1960s to destroy waste rocket propellants and chemicals. The area is primarily defined by VOCs and perchlorate at depths beyond the proposed mining project. The central flat- or low-lying areas were impacted by perchlorate and/or dioxins/furans. GenCorp removed over 8,600 tons of dioxin-impacted soils during 2005 and is expected to complete the work during 2006. GenCorp is evaluating remedial options for perchlorate in soils, including bioremediation, flushing, capping and other options.

The Rio Del Oro Mining Application does not currently contemplate mining of Constraint Area B.

Constraint Area C: Sigma Hog-out:

Sigma Hog-out area is located near the center of the project site and was created by DAC during the early 1960s at the Sigma Complex, a solid rocket motor test facility. The "hog-out" operation used high pressure water jets to remove solid fuel from rocket motors; and the perchlorate-laden water was discharged to ponds within a nearby dredge valley. The water infiltrated into the ground and migrated northward along the valley. MDC is evaluating

remedial options for perchlorate in soils, including bioremediation, flushing, and other options.

The coarse tailings can be included in the mining operation because perchlorate and other COCs did not impact the aggregate materials proposed for mining. GenCorp will be contacted prior to any mining within the Sigma Hog-out area to confirm the tailings that can be mined.

Constraint Area D: White Rock Dump #1:

White Rock Dump #1 (WRD1) is located near the center of the project site and was created during the 1950s on behalf of Sacramento County. Municipal trash was burned at WRD1 and the residual material pushed aside into two piles. The residual material is comprised of ash, clinker, rusty cans, bottles, ceramics, and other noncombustible debris. Lead and dioxins/furans are present in the ashy material. Sacramento County and Aerojet are working with DTSC and RWQCB to cover the dump with native soil to prevent future contact with the material.

Aggregate mining shall not occur within WRD1.

Constraint Area E: DM14 Area:

The DM14 area is located near the east-central side of the project site and was used by DAC during the late 1950s to assemble the "Genie" missile (Douglas Missile 14). Freon is present in deep soils and is associated with a sump that was connected to a water-curtain spray paint booth. MDC has shown that the Freon concentrations do not impact human health or the groundwater; and remedial action is not necessary.

The RDO Mining Application does not currently contemplate mining of Constraint Area E.

Constraint Area F: Rice Hull Ash Area:

Rice Hull Ash (RHA) area is located along the eastern boundary of the project site and was created during the 1950s and early 1960s by the Beagle Products Company. Rice hulls were transported to a dredge pit (RHA area), deposited in large piles, burned to produce RHA, and then packaged as an oil and grease absorbent. The RHA operation was apparently idle during the late 1960s through 1983, when Greasweep Western leased the RHA area from MDC to produce the Greasweep-brand absorbent. GenCorp became the lessor in 1984 until 2005 when Greasweep Western ceased operations.

The coarse tailings around the perimeter of the RHA area can be included in the mining operation but additional dust control water will be necessary due to the fine-grained nature of the RHA.

Constraint Area G: Alpha Complex:

Alpha Complex is located along the southeastern boundary of the project site and was used by DAC to test liquid rocket engines during the late 1950s and 1960s. VOCs were used to clean the engines and these solvents were discharged to the ground. MDC is currently operating a soil vapor extraction (SVE) system to remove VOCs from the deep soils.

The RDO Mining Application does not currently contemplate mining of Constraint Area G.

Constraint Area H: By-Dry Feed Products:

By-Dry Feed Products area is located along White Rock Road near the center of the project site. The area was developed along an access road to WRD1 and construction began in 1953. The area includes several old buildings and foundations of former structures which were reportedly used to make composts, feeds, fertilizers, and bone meal.

Clark Cattle Company currently uses the area as a base of operation for livestock grazing on the IRCTS. The buildings are used for an office, a repair shop, for storage of equipment, hay/straw and supplies, for the care of young cows and horses, and/or for other agricultural uses.

GenCorp completed an investigation of the By-Dry area during 2005 and found a deposit of ashy material along the western side of the area. The material was found to contain lead and dioxins/furans above regulatory guidelines for residential uses. GenCorp is planning to remove the ashy material to a Class II landfill during 2006 after DTSC approves a Removal Action Workplan.

The RDO Mining Application does not currently contemplate mining of Constraint Area H.

2.6 VEGETATION

A wetland delineation of *Rio Del Oro*, including the Project area, was first conducted by Gibson and Skordal in 1999 and subsequently verified by the US Army Corps of Engineers ("Corps") in January 2000. Due to the pending expiration of the original verification, the Project area was re-delineated in June 2004 by ECORP Consulting, Inc.

("ECORP"). A rare plant survey was conducted on the Rio Del Oro Site in May 2003 (updated 2006). ECORP recently prepared a detailed Biological Assessment and Oak Tree Survey for the Project area, which is included in the application package.

2.6.1 Description of Affected Areas

The *Rio Del Oro* Project site consists of cottonwood riparian woodland, oak woodland, and annual grassland habitat. Linear rock tailing rows, some reaching 75 feet in height, are scattered over the majority of the site. Historically, the site was used for gold mining operations. The mining activities consisted of dredging ancient alluvial deposits. The areas that were mined are marked today by alternating piles of tailings and lower areas where the finer sediment settled out.

Cottonwood riparian habitat occurs within depressions between rows of man-made rock tailings. These characteristic dredge tailings areas are characterized by riparian and shrub-like vegetation, including Fremont cottonwood (*Populus fremontii*), willow (*Salix sp.*), elderberry (*Sambucus mexicana*), and coyote brush (*Baccharis sp.*).

Separate from the tailings, a very small amount of annual grassland exists on the *Rio Del Oro* Project site. Within the annual grassland are ephemeral features including vernal pools and seasonal wetlands. The annual grassland community is comprised predominantly of non-native naturalized Mediterranean grasses. These include ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), Mediterrainean barly (*Hordeum marinum*), and medusahead grass (*Taeniatherum caput-medusae*), other non-native herbaceous species include hairy hawk-bit (*Leontodon taraxacoides*), filaree (*Erodium botrys*), pineapple weed (*Chamomilla suaveolens*), and yellow star thistle (*Centaurea solstitialis*).

A list of plant species observed on the site (May 2003) is included in the Biological Resources Assessment.

2.6.2 Special Status Plant Species

ECORP biologists conducted surveys in May 2003 during the optimum blooming period for each of the potentially occurring special-status species. No special-status plants were observed within the *Rio Del Oro* Project area; however, populations of Greene's legenere (*Legenere limosa*, federal species of concern and CNPS 1B) were documented in the vernal pool complex in the southern portion of Rio Del Oro.

An oak tree inventory survey performed on September 29, 2004 by Sierra Nevada Arborists revealed 47 oak trees on site, all of which occur in dredged hollow areas, as opposed to tailings. A copy of the survey is included in the application package. At our request, ECORP reviewed and summarized the tree inventory report prepared by Sierra Nevada Arborists (2003) for the Rio Del Oro property, specifically as it relates to the *Rio Del Oro* Mining Project (see attached letter from ECORP dated April 11, 2006). The *Rio Del Oro* Mining Project site represents a subset of the Rio Del Oro Property.

ECORP identified thirty-five (35) native oak trees measuring at least six (6) inches in diameter at breast height (DBH) on the Rio Del Oro Mining Project site. Interior live oak (*Quercus wislizenii*) was the only native oak species present on site. To minimize the impacts to these native oaks, Granite proposes to implement the following measures in accordance with the County Tree Ordinance and General Plan policies:

1. *Obtain an oak tree removal permit from the County prior to Project implementation;* and
2. *Replace native oak trees with a DBH of 6 inches or greater that cannot be avoided by the Project at a ratio satisfactory to the County, or pay an in lieu fee to the County's Tree Preservation Fund.*

Specific requirements for other native trees (excluding cottonwoods) will be determined through coordination with the County and City on an as-needed basis.

2.7 WILDLIFE

ECORP recently prepared a Biological Assessment of the *Rio Del Oro* Project site. This assessment has been included in the application package.

2.7.1 Description of Habitats

Vegetation communities occur primarily within the low-lying areas between the tailing piles. Vegetation communities identified within the Project site can generally be grouped into three categories: woodland, scrub, and grassland communities.

Additionally, approximately 0.224 acres of jurisdictional wetlands (0.008 acre seasonal wetland swale, 0.047 acre seasonal wetland and 0.169 acre ephemeral drainage) exists within the *Rio Del Oro* Project site. In addition, 8.8 acres of non-jurisdictional wetlands were identified in the Project site. All wetlands will be fenced prior to Project initiation, and no mining or other activities will occur

within 100 feet of any wetlands until the appropriate approvals and permits are in place, unless the wetland is already adjacent to an existing road, which will continue to be used throughout the life of the Project.

In order to ensure that any significant impacts to the wetlands will be properly mitigated, the Project has two (2) general mining phases. Phase 1 includes mining the portions of the site that do not have any wetlands. Phase 2 will involve mining of the material located below and around the wetlands. Phase 2 activities will not commence until GenCorp obtains the required approvals and permits from the Corps, the U.S. Fish and Wildlife Service ("Service"), the Central Valley Water Quality Control Board ("Board"), and the California Department of Fish and Game (DFG); collectively referred to hereafter as the "Resource Agencies." It is anticipated that, at a minimum, these permits will require GenCorp to ensure "no net loss" of identified wetlands in accordance with state and federal requirements.

2.7.2 Special Status Wildlife Species

The seasonal wetlands and vernal pools on the Project site represent habitat for the federally-threatened vernal pool fairy shrimp (*Branchinecta lynchi*) and the federally-endangered vernal pool tadpole shrimp (*Lepidurus packardi*). Gibson and Skordal conducted wet season surveys during 2001 on the *Rio Del Oro* Project site. Vernal pool fairy shrimp were documented in two seasonal wetlands located within the *Rio Del Oro* Mining Project site on the 2005 verified delineation. Vernal pool tadpole shrimp were documented in five features located adjacent to, but not within, the Project site on the 2005 verified delineation. California linderiella were observed during both survey years in a variety of seasonal wetlands, ponds, and riparian wetlands (Gibson and Skordal 2000a, 2001). Midvalley fairy shrimp were not observed on-site during these survey efforts. The Corps, in consultation with the Service, is ultimately responsible in making the determination of potentially suitable habitat.

Gibson and Skordal conducted elderberry surveys on the *Rio Del Oro* Project site during July and August 2000. The elderberry plant (*Sambucus mexicana*) is the exclusive host plant of the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). There are 266 elderberry plants located within the *Rio Del Oro* Project site. Evidence of Valley elderberry longhorn beetle occurrence (i.e., exit holes) was observed on 37 (14 percent) of these shrubs. A 100-foot buffer will be fenced around all elderberry bushes. All elderberry bush locations will be verified in the field prior to installation or moving of the portable plant so that no valley elderberry longhorn beetle habitat is affected during mining. All elderberry bushes will be fenced prior to Project initiation. No mining or other activities will occur within 100 feet of any elderberry bushes

until the appropriate approvals and permits are in place, unless the elderberry bush is already adjacent to an existing road, which will continue to be used throughout the life of the Project.

In order to ensure that any significant impacts to the elderberry bushes will be properly mitigated, the Project has two (2) general mining phases. Phase 1 includes mining the portions of the site that do not have any elderberry bushes. Phase 2 will involve mining of the material located below and around the elderberry bushes. Phase 2 activities will not commence until GenCorp obtains the required approvals and permits from the Resource Agencies listed above. It is anticipated that, at a minimum, these permits will require GenCorp to prevent the take of any species protected by the Endangered Species Act in accordance with state and federal requirements.

Plant communities on-site represent potentially suitable habitat for a number of regionally occurring special-status bird species. Potentially occurring special-status birds include nesting raptors (white-tailed kite, Cooper's hawk, Swainson's hawk, northern harrier, burrowing owl, and other common raptor species), nesting songbirds (loggerhead shrike, lark sparrow, and California thrasher), and wintering or migrant birds (sharp-shinned hawk, ferruginous hawk, golden eagle, merlin, and tricolored blackbird). The destruction of active migratory bird nests, including those of raptors, is a violation of the MBTA, and disruption or destruction of an active raptor nest is also a violation of California Fish and Game Code section 3503.5. Furthermore, the destruction of nests of special-status bird species would constitute a violation of the federal or California Endangered Species Acts, or other applicable laws, depending on the status of the species.

Prior to commencing mining activities, the Applicant will retain a qualified biologist to perform a pre-construction survey during nesting season, and not more than 12 months prior to the commencement of ground disturbing activities, to determine whether any special-status bird species potential nesting sites are present. The biologist shall survey the Project Site and within 100 feet of the project site boundaries. If active nests are not found during the pre-construction survey, further mitigation shall not be required at that time. If active nesting sites are discovered, the biologist shall submit the result to the Department of Fish and Game, and the Operator. Construction activities shall not take place within 500 feet of the raptor nests and 100 feet of other migratory birds until the young have fledged. Trees containing nests that must be removed as a result of Project activities shall be removed during the non-breeding season (September to January).

In the event that an occupied nest site of a protected bird species is discovered during Project tree removal operations, the Operator shall protect the nest tree, screening trees, and replacement trees, shall apply the provisions of 14 CCR 919.2(d), and shall immediately notify the Department of Fish and Game. Appropriate mitigations will be devised through consultation with the agencies and the Operator. The specific protection measures to be implemented will be based on the establishment of buffer zones, compliance with year round restrictions, and the established critical periods for each species.

2.8 AIR RESOURCES/CLIMATOLOGY

The *Rio Del Oro* mining Project plans to use a portable processing plant to minimize fugitive dust emissions associated with hauling aggregate material to the plant. A copy of the Air Pollution Control Plan prepared for the proposed operation, which will be submitted to the Sacramento Metropolitan Air Quality Management District, is included in the application package.

2.9 LAND USES AND AESTHETICS

2.9.1 Existing and Surrounding Land Uses

The proposed mining site is distant from any non-industrial uses. The Project site is surrounded by Teichert's Grantline mining site to the west, vacant land owned by Aerojet to the south; Teichert's Grantline mining processing plant and Tsakopoulos-Bachman's industrial property to the east; and Aerojet-General Corporation's mining/industrial property to the north. The nearest designated residential area is located approximately 3,100 feet southeast of the proposed site.

2.9.2 Visual Impact to These Areas

Because mining will occur in a relatively remote area, visual impacts of the operation will be minor. Additionally, natural re-vegetation will occur as mining is completed, thereby resulting in a low level of visual change to the landscape.

3.0 DESCRIPTION OF PROPOSED MINING OPERATION

The type and extent of mining will affect reclamation planning. The following sections describe the mining operations and identify the aspects of the operation that are pertinent to the design of an effective Reclamation Plan.

3.1 DIMENSIONS, ACREAGE

The 1,300-acre Project site is owned by GenCorp. Approximately 600 acres of the proposed mining area, consisting of dredge tailings, will be disturbed. The actual disturbed acreage may be more or less depending on market conditions and on-site aggregate availability. The applicant proposes to mine these tailings to an elevation of 155 to 180 feet.

3.2 INITIATION AND TERMINATION

Mining will commence immediately following approval of the Project and will continue for up to 10 years from the approval date. Therefore, the dates of initiation and termination are estimated as July 12, 2007 and July 12, 2017 respectively.

3.3 PRODUCTION SCHEDULE

Production rates will vary as a function of market demand. However, the estimated production rate from the mining proposed in this application is approximately 1.5 to 4 million cubic yards per year, with a total of approximately 5 to 11 million cubic yards to be mined. A portion of the mined and processed material may be used on-site for reclamation.

3.4 MINING PLAN, PHASING

The Project has two (2) general mining phases. Phase 1 includes mining the portions of the site that do not have any elderberry bushes or wetlands. All elderberry bushes and wetlands will be avoided until GenCorp obtains the required approvals and permits from the Resource Agencies. No mining or other activities will occur within 100 feet of any elderberry bushes or wetlands until the appropriate approvals and permits are in place, unless the elderberry bush or wetland is already adjacent to an existing road, which will continue to be used throughout the life of the Project. Phase 2 occurs after all required permits and approvals are obtained by GenCorp from the Resource Agencies related to mitigation of the elderberry bushes and wetlands. The material located below and around the elderberry bushes and wetlands will be mined in Phase 2. Environmental constraint areas C and F, which may be mined at some time in the future, will honor the overall phasing of the project. Constraint areas which contain elderberry or wetland species would not be mined in Phase 1.

It is estimated that Phase 1 will take approximately 6 to 8 years to complete, Phase 2 is expected to take 2 to 4 years to complete; although it is difficult to estimate the term of mining for each individual phase due to market fluctuations. Please see Exhibit H, Mining Plan, which depicts the progression of mining during the two phases. The nature of dredge tailings is such that material quality may vary from one row of cobbles

to the next. Therefore, due to material quality and other potential site development constraints, the operator must maintain flexibility to discontinue mining of one cobble row in exchange for beginning another. As mining progresses, reclamation will immediately follow extraction and load-out activities. Because the operator will be concurrently reclaiming tailing rows as part of its mining plan, a row-by-row reclamation plan is not feasible. In most cases, reclamation of a row of cobbles would begin prior to the completion of the mining of that row. Nonetheless, the operator proposes to submit a semi-annual, RDO Mining and Reclamation Status Report ("Status Report") which will include the following:

- Description of the proposed mining and reclamation areas for the following six months;
- Prior mining areas, the reclamation status of those areas, and an updated exhibit; and
- Representative cross-sections for areas of proposed disturbance.

Representative cross-sections for areas of proposed disturbance shall be included as part of the Status Report. The updated Status Report and exhibits will be submitted to the Director as a supplement to this Reclamation Plan.

Additionally, because Phase 2 is contingent on GenCorp permitting, there is a chance that Phase 2 may not be mined. Under this scenario, the site topography at the end of Phase 1 would be the final site configuration. Site topography and typical cross-sections, excluding those areas that would fall under Phase 2, will be provided with each semi-annual letter report.

Mining and site reclamation operations include:

- Removal of aggregate material by means of front-end loader, bulldozer, excavator, and/or scraper;
- Processing of the excavated material with a portable crushing and screening plant; and
- As the mining progresses across a phase, the excavated areas will be reclaimed to final reclamation grades. Minor finished grading and slope contouring will be performed with motor graders, scrapers or bulldozers.

3.5 PROCESSING

All processing of mined material will occur at the *Rio Del Oro* Project site. A portable crushing and screening plant will be used to process the material. A portion of the mined material may be sold unprocessed.

3.6 WATER REQUIREMENTS

Water requirements for this site will be limited to that necessary for dust control of the material itself and the unpaved access/haul roads. The estimated use is 50,000 to 200,000 gallons per day (depending on the material's in place moisture as well as the hours of operation). Water will be supplied from one of two sources: 1) the County municipal water line located on the north side of White Rock Road; or 2) Boeing's groundwater extraction and treatment (GET) system along Douglas Road at extraction well EX-25. A water truck will transport water to the active portions of the mining site.

The EX-25 GET facility is located along Douglas Road near the intersection with the IRCTS Beta Complex entrance road. The GET facility discharges treated groundwater to Morrison Creek to the north under a NPDES permit. EX-25 currently operates at approximately 400 gallons per minute; and the discharge of treated groundwater would continue when Granite does not use the water.

3.6.1 Waste Water

No waste water will be produced or disposed of as a part of this mining operation at the mining site.

3.6.2 Drinking Water

Potable water will be brought to the site to provide safe drinking water for employees.

3.6.3 Sewage Disposal

One existing septic system is currently used on a limited basis by the Clark Cattle Company at the By-Dry area; and an inactive septic system is located at both the DM14 area and at the Sigma Complex. During operations, portable toilets will be brought to the site and maintained on a regular schedule.

3.7 ENERGY REQUIREMENTS

Energy requirements for the proposed mining operation are limited to that needed to extract, transport and process materials.

Petroleum fuels and lubricants are required for the vehicles used to mine the aggregate material, the portable crushing and screening plant, the equipment used to reclaim the mined areas, and the equipment used to load out the construction aggregate products. The scale loadout area will require electric power (which may be temporarily provided with a diesel generator. Petroleum fuels and lubricants may be stored onsite.

3.8 NOISE AND EMISSIONS

Mining Operations will include the use of bulldozer(s), front-end loader(s) or excavator(s), scraper(s), water truck(s), motor grader(s), and a portable crushing and screening processing plant. These mining operations may affect noise and emissions.

3.8.1 Noise

Noise is generally defined as "unwanted sound." Mineral resource extraction, hauling, screening loading and other site activities will create noise. Brown and Buntin Associates (BBA), acoustical and noise consultants, have been retained by the applicant to conduct noise studies and prepare a technical noise report for the proposed Project. The Noise Analysis has been included as part of the application.

As mentioned previously, the nearest proposed off-site residences are located approximately 3,100 feet east of the Project site. The nearest off-site active non-residential structures are industrial facilities, located within approximately 200 feet of the Project boundary. This area is zoned SPA. Additionally, substantial sources of ambient noise exist in the vicinity of the Project site, including traffic noise from White Rock Road and frequent jet landings at Mather Field.

3.8.2 Dust, Odors, Vehicular Emissions

Minimal soil disturbance is expected to occur as a result of mining operations because no topsoil removal is required to access the dredge tailings. However, water trucks will be used to maintain a moist aggregate and haul road surface, thereby minimizing fugitive dust. The portable plant will limit the travel distance between the mining operations and processing operations, thus decreasing fugitive dust emissions. Additional dust controls on the processing plant itself will consist of enclosures, wet suppression (water sprayers), and bag houses. In addition, the revegetation which will occur as part of the reclamation activities will help to control dust. A copy of the Air Pollution Control Plan prepared for the proposed operation, which will be submitted to the Sacramento Metropolitan Air Quality Management District, has been included in the application submittal.

3.9 HOURS OF OPERATION/NUMBER OF EMPLOYEES

The City Zoning Code limits the hours for all mining operations unless modified by the conditions of approval or a subsequent entitlement granted by the Zoning Administrator. The hours allowed by Code are 6:00 a.m. to 10:00 p.m., Monday through Friday, and 6:00 a.m. until 3:00 p.m. on Saturdays. The applicant requests permission to

operate on a 24 hours per day, 7 days per week basis, if required. The Applicant believes this request is reasonable given the remoteness of the site and the fact that the proposed mining operation is distant from any residential use.

The number of employees working on-site at any one time is anticipated to be twelve (12).

3.10 TRANSPORTATION

This Project is expected to generate an average of 500 truck trips per day. The actual number of truck trips depends on overall market conditions. Transportation during concurrent reclamation activities will not add appreciably to the mining effects. Trucks will enter and leave the site from White Rock Road and occasionally from Douglas Road.

3.11 HAZARDOUS MATERIALS

The project will not involve the handling, storage, or transportation of hazardous materials. Any trash generated on site will be hauled off to a local landfill.

A Hazardous Materials Business Plan (HMBP) will be prepared for this site. All plant employees shall be trained according to the HMBP. The HMBP includes criteria for identification of potential hazardous sites and discusses the timing, course of action, and responsibilities of interested parties. The HMBP will also address contamination from both the aerospace and industrial activities and potential contamination above and beyond the expected occasional cans, empty drums, cables, and other items that were associated with the historic dredger mining operations.

In the unlikely event that potentially hazardous materials are encountered during the mining operations, Granite will contact GenCorp and the Department of Toxic Substances Control (DTSC) within 24 hours to determine whether the materials are, in fact, hazardous. No operations will occur within the potentially contaminated area until clearance is received from GenCorp and DTSC.

If the contamination from a known constraint area is found to be more extensive or different than indicated by the existing data, the constraint areas will be expanded to reflect the more extensive area. The constraint area restrictions as outlined in the Reclamation Plan shall apply to the more extensive constraint areas.

Additionally, no mining waste will be generated by this project. All processed materials will be sold or used on site for reclamation. No waste water will be generated on site since water will only be used for dust suppression. Portable toilets will be used on site and will be maintained on a regular schedule.

3.12 MAINTENANCE AND FUELS

Any petroleum fuels or lubricants stored on site will be kept in the staging/sales area. Fuel will be stored in above-ground containers with secondary containment as required by law. An approved Spill Prevention, Control, and Countermeasures (SPCC) Plan will guide reporting, control, and cleanup activities in the event of a spill on-site.

Equipment fueling will be accomplished using mobile fuel trucks which will come on-site to service equipment. All rubber-tired equipment will be fueled in a designated area which will have an impermeable base. Fueling and maintenance activities associated with track-mounted equipment shall be conducted with proper safeguards to prevent hazardous materials releases. Absorbent booms will be stored in the fueling/maintenance area to allow rapid response and containment of any spills during maintenance activities.

4.0 DESCRIPTION OF PROPOSED RECLAMATION

This Reclamation Plan outlines typical reclamation activities and site-specific techniques required before mining, during mining, and at final site reclamation. These measures were developed to:

- Comply with local and State laws, regulations, and mitigation measures;
- Minimize wind and water erosion;
- Blend the mined lands into the surrounding landscape; and
- Return the site to a beneficial end use.

Reclamation objectives include controlling drainage, stabilizing soils, lessening the time needed for the vegetation of the site to recover, and providing an environment conducive to natural reestablishment of vegetation. Appendix C is the Revegetation and Grazing Management Plan for the Reclamation Plan.

4.1 SUBSEQUENT USES

After the proposed mining is complete, the land will be undeveloped open space and will be used for seasonal grazing, similar to the grazing which currently occurs on the property and adjacent properties. Ultimately, the site may also be used for urban/industrial development in the future. The removal of cobbles from the site makes it more viable for ultimate urban development.

4.2 IMPACT ON FUTURE MINING

The proposed Project calls for returning the land to its existing use of grazing. The reclamation will not detrimentally affect the feasibility of future mining in the area. Only the tailings within the proposed area will be mined.

4.3 RECLAMATION SCHEDULE

Reclamation of the site will occur concurrently with mining operations. As mining progresses, reclamation will immediately follow extraction and load-out activities. Because the operator will be concurrently reclaiming tailing rows as part of its mining plan, a row-by-row reclamation plan is not feasible. In most cases, reclamation of a row of cobbles would begin prior to the completion of the mining of that row. Please refer to Exhibit I for a description of the Reclamation Plan. The dredging operation discarded wire rope, empty lubricant drums, and possibly other metallic debris into the tailings. This debris will be stockpiled and sent to a scrap yard and/or landfill when a load of material has accumulated.

4.4 POST-MINING TOPOGRAPHY

4.4.1 Slope Stability

The proposed mining plan will return the subject property to a condition more like its natural state, by removing most of the man-made dredge tailing mounds. The undisturbed boundaries of the dredged area indicate that the natural terrain once sloped from elevations of approximately 190 feet along the north and east edges of the site to elevations of approximately 155 feet along the south and west edges of the site. Thus, the natural terrain consisted of relatively flat ground with slopes of approximately 1-2%. All side slopes will be reclaimed at a maximum 2:1 (horizontal:vertical) inclination per geotechnical recommendation.

4.4.2 Drainage

As discussed above, the site's natural drainage patterns were heavily modified by previous gold dredging operations. No interim drainage swales or ponds are necessary because the site consists of coarse dredge tailings and water infiltration is high. While the final grade of the mined area will be lower than adjacent ground, it will not create a drainage issue for the following reasons: 1) the area being mined has high water infiltration because it consists of previously disturbed dredge tailings and fines; and, 2) there is no through drainage in the area of the site where mining is taking place. Furthermore, it should be noted

that the original mining and Reclamation Plan also provided for drainage through infiltration as well.

4.4.3 Deposition of Old Equipment

Mobile equipment will primarily be used for mining, processing, and reclamation. Only mobile equipment will be used in this mining and processing operation. All scale facilities and ancillary facilities will be removed from the site upon completion of mining.

4.5 RESOILING

No overburden exists in the tailing area to be mined. However, fine material will be placed over the cobble area for reclamation. Pursuant to the Revegetation and Grazing Management Plan attached as Appendix C, fine material will be placed to provide a minimum of 6-inches of soil as necessary.

4.6 REVEGETATION

A Revegetation and Grazing Management Plan is attached as Appendix A. This plan describes soil and site preparation, revegetation, erosion control and management, noxious weed management, test plots and reclamation monitoring and performance standards.

4.7 EROSION AND SEDIMENT CONTROL

No overburden exists in the tailings areas to be mined. The cobble rows will be mined slightly below the grade of the surrounding ground. The excavated areas will be sloped to contain any sediment or runoff. Stockpile locations will typically be within the excavation areas. The reclaimed areas will be hydroseeded on a periodic basis, but not longer than six (6) months after operations within a cobble row are complete. The scale area will be graded to drain to a detention basin. Erosion control management is described in Appendix A, Revegetation and Grazing Management Plan. Revegetation efforts will comply with the standards set forth in the Revegetation and Grazing Management Plan.

A Storm Water Pollution Prevention Plan has been prepared for this site despite the fact that no storm water is expected to discharge offsite. Performance standards and BMPs for erosion and sediment control, drainage, and diversion structures are included in the SWPPP.

A basin design memo from Cunningham engineering is included as an appendix in the SWPPP. Per the memo, in the event of a 100-year annual rainfall distribution, at the end

of the water year, the pond will b e 52% full. The storm water retention basin for the Staging/Sales Site shall be constructed to comply with the design memo. Inlet locations and specifications are included in the SWPPP. An emergency spillway was not included in the design because the top of the basin is surrounded by cobble.

4.8 PUBLIC SAFETY

The proposed mining site is relatively distant from non-industrial uses. As stated previously, the nearest planned residential development is located approximately 3,100 feet east of the proposed site. As such, public health and safety will not be impacted.

Reclamation of this site will involve the creation of open space/grazing area by leaving the previously mined site "as is." As such, no hazardous materials will be utilized in this process. Additionally, although TCE, a contaminant, has been found in groundwater beneath the proposed mining site, this contamination is far beneath the surface (over 100 feet). Since the mining depths are above the groundwater table, there will be no disturbance of the groundwater. Accordingly, any contamination in the groundwater has no relationship to proposed mining activities and vice versa.

4.9 PERFORMANCE STANDARDS

SMARA Section 2772 (a) requires that the Reclamation Plan establish "site-specific criteria for evaluating compliance with the approved Reclamation Plan, including topography, revegetation, and sediment and erosion control." The following discussion sets forth minimum site criteria, or performance standards, for the various aspects of site reclamation. Monitoring of reclamation performance standards will be conducted by a qualified individual or group, agreed upon by the applicant and the City. The attached Revegetation and Grazing Management Plan describes specific reclamation monitoring and performance standards for this plan. In addition, the City of Rancho Cordova, pursuant to City Code Section 20.040.070 (d) provides the following standards:

> (d) Unless otherwise Specified in the approved Reclamation Plan, the reclamation of mined lands shall be carried out in accordance with the following requirements:
>
> **1. Reclamation Timing**
>
> a. The reclamation of mined lands shall occur as soon as practical following completion of mining operation at successive locations within the mining site as required by the schedule in the approved Reclamation Plan.

b. The reclamation of lands shall occur as soon as practical following completion of mining operations, except where the permanent reclaimed condition of mined lands cannot be achieved within one year due to the regulatory approvals (e.g., compliance with the California Environmental Quality Act) required for the ultimate land use contemplated or proposed for the property (e.g. urban development). In such case only interim reclamation, pursuant to section 20.040.070(c), need be accomplished within one year, and final reclamation shall be completed as soon as it is possible to complete the reclamation in compliance with the above regulatory approvals, but in no case, shall reclamation take more than three years.

2. Disposal of Overburden and Mining Waste

a. Permanent piles or dumps of overburden and waste rock placed on the land shall be made stable, shall not restrict natural drainage without provision for diversion, and shall have an overall smooth or even profile subject to the satisfaction of the of the City Engineer. Where practical, such permanent piles or dumps shall be located in the least visible location at the mining site.

b. Old equipment and inert mining wastes shall be removed or buried subject to the approval of the hearing officer.

c. Toxic materials shall be removed from the site or permanently protected to prevent leaching into the underlying groundwater, to the satisfaction of the Planning Department.

3. Re-vegetation

a. All permanently exposed lands that have been denuded by mining operations shall be re-vegetated to provide ground cover sufficient to control erosion from such lands.

b. All plantings shall be established and maintained in good horticultural condition. The re-vegetation shall be able to survive under natural conditions.

c. Re-vegetation methods shall take into account the topography and existing growth patterns and mixes of flora present at and adjacent to the site of mining operations in order to create a more natural appearance. Plantings shall avoid rigid, geometric patterns and shall utilize natural scatterings.

d. Where the ultimate intended or proposed use of mined lands would be a level of development inconsistent with extensive permanent vegetation, the amount of vegetation required for reclamation need not be more than sufficient to prevent erosion.

4. Re-soiling

a. Re-soiling measures shall take into consideration the quality of soils which may be required to sustain plant life pursuant to any re-vegetation that the hearing officer may require in its approval of the applicant's Reclamation Plan.

b. Coarse, hard material shall be graded and covered with a layer of finer material or weathered waste. A soil layer shall then be placed on this prepared surface. Where quantities of available soils are inadequate to provide cover, native materials shall be upgraded to the extent feasible for this purpose.

5. Final Slopes

a. Final slopes shall be engineered and contoured so as to be geologically stable, to control the drainage there from, and to blend with the surrounding topography where practical. On the advice of the City Engineer, the Planning Department may require the establishment of terrace drains to control drainage and erosion.

b. Final slopes shall not be steeper than two feet horizontal to one foot vertical (2:1) unless the applicant can demonstrate to the Planning Department's satisfaction that a steeper slope will not:

(1) Reduce the effectiveness of re-vegetation and erosion control measures where they are necessary;

(2) Be incompatible with the alternate future uses approved by the commission of the site; and

(3) Be hazardous to persons that may utilize the site under the alternate future uses approved for the site.

6. Drainage, Erosion, and Sediment Control

a. Any temporary stream or watershed diversion shall be restored to its state prior to any surface mining activities unless the Planning

Department deems otherwise based on recommendations from the City Engineer.

b. Stream bed channels and stream banks affected by surface mining shall be rehabilitated to a condition which would minimize erosion and sedimentation, except that such rehabilitation need not attempt to restore or mimic natural conditions where the contemplated or proposed ultimate use of the reclaimed property would be inconsistent with the maintenance of restored or rehabilitated stream bed channels and stream banks.

c. Re-vegetation and re-grading techniques shall be designed and executed so as to minimize erosion and sedimentation. Drainage shall be provided to natural outlets or interior basins designed for water storage, with such basins subject to the approval of the City Engineer. In addition, final excavation shall eliminate potholes and similar catchments so as to prevent potential breeding areas for mosquitoes.

d. The final grading and drainage of the site shall be designed in a manner to prevent discharge of sediment above natural levels existent prior to mining operations.

e. Silt basins which will store water during periods of surface runoff shall be equipped with sediment control and removal facilities and protected spillways designed to minimize erosion when such basins have outlet to lower ground.

f. No condition shall remain after reclamation which will or could lead to degradation of groundwater quality below applicable standards to the Regional Water Quality Control Board or any other agency with jurisdiction over water quality.

7. Backfilling and Grading

a. Subject to the approval of the City Engineer, backfilled and graded areas shall be placed to avoid excessive settlement and toe the degree necessary to accommodate anticipated future uses.

b. Materials used in the refilling (if necessary) shall be of a quality suitable to prevent contamination and/or pollution of groundwater. If materials for backfilling and grading are obtained from an area other than the site of surface mining operations, such materials shall be

included and the approximate quantities identified in the applicant's Reclamation Plan.

8. **Reservoirs, ponds, lakes or any body of water created as a feature of the Reclamation Plan shall be approved by the City Engineer and the Planning Department.**

4.10 MAINTENANCE, MONITORING, AND REMEDIAL MEASURES

Pursuant to CCR Section 2773(a), the success of reclamation will be monitored for three years, or until performance standards are met, provided that, during the last two years, there has been no human intervention, including for example, irrigation, fertilization, or weeding. Remedial measures will be implemented as necessary to achieve the performance standards.

4.11 REPORTING

Once the reclamation activities for a phase have been completed, monitoring activities will commence and will continue until the City is satisfied that performance standards have been met. Reporting of the progress of reclamation will be relayed to the City on an annual basis.

Pursuant to SMARA Section 2774(b), the City shall conduct an annual inspection of the mining operation to determine compliance with SMARA. The City shall notify the Director within 30 days of the date of completion of the inspection that the inspection has been conducted.

5.0 COST OF RECLAMATION

A reclamation cost estimate is provided in Appendix B.

6.0 APPLICANT STATEMENT OF RESPONSIBILITY

The Applicant's Statements of Responsibility and Lead Agency Certification are provided as Appendix C.

LEAD AGENCY CERTIFICATION

I, the undersigned, hereby certify that this reclamation plan complies with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et seq. and 3700 et seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, and with the requirements of the Surface Mining and Reclamation Act, Sections 2710 et seq.

Signed this _____ day of _____, 20___.

Planning Director _____

STATEMENT OF RESPONSIBILITIES

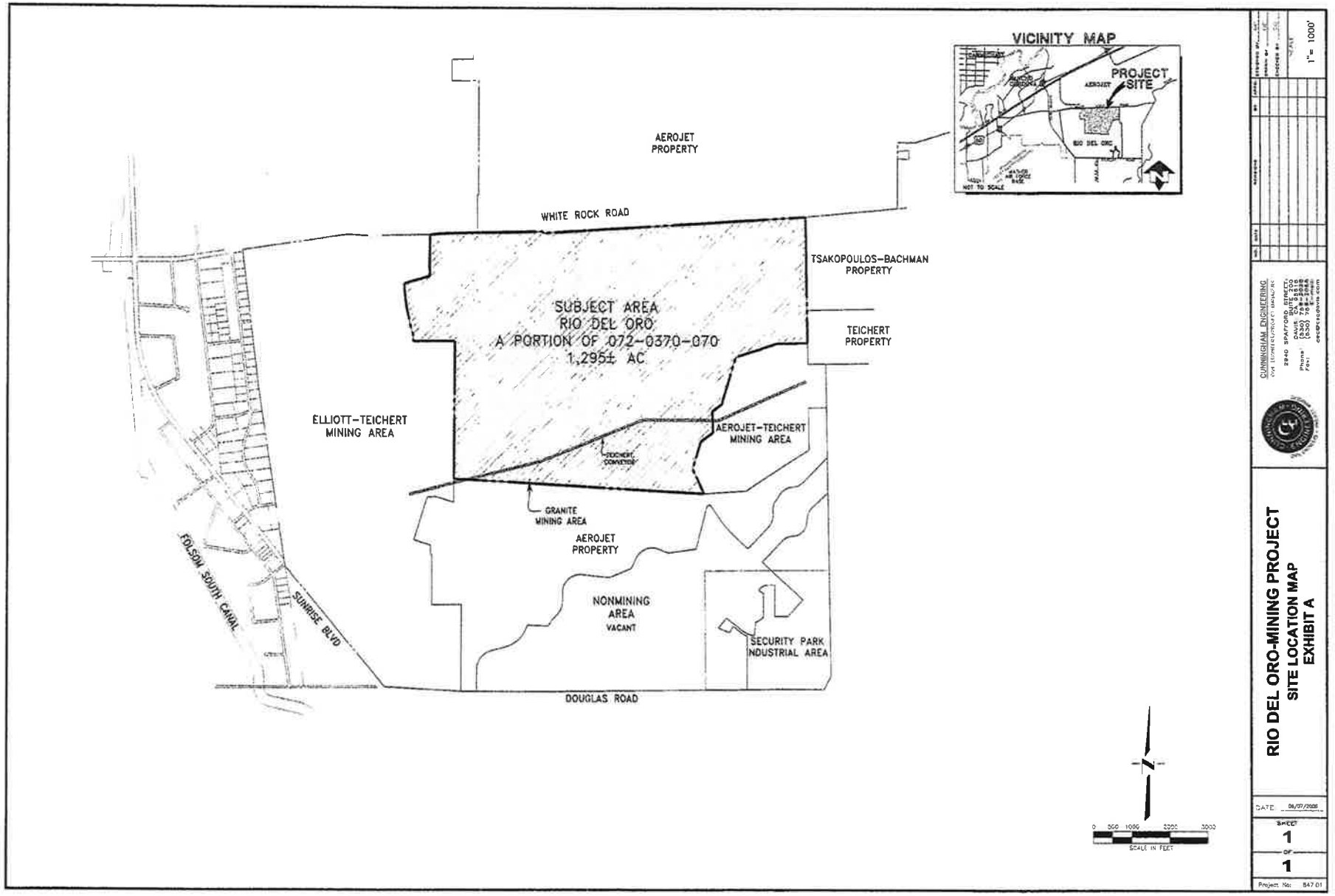
I, the undersigned, hereby agree to accept full responsibility for reclamation of all mined lands as described and submitted herein and in conformance with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et seq. and 3700 et seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, the Surface Mining and Reclamation Act commencing with Section 2710 et seq., and with any modifications requested by the administering agency as conditions of approval.

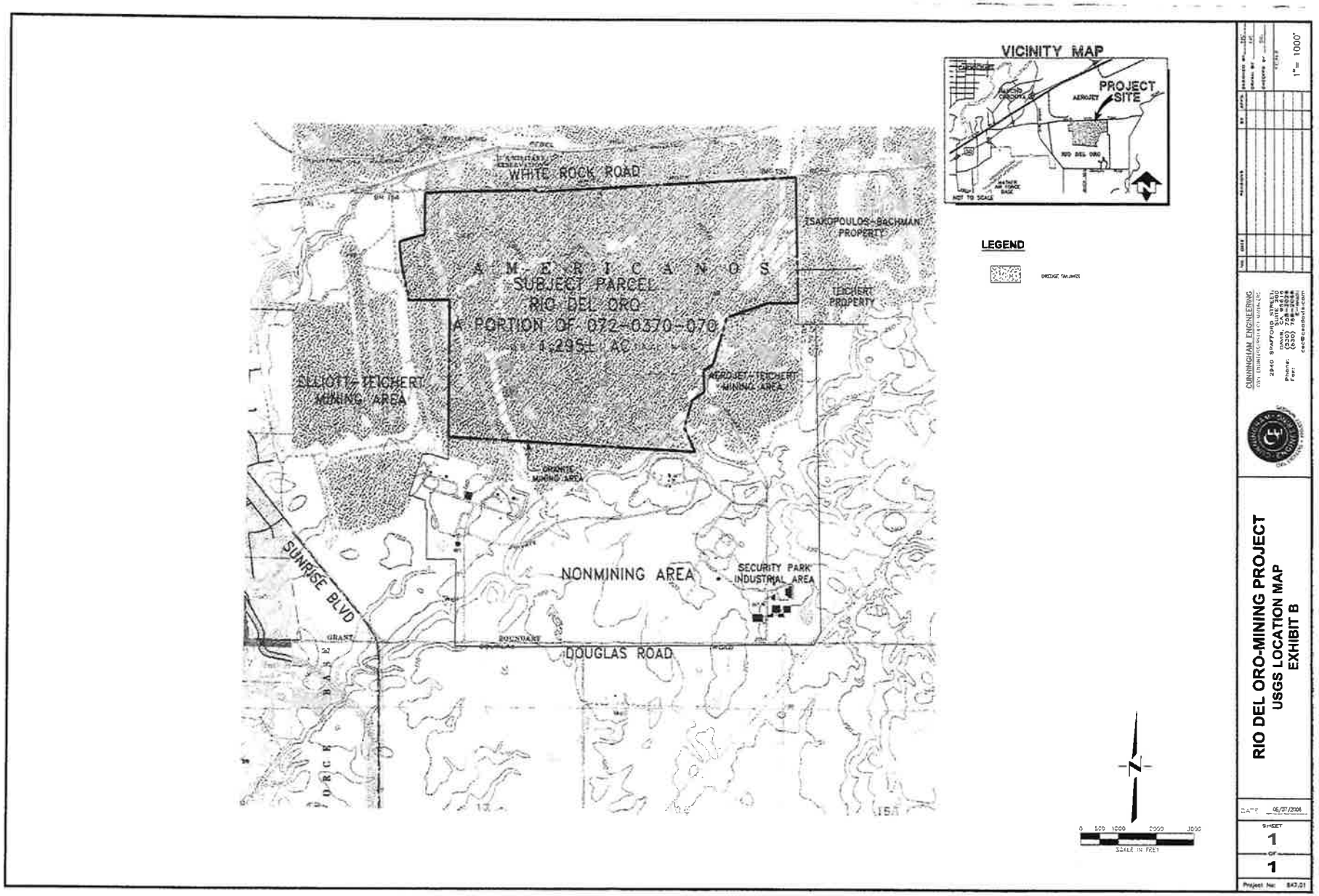
Signed this 3 day of July, 2007.

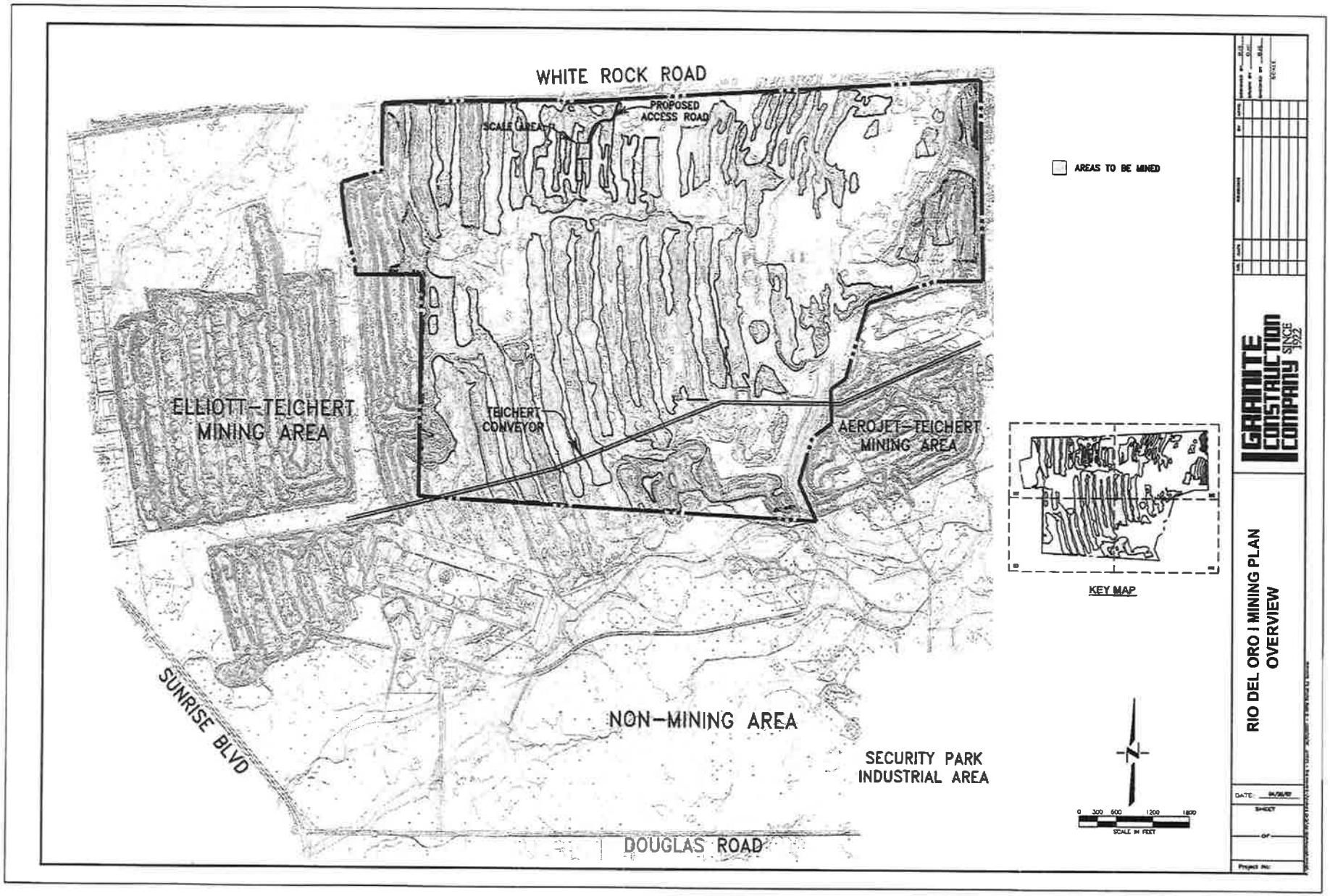
Mine Operator or Operator's Agent _____

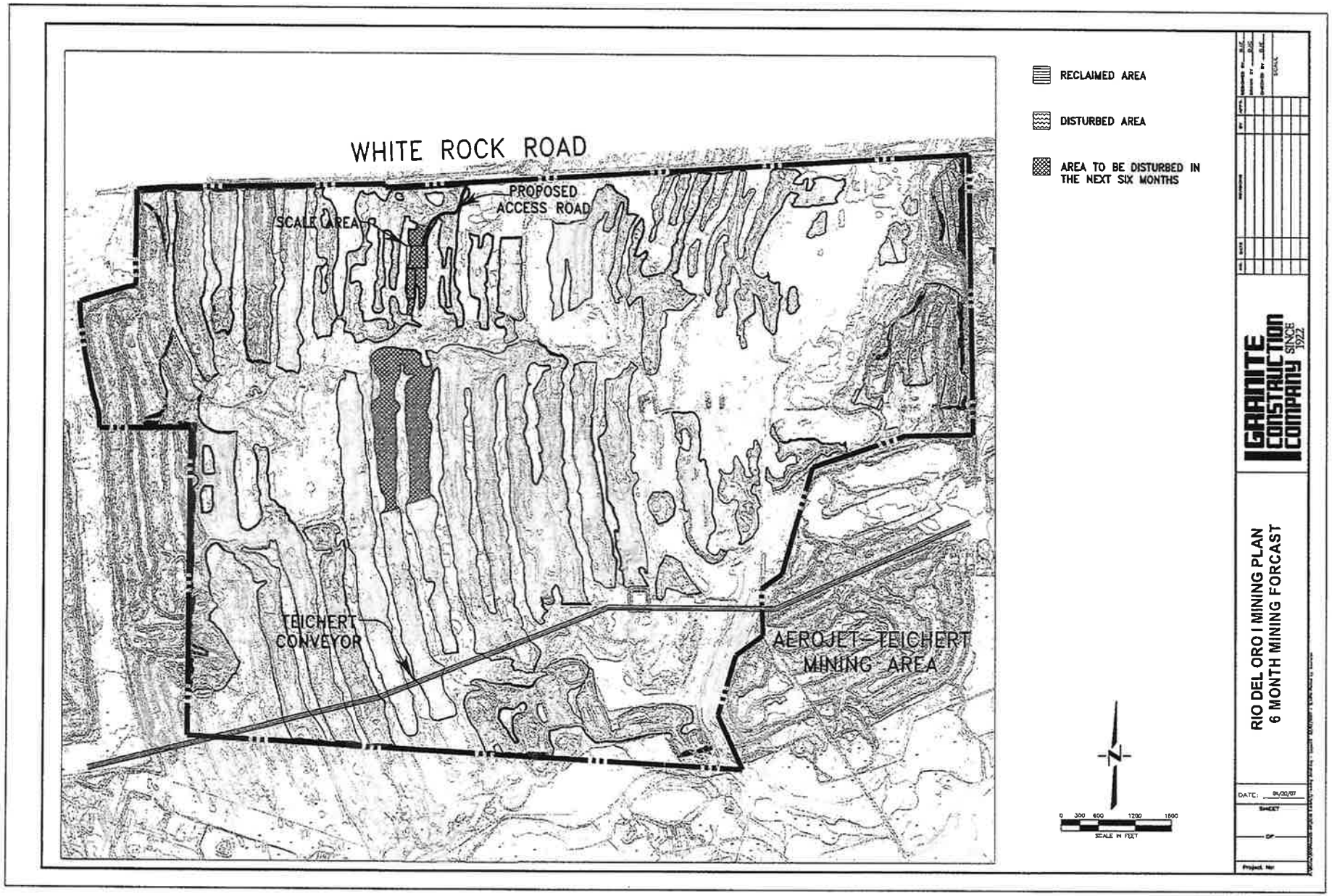
Rio Del Oro Mining Project-Plan Table of Contents:

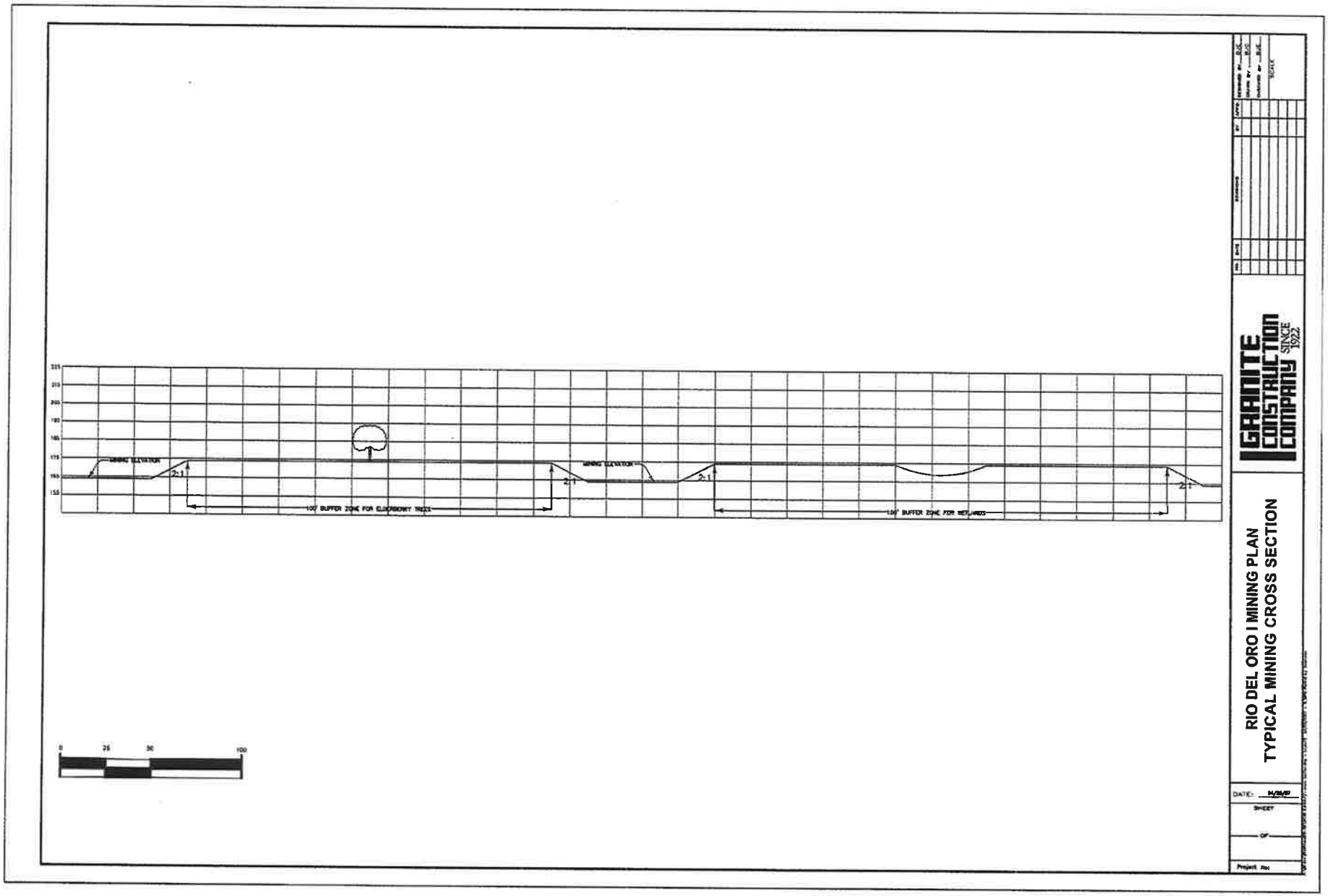
1. Project Site Location Map-Exhibit A
2. USGS Location Map-Exhibit B
3. Overview
4. 6 Month Forecast
5. Typical Mining Cross Section
6. Well and Water Supply Map-Exhibit D
7. Existing Site Conditions-Exhibit E
8. Staging/Sales Site-Exhibit G
9. Mining Plan-Exhibit H (Sheets M1 through M4)
10. Mining Plan Scale Area and Access Road Detail
11. Reclamation Plan-Exhibit I (Sheets R1 through R4)
12. 500' Radius Ownership Map-Exhibit C

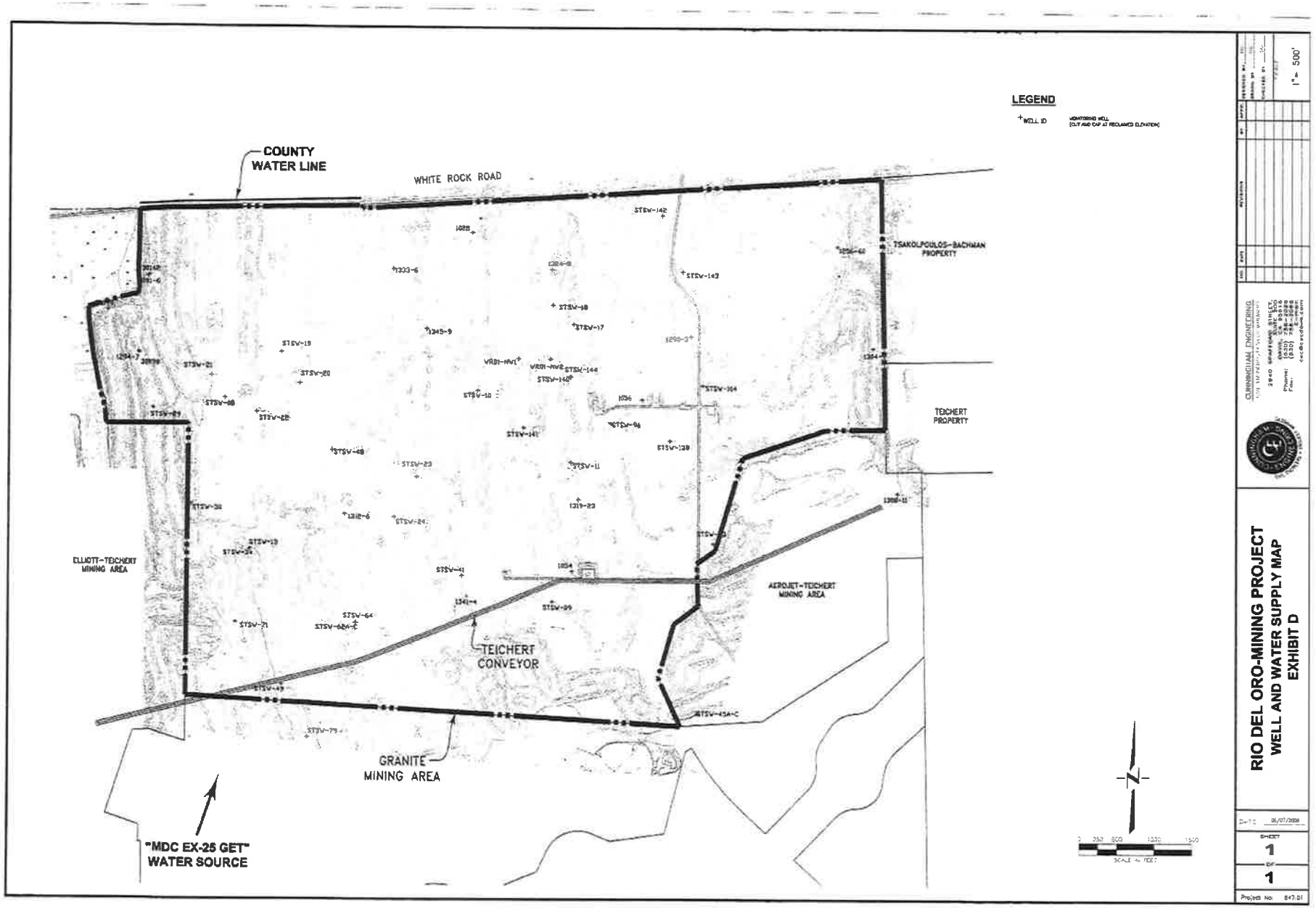

VICINITY MAP
PROJECT SITE
AEROJET PROPERTY
WHITE ROCK ROAD
TSAKOPOULOS–BACHMAN PROPERTY
SUBJECT AREA
RIO DEL ORO
A PORTION OF 072-0370-070
1,295± AC
TEICHERT PROPERTY
ELLIOTT–TEICHERT MINING AREA
AEROJET–TEICHERT MINING AREA
GRANITE MINING AREA
AEROJET PROPERTY
NONMINING AREA
VACANT
SECURITY PARK INDUSTRIAL AREA
FOLSOM SOUTH CANAL
SUNRISE BLVD
DOUGLAS ROAD
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO-MINING PROJECT
SITE LOCATION MAP
EXHIBIT A
DATE 06/07/2006
SHEET 1 OF 1
Project No: 847.01

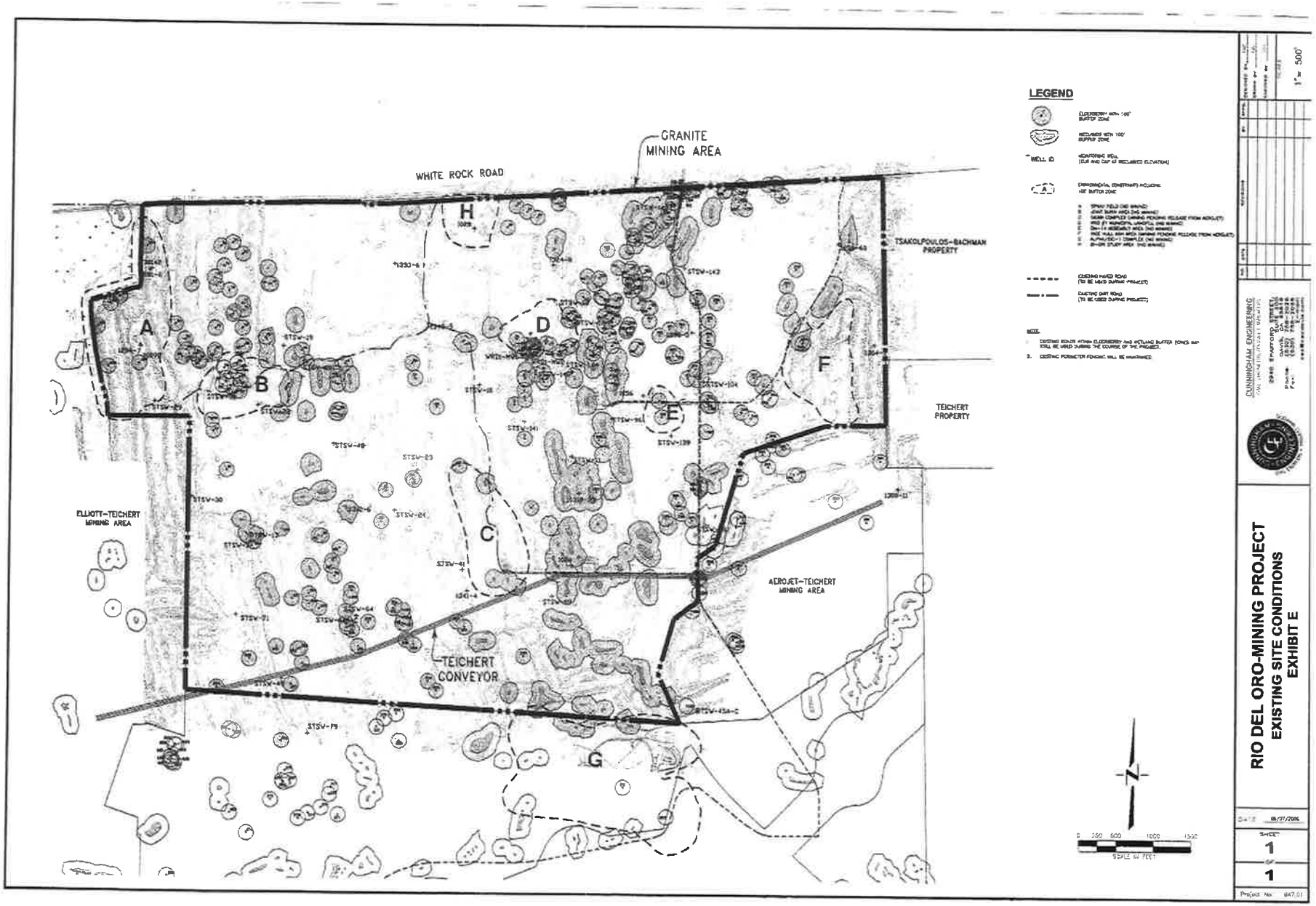

VICINITY MAP
PROJECT SITE
AEROJET
RIO DEL ORO
NOT TO SCALE
WHITE ROCK ROAD
TSAKOPOULOS-BACHMAN PROPERTY
AMERICANOS
SUBJECT PARCEL
RIO DEL ORO
A PORTION OF 072-0370-070
1,295± AC
TEICHERT PROPERTY
ELLIOTT-TEICHERT MINING AREA
AEROJET-TEICHERT MINING AREA
GRANITE MINING AREA
NONMINING AREA
SECURITY PARK INDUSTRIAL AREA
SUNRISE BLVD
DOUGLAS ROAD
LEGEND
DREDGE TAILINGS
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO-MINING PROJECT
USGS LOCATION MAP
EXHIBIT B
DATE 06/07/2006
SHEET 1 OF 1
Project No: 847.01

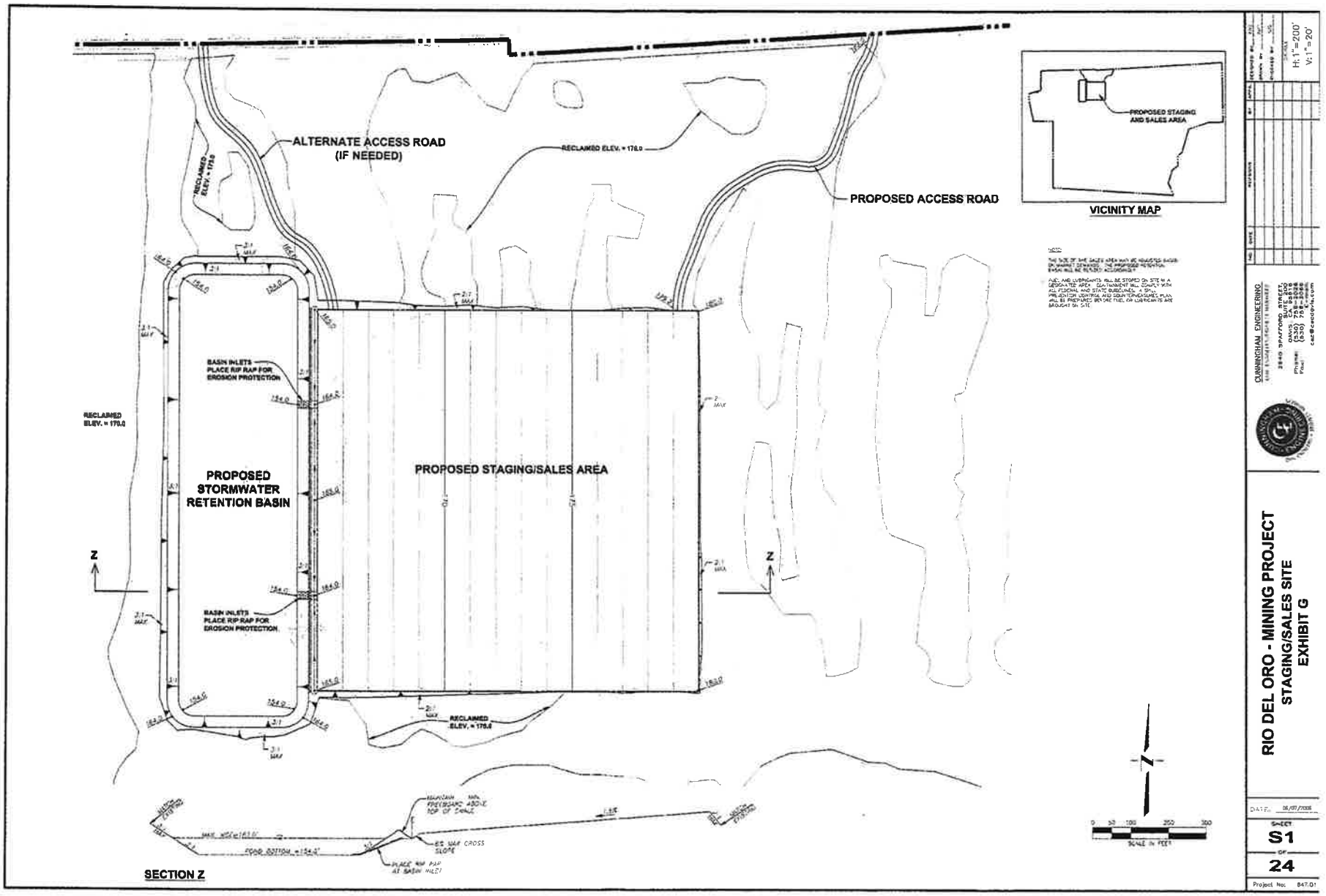

WHITE ROCK ROAD
PROPOSED ACCESS ROAD
SCALE AREA
AREAS TO BE MINED
ELLIOTT-TEICHERT MINING AREA
TEICHERT CONVEYOR
AEROJET-TEICHERT MINING AREA
KEY MAP
SUNRISE BLVD
NON-MINING AREA
SECURITY PARK INDUSTRIAL AREA
DOUGLAS ROAD
0 300 600 1200 1800
SCALE IN FEET
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
OVERVIEW
DATE:
SHEET
OF
Project No:

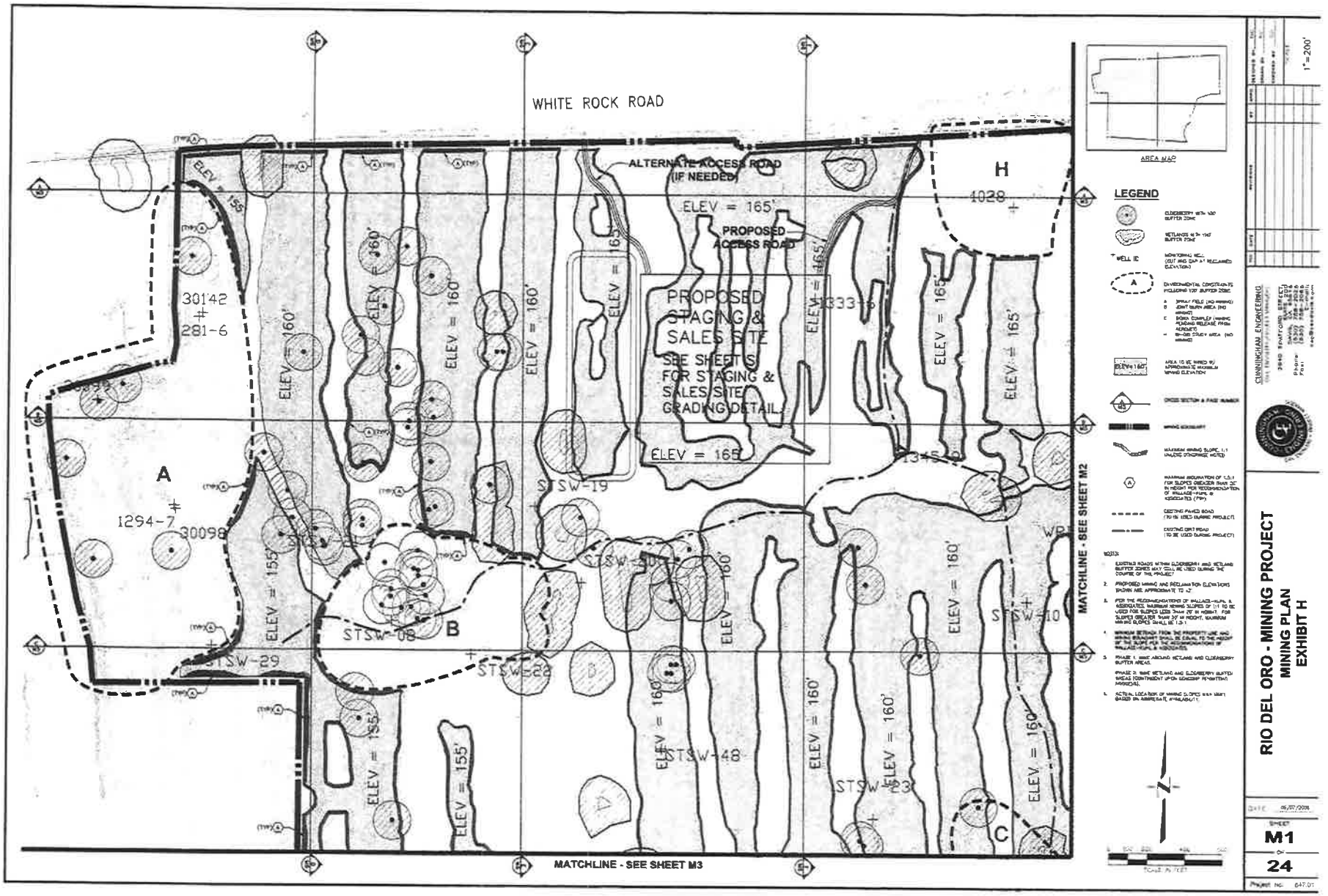

WHITE ROCK ROAD
PROPOSED ACCESS ROAD
SCALE AREA
TEICHERT CONVEYOR
AEROJET - TEICHERT MINING AREA
RECLAIMED AREA
DISTURBED AREA
AREA TO BE DISTURBED IN THE NEXT SIX MONTHS
N
0 300 600 1200 1800
SCALE IN FEET
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
6 MONTH MINING FORCAST
DATE: 01/20/07
SHEET
OF
Project No:

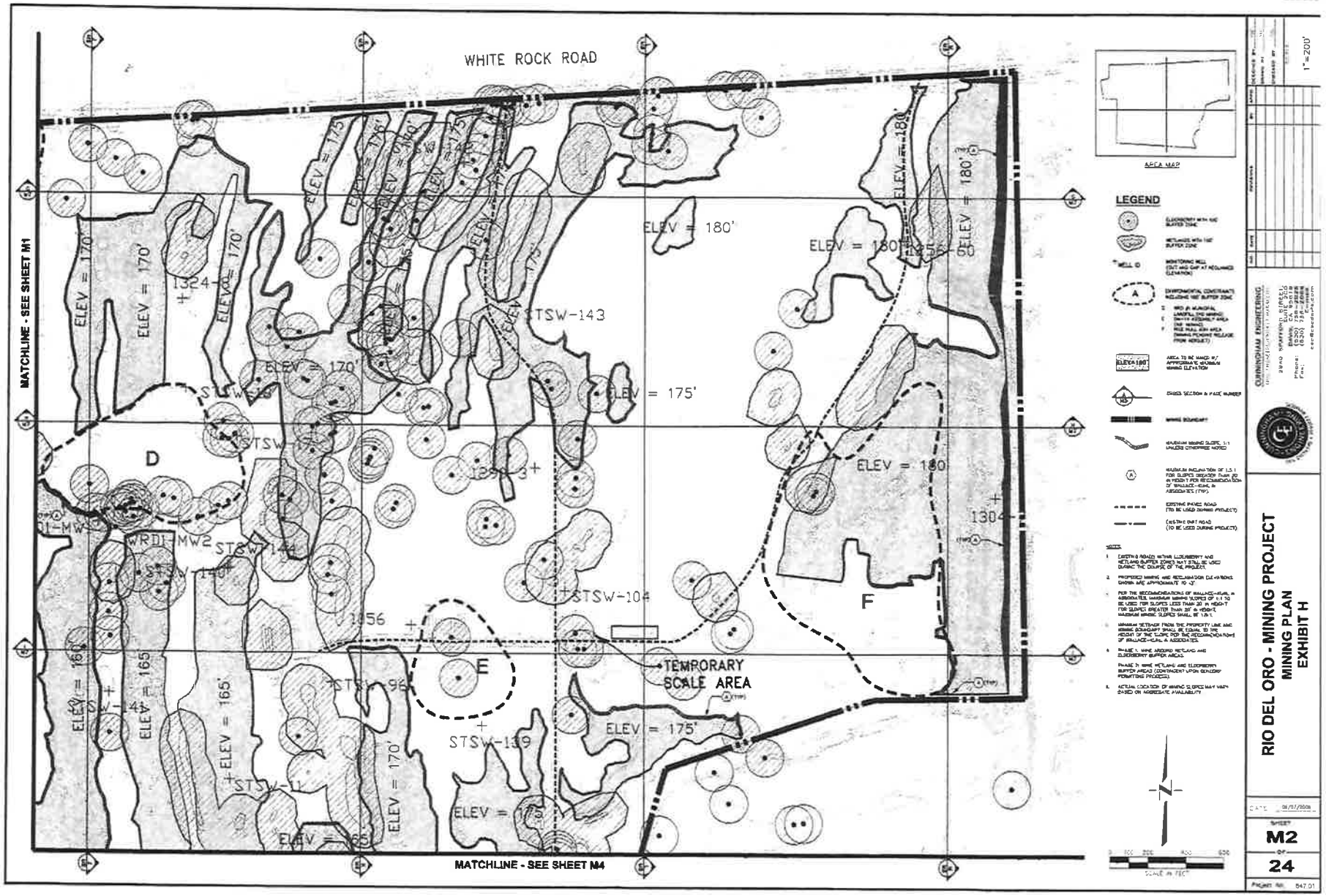

MINING ELEVATION
2:1
100' BUFFER ZONE FOR ELDERBERRY TREES
MINING ELEVATION
2:1
2:1
100' BUFFER ZONE FOR WETLANDS
2:1
0
25
50
100
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
TYPICAL MINING CROSS SECTION
DATE:
SHEET
OF
Project No:

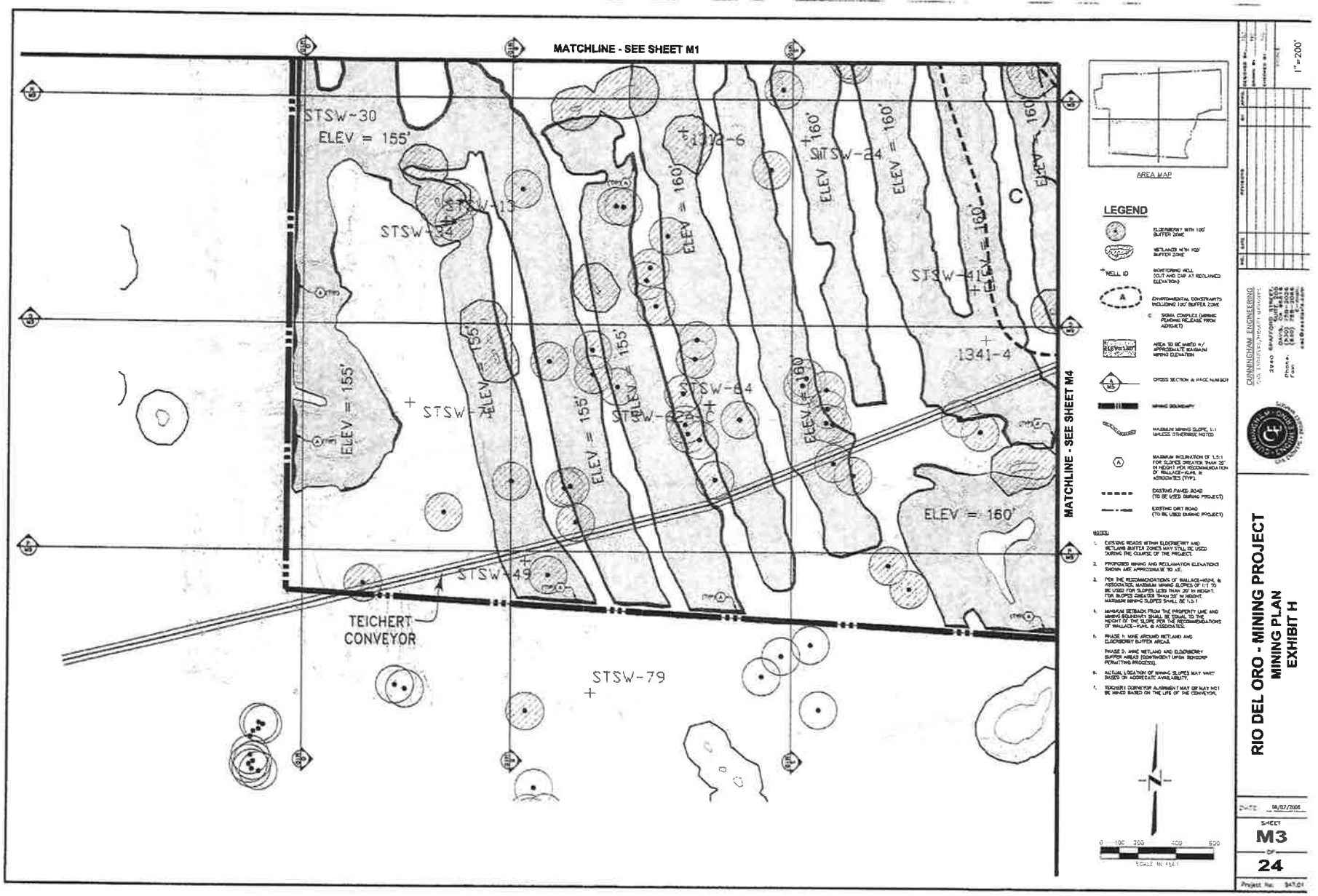

LEGEND
WELL ID
COUNTY WATER LINE
WHITE ROCK ROAD
TSAKOLPOULOS-BACHMAN PROPERTY
TEICHERT PROPERTY
ELLIOTT-TEICHERT MINING AREA
AEROJET-TEICHERT MINING AREA
TEICHERT CONVEYOR
GRANITE MINING AREA
"MDC EX-25 GET" WATER SOURCE
1" = 500'
RIO DEL ORO-MINING PROJECT
WELL AND WATER SUPPLY MAP
EXHIBIT D
06/07/2022
SHEET 1 OF 1
Project No. 847.01

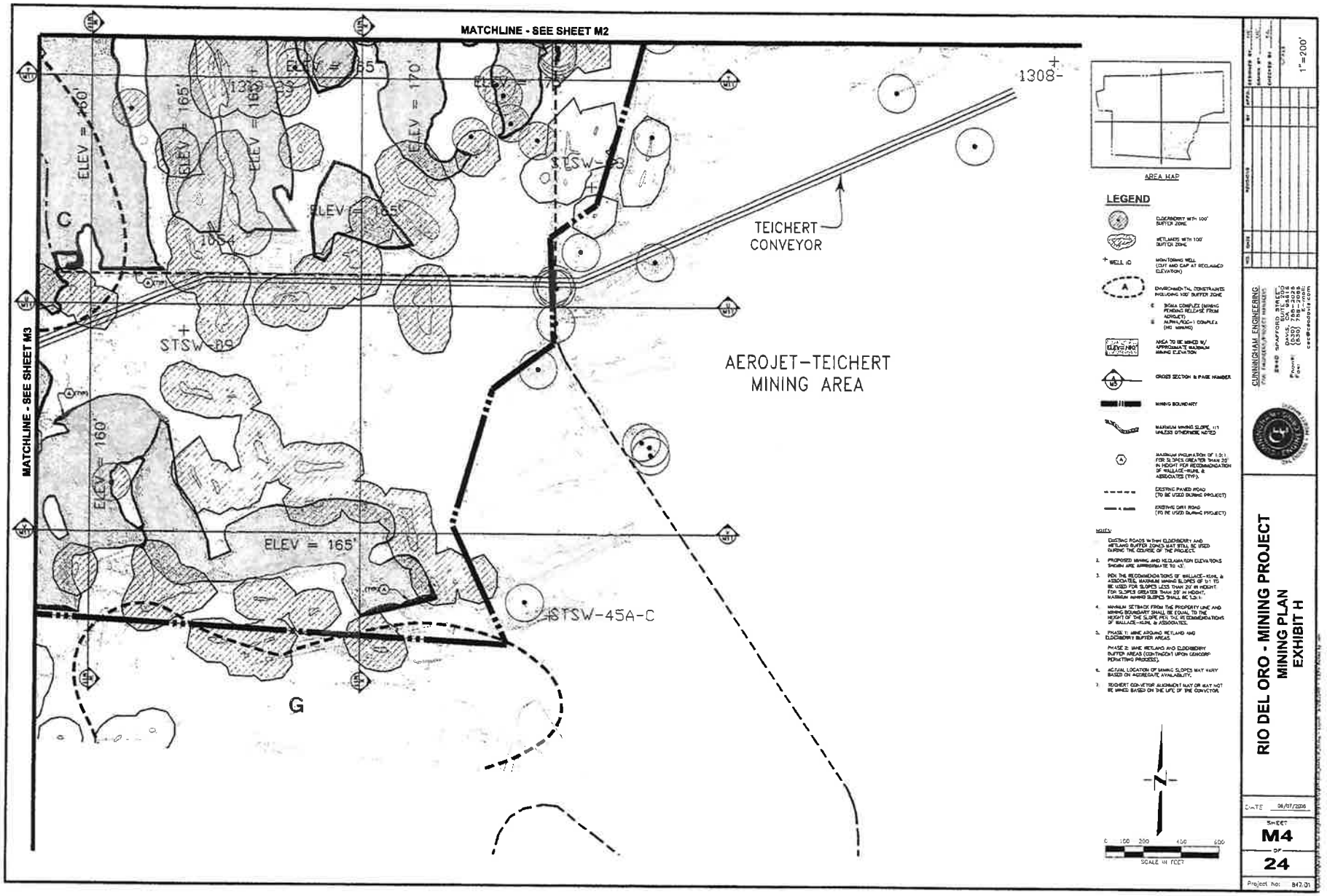

GRANITE MINING AREA
WHITE ROCK ROAD
TSAKOLPOULOS–BACHMAN PROPERTY
TEICHERT PROPERTY
ELLIOTT–TEICHERT MINING AREA
AEROJET–TEICHERT MINING AREA
TEICHERT CONVEYOR
A
B
C
D
E
F
G
H
LEGEND
N
0 250 500 1000 1500
SCALE IN FEET
1" = 500'
CUNNINGHAM ENGINEERING
RIO DEL ORO-MINING PROJECT
EXISTING SITE CONDITIONS
EXHIBIT E
08/27/2006
1
1

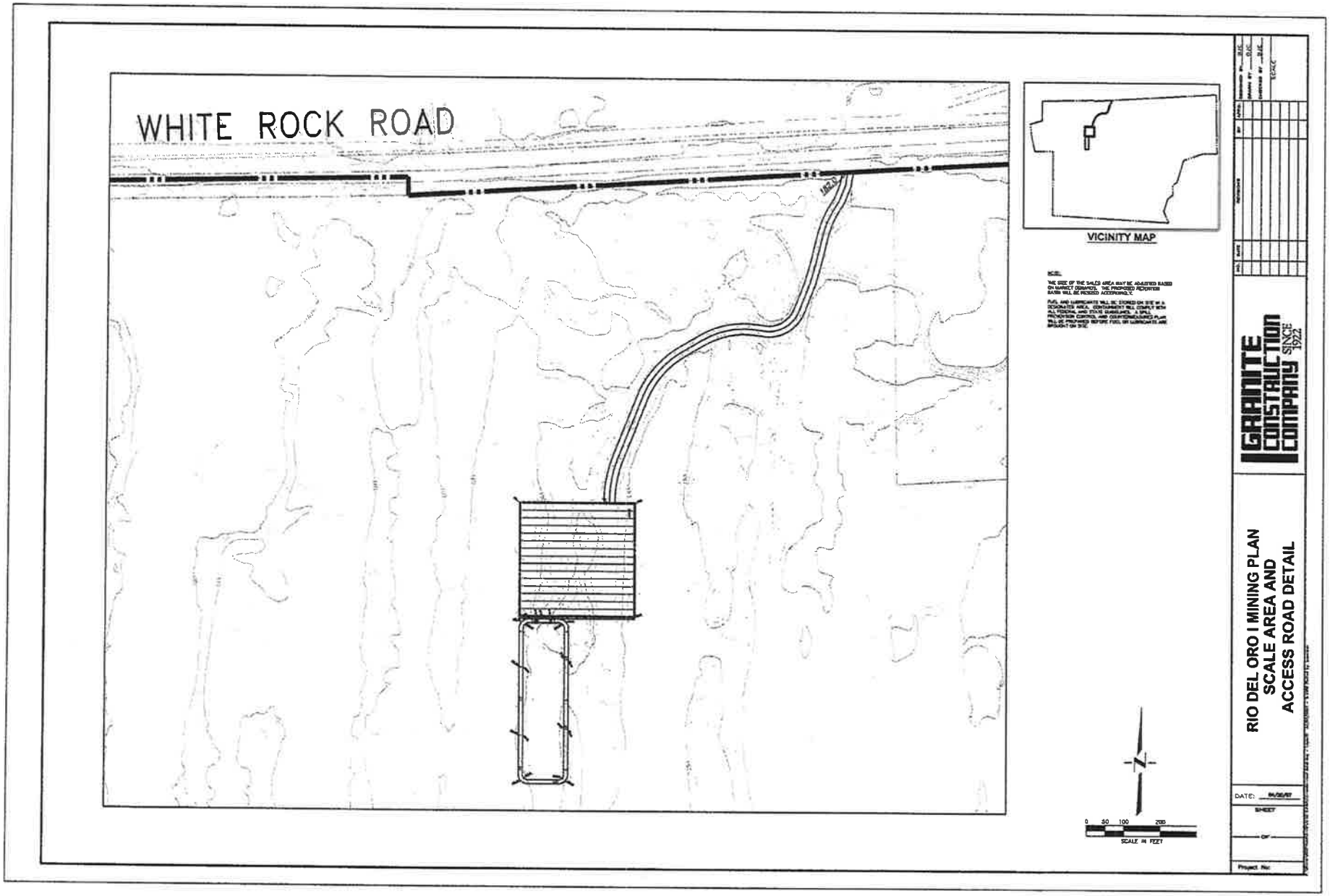

ALTERNATE ACCESS ROAD
(IF NEEDED)
RECLAIMED ELEV. = 170.0
PROPOSED ACCESS ROAD
PROPOSED STAGING AND SALES AREA
VICINITY MAP
BASIN INLETS
PLACE RIP RAP FOR
EROSION PROTECTION
PROPOSED
STORMWATER
RETENTION BASIN
PROPOSED STAGING/SALES AREA
RECLAIMED
ELEV. = 170.0
Z
Z
SECTION Z
FREEBOARD ABOVE
TOP OF BANK
FLOW BOTTOM = 154.0'
PLACE RIP RAP
AT BASIN INLET
0 50 100 200 300
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO - MINING PROJECT
STAGING/SALES SITE
EXHIBIT G
SHEET
S1
OF
24
Project No: 847.01

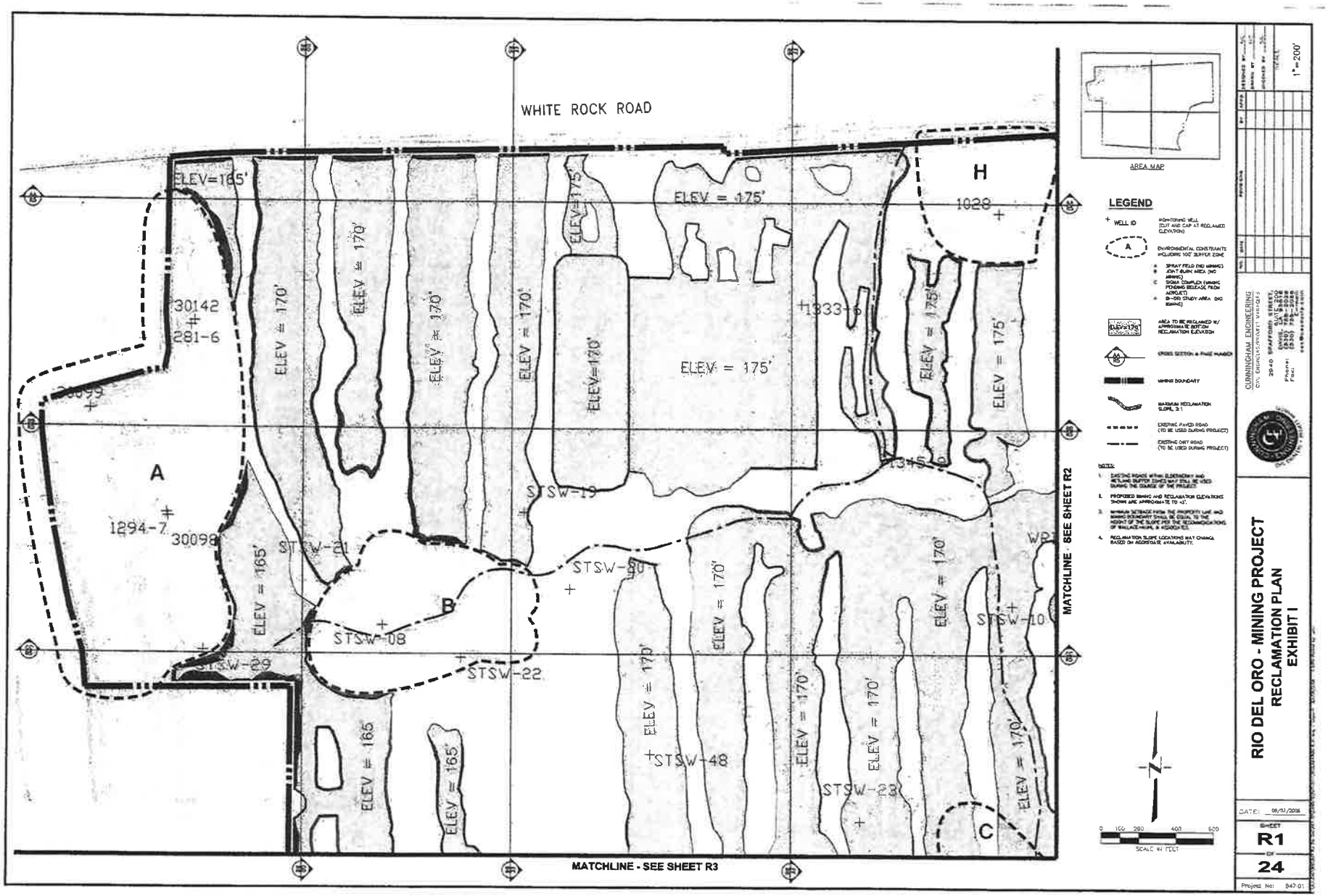

WHITE ROCK ROAD
ALTERNATE ACCESS ROAD (IF NEEDED)
PROPOSED ACCESS ROAD
PROPOSED STAGING & SALES SITE
SEE SHEET S FOR STAGING & SALES SITE GRADING DETAIL
ELEV = 165'
ELEV = 160'
ELEV = 155'
A
B
C
H
1294-7
30098
30142
281-6
1028
1333-6
1345-9
STSW-19
STSW-08
STSW-29
STSW-22
STSW-48
STSW-23
STSW-10
MATCHLINE - SEE SHEET M2
MATCHLINE - SEE SHEET M3
AREA MAP
LEGEND
CUNNINGHAM ENGINEERING
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
1" = 200'
SHEET
M1
24

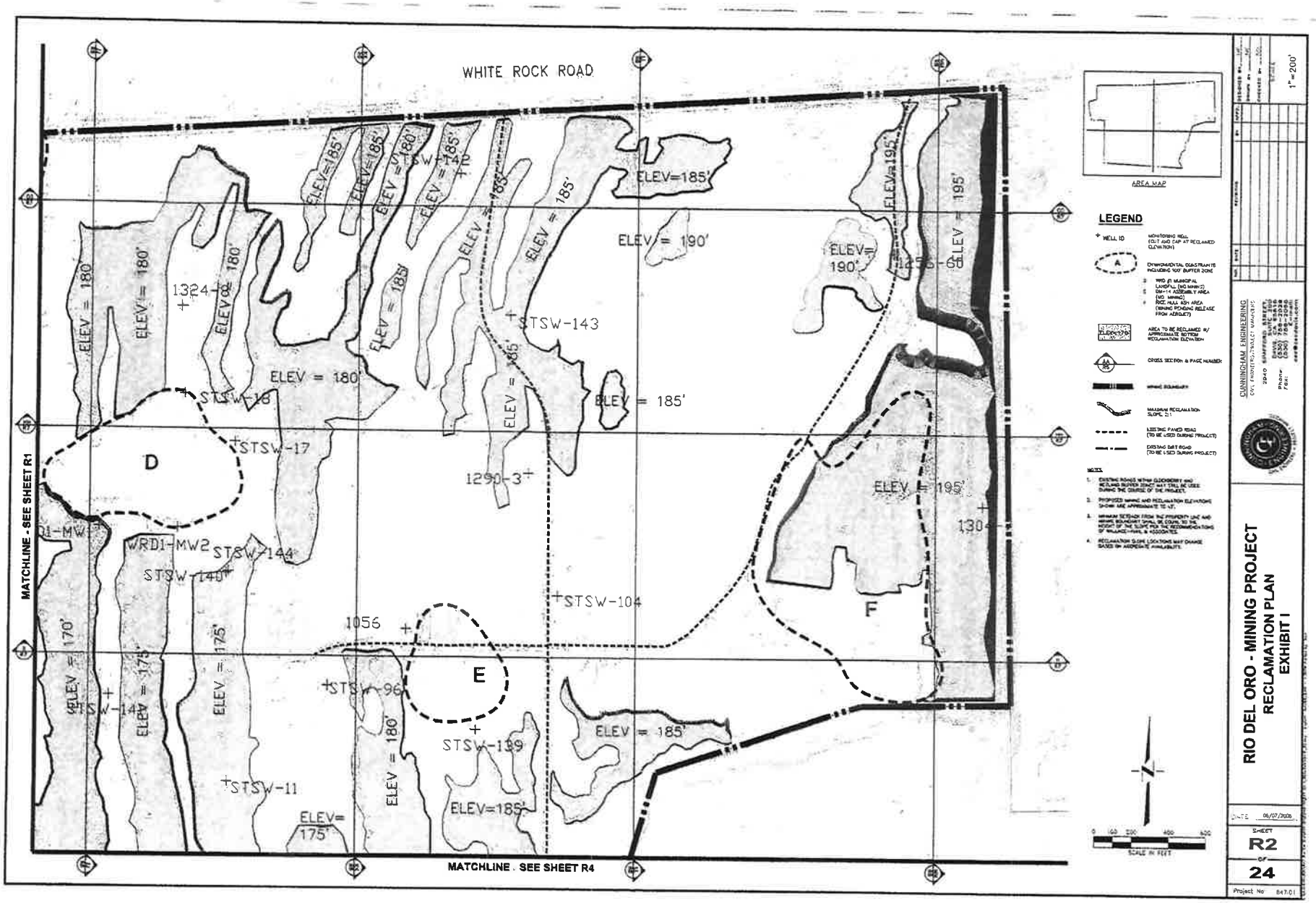

WHITE ROCK ROAD
MATCHLINE - SEE SHEET M1
MATCHLINE - SEE SHEET M4
TEMPORARY SCALE AREA
LEGEND
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
M2
24

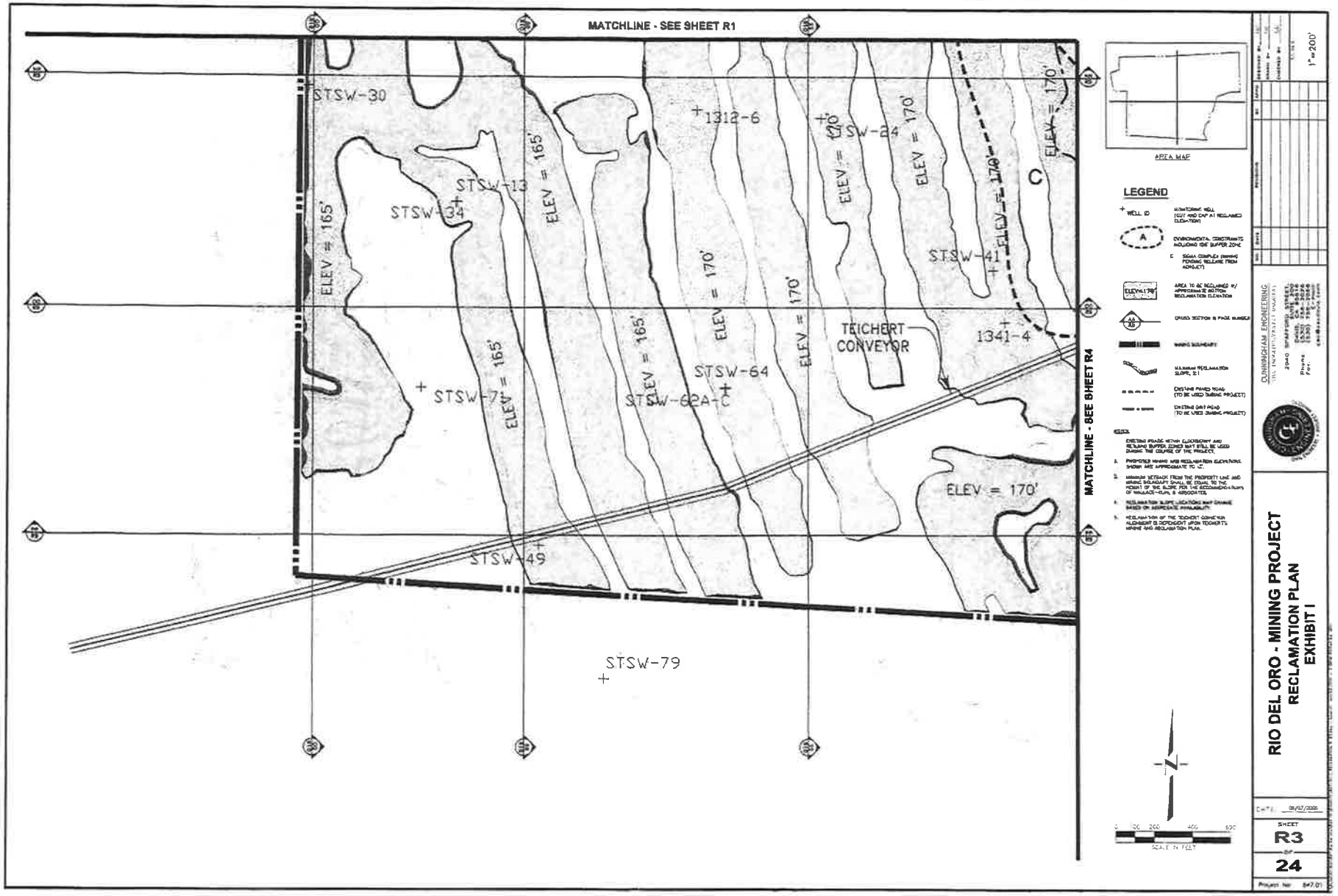

MATCHLINE - SEE SHEET M1
MATCHLINE - SEE SHEET M4
STSW-30
ELEV = 155'
STSW-34
STSW-13
STSW-11
STSW-24
STSW-84
STSW-49
STSW-79
1341-4
ELEV = 160'
ELEV = 155'
TEICHERT
CONVEYOR
AREA MAP
LEGEND
NOTES:
1" = 200'
CUNNINGHAM ENGINEERING
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
SHEET
M3
OF
24

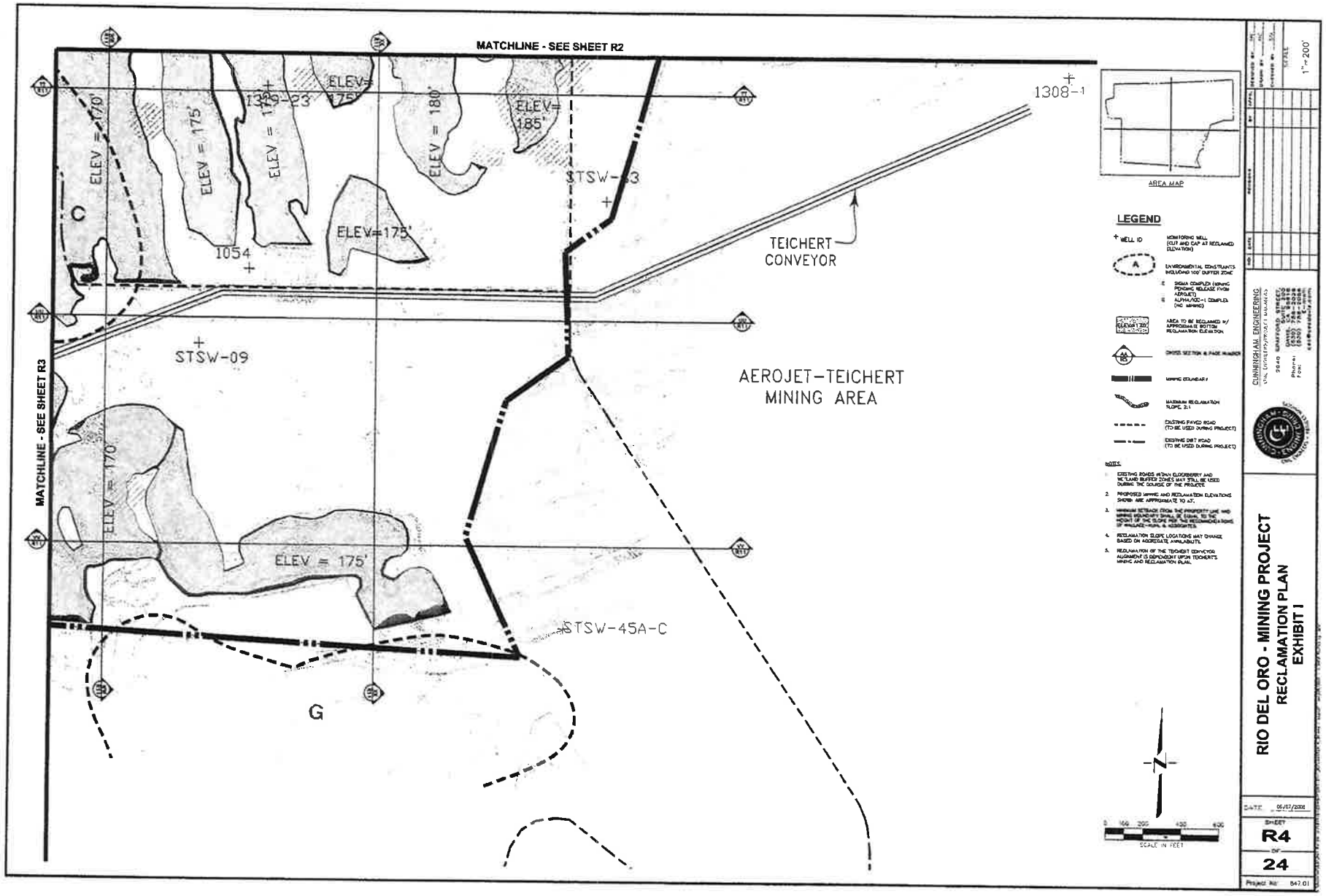

MATCHLINE - SEE SHEET M2
MATCHLINE - SEE SHEET M3
ELEV = 165'
ELEV = 160'
ELEV = 170'
ELEV = 155'
STSW-88
STSW-89
STSW-45A-C
TEICHERT CONVEYOR
AEROJET-TEICHERT MINING AREA
1308
C
G
AREA MAP
LEGEND
N
0 100 200 400 600
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
DATE 06/07/2006
SHEET M4 OF 24
Project No: 842.01

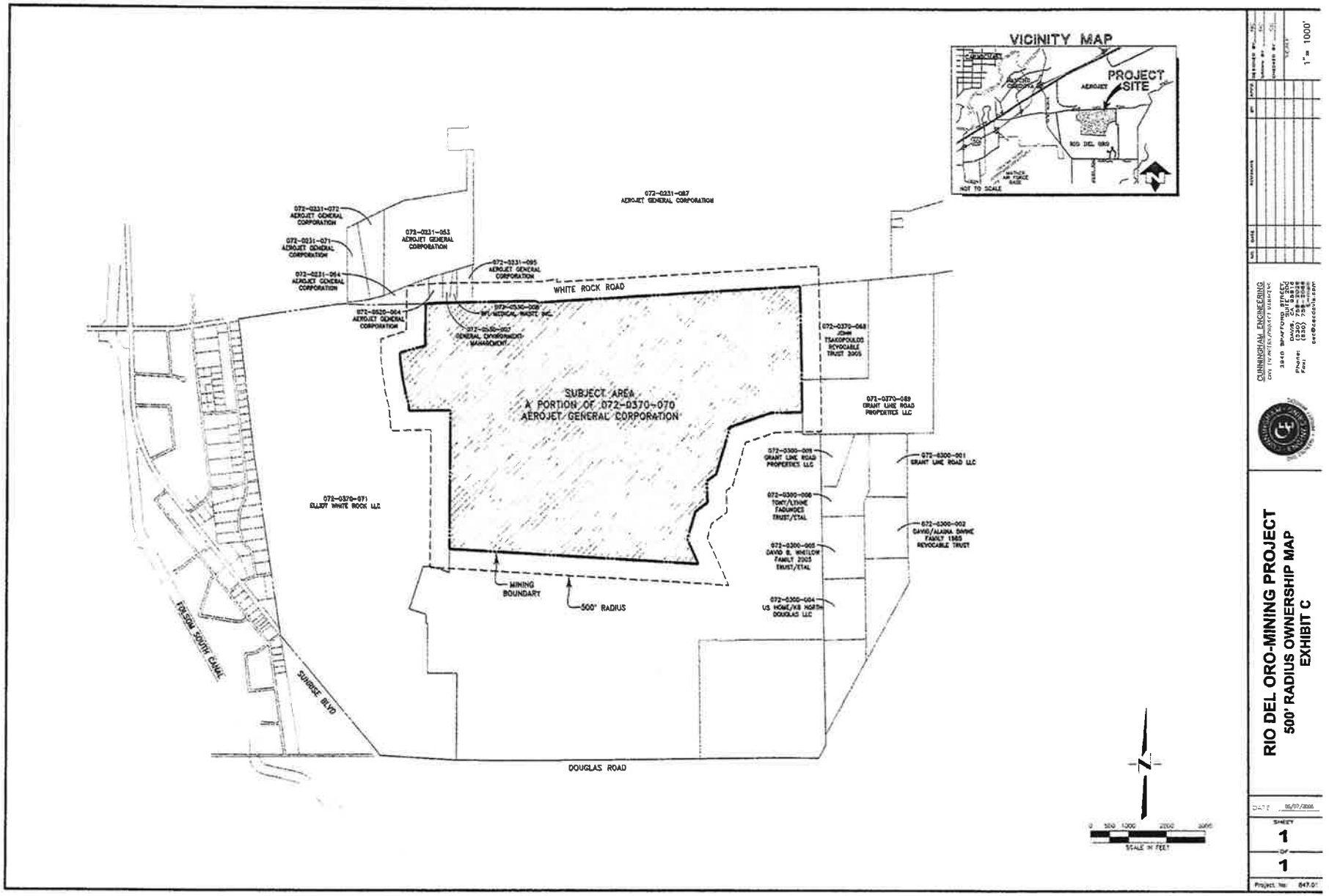

WHITE ROCK ROAD
VICINITY MAP
SCALE IN FEET
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
SCALE AREA AND
ACCESS ROAD DETAIL
DATE:
SHEET
OF
Project No:


WHITE ROCK ROAD
ELEV=165'
ELEV = 170'
ELEV = 175'
A
B
C
H
30142
281-6
1294-7
30098
1028
1333-6
1345-6
STSW-19
STSW-21
STSW-08
STSW-22
STSW-48
STSW-23
STSW-10
MATCHLINE - SEE SHEET R2
MATCHLINE - SEE SHEET R3
AREA MAP
LEGEND
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
CUNNINGHAM ENGINEERING
1"=200'
R1
24


WHITE ROCK ROAD
MATCHLINE - SEE SHEET R1
MATCHLINE . SEE SHEET R4
AREA MAP
LEGEND
D
E
F
STSW-18
STSW-17
STSW-143
STSW-144
STSW-140
STSW-104
STSW-96
STSW-139
STSW-11
WRD1-MW2
1324
1290-3
1056
1300
ELEV = 180'
ELEV = 185'
ELEV = 190'
ELEV = 195'
ELEV = 175'
ELEV = 170'
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
SHEET
R2
OF
24
1"=200'


MATCHLINE - SEE SHEET R1
MATCHLINE - SEE SHEET R4
STSW-30
STSW-13
STSW-34
STSW-7
STSW-49
STSW-79
STSW-64
STSW-62A
STSW-24
STSW-41
1312-6
1341-4
TEICHERT CONVEYOR
ELEV = 165'
ELEV = 170'
AREA MAP
LEGEND
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
SHEET
R3
OF
24


MATCHLINE - SEE SHEET R2
MATCHLINE - SEE SHEET R3
ELEV = 170'
ELEV = 175'
ELEV = 180'
ELEV= 185'
ELEV=175'
1308-1
STSW-23
STSW-09
STSW-45A-C
1054
TEICHERT CONVEYOR
AEROJET-TEICHERT MINING AREA
AREA MAP
LEGEND
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
SHEET R4
OF 24


VICINITY MAP
PROJECT SITE
NOT TO SCALE
SUBJECT AREA
A PORTION OF 072-0370-070
AEROJET GENERAL CORPORATION
072-0231-087
AEROJET GENERAL CORPORATION
072-0231-072
AEROJET GENERAL CORPORATION
072-0231-053
AEROJET GENERAL CORPORATION
072-0231-071
AEROJET GENERAL CORPORATION
072-0231-064
AEROJET GENERAL CORPORATION
072-0231-095
AEROJET GENERAL CORPORATION
WHITE ROCK ROAD
072-0520-004
AEROJET GENERAL CORPORATION
072-0370-068
JOHN TSAKOPOULOS REVOCABLE TRUST 2005
071-0370-089
GRANT LINE ROAD PROPERTIES LLC
072-0300-009
GRANT LINE ROAD PROPERTIES LLC
072-0300-001
GRANT LINE ROAD LLC
072-0300-006
TONY/LYNNE FAGUNDES TRUST/ETAL
072-0300-002
DAVID/ALAINA DAHNE FAMILY 1995 REVOCABLE TRUST
072-0300-005
DAVID B. WHITLOW FAMILY 2005 TRUST/ETAL
072-0300-004
US HOME/KB HOME DOUGLAS LLC
072-0370-071
ELLIOT WHITE ROCK LLC
MINING BOUNDARY
500' RADIUS
FOLSOM SOUTH CANAL
SUNRISE BLVD
DOUGLAS ROAD
SCALE IN FEET
CUNNINGHAM ENGINEERING
3840 Bradford Street, Suite 200
Davis, CA 95618
Phone: (530) 758-3988
Fax: (530) 758-3989
cec@cecdavis.com
RIO DEL ORO-MINING PROJECT
500' RADIUS OWNERSHIP MAP
EXHIBIT C
DATE 05/07/2008
SHEET 1 OF 1
Project No: 847.01

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
1.	The applicant will meet in good faith to discuss the possible creation of a "Reclamation Authority" as authorized by the State of California.	Within 90 days of the approval date of the Mining Permit	Planning	
2.	The Granite Construction Mining and Reclamation Plan is approved by the Planning Commission as of July 26, 2007, subject to the Conditions of Approval/MMRP, Reclamation Plan and the Financial Assurance Cost Estimate. The Mining Permit is valid for ten, 10 years from the date of approval.	Expires 10 years from July 26,2007	Planning	
3.	The Applicant shall hold harmless the City, its Council Members, its Planning Commission, officers, agents, employees, and representatives from liability for any award, damages, costs and fees incurred by the City and/or awarded to any plaintiff in an action challenging the validity of this permit or any environmental or other documentation related to approval of this permit. Applicant further agrees to provide a defense for the City in any such action.	During all phases of the project	Planning	
4.	Granite Construction is authorized to operate on a 24 hours per day, 7 days per week basis. If during the mining, the City receives complaints regarding nighttime mining operations, the Planning Director shall evaluate the technical merits of the complaints and at his discretion shall work with the applicant to modify mining operations to ensure compliance with General Plan and Zoning Code standards. As necessary to resolve the conflict, the hours for the mining operations could be changed to operate at the normal time periods of 6:00 a.m. to 10:00 p.m., Monday through Friday, and 6:00 a.m. until 3:00 p.m. on Saturdays, only.	During all phases of the project	Planning	

Exhibit B

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
5.	The applicant shall mitigate the potential for track-out on-site. If track-out still occurs, the project applicant shall require paved streets adjacent to construction sites to be washed or swept daily to remove accumulated dust. This requirement shall be included as a note in the reclamation plan submittal.	During all phases of the project	Public Works	
6.	Maintain security fencing around the perimeter of the site, and provide warning/trespass signs to comply with the Zoning Code. All perimeter fencing shall be retained until post-reclamation development of the project site occurs.	During all phases of the project	Planning	
7.	Should the City Engineer determine that an unexpected and significant, project related traffic problem has occurred during the course of the mining operation and transfer of materials off-site, he/she will work with the applicant to implement appropriate mitigation measures. On-site mitigation shall be initially encouraged by the City such as truck metering or queuing. The operator shall agree to cooperate and pay its fair share as determined by the Public Works Director for the construction of off-site improvements, if needed.	During all phases of the project	Public Works	
8.	The proponent shall ensure the moisture content of the material being conveyed; if used in the future, to the processing plant is sufficient to avoid visible dust emissions from the loading and unloading points.	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
9.	In the unlikely event the mining operation encounters any former waste disposal area, mining activities shall immediately cease and the following agencies shall be contacted to determine the appropriate course of action: • Sacramento County Environmental Management Department, Environmental Health Division: (916) 875-8416. • State Department of Toxic Substances Control (916) 255-3601. • Central Valley Regional Water Quality Control Board: (916) 255-3000.	During all phases of the project	Planning	
10.	Mining equipment and any toxic substance associated with mining or reclamation operations shall be protected from flooding and from contact with surface water.	During all phases of the project	Planning	
11.	The discharge of wastewater (including aggregate process water) to surface waters or surface water drainage courses is prohibited.	During all phases of the project	Planning	
12.	No polluting substance or toxic compound shall be applied to the mining surface area. Any form of pollutant used on the site shall be contained and not disposed of onsite.	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Prior to Issuance of the Work Authorization Permit			
13.	Applicant shall pay the City any outstanding balance incurred by the City for the processing of the mining permit.	Prior to the issuance of the work authorization permit	Planning	
14.	The applicant shall comply with all the mitigation measures included in the Mitigated Negative Declaration adopted July 26, 2007 and pay the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is $10,000. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the proponent, and if the actual monitoring costs exceed the initial estimate, the proponent shall be responsible to pay the additional amount.	Prior to the issuance of the work authorization permit	Planning	
15.	Provide the City of Rancho Cordova with a performance bond in the amount of $644,928 made payable to the City of Rancho Cordova and the Department of Conservation of the State of California to financially guarantee reclamation of the property. The amount of the bond shall be subject to annual review and adjustment, pursuant to the requirements of the City's Mining Ordinance.	Prior to the issuance of the work authorization permit	Planning	
16.	The applicant and the City shall negotiate an agreement establishing the terms, conditions and method of determining the payment of a percentage of the retail sales (not to exceed 1% of the gross sales) generated by the sales of mined materials removed from the City and sold off-site.	Prior to the issuance of the work authorization permit	Finance	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
17.	The applicant shall be required to install signs, to the satisfaction of the Public Works Department, alerting the traveling public to trucks entering/exiting the property.	Prior to the issuance of the work authorization permit	Public Works	
18.	The applicant shall enter into an agreement with the City to address damages and impacts to City roadways directly attributable to the project. Impacts include, but are not limited to; public improvements necessitated by the project and accelerated wear on public infrastructure. The form of the agreement may include a fee per unit of material hauled away from the site and/or a capital fee to the satisfaction of the Public Works Department. The applicant shall prepare a roadway condition assessment for the City's review prior to hauling material off-site which describes the current condition of the impacted City roadways.	Prior to the issuance of the work authorization permit	Public Works	
19.	All haul route exit drives shall be paved minimum 100-feet prior to the point of exit to public right-of-way and swept on a regular basis to the satisfaction of Public Works.	Prior to the issuance of the work authorization permit	Public Works	
20.	Obtain appropriate permits from Public Works and provide adequate drain facilities into the established flood control system, in accordance with the Sacramento County Improvement Standards. The drainage plan shall mitigate the increase in surface runoff into Morrison Creek and shall show Best Management Practices (BMPs) to prevent erosion and sedimentation in those swale areas.	Prior to the issuance of the work authorization permit	Water Resources-Drainage	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Prior to Certification of the Completion of the Reclamation Plan			
21	The project proponent shall prepare for approval by the Planning Director a Tree Replanting Plan representing the size, species, and location of trees to be planted in compliance with mitigation measure MM 4.2 of the Final Mitigated Negative Declaration. The plan shall seek to place trees within the vicinity of the project and consistent with whatever use is planned for or located on the property.	Prior to Final Certification of the Reclamation Plan	Planning	

Mitigation Measures

Section 2		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
MM 1.1	The project proponent shall ensure that night time lighting levels be maintained at the minimum level necessary to provide for security and safety at the project site. All night time lighting shall be shielded and aimed appropriately to prevent any direct upward illumination or light directed at adjacent properties. If the City receives complaints from any residents of adjacent areas of nuisance lights, the project proponent shall take immediate action to prevent lights from producing significant light or glare at adjacent properties. All on-site stationary lighting shall comply with this requirement throughout the entirety of operation of the project. Vehicle and all other mobile equipment lights (except for any lights mounted on the mobile processing plant) are exempt from this requirement for safety reasons. However, the use of high beams shall be limited within 1,500 feet of the western boundary of the project site to those times when they are required for safety reasons. Signs visible to truck drivers shall be posted along any haul roads within 1,500 feet of the western boundary of the project site that state that high beams are to be used only as required for safety. All drivers shall be notified of this requirement prior to operating on-site.	Throughout project operation once homes are occupied within the Rio Del Oro project or within 1,500 feet of any portion of the project site.	City of Rancho Cordova Planning Department and Code Enforcement Department.	
MM 3.1a	The project proponent shall require that the operators water all haul roads and all exposed soils at least twice daily during construction, mining and reclamation activities.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1b	The project proponent shall require that the operators limit vehicle speed for on-site construction vehicles to 15 miles per hour on any unpaved roadways at all times. Signs stating the speed limit and that dust control measures are in effect shall be placed at each entrance/exit of the site and along all haul roads. Truck and equipment operators shall be notified that dust abatement is a concern and of the 15 mph speed limit.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1c	The project proponent shall require that, when transporting materials by truck during mining and reclamation activities, loads shall be covered or two feet of freeboard shall be maintained by the operator. Compliance with this measure shall be enforced by both the City and the project foreman.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1d	The project proponent shall ensure that all exposed soil existing after mining of the project site is seeded with non-invasive species and mulched with certified weed-free straw mulch immediately after mining. The amount of exposed soil at any one time shall me minimized as much as possible. Seeding and straw mulching shall be conducted as the project progresses, immediately following regrading of the soil. All seeding shall be conducted according to California Stormwater Quality Association (CASQA) guidelines, as shown in their California Stormwater BMP Handbook (EC-4). All straw mulch application shall be conducted according to CASQA guidelines, as shown in their California Stormwater BMP Handbook (EC-6). All seeded and mulched areas shall be inspected daily to ensure dust is controlled during the establishment period. Water shall be applied to any areas known or suspected to generate dust during any high wind events (winds greater than 15 miles per hour).	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1e	The project proponent shall provide a plan for approval by the City and the Sacramento Metropolitan Air Quality Management District (SMAQMD) demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction and operation of the proposed project will achieve a fleet-averaged 20 percent NOx reduction and a 45 percent particulate reduction compared to the most recent CARB fleet average. The project proponent shall submit to the City and SMAQMD a comprehensive inventory of all off-road equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no activity occurs; and, The project proponent shall ensure that emissions from all off-road diesel powered equipment used on the proposed project sites does not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be performed at least weekly by a qualified third-party professional, and a monthly summary of the visual results shall be submitted to the City and SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site	Equipment Inventory shall be submitted prior to site disturbance. Remainder of measure shall be complied with throughout construction and operation of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

	inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulation. In the event construction equipment meeting the requirements set forth above is determined not to be available, the project proponent shall notify the City and SMAQMD. Upon verification that required low-emission construction equipment is not available, the City may waive this measure. This requirement shall be included as a note in all project construction plans.			
MM 3.1f	The project proponent shall offset excess emissions (to below the 65 lbs/day threshold of significance) by paying an off-site operational mitigation fee to the Sacramento Metropolitan Air Quality Management District (SMAQMD) Operational Mitigation Fee Program. The final amount of the fee is to be determined by SMAQMD in consultation with the project proponent during the stationary air quality permit process. The project proponent shall provide documentation of the payment of the fee to the City prior to site disturbance.	Prior to site disturbance.	SMAQMD in consultation with the City of Rancho Cordova Planning Department.	
MM 3.2	Mining conducted by the project proponent shall be phased such that aggregate located generally in the western portion of the project site is mined early in the process. Mining shall be phased so that mining generally progresses from west to east as much as possible during the project life. The project proponent shall coordinate with Elliott Homes and GenCorp Realty Investments to ensure that mining is phased to reduce impacts to new development.	Throughout all phases of the project.	City of Rancho Cordova Planning Department.	
MM 4.1a	Prior to each phase of construction or mining or any other site disturbance between the dates of March 1 and August 31, a determinate survey shall be conducted to determine if	All necessary surveys shall be provided to the	City of Rancho Cordova Planning	

Mitigation Measures

	active nesting by birds protected under the Migratory Bird Treaty Act (MBTA) or other special-status bird species is taking place. Surveys shall be conducted according to the following requirements: • The survey(s) shall be conducted by a qualified biologist or other equivalent professional • The survey(s) shall be conducted no more than 30 days and no less than 14 days prior to site disturbance to occur between March 1 and August 31 for each year the proposed project would operate. • The survey(s) shall include all areas within 250 feet of the project site. • A copy of the survey(s) shall be provided to the City of Rancho Cordova no less than 7 business days prior to site disturbance. If any special-status bird species are found to be nesting within the survey area, the project proponent shall immediately contact the City of Rancho Cordova Planning Department in order to determine the appropriate mitigation, if any, required to minimize impacts to nesting birds. No activity of any kind may occur within 250 feet of any nesting activity or as otherwise required following consultation with the City Planning Department and the California Department of Fish and Game until such time as the young have fledged. If all activities are to be completed outside the nesting season (identified above), determinate surveys shall not be required.	City of Rancho Cordova Planning Department no less than 7 days prior to site disturbance between March 1 and August 31 Surveys shall be repeated for each year the project plans to operate.	Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1b	The project proponent shall update determinate surveys for potentially occurring special-status species or their habitat using protocol acceptable to the regulatory agencies with authority over these species, or assume species presence within the area of project activity. • If any special-status species or their habitat are indicated or assumed, a detailed plan which describes the specific methods to be implemented to avoid and/or mitigate any project impacts upon special-status species to a less than significant level will be required. This detailed Special Status Species Avoidance/Mitigation Plan shall be prepared in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), and shall emphasize a multi-species approach to the maximum extent possible. The Special-Status Species Avoidance/Mitigation Plan shall be submitted to the City Planning Department for approval. • Where project impacts include take of a State listed animal species, a "2081-incidental take" permit shall be obtained from the CDFG and permit conditions implemented, pursuant to the California Endangered Species Act. Proof of such a permit shall be provided to the City of Rancho Cordova Planning Department prior to site disturbance. Determinate surveys for potentially occurring special-status species shall be conducted no more than three months prior to site disturbance. A copy of all determinate surveys shall be provided to the City Planning Department no less than seven days prior to site disturbance.	Determinate surveys shall be performed no more than three months prior to site disturbance. Any required avoidance/mitigation plans or permits listed above shall be provided to the City Planning Department prior to approval of improvement/grading plans or prior to site disturbance, whichever comes first.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1c	No disturbance, during any phase of the proposed project, within 100 feet of any wetlands or ephemeral drainages identified in the wetland delineation for the Rio Del Oro Specific Plan shall take place until such time as the approved mitigation is in place properly addressing the impacts to vernal pools and other seasonal habitats that support vernal pool fairy shrimp and vernal pool tadpole shrimp in such a manger that there will be no net loss of habitat (acreage and function) for these species in the Laguna Formation (pursuant to City Policy NR.2.1). The project proponent shall prepare and submit an annual Habitat Monitoring Report (HMR) to the City, which documents efforts to avoid sensitive habitat areas and the associated monitoring efforts. Included in the HMR will be the appropriate documentation of GenCorp's (or others) permitting and mitigation efforts. The project proponent will provide all required permits and approvals to the City before impacting sensitive habitat areas. The HMR shall also include a schedule of planned activities including the following: • The location of the proposed vernal pool and seasonal wetland habitat site(s) and a detailed map of showing the acreage, distribution, and type of wetlands to be created to ensure no net loss in wetland habitat acreage, values and functions. The compensation wetlands shall be designed to, at a minimum: meet or exceed the hydrophytic conditions and operating functions of the existing wetlands proposed for impact.	Prior to approval of grading and improvement plans and construction plans prior to any ground-disturbing activity.	City of Rancho Cordova Planning Department.	

Mitigation Measures

	• A monitoring plan to assess whether the compensation wetlands are functioning as intended. Specific performance standards for hydrologic, floral, and faunal parameters shall be proposed to determine success of the created wetlands. The monitoring plan shall specify the corrective measures/modifications to be implemented in the event that monitoring indicates that the performance standards are not being met. • A maintenance plan for the wetland preservation/mitigation areas describing the measures to be implemented to assure that they are maintained as wetland habitat in perpetuity. • A requirement that fencing be installed around all existing vernal pools that are within fifty feet of any haul route, spoil zone, stockpile zone, creation zone, or other construction area. The fencing shall be of high visibility material and limit access to the project site. Fencing shall be placed no closer than 10-feet to the delineated, verified perimeter of existing vernal pools. • A requirement that a qualified biological resources monitor, approved by the City be on the site(s) to ensure compliance with identified mitigation for the duration of all the proposed activities. The construction manager shall submit bi-annual compliance reports to City monitor for review for a period of five years. • The vernal pool and seasonal wetland habitat site shall be surveyed by a qualified biologist no more than 30 days prior to the onset of construction for the presence of raptor and federal and state listed bird nesting sites,			

Mitigation Measures

	unless it is determined that construction will occur outside of the breeding season for all species likely to occur on site or observed present. If active nesting sites are observed present all state and federal guidelines pertaining to active nesting sites shall be strictly adhered to in consultation with a qualified biologist. • The project proponent shall grant full access to the vernal pool and seasonal wetland habitat site to the City for the monitoring of construction activities and mitigation compliance. Access shall be granted during all construction activities and the City monitor may issue stop work orders if mitigation non-compliance is identified. • The project proponent shall specify that measures for reuse or disposal of excavated material are suitable for use at project site. The plan should minimize the elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan shall include specific information regarding the eventual reuse or disposal site, transportation method(s), disposal reuse management, and schedule. • A spill prevention and response plan to the satisfaction of the City. • A requirement that all disturbed areas be revegetated by the following methods: hydro seeding, drill seeding, or spreading of upland seed bearing soil. The method of revegetation shall be approved by a qualified wetland			

Mitigation Measures

	specialist and to the satisfaction of the City. • Incorporation of the use of non-toxic soil stabilizers according to manufacture's specifications to all inactive construction areas. Use non-toxic binders to exposed areas after cut and fill operations and hydro seeded areas. The vernal pool and seasonal wetland habitat site shall be watered as directed by the City of Rancho Cordova Department Public Works and the SMAQMD and the frequency shall be based on the type of operation, soil and wind exposure. The project proponent shall submit the proposed Habitat Monitoring Plan (HMP) to the City for endorsement prior to grading permit approval or any groundbreaking activity and initiation of mitigation activities (including mitigation land acquisition). Execution of mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of wetlands within the project site (to the standard set by City Policy NR.2.1).			
MM 4.1d	The project proponent may conduct construction or operation of the proposed project in those areas that lie more than 100 feet from any trees, elderberry shrubs, wetlands, or ephemeral drainages prior to the satisfaction of mitigation measure MM 4.1c providing that the standard set of best management practices are employed when working in areas within 250 feet of these features including:	All BMPs shall be shown on all plans for the proposed project prior to approval. Measure shall be complied with continuously until	City of Rancho Cordova Planning Department in consultation with the Public Works Department,	

Mitigation Measures

	• Implementation of erosion control measures during all construction and operation including installation of long-term erosion control devices such as straw wattles, hay bale check dams, and silt fencing as required; • Removal of cover vegetation as close as practicable to the time of construction or mining; • Confinement of construction equipment and associated activities to the areas to be mined (as shown in **Figure 2** and excluding those areas identified as "constraints areas" shown in **Figure 5**); • Reestablishment of stream bank contours following construction and installation of permanent erosion control as needed; • Prohibiting refueling of construction related equipment within 250-feet of the aquatic environment; • Maintenance of hazardous materials spill kits in proximity to all aquatic crossings; • Compliance with state and federal permits; • Performance of proper sediment control; • Formulation and adherence to a spill prevention and response plan; • Monitoring of construction and mining activities near specified features;	the end of the project or compliance with mitigation measure 4.1c.	Sacramento County Department of Water Resources, and the California Regional Water Quality Control Board.	

Mitigation Measures

	• Removal of all construction and operational spoils, remaining materials and miscellaneous litter for proper off-site disposal; and • Post-construction monitoring and supplemental revegetation of all disturbed areas. These requirements shall be conducted according to City standards and to California Stormwater Quality Association standards. These measures can be included in the Stormwater Pollution Prevention Plan (SWPPP) required by the Public Works Department, the County Department of Water Resources, and/or the California Regional Water Quality Control Board. While these measures may be combined with a SWPPP, the project proponent shall ensure that all BMPs required in this measure are complied with throughout the life of the project, regardless of the requirement or contents of a SWPPP. A qualified biological or stormwater monitor shall be contracted for monitoring of the condition and quality of these measures throughout the life of the project. Quarterly reports shall be submitted to the City Planning Department throughout the life of the project, indicating the presence, use, condition, and replacement (as needed) of all protective BMPs. If the conditions of mitigation measure 4.1d are met, either through the actions of the project proponent or compliance with mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS by the project proponent for that project, the requirements of this measure will be considered met and the conditions of any actions conducted pursuant to measure			

Mitigation Measures

	4.1d or 3.10-1a shall be followed instead.			
MM 4.1e	No project activity shall proceed within 100 feet of areas containing VELB habitat (i.e., elderberry shrubs) until a BO has been issued by USFWS, and the project proponent has abided by all pertinent conditions in the BO relating to the proposed project, including conservation and minimization measures, intended to be completed before on-site action. Conservation and minimization measures are likely to include preparation of supporting documentation that describes methods for relocation of existing shrubs and maintaining existing shrubs and other vegetation in the preserve. Relocation of existing elderberry shrubs and planting of new elderberry seedlings shall be implemented on a no-net-loss basis. Detailed information on monitoring success of relocated and planted shrubs and measures to compensate (should success criteria not be met) would also likely be required in the BO. Ratios for mitigation of VELB habitat will ultimately be determined through the ESA Section 7 consultation process with USFWS, but shall be a minimum of "no net loss." A VELB mitigation plan is currently being developed through ESA Section 7 consultation with USFWS. The mitigation plan will also address the proposed delisting of VELB and any mitigation to be implemented if the delisting occurs prior to project implementation due to requirements under CEQA. Implementation of this plan would satisfy mitigation requirements for the removal of elderberry savanna, a sensitive habitat as identified by DFG, as well as single elderberry shrubs. A copy of the USFWS-approved mitigation plan shall be submitted to the City before the approval of any grading or improvement plans or any ground-disturbing activities within 100 feet of VELB habitat.	Prior to the approval of grading permits or any ground-disturbing activity within 100 feet of VELF habitat.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.	

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	Should delisting of VELB occur, a mitigation plan that would compensate for the removal of elderberry savanna, a sensitive habitat as identified by DFG, would still be required. The mitigation plan shall be submitted to and approved by DFG and the City before the approval of any grading or improvement plans or any ground-disturbing activities that would affect elderberry savanna for all project phases. Execution of mitigation measure 3.10-4b of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of elderberry shrubs within the project site.			
MM 4.1f	The project proponent shall ensure that constraints Area B shown in **Figure 5** is expanded to include the whole of the area to be dedicated as elderberry preserve according to the Rio Del Oro Specific Plan EIR/EIS, as shown on Exhibit 3.10-3 of that document. Updated plans showing this expanded constraints area shall be submitted to the City Planning Department for review and approval prior to initiation of any site disturbance within 250 feet of existing Elderberry shrubs on the project site.	Prior to site disturbance within 250 feet of any Elderberry shrub on the project site.	City of Rancho Cordova Planning Department.	
MM 4.2	Prior to any site disturbance, a certified arborist or similarly qualified professional, approved by the City, shall conduct a full tree survey for the project site. The tree survey shall indicate the size, species, and general health of all trees located on the project site that exceed 6 inches diameter at breast height (dbh). If any native oaks or other native trees of 6 inches or greater dbh, multi-trunk native oaks or native	Prior to approval of grading permits and prior to any site disturbance.	City of Rancho Cordova Planning Department.	

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	trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a qualified professional to be in good health are found to exist in the project site, such trees shall be avoided if feasible. If such trees cannot feasibly be avoided, the project proponent shall do one of the following prior to site disturbance within 100 feet of any on-site trees: • All such trees that will be removed or otherwise damaged by project implementation shall be replaced at an inch-for-inch ratio. A replacement tree planting plan shall be prepared by a qualified professional or licensed landscape architect and shall be submitted to the City for approval before removal of trees; or • The project proponent shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City by a method comparable to an inch-by-inch replacement. The mitigation plan shall be subject to City approval. If the City adopts a tree preservation ordinance at any time in the future, any future project activities shall be subject to that ordinance instead. If mitigation measure 3.10-3 of the Rio Del Oro Specific Plan EIR/EIS is satisfied, and the actions conducted pursuant to that measure include the proposed project site and the trees within, this measure shall be considered met and no further action is required.			
MM 5.1a	The project proponent shall ensure that throughout all phases of the proposed project no mining activities or other ground disturbance occur within 150 feet of any structures or equipment located on-site as a result of historic rocket testing, including concrete pads associated with those	Coordination with Planning Department staff shall occur prior to any ground	City of Rancho Cordova Planning Department.	

Mitigation Measures

	activities. These structures are located in the general area of "Environmental Constraints Area C", as identified by the project proponent. The project proponent shall coordinate with Planning Department staff to ensure that activities are excluded from the proper portions of the project site prior to site disturbance in order to ensure that no activities take place in these locations. All on-site employees and truck drivers shall be notified of those areas to be avoided prior to working on the site.	disturbance on-site. Measure shall be in force throughout all phases of the proposed project.		
MM 5.1b	The City Planning Department shall be notified immediately if any cultural resources (e.g. prehistoric or historic artifacts, structural features, unusual amounts of bone or shell, fossils, or architectural remains) are uncovered during construction. All construction must stop immediately in the vicinity of the find and an archaeologist that meets the Secretary of the Interiors Professional Qualifications Standards in prehistoric or historical archaeology or a paleontologist shall be retained by the project proponent to evaluate the finds and recommend appropriate action. The recommendations of the archaeologist and/or the paleontologist shall be implemented prior to continuing construction.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 5.2	The City Planning Department shall be notified immediately if any human remains are uncovered during construction. All construction must stop immediately in the vicinity of the remains. The Planning Department shall notify the County Coroner according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in State CEQA Guidelines 15064.5(d-e) shall be followed.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	

Mitigation Measures

MM 6.1	As mining occurs on the project site, all tailing piles over 20 feet in height shall be cut at a slope of 1.5 horizontal to 1 vertical or shallower. At no time shall mining activity on such piles allow the slope to exceed that amount. If slopes cut at 1.5 to 1 appear to exhibit signs of potential failure (small localized slides, other signs of slope erosion, etc.) then mining shall continue at a grade of 2 feet horizontal to 1 foot vertical, or shallower, thereafter.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 7.1a	As construction and operation of the proposed project occurs, all debris, trash, refuse, and abandoned, discarded, and/or out-of-service items shall be removed from the proposed project sites and deposited off-site in an appropriate disposal facility and in a timely manner. No storage of any these materials shall occur on those portions of the site designated as environmentally sensitive areas/receptors (e.g. wetlands).	Measure shall be implemented throughout all phases of construction and operation. All such materials shall be completely removed prior to release of any portion of the site for other uses.	City of Rancho Cordova Planning Department.	
MM 7.1b	If any underground storage tanks (UST) are discovered during construction activities, the City Planning Department must be contacted and all construction activities within 500 feet of the UST shall cease immediately. The UST shall be removed as required by the County Environmental Management Department (EMD), Hazardous Materials Division. In addition, groundwater and soil investigation for contamination and remediation in the tank vicinity shall be conducted if required by the EMD.	Measure shall be implemented throughout all phases of construction and operation.	City of Rancho Cordova Planning Department.	

Mitigation Measures

MM 7.2a	No site disturbance shall occur within areas D or G of the Environmental Constraints Areas, as shown in Figure 5 for the project at any time. No improvements of roads or other infrastructure existing in those areas shall be conducted unless clearance for such activity is provided by the City, the Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board (CRWQCB) after adequate review of the proposed action and its environmental impacts are assessed by all parties. New truck travel roads, either permanent or temporary, shall not be constructed within these areas at any time. Nor shall any existing roads within these areas be used during mining operations unless those roads are cleared for such use by the DTSC and CRWQCB.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department, in consultation with the California Department of Toxic Substances Control and the California Regional Water Quality Control Board.	
MM 7.2b	No site disturbance shall occur within areas A, B, C, E, F, or H of the Environmental Constraints Area, as shown in **Figure 5**, until such time as the Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (CRWQCB) has released those areas for mining. Documentation stating that those areas are safe for mining and that clearance has been given by both the DTSC and GenCorp must be provided to the City at least 10 days prior to initiation of mining activities or other site disturbance in those areas.	Throughout all phases of the proposed project.	California Department of Toxic Substances Control and the California Regional Water Quality Control Board, in consultation with the City of Rancho Cordova.	
MM 7.3	No activities that include the use of open flame or sparks, such as welding or burning of waste materials, shall be conducted except in areas previously cleared by mining and devoid of vegetation or within the "sales and staging" area of	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department and	

Mitigation Measures

	the project site (as shown in Figure 4). Operations that could ignite fires shall be surrounded by a fire buffer of at least 15 feet on all sides. This buffer shall provide protection to any flammable materials including existing vegetation. Operations that could ignite fires shall not be conducted during any high wind events (winds generally in excess of 15 miles per hour). The project proponent shall ensure that spark arrestors are installed and operating normally within the exhaust system of all engines in mining and processing vehicles and equipment at all times. All vehicles used on the project site shall be equipped with fire extinguishers and all on-site personnel shall receive training in their use and application. An Emergency Communication Plan shall be developed for the proposed project that describes clear procedures to follow in the event of a fire on the project site. A copy of this plan shall be provided to the City of Rancho Cordova Planning Department for reference purposes prior to the initiation of mining activities.		the Sacramento Metropolitan Fire District.	
MM 8.1	The project proponent shall have a licensed professional engineer evaluate the structural integrity of the crossings of Morrison Creek on the private road north of Douglas Road in order to determine whether the crossings will handle the increased loads associated with the proposed project. Final design and specifications of any improvement of the crossings required is to be approved by the licensed engineer and submitted to the City for review and approval. All required permits shall be obtained for any improvement, including but not limited to a Streambed Alteration Agreement from the California Regional Water Quality Control Board.	Prior to use of the southern access road to Douglas Road.	City of Rancho Cordova Public Works Department.	

Mitigation Measures

	Improvements to the crossings are the full financial responsibility of the project proponent. Improvements must be constructed prior to use of the access road to Douglas Road. If this access road is not to be used by the project, no improvement of the crossings is required.			
MM 8.2	The project proponent shall include the specific BMPs in the Stormwater Pollution Prevention Plan (SWPPP) for the proposed project. Additionally, these BMPs shall be implemented throughout the operation of the proposed project. All BMPs shall be executed to the level of standard published by the California Stormwater Quality Association's Construction Stormwater BMP Handbook. BMPs to be utilized shall include, but are not limited to: • NS-8 Vehicle and Equipment Cleaning; • NS-8 Vehicle and Equipment Fueling; • NS-10 Vehicle and Equipment Maintenance; • WM-1 Material Delivery and Storage; • WM-2 Material Use; • WM-3 Stockpile Management; • WM-4 Spill Prevention and Control; • WM-5 Solid Waste Management; and, • WM-6 Hazardous Waste Management.	Measures shall be included in the SWPPP for the project and on all improvement, grading, or mining plans. All measures shall be implemented throughout all phases of the proposed project.	City of Rancho Cordova Public Works Department in coordination with the County of Sacramento Department of Water Resources.	
MM 11.1	Upon occupation of one or more residences in the Rio Del Oro Specific Plan area to the west of the project site, the project proponent shall ensure that no mining or aggregate processing is conducted within the following minimum distances from the nearest occupied residences: • No mining may occur within 840 feet of the nearest occupied residence in the daytime. No mining may occur within 1,560 feet of the nearest occupied residence in the	Throughout operation of the proposed project upon occupation of one or more homes to be constructed in the Rio Del Oro	City of Rancho Cordova Planning Department.	

Mitigation Measures

	nighttime. • No aggregate processing may occur within 1,270 feet of the nearest occupied residence in the daytime. No aggregate processing may occur within 2,155 feet of the nearest occupied residence in the nighttime. These minimum distances may be revised by the City of Rancho Cordova in the event that the project proponent provides additional data, prepared by a qualified noise professional, which shows that noise levels at or below current City Noise Standards would be, or actually are, experienced at the nearest occupied residence from mining and/or processing operations. Mining operations and aggregate processing may be conducted within these minimum distances only under the following conditions: • The project proponent shall incorporate temporary noise barriers such as berms or product stockpiles of a sufficient height to block sight lines between occupied homes and processing/mining operations. All temporary noise barriers shall be shown on project plans and submitted to the City Planning Department for review and approval prior to construction. • The project proponent shall provide an acoustical analysis prepared by a qualified noise professional showing that the temporary noise barriers are sufficient to reduce noise at the project boundary below current City noise standards of 55 dB L_{eq} daytime/45 dB L_{eq} nighttime.	Specific Plan area.		
MM 11.2a	The project proponent shall ensure that the Douglas Road access point is utilized only between the hours of 7:00 AM and 6:00 PM on weekdays and 8:00 AM and 6:00 PM on	Throughout all phases of the proposed project.	City of Rancho Cordova Planning	

Mitigation Measures

	weekends. The gate at that access point shall remain locked outside of those hours to discourage unauthorized use.		Department in consultation with the Sacramento Metropolitan Fire District.	
MM 11.2b	Prior to the occupation of homes in any portion of the Rio Del Oro or Westborough developments, the project proponent shall post signage visible to residents providing a name, address, and 24-hour phone number for information and/or complaints regarding the mining activities of the proposed project. Placement of the signage immediately adjacent to White Rock Road is considered sufficiently visible. Signage shall also include the address and main phone number for the City Planning Department. Signage meeting the above requirements shall also be installed prior to site disturbance at the entrance at Douglas Road in a location plainly visible from Douglas Road.	Signage shall be posted prior to occupation of homes within the Rio Del Oro or Westborough projects.	City of Rancho Cordova Planning Department.	
MM 15.1	The project proponent shall ensure that no trucks traveling to or from the proposed project via the Douglas Road access point utilize the intersection of Sunrise Boulevard and Douglas Intersection between the hours of 7:00 AM and 9:00 AM and between the hours of 4:00 PM and 6:00 PM, except when required by local projects served by the proposed project. All drivers shall be notified of this requirement in writing prior to operation to and from the project site. The project proponent shall post signage at the Douglas Road access point that clearly notifies drivers both entering and leaving the site of the time restriction.	Throughout operation of the proposed project.	City of Rancho Cordova Planning Department and Public Works Department.	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
1.	The applicant, Granite Construction Company shall meet with City staff prior to the issuance of the Project RC06-224A work authorization permit, July 26, 2017 to review the conditions of approvals and Mitigation Monitoring Plan.	Prior to July 26, 2017	Planning/ Public Works	
2.	The Granite Construction Mining and Reclamation Plan is approved by the City Council as of July 26, 2007, subject to the Conditions of Approval/MMRP, Reclamation Plan and the Financial Assurance Cost Estimate. The Mining Permit is valid for 5 years from the date of July 26, 2017 (original mining permit end date) with an optional 5 year renewal thereafter.	Expires 5 years from July 26, 2017 with an optional 5 year renewal thereafter	Planning	
3.	The Applicant shall hold harmless the City, its Council Members, officers, agents, employees, and representatives from liability for any award, damages, costs and fees incurred by the City and/or awarded to any plaintiff in an action challenging the validity of this permit or any environmental or other documentation related to approval of this permit. Applicant further agrees to provide a defense for the City in any such action.	During all phases of the project	Planning	
4.	Granite Construction is authorized to operate on a 24 hours per day, 7 days per week basis. If during the mining, the City receives complaints regarding nighttime mining operations, the Planning Director shall evaluate the technical merits of the complaints and at his discretion shall work with the applicant to modify mining operations to ensure compliance with General Plan and Zoning Code standards. As necessary to resolve the conflict, the hours for the mining operations could be changed to operate at the normal time periods of 6:00 a.m. to 10:00 p.m., Monday through Friday, and 6:00 a.m. until 3:00 p.m. on Saturdays, only.	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
5.	The applicant shall mitigate the potential for track-out on-site. If track-out still occurs, the project applicant shall require paved streets adjacent to construction sites to be washed or swept daily to remove accumulated dust. This requirement shall be included as a note in the reclamation plan submittal.	During all phases of the project	Public Works	
6.	Maintain security fencing around the perimeter of the site, and provide warning/trespass signs to comply with the Zoning Code. All perimeter fencing shall be retained until post-reclamation development of the project site occurs.	During all phases of the project	Planning	
7.	Should the City Engineer determine that an unexpected and significant, project related traffic problem has occurred during the course of the mining operation and transfer of materials off-site, he/she will work with the applicant to implement appropriate mitigation measures. On-site mitigation shall be initially encouraged by the City such as truck metering or queuing. The operator shall agree to cooperate and pay its fair share as determined by the Public Works Director for the construction of off-site improvements, if needed.	During all phases of the project	Public Works	
8.	The proponent shall ensure the moisture content of the material being conveyed; if used in the future, to the processing plant is sufficient to avoid visible dust emissions from the loading and unloading points.	During all phases of the project	Planning	
9.	In the unlikely event the mining operation encounters any former waste disposal area, mining activities shall immediately cease and the following agencies shall be contacted to determine the appropriate course of action: • Sacramento County Environmental Management Department,	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Environmental Health Division: (916) 875-8416. • State Department of Toxic Substances Control: (916) 255-3601. • Central Valley Regional Water Quality Control Board: (916) 255-3000.			
10.	Mining equipment and any toxic substance associated with mining or reclamation operations shall be protected from flooding and from contact with surface water.	During all phases of the project	Planning	
11.	The discharge of wastewater (including aggregate process water) to surface waters or surface water drainage courses is prohibited.	During all phases of the project	Planning	
12.	No polluting substance or toxic compound shall be applied to the mining surface area. Any form of pollutant used on the site shall be contained and not disposed of onsite.	During all phases of the project	Planning	
	Prior to Issuance of the Work Authorization Permit			
13.	Applicant shall pay the City any outstanding balance incurred by the City for the processing of the mining permit.	Prior to the issuance of the Project RC06-224A work authorization permit	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
14.	The applicant shall comply with all the mitigation measures included in the Mitigated Negative Declaration adopted July 26, 2007 and pay the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is $10,000. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the proponent, and if the actual monitoring costs exceed the initial estimate, the proponent shall be responsible to pay the additional amount.	Prior to the issuance of the Project RC06-224A work authorization permit	Planning	
15.	A performance bond made payable to the City of Rancho Cordova and the Department of Conservation of the State of California to financially guarantee reclamation of the property. The amount of the bond shall be subject to annual review and adjustment, pursuant to the requirements of the City's Mining Ordinance.	Prior to the issuance of the Project RC06-224A work authorization permit	Planning	
16.	The applicant and the City shall negotiate an agreement establishing the terms, conditions and method of determining the payment of a percentage of the retail sales (not to exceed 1% of the gross sales) generated by the sales of mined materials removed from the City and sold off-site.	Prior to the issuance of the Project RC06-224A work authorization permit	Finance	
17.	The applicant shall be required to install signs, to the satisfaction of the Public Works Department, alerting the traveling public to trucks entering/exiting the property.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	
18.	The applicant shall enter into an agreement with the City to address damages and impacts to City roadways directly attributable to the project.	Prior to the issuance of the	Public Works	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Impacts include, but are not limited to; public improvements necessitated by the project and accelerated wear on public infrastructure. The form of the agreement may include a fee per unit of material hauled away from the site and/or a capital fee to the satisfaction of the Public Works Department. The applicant shall prepare a roadway condition assessment for the City's review prior to hauling material off-site which describes the current condition of the impacted City roadways.	Project RC06-224A work authorization permit		
19.	All haul route exit drives shall be paved minimum 100-feet prior to the point of exit to public right-of-way and swept on a regular basis to the satisfaction of Public Works.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	
20.	Obtain appropriate permits from Public Works and provide adequate drain facilities into the established flood control system, in accordance with the Sacramento County Improvement Standards. The drainage plan shall mitigate the increase in surface runoff into Morrison Creek and shall show Best Management Practices (BMPs) to prevent erosion and sedimentation in those swale areas.	Prior to the issuance of the Project RC06-224A work authorization permit	Water Resources-Drainage	
	Prior to Certification of the Completion of the Reclamation Plan			
21.	The project proponent shall prepare for approval by the Planning Director a Tree Replanting Plan representing the size, species, and location of trees to be planted in compliance with mitigation measure MM 4.2 of the Final Mitigated Negative Declaration. The plan shall seek to place trees within the vicinity of the project and consistent with whatever use is planned for or located on the property.	Prior to Final Certification of the Completion of the Reclamation Plan	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Supplemental Conditions to the Permit Renewal RC-06-224A			
22.	Prior to operations under the permit renewal, the applicant shall execute a Roadway Impact and Truck Management Program Agreement that will satisfy Condition No. 7 and Condition No. 18 of the original permit and the terms of a Truck Management Plan Operational Agreement executed between the City and County of Sacramento.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	
23.	Truck access to Highway 50 shall be from Sunrise Boulevard and not from Zinfandel Drive. With the exception of local deliveries, no through trips shall be allowed on White Rock Road west of Sunrise Boulevard	During all phases of the project	Public Works	
24.	Prior to operations under the permit renewal, the applicant shall execute a Payment Agreement that will satisfy Condition No. 16 of the original permit.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	

Mitigation Measures

Section 2		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
MM 1.1	The project proponent shall ensure that night time lighting levels be maintained at the minimum level necessary to provide for security and safety at the project site. All night time lighting shall be shielded and aimed appropriately to prevent any direct upward illumination or light directed at adjacent properties. If the City receives complaints from any residents of adjacent areas of nuisance lights, the project proponent shall take immediate action to prevent lights from producing significant light or glare at adjacent properties. All on-site stationary lighting shall comply with this requirement throughout the entirety of operation of the project. Vehicle and all other mobile equipment lights (except for any lights mounted on the mobile processing plant) are exempt from this requirement for safety reasons. However, the use of high beams shall be limited within 1,500 feet of the western boundary of the project site to those times when they are required for safety reasons. Signs visible to truck drivers shall be posted along any haul roads within 1,500 feet of the western boundary of the project site that state that high beams are to be used only as required for safety. All drivers shall be notified of this requirement prior to operating on-site.	Throughout project operation once homes are occupied within the Rio Del Oro project or within 1,500 feet of any portion of the project site.	City of Rancho Cordova Planning Department and Code Enforcement Department.	
MM 3.1a	The project proponent shall require that the operators water all haul roads and all exposed soils at least twice daily during construction, mining and reclamation activities.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1b	The project proponent shall require that the operators limit vehicle speed for on-site construction vehicles to 15 miles per hour on any unpaved roadways at all times. Signs stating the speed limit and that dust control measures are in effect shall be placed at each entrance/exit of the site and along all haul roads. Truck and equipment operators shall be notified that dust abatement is a concern and of the 15 mph speed limit.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1c	The project proponent shall require that, when transporting materials by truck during mining and reclamation activities, loads shall be covered or two feet of freeboard shall be maintained by the operator. Compliance with this measure shall be enforced by both the City and the project foreman.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1d	The project proponent shall ensure that all exposed soil existing after mining of the project site is seeded with non-invasive species and mulched with certified weed-free straw mulch immediately after mining. The amount of exposed soil at any one time shall me minimized as much as possible. Seeding and straw mulching shall be conducted as the project progresses, immediately following regrading of the soil. All seeding shall be conducted according to California Stormwater Quality Association (CASQA) guidelines, as shown in their California Stormwater BMP Handbook (EC-4). All straw mulch application shall be conducted according to CASQA guidelines, as shown in their California Stormwater BMP Handbook (EC-6). All seeded and mulched areas shall be inspected daily to ensure dust is controlled during the establishment period. Water shall be applied to any areas known or suspected to generate dust during any high wind events (winds greater than 15 miles per hour).	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1e	The project proponent shall provide a plan for approval by the City and the Sacramento Metropolitan Air Quality Management District (SMAQMD) demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction and operation of the proposed project will achieve a fleet-averaged 20 percent NOx reduction and a 45 percent particulate reduction compared to the most recent CARB fleet average. The project proponent shall submit to the City and SMAQMD a comprehensive inventory of all off-road equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no activity occurs; and, The project proponent shall ensure that emissions from all off-road diesel powered equipment used on the proposed project sites does not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be performed at least weekly by a qualified third-party professional, and a monthly summary of the visual results shall be submitted to the City and SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site	Equipment Inventory shall be submitted prior to site disturbance. Remainder of measure shall be complied with throughout construction and operation of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

	inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulation. In the event construction equipment meeting the requirements set forth above is determined not to be available, the project proponent shall notify the City and SMAQMD. Upon verification that required low-emission construction equipment is not available, the City may waive this measure. This requirement shall be included as a note in all project construction plans.			
MM 3.1f	The project proponent shall offset excess emissions (to below the 65 lbs/day threshold of significance) by paying an off-site operational mitigation fee to the Sacramento Metropolitan Air Quality Management District (SMAQMD) Operational Mitigation Fee Program. The final amount of the fee is to be determined by SMAQMD in consultation with the project proponent during the stationary air quality permit process. The project proponent shall provide documentation of the payment of the fee to the City prior to site disturbance.	Prior to site disturbance.	SMAQMD in consultation with the City of Rancho Cordova Planning Department.	
MM 3.2	Mining conducted by the project proponent shall be phased such that aggregate located generally in the western portion of the project site is mined early in the process. Mining shall be phased so that mining generally progresses from west to east as much as possible during the project life. The project proponent shall coordinate with Elliott Homes and GenCorp Realty Investments to ensure that mining is phased to reduce impacts to new development.	Throughout all phases of the project.	City of Rancho Cordova Planning Department.	
MM 4.1a	Prior to each phase of construction or mining or any other site disturbance between the dates of March 1 and August 31, a determinate survey shall be conducted to determine if	All necessary surveys shall be provided to the	City of Rancho Cordova Planning	

	active nesting by birds protected under the Migratory Bird Treaty Act (MBTA) or other special-status bird species is taking place. Surveys shall be conducted according to the following requirements: • The survey(s) shall be conducted by a qualified biologist or other equivalent professional. • The survey(s) shall be conducted no more than 30 days and no less than 14 days prior to site disturbance to occur between March 1 and August 31 for each year the proposed project would operate. • The survey(s) shall include all areas within 250 feet of the project site. • A copy of the survey(s) shall be provided to the City of Rancho Cordova no less than 7 business days prior to site disturbance. If any special-status bird species are found to be nesting within the survey area, the project proponent shall immediately contact the City of Rancho Cordova Planning Department in order to determine the appropriate mitigation, if any, required to minimize impacts to nesting birds. No activity of any kind may occur within 250 feet of any nesting activity or as otherwise required following consultation with the City Planning Department and the California Department of Fish and Game until such time as the young have fledged. If all activities are to be completed outside the nesting season (identified above), determinate surveys shall not be required.	City of Rancho Cordova Planning Department no less than 7 days prior to site disturbance between March 1 and August 31. Surveys shall be repeated for each year the project plans to operate.	Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1b	The project proponent shall update determinate surveys for potentially occurring special-status species or their habitat using protocol acceptable to the regulatory agencies with authority over these species, or assume species presence within the area of project activity. • If any special-status species or their habitat are indicated or assumed, a detailed plan which describes the specific methods to be implemented to avoid and/or mitigate any project impacts upon special-status species to a less than significant level will be required. This detailed Special Status Species Avoidance/Mitigation Plan shall be prepared in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), and shall emphasize a multi-species approach to the maximum extent possible. The Special-Status Species Avoidance/Mitigation Plan shall be submitted to the City Planning Department for approval. • Where project impacts include take of a State listed animal species, a "2081-incidental take" permit shall be obtained from the CDFG and permit conditions implemented, pursuant to the California Endangered Species Act. Proof of such a permit shall be provided to the City of Rancho Cordova Planning Department prior to site disturbance. Determinate surveys for potentially occurring special-status species shall be conducted no more than three months prior to site disturbance. A copy of all determinate surveys shall be provided to the City Planning Department no less than seven days prior to site disturbance.	Determinate surveys shall be performed no more than three months prior to site disturbance. Any required avoidance/mitigation plans or permits listed above shall be provided to the City Planning Department prior to approval of improvement/grading plans or prior to site disturbance, whichever comes first.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1c	No disturbance, during any phase of the proposed project, within 100 feet of any wetlands or ephemeral drainages identified in the wetland delineation for the Rio Del Oro Specific Plan shall take place until such time as the approved mitigation is in place properly addressing the impacts to vernal pools and other seasonal habitats that support vernal pool fairy shrimp and vernal pool tadpole shrimp in such a manger that there will be no net loss of habitat (acreage and function) for these species in the Laguna Formation (pursuant to City Policy NR.2.1). The project proponent shall prepare and submit an annual Habitat Monitoring Report (HMR) to the City, which documents efforts to avoid sensitive habitat areas and the associated monitoring efforts. Included in the HMR will be the appropriate documentation of GenCorp's (or others) permitting and mitigation efforts. The project proponent will provide all required permits and approvals to the City before impacting sensitive habitat areas. The HMR shall also include a schedule of planned activities including the following: • The location of the proposed vernal pool and seasonal wetland habitat site(s) and a detailed map of showing the acreage, distribution, and type of wetlands to be created to ensure no net loss in wetland habitat acreage, values and functions. The compensation wetlands shall be designed to, at a minimum: meet or exceed the hydrophytic conditions and operating functions of the existing wetlands proposed for impact.	Prior to approval of grading and improvement plans and construction plans prior to any ground-disturbing activity.	City of Rancho Cordova Planning Department.	

Mitigation Measures

	• A monitoring plan to assess whether the compensation wetlands are functioning as intended. Specific performance standards for hydrologic, floral, and faunal parameters shall be proposed to determine success of the created wetlands. The monitoring plan shall specify the corrective measures/modifications to be implemented in the event that monitoring indicates that the performance standards are not being met. • A maintenance plan for the wetland preservation/mitigation areas describing the measures to be implemented to assure that they are maintained as wetland habitat in perpetuity. • A requirement that fencing be installed around all existing vernal pools that are within fifty feet of any haul route, spoil zone, stockpile zone, creation zone, or other construction area. The fencing shall be of high visibility material and limit access to the project site. Fencing shall be placed no closer than 10-feet to the delineated, verified perimeter of existing vernal pools. • A requirement that a qualified biological resources monitor, approved by the City be on the site(s) to ensure compliance with identified mitigation for the duration of all the proposed activities. The construction manager shall submit bi-annual compliance reports to City monitor for review for a period of five years. • The vernal pool and seasonal wetland habitat site shall be surveyed by a qualified biologist no more than 30 days prior to the onset of construction for the presence of raptor and federal and state listed bird nesting sites,			

	unless it is determined that construction will occur outside of the breeding season for all species likely to occur on site or observed present. If active nesting sites are observed present all state and federal guidelines pertaining to active nesting sites shall be strictly adhered to in consultation with a qualified biologist. • The project proponent shall grant full access to the vernal pool and seasonal wetland habitat site to the City for the monitoring of construction activities and mitigation compliance. Access shall be granted during all construction activities and the City monitor may issue stop work orders if mitigation non-compliance is identified. • The project proponent shall specify that measures for reuse or disposal of excavated material are suitable for use at project site. The plan should minimize the elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan shall include specific information regarding the eventual reuse or disposal site, transportation method(s), disposal reuse management, and schedule. • A spill prevention and response plan to the satisfaction of the City. • A requirement that all disturbed areas be revegetated by the following methods: hydro seeding, drill seeding, or spreading of upland seed bearing soil. The method of revegetation shall be approved by a qualified wetland			

Mitigation Measures

	specialist and to the satisfaction of the City. • Incorporation of the use of non-toxic soil stabilizers according to manufacture's specifications to all inactive construction areas. Use non-toxic binders to exposed areas after cut and fill operations and hydro seeded areas. The vernal pool and seasonal wetland habitat site shall be watered as directed by the City of Rancho Cordova Department Public Works and the SMAQMD and the frequency shall be based on the type of operation, soil and wind exposure. The project proponent shall submit the proposed Habitat Monitoring Plan (HMP) to the City for endorsement prior to grading permit approval or any groundbreaking activity and initiation of mitigation activities (including mitigation land acquisition). Execution of mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of wetlands within the project site (to the standard set by City Policy NR.2.1).			
MM 4.1d	The project proponent may conduct construction or operation of the proposed project in those areas that lie more than 100 feet from any trees, elderberry shrubs, wetlands, or ephemeral drainages prior to the satisfaction of mitigation measure MM 4.1c providing that the standard set of best management practices are employed when working in areas within 250 feet of these features including:	All BMPs shall be shown on all plans for the proposed project prior to approval. Measure shall be complied with continuously until	City of Rancho Cordova Planning Department in consultation with the Public Works Department,	

	• Implementation of erosion control measures during all construction and operation including installation of long-term erosion control devices such as straw wattles, hay bale check dams, and silt fencing as required; • Removal of cover vegetation as close as practicable to the time of construction or mining; • Confinement of construction equipment and associated activities to the areas to be mined (as shown in **Figure 2** and excluding those areas identified as "constraints areas" shown in **Figure 5**); • Reestablishment of stream bank contours following construction and installation of permanent erosion control as needed; • Prohibiting refueling of construction related equipment within 250-feet of the aquatic environment; • Maintenance of hazardous materials spill kits in proximity to all aquatic crossings; • Compliance with state and federal permits; • Performance of proper sediment control; • Formulation and adherence to a spill prevention and response plan; • Monitoring of construction and mining activities near specified features;	the end of the project or compliance with mitigation measure 4.1c.	Sacramento County Department of Water Resources, and the California Regional Water Quality Control Board.	

	• Removal of all construction and operational spoils, remaining materials and miscellaneous litter for proper off-site disposal; and • Post-construction monitoring and supplemental revegetation of all disturbed areas. These requirements shall be conducted according to City standards and to California Stormwater Quality Association standards. These measures can be included in the Stormwater Pollution Prevention Plan (SWPPP) required by the Public Works Department, the County Department of Water Resources, and/or the California Regional Water Quality Control Board. While these measures may be combined with a SWPPP, the project proponent shall ensure that all BMPs required in this measure are complied with throughout the life of the project, regardless of the requirement or contents of a SWPPP. A qualified biological or stormwater monitor shall be contracted for monitoring of the condition and quality of these measures throughout the life of the project. Quarterly reports shall be submitted to the City Planning Department throughout the life of the project, indicating the presence, use, condition, and replacement (as needed) of all protective BMPs. If the conditions of mitigation measure 4.1d are met, either through the actions of the project proponent or compliance with mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS by the project proponent for that project, the requirements of this measure will be considered met and the conditions of any actions conducted pursuant to measure			

Mitigation Measures

	4.1d or 3.10-1a shall be followed instead.			
MM 4.1e	No project activity shall proceed within 100 feet of areas containing VELB habitat (i.e., elderberry shrubs) until a BO has been issued by USFWS, and the project proponent has abided by all pertinent conditions in the BO relating to the proposed project, including conservation and minimization measures, intended to be completed before on-site action. Conservation and minimization measures are likely to include preparation of supporting documentation that describes methods for relocation of existing shrubs and maintaining existing shrubs and other vegetation in the preserve. Relocation of existing elderberry shrubs and planting of new elderberry seedlings shall be implemented on a no-net-loss basis. Detailed information on monitoring success of relocated and planted shrubs and measures to compensate (should success criteria not be met) would also likely be required in the BO. Ratios for mitigation of VELB habitat will ultimately be determined through the ESA Section 7 consultation process with USFWS, but shall be a minimum of "no net loss." A VELB mitigation plan is currently being developed through ESA Section 7 consultation with USFWS. The mitigation plan will also address the proposed delisting of VELB and any mitigation to be implemented if the delisting occurs prior to project implementation due to requirements under CEQA. Implementation of this plan would satisfy mitigation requirements for the removal of elderberry savanna, a sensitive habitat as identified by DFG, as well as single elderberry shrubs. A copy of the USFWS-approved mitigation plan shall be submitted to the City before the approval of any grading or improvement plans or any ground-disturbing activities within 100 feet of VELB habitat.	Prior to the approval of grading permits or any ground-disturbing activity within 100 feet of VELF habitat.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.	

Mitigation Measures

	Should delisting of VELB occur, a mitigation plan that would compensate for the removal of elderberry savanna, a sensitive habitat as identified by DFG, would still be required. The mitigation plan shall be submitted to and approved by DFG and the City before the approval of any grading or improvement plans or any ground-disturbing activities that would affect elderberry savanna for all project phases. Execution of mitigation measure 3.10-4b of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of elderberry shrubs within the project site.			
MM 4.1f	The project proponent shall ensure that constraints Area B shown in **Figure 5** is expanded to include the whole of the area to be dedicated as elderberry preserve according to the Rio Del Oro Specific Plan EIR/EIS, as shown on Exhibit 3.10-3 of that document. Updated plans showing this expanded constraints area shall be submitted to the City Planning Department for review and approval prior to initiation of any site disturbance within 250 feet of existing Elderberry shrubs on the project site.	Prior to site disturbance within 250 feet of any Elderberry shrub on the project site.	City of Rancho Cordova Planning Department.	
MM 4.2	Prior to any site disturbance, a certified arborist or similarly qualified professional, approved by the City, shall conduct a full tree survey for the project site. The tree survey shall indicate the size, species, and general health of all trees located on the project site that exceed 6 inches diameter at breast height (dbh). If any native oaks or other native trees of 6 inches or greater dbh, multi-trunk native oaks or native	Prior to approval of grading permits and prior to any site disturbance.	City of Rancho Cordova Planning Department.	

	trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a qualified professional to be in good health are found to exist in the project site, such trees shall be avoided if feasible. If such trees cannot feasibly be avoided, the project proponent shall do one of the following prior to site disturbance within 100 feet of any on-site trees: • All such trees that will be removed or otherwise damaged by project implementation shall be replaced at an inch-for-inch ratio. A replacement tree planting plan shall be prepared by a qualified professional or licensed landscape architect and shall be submitted to the City for approval before removal of trees; or • The project proponent shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City by a method comparable to an inch-by-inch replacement. The mitigation plan shall be subject to City approval. If the City adopts a tree preservation ordinance at any time in the future, any future project activities shall be subject to that ordinance instead. If mitigation measure 3.10-3 of the Rio Del Oro Specific Plan EIR/EIS is satisfied, and the actions conducted pursuant to that measure include the proposed project site and the trees within, this measure shall be considered met and no further action is required.			
MM 5.1a	The project proponent shall ensure that throughout all phases of the proposed project no mining activities or other ground disturbance occur within 150 feet of any structures or equipment located on-site as a result of historic rocket testing, including concrete pads associated with those	Coordination with Planning Department staff shall occur prior to any ground	City of Rancho Cordova Planning Department.	

Mitigation Measures

	activities. These structures are located in the general area of "Environmental Constraints Area C", as identified by the project proponent. The project proponent shall coordinate with Planning Department staff to ensure that activities are excluded from the proper portions of the project site prior to site disturbance in order to ensure that no activities take place in these locations. All on-site employees and truck drivers shall be notified of those areas to be avoided prior to working on the site.	disturbance on-site. Measure shall be in force throughout all phases of the proposed project.		
MM 5.1b	The City Planning Department shall be notified immediately if any cultural resources (e.g. prehistoric or historic artifacts, structural features, unusual amounts of bone or shell, fossils, or architectural remains) are uncovered during construction. All construction must stop immediately in the vicinity of the find and an archaeologist that meets the Secretary of the Interiors Professional Qualifications Standards in prehistoric or historical archaeology or a paleontologist shall be retained by the project proponent to evaluate the finds and recommend appropriate action. The recommendations of the archaeologist and/or the paleontologist shall be implemented prior to continuing construction.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 5.2	The City Planning Department shall be notified immediately if any human remains are uncovered during construction. All construction must stop immediately in the vicinity of the remains. The Planning Department shall notify the County Coroner according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in State CEQA Guidelines 15064.5(d-e) shall be followed.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	

Mitigation Measures

MM 6.1	As mining occurs on the project site, all tailing piles over 20 feet in height shall be cut at a slope of 1.5 horizontal to 1 vertical or shallower. At no time shall mining activity on such piles allow the slope to exceed that amount. If slopes cut at 1.5 to 1 appear to exhibit signs of potential failure (small localized slides, other signs of slope erosion, etc.) then mining shall continue at a grade of 2 feet horizontal to 1 foot vertical, or shallower, thereafter.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 7.1a	As construction and operation of the proposed project occurs, all debris, trash, refuse, and abandoned, discarded, and/or out-of-service items shall be removed from the proposed project sites and deposited off-site in an appropriate disposal facility and in a timely manner. No storage of any these materials shall occur on those portions of the site designated as environmentally sensitive areas/receptors (e.g. wetlands).	Measure shall be implemented throughout all phases of construction and operation. All such materials shall be completely removed prior to release of any portion of the site for other uses.	City of Rancho Cordova Planning Department.	
MM 7.1b	If any underground storage tanks (UST) are discovered during construction activities, the City Planning Department must be contacted and all construction activities within 500 feet of the UST shall cease immediately. The UST shall be removed as required by the County Environmental Management Department (EMD), Hazardous Materials Division. In addition, groundwater and soil investigation for contamination and remediation in the tank vicinity shall be conducted if required by the EMD.	Measure shall be implemented throughout all phases of construction and operation.	City of Rancho Cordova Planning Department.	

Mitigation Measures

MM 7.2a	No site disturbance shall occur within areas D or G of the Environmental Constraints Areas, as shown in Figure 5 for the project at any time. No improvements of roads or other infrastructure existing in those areas shall be conducted unless clearance for such activity is provided by the City, the Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board (CRWQCB) after adequate review of the proposed action and its environmental impacts are assessed by all parties. New truck travel roads, either permanent or temporary, shall not be constructed within these areas at any time. Nor shall any existing roads within these areas be used during mining operations unless those roads are cleared for such use by the DTSC and CRWQCB.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department, in consultation with the California Department of Toxic Substances Control and the California Regional Water Quality Control Board.	
MM 7.2b	No site disturbance shall occur within areas A, B, C, E, F, or H of the Environmental Constraints Area, as shown in **Figure 5**, until such time as the Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (CRWQCB) has released those areas for mining. Documentation stating that those areas are safe for mining and that clearance has been given by both the DTSC and GenCorp must be provided to the City at least 10 days prior to initiation of mining activities or other site disturbance in those areas.	Throughout all phases of the proposed project.	California Department of Toxic Substances Control and the California Regional Water Quality Control Board, in consultation with the City of Rancho Cordova.	
MM 7.3	No activities that include the use of open flame or sparks, such as welding or burning of waste materials, shall be conducted except in areas previously cleared by mining and devoid of vegetation or within the "sales and staging" area of	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department and	

Mitigation Measures

	the project site (as shown in Figure 4). Operations that could ignite fires shall be surrounded by a fire buffer of at least 15 feet on all sides. This buffer shall provide protection to any flammable materials including existing vegetation. Operations that could ignite fires shall not be conducted during any high wind events (winds generally in excess of 15 miles per hour). The project proponent shall ensure that spark arrestors are installed and operating normally within the exhaust system of all engines in mining and processing vehicles and equipment at all times. All vehicles used on the project site shall be equipped with fire extinguishers and all on-site personnel shall receive training in their use and application. An Emergency Communication Plan shall be developed for the proposed project that describes clear procedures to follow in the event of a fire on the project site. A copy of this plan shall be provided to the City of Rancho Cordova Planning Department for reference purposes prior to the initiation of mining activities.		the Sacramento Metropolitan Fire District.	
MM 8.1	The project proponent shall have a licensed professional engineer evaluate the structural integrity of the crossings of Morrison Creek on the private road north of Douglas Road in order to determine whether the crossings will handle the increased loads associated with the proposed project. Final design and specifications of any improvement of the crossings required is to be approved by the licensed engineer and submitted to the City for review and approval. All required permits shall be obtained for any improvement, including but not limited to a Streambed Alteration Agreement from the California Regional Water Quality Control Board.	Prior to use of the southern access road to Douglas Road.	City of Rancho Cordova Public Works Department.	

Mitigation Measures

	Improvements to the crossings are the full financial responsibility of the project proponent. Improvements must be constructed prior to use of the access road to Douglas Road. If this access road is not to be used by the project, no improvement of the crossings is required.			
MM 8.2	The project proponent shall include the specific BMPs in the Stormwater Pollution Prevention Plan (SWPPP) for the proposed project. Additionally, these BMPs shall be implemented throughout the operation of the proposed project. All BMPs shall be executed to the level of standard published by the California Stormwater Quality Association's Construction Stormwater BMP Handbook. BMPs to be utilized shall include, but are not limited to: • NS-8 Vehicle and Equipment Cleaning; • NS-8 Vehicle and Equipment Fueling; • NS-10 Vehicle and Equipment Maintenance; • WM-1 Material Delivery and Storage; • WM-2 Material Use; • WM-3 Stockpile Management; • WM-4 Spill Prevention and Control; • WM-5 Solid Waste Management; and, • WM-6 Hazardous Waste Management.	Measures shall be included in the SWPPP for the project and on all improvement, grading, or mining plans. All measures shall be implemented throughout all phases of the proposed project.	City of Rancho Cordova Public Works Department in coordination with the County of Sacramento Department of Water Resources.	
MM 11.1	Upon occupation of one or more residences in the Rio Del Oro Specific Plan area to the west of the project site, the project proponent shall ensure that no mining or aggregate processing is conducted within the following minimum distances from the nearest occupied residences: • No mining may occur within 840 feet of the nearest occupied residence in the daytime. No mining may occur within 1,560 feet of the nearest occupied residence in the	Throughout operation of the proposed project upon occupation of one or more homes to be constructed in the Rio Del Oro	City of Rancho Cordova Planning Department.	

Mitigation Measures

	nighttime. • No aggregate processing may occur within 1,270 feet of the nearest occupied residence in the daytime. No aggregate processing may occur within 2,155 feet of the nearest occupied residence in the nighttime. These minimum distances may be revised by the City of Rancho Cordova in the event that the project proponent provides additional data, prepared by a qualified noise professional, which shows that noise levels at or below current City Noise Standards would be, or actually are, experienced at the nearest occupied residence from mining and/or processing operations. Mining operations and aggregate processing may be conducted within these minimum distances only under the following conditions: • The project proponent shall incorporate temporary noise barriers such as berms or product stockpiles of a sufficient height to block sight lines between occupied homes and processing/mining operations. All temporary noise barriers shall be shown on project plans and submitted to the City Planning Department for review and approval prior to construction. • The project proponent shall provide an acoustical analysis prepared by a qualified noise professional showing that the temporary noise barriers are sufficient to reduce noise at the project boundary below current City noise standards of 55 dB L_{eq} daytime/45 dB L_{eq} nighttime.	Specific Plan area.		
MM 11.2a	The project proponent shall ensure that the Douglas Road access point is utilized only between the hours of 7:00 AM and 6:00 PM on weekdays and 8:00 AM and 6:00 PM on	Throughout all phases of the proposed project.	City of Rancho Cordova Planning	

Mitigation Measures

	weekends. The gate at that access point shall remain locked outside of those hours to discourage unauthorized use.		Department in consultation with the Sacramento Metropolitan Fire District.	
MM 11.2b	Prior to the occupation of homes in any portion of the Rio Del Oro or Westborough developments, the project proponent shall post signage visible to residents providing a name, address, and 24-hour phone number for information and/or complaints regarding the mining activities of the proposed project. Placement of the signage immediately adjacent to White Rock Road is considered sufficiently visible. Signage shall also include the address and main phone number for the City Planning Department. Signage meeting the above requirements shall also be installed prior to site disturbance at the entrance at Douglas Road in a location plainly visible from Douglas Road.	Signage shall be posted prior to occupation of homes within the Rio Del Oro or Westborough projects.	City of Rancho Cordova Planning Department.	
MM 15.1	The project proponent shall ensure that no trucks traveling to or from the proposed project via the Douglas Road access point utilize the intersection of Sunrise Boulevard and Douglas Intersection between the hours of 7:00 AM and 9:00 AM and between the hours of 4:00 PM and 6:00 PM, except when required by local projects served by the proposed project. All drivers shall be notified of this requirement in writing prior to operation to and from the project site. The project proponent shall post signage at the Douglas Road access point that clearly notifies drivers both entering and leaving the site of the time restriction.	Throughout operation of the proposed project.	City of Rancho Cordova Planning Department and Public Works Department.	

Attachment E
Quarterly Routine BMP Inspection Form

Quarterly Routine BMP Inspection Form

Areas Inspected	Applicable (Yes/No)	Notes
Aggregate Stockpiles		
Aggregate processing		
Returned Rubble		
Aggregate Mining		
Truck & Equip Wash		
Equipment Painting Areas		
Sand Blasting		
Vehicle/Equipment Maintenance Shop		
Air Compressors		
Battery Storage		
Used Brake Pads		
Lubricant Storage		
AST fuel and fueling		
Haz Material Storage		
Haz Waste Storage		
Garbage Dumpsters		
Paved Parking & Outside Storage		
Unpaved parking & outside storage		
Boneyard/surplus equipment storage		
Storm water Collection		
Offsite trackout		
Offsite cleanout of trucks		

Have identified corrective actions been implemented to correct deficiencies noted during

inspection? Yes ☐ No ☐

Date corrective Action completed: _____

Signature:_____ Date:_____

a fresh take.
RANCHO CORDOVA
CALIFORNIA

PLANNING DEPARTMENT
2729 Prospect Park Drive | Rancho Cordova, CA 95670
Phone: (916) 851-8750 | Fax: (916) 851-8762

February 21, 2022

Anji Amachree
Division of Mine Reclamation
715 P Street, MS 1905
Sacramento, CA95814

Subject: Granite Construction Company White Rock/Rio Del Oro Site, CA Mine ID# 91-34-0048,

- **INTERIM MANAGEMENT PLAN REVIEW**

Dear Anji Amachree:

On February 2, 2022, the City of Rancho Cordova Planning Department received an Interim Management Plan (IMP) for the White Rock/Rio Del Oro site (CA Mine ID #91-34-0048) Attachment A. In accordance with Public Resources Code (PRC) 2770(h)(4)(B), the City of Rancho Cordova has reviewed the attached IMP and does not have any further comments. Therefore, the IMP satisfies the requirements of the PRC Section 2774. The City of Rancho Cordova is forwarding the Granite Construction Company Interim Management Plan to the Division of Mine Reclamation for comment.

If you have any questions, I can be contacted at jcowles@cityofranchocordova.org or at my direct phone line 916-851-8756.

Sincerely,

June Cowles

June Cowles, Senior Planner
City of Rancho Cordova

Attachment A: Granite Construction Company White Rock/Rio Del Oro Site, CA Mine ID# 91-34-0048 Interim Management Plan

Valley Region Office
P.O. Box 15287
Sacramento, CA 95851
Phone: 916-855-4400
www.graniteconstruction.com

February 2, 2022

City of Rancho Cordova
Planning Department
2729 Prospect Park Drive,
Rancho Cordova, CA 95670
Attention: June Cowles

RE: White Rock/Rio Del Oro Interim Management Plan

Dear Mrs. Cowles,

Construction Company ("Granite") has enclosed the Interim Management Plan (IMP) for the White Rock/Rio Del Oro site (CA Mine ID #91-34-0048) operated by Granite.

Please feel free to contact me with any questions or concerns.

Sincerely,
Granite Construction Company

Courtney Deporto

Courtney DePorto
Environmental Coordinator II
Valley Region
C: 916-825-5708
O: 916-855-4514
Courtney.deporto@gcinc.com

White Rock/ Rio Del Oro
Interim Management Plan

The Surface Mining and Reclamation Act of 1975, Public Resources Code Section 2710 *et seq.* (SMARA) requires mining operations to submit an Interim Management Plan when an operation becomes idle. The following Interim Management Plan is prepared in accordance with Section 2770 (h) of the Public Resources Code. The mining status of the White Rock/Rio Del Oro site became "idle" on January 1, 2022, as defined in PRC Section 2721.1. Granite Construction Company ("Granite") is requesting "idle" status because there was no production in 2021 and there is no anticipated production in 2022. However, surface mining activities are anticipated to occur at the site in the future. Granite is pursuing a 5-year extension of CUP RC-06-224A which expires in 2022. Upon an increase in demand for aggregates in the area and subsequent increase in production/sales at the White Rock site, Granite will notify the City of Ranch Cordova of the change in mine status from idle to active.

The surface mining activities at the site that will continue while the mine site is "idle" include the mining of sand and gravel, production and sale of aggregate and construction materials, and stockpile management (See attached Mining and Reclamation Map).

Site Information

Site Name: White Rock/Rio Del Oro

CA Mine ID Number: 91-34-0048

Lead Agency: City of Rancho Cordova

Site Location/Description: The White Rock site is located North and South of White Rock Road, east of Sunrise Blvd. Operations at White Rock include sand and gravel mining, stockpile management and reclamation on approximately 1,300 acres of land (see attached map).

Mining and Reclamation Plan: #RC-06-224A, Approved on December 5, 2016

Previous Maximum Annual Production: 27,746 tons (2020 Reporting Year)

Production While Idle: None currently anticipated.

Financial Assurance: $1,066,032.00 approved by the Lead Agency on 3/30/2021

Owner/Operator Information

Operator Name: Granite Construction Company

Mailing Address: P.O. Box 15287, Sacramento, CA 95851

Operator Telephone Number: (916) 855-4400

Contact Person: Courtney DePorto

Interim Management Plan

1. Financial Assurances will remain in effect for the duration of the IMP and will be increased or decreased as required based on the annual update to the Financial Assurance Cost Estimate (FACE).

2. Reclamation activities, including grading and revegetation will occur per the approved Reclamation Plan once mining at the site have ceased indefinitely. Revegetation via natural recruitment will be ongoing.

3. The following equipment and facilities will remain on-site while the site is in "idle" status: scales, scale house building, portable crushing and screening equipment, and off-road equipment.

4. Stormwater drains internally and does not run off-site. Protective BMP's and the general site area are inspected quarterly as required by the CUP (See attached Quarterly Routine BMP Inspection Form). Maintenance and repairs will be conducted on an as needed basis. Erosion and sediment control issues are not anticipated to occur while the site is idle.

5. Noxious weed management within the mine site will be addressed concurrent with final site revegetation, where necessary.

6. All perimeter fences, gates, and landscaping will be maintained and inspected regularly. All gates will remain locked when the site is unoccupied, and a "No Trespassing" sign will be maintained at the entrance.

7. This IMP will be reviewed and updated annually and will remain in effect for as long as the mining status of the site is "idle".

Attachments:

A. Mining and Reclamation Map
B. Approved Financial Assurance Mechanism
C. Approved Financial Assurance Cost Estimate
D. Approved Mining and Reclamation Plan Permit
E. Quarterly Routine BMP Inspection Form

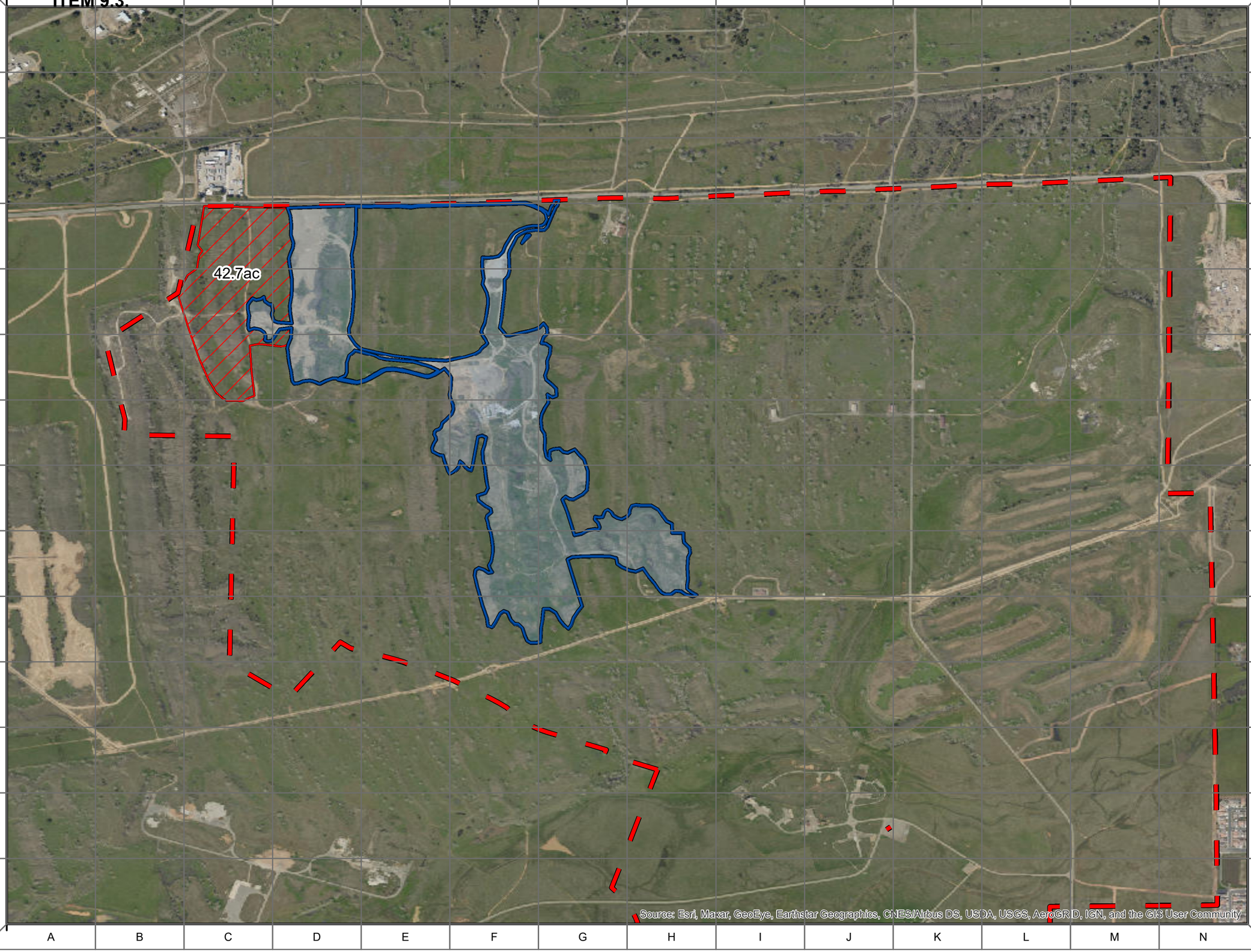
Attachment A
Mining and Reclamation Map

Rio Del Oro

Mining & Reclamation

8/26/2021

GRANITE™



Disturbed Area

Property Boundary

Proposed Mine Area in 2022

Total Area Disturbed: 134 ac
Total Area Reclaimed: 0 ac
Total Area Subject to RP: 1,300 ac

N

0 1,000 2,000 Feet

Brett Wong - Market Research Analyst
D:\. . .Environmental\NorCal_Enviro_Mining_Rec11x17.mxd

Attachment B
Approved Financial Assurance Mechanism

a fresh take.
RANCHO CORDOVA
CALIFORNIA

January 4, 2021

Department of Conservation
Office of Mine Reclamation
Reporting and Compliance Unit
801 K Street, MS 09-06
Sacramento, CA 95814

Subject: Rio Del Oro Mining Project Site ID #91-34-0048

Dear Ms. Byrnes,

In accordance with Public Resources Code Section 2773.1 and California Code of Regulations, Title 14, Section 3805, enclosed is a copy of the proposed financial assurance cost estimate for the Rio Del Oro Mining Project Site ID #91-34-0048. The City of Rancho Cordova has reviewed the cost estimate and believes that the amount is adequate for the City or the Department of Conservation to conduct and complete reclamation on the mined lands in accordance with the approved reclamation plan.

If you have any question regarding the submitted documents, please contact me at (916) 851-8863.

Sincerely,

Quoc Nham, PE
Associate Civil Engineer

City of Rancho Cordova
2729 Prospect Park Drive, Rancho Cordova, CA 95670
(916) 851-8700

aFreshTake.org

State of California
DEPARTMENT OF CONSERVATION
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BETA Excel Version of the FACE-1 Financial Assurance Cost Estimate Form.
Please contact DMR if errors are found in this document.

FINANCIAL ASSURANCE COST ESTIMATE

FOR

White Rock

(Mine Name)

CA Mine ID # 91- 34-0048

Reclmation Plan #/Name RC-06-224

Prepared by: *(Name & Affiliation)*	This financial assurance cost estimate prepared and submitted pursuant to *(choose one)*:
Granite Construction Company Suzanne Collins, Assistant Plant Manager Date: 9/28/2020	☐ A new or amended reclamation plan approved on (Date): ☒ An annual mine inspection performed on (Date): 08/28/2020 ☐ Other: Please Specify:

Most Recent Approved Financial Assurance Cost Estimate

Date: 10/29/2019

Amount: $ 877,639.00

Amount of existing Financial Assurance Mechansim(s)

Date: 2/5/2020

Amount: $ 877,639.00

I. SUPPORTING DOCUMENTS

This estimate represents the cost of conducting and completing reclamation in accordance with the Surface Mining and Reclamation Act (SMARA) and the following supporting documents:

Reclamation Plan Approval Date and Number

- RC-06-224 approved on 07/26/07. Renewal approved on 12/05/16. (includes MMRP, Mining Plan, Rec Plan

Permits and/or Environmental Documents Approved as, or Conditional upon, the Reclamation Plan

- Mitigation Monioring and Reporting Program (MMRP) and Conditions of Approval_022508
  Revegetation and Grazing Management Plan_040106
  Oak Tree Mitigation Plan_041306
  Special Species Avoidance Plan_080207

Other Agency Financial Assurances Securing Reclamation of Disturbed Lands

- NA

Wage Rates used in Cost Estimate* *(cost estimates are required to use current 'General prevailing wage determinations made by the director of industrial relations' where applicable (http://www.dir.ca.gov/OPRL/PWD/index.htm) with employer labor surcharge added, or greater)*

- CA General Prevailing Wage Determination

Equipment Rates used in Cost Estimates* *(use current 'Labor Surchage and Equipment Rental Rates (Cost of Equipment Ownership)' equipment rates published by Caltrans (http://www.dot.ca.gov/hq/construc/equipmnt.html) or other publicly available and verifiable local rates)*

- Caltrans Labor Surcharge and Equipment Rental Rates

Equipment Production Rates used in Cost Estimate *(Use of current Caterpillar Performance Handbook or equivalent published production rates is required)*

- Caterpillar Performance Handbook and Professional Experience

**Many mine sites are remote projects that require hours of travel (to and from) and sometimes require additional time to prepare for even the simplest of tasks. In accordance with labor Code Sections 1773.1 and 1773.9, contractors are required to make travel and/or subsistence (per diem) payments to each worker to execute the work. These arrangements can be quite variable and site specific.*

Attachments:

- NA

(add additional pages as needed)

II. Description of Current Site Conditions

(i.e., disturbed acres, slope conditions, excavation depths, topsoil and overburden stockpiles, equipment and facilities, reclamation in progress, erosion control status, required corrective actions, etc.)

Currently, 133 acres have been disturbed and reclamation has not begun. Typically, tailings stockpiles are harvested back to original grade. Generally the material has been moved to a central processing site, but some stockpiles exist near the excavated areas. On-site stockpiles include material from previous excavations and waste fines. Equipment stored on-site includes portable scale house, truck weigh scale equipment, and fencing. If operations commence in 2020-2021, portable processing equipment will be stored on-site. No erosion on-site.

III. Description of Anticipated Site Conditions (12 months from date of estimate)

(i.e., increase of disturbed acres, increase of depth, increases in amount of equipment and/or facilities, required corrective actions, etc.)

There are currently no plans to process material, however, if the need arises, approximately 42.7 additional acres will be disturbed in the next 12 months. Portable equipment will be brought on-site to process material.

IV. Description/Justification of Cost Increase/Decrease

The cost estimate has increase from $877,639.00 to $1,065,404.00. The increase is due to an increase in anticipated disturbed acreage and changes in equipment and labor rates.

(add additional pages as needed)

V. PLANT STRUCTURES AND EQUIPMENT REMOVAL *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Current Site Condition:

- Current structures and equipment include approximately 1200' of chain link fence and barb wire surrounding the scale house pad, one rented scale house module, and truck weigh scales equipment and portable processing equipment.

Reclamation Plan Performance Standard (End Use):

- Undeveloped open space used for seasonal grazing.

Describe tasks:

- Removal of approximately 1200' of chain link fence and barb wire including tear down, removal of posts and transporting materials off-site. Removal of one scale house trailer by rental company (no charge). Excavation and removal of truck scales and concrete footings.

Equipment on site wholly owned by operator?: ☐ YES ☒ NO
(if no, please provide the name/s and contact information for any lien holder)

- N/A; Processing equipment owned and operated by a subcontractor.

(add additional pages as needed)

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V. PLANT STRUCTURES & EQUIPMENT REMOVAL

Remove Fence
(↑ Describe Reclamation Activity Being Estimated)

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation jobs, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
Full Size Pickup [00-06]	HR	$27.42	16.0	$439
330BL Excavator [0345]	HR	$154.07	16.0	$2,465
3 Axel Dump Truck [3AXL]	HR	$71.55	16.0	$1,145
		$0.00	0.0	$0
		$0.00	0.0	$0

Total Equipment Cost for this Task = $4,049

B. Labor - List all labor categories to complete identified task

Labor Category	$/Hour (prevailing wage)	Labor Surcharge/Hr *(where applicable)* (enter % of wage) 0.0%	# of Hours	Cost ($)
Foreman [GRP1-A1]	$83.05	$0.00	16.0	$1,329
Excavator Operator [GRP2-A1]	$81.52	$0.00	16.0	$1,304
Laborer [GRP3-A2]	$57.34	$0.00	16.0	$917
Teamster [GRP3]	$64.92	$0.00	16.0	$1,039
	$0.00	$0.00	0.0	$0

Total Labor Cost for this Task = $4,589

C. Demolition - List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost ($)
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0

Total Materials Cost for this Task = $0

D. Total Direct Cost of Structure and Equipment Removal (Total A+B+C)

Equipment Cost + Labor Cost + Demolition Cost = $8,638

E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation)

Net Salvage Value = $ **0.00**

F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = **$8,638**

NOTE: Above **Total Cost** will display $0.00 if net of entered removal costs and salvage value is negative.

*Note: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

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V. PLANT STRUCTURES & EQUIPMENT REMOVAL

Removal of Scales and Footings
(↑ Describe Reclamation Activity Being Estimated)

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation jobs, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
Full Size Pickup [00-06]	HR	$27.42	8.0	$219
330 BL Excavator [0345]	HR	$154.07	8.0	$1,233
Omega T-450 Crane [5669]	HR	$143.02	8.0	$1,144
Flatbed [T&TT 60]	HR	$79.48	8.0	$636
3 Axles Side Dump Truck [3AXL]	HR	$71.55	16.0	$1,145

Total Equipment Cost for this Task = $4,377

B. Labor - List all labor categories to complete identified task

Labor Category	$/Hour (prevailing wage)	Labor Surcharge/Hr *(where applicable)* (enter % of wage) 0.0%	# of Hours	Cost ($)
Foreman [GRP1 - A1]	$83.05	$0.00	8.0	$664
Excavator Operator [GRP 2 - A1]	$81.52	$0.00	8.0	$652
Crane Operator [GRP3A -A1]	$80.04	$0.00	8.0	$640
Teamster [GRP 3]	$64.92	$0.00	24.0	$1,558
Laborer [GRP3 - A2]	$57.34	$0.00	8.0	$459

Total Labor Cost for this Task = $3,974

C. Demolition - List all structures and equipment to be dismantled or demolished and removed from site

Structure/Equipment to be removed	Type of Material	Volume/ Quantity	Unit Cost Basis	Disposal Cost	Cost ($)
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0
		0.00	$0.00	$0.00	$0

Total Materials Cost for this Task = $0

D. Total Direct Cost of Structure and Equipment Removal (Total A+B+C)

Equipment Cost + Labor Cost + Demolition Cost = $8,350

E. Net Salvage Value* (Supported by properly prepared third party estimate, bid, or cost calculation)

Net Salvage Value = $ **0.00**

F. Total Cost of Structure and Equipment Removal (Subtract Line D from Line E)

Total Cost of Structure and Equipment Removal = **$8,350**

NOTE: Above **Total Cost** will display $0.00 if net of entered removal costs and salvage value is negative.

*Note: Salvage value may only be used to offset the direct cost of removing the single item for which salvage value is being claimed. Salvage value shall not be used to offset any other demolition, general cleanup, or reclamation costs.

VI. PRIMARY RECLAMATION ACTIVITY

Use multiple sheets as necessary to estimate the cost of each activity required. Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department if necessary.

Current Site Conditions:

- Currently 133 acres are disturbed with a potentail of an additional 42.7 acres anticipated over the next 12 months.

Reclamation Plan Performance Standard (End Use):

- Undeveloped open space used for seasonal grazing.

Describe tasks, methods, equipment, etc:

Decompaction, cut, fill, haul, slope reduction, compaction, grading, topsoil placement, drainage work, soil amendment, special requirements, etc. Separate sheets may be used for each task if necessary.

- Grade approximately 175.7 acres of stockpiles and excavated area with dozer and grader to ensure gentle contours.

Provide Quantities:

Overburden and topsoil, cut and fill, import or export (cubic yards), area (acres), haul distance (feet), equipment production rates (cubic yards/hour, or as applicable), etc.

- Grading of 175.7 acres. Estimate of 6.5 acres of grading per day for a total of 27 days of grading.

(add additional pages as needed)

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VI. PRIMARY RECLAMATION ACTIVITY

General Grading
(↑ Describe Reclamation Activity Being Estimated)

Acres:	175.7	Overburden (cy):	NA
Haul Distance (ft):	NA	Topsoil (cy):	NA
Production Rate (cy/hr):	NA	*(NOTE: no automatic calculations occur to data in this upper table)*	

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation jobs, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
CAT D9R Dozer [5175]	HR	$257.30	216.0	$55,577
CAT 14G Motor Grader [3180]	HR	$119.99	216.0	$25,918
Full Size Pickup [00-06]	HR	$27.42	216.0	$5,923
Water Truck [36-48]	HR	$64.07	216.0	$13,839
		$0.00	0.0	$0
		$0.00	0.0	$0

Total Equipment Cost for this Task = $101,256

B. Labor - List all labor categories to complete identified tasks

Labor Category	$/Hour (prevailing wage)	Labor Surcharge/Hr *(where applicable)* (enter % of wage) 0.0%	# of Hours	Cost ($)
Dozer Operator [GRP3 - A1]	$80.04	$0.00	216.0	$17,289
Blade Operator [GRP2 - A1]	$81.52	$0.00	216.0	$17,608
Teamster [GRP 3]	$64.92	$0.00	216.0	$14,023
Foreman [GRP1 -A1]	$83.05	$0.00	216.0	$17,939
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0

Total Labor Cost for this Task = $66,858

C. Materials - List all materials required to complete identified task

Item	$/Unit	Sales tax (enter local rate in %) 0.0%	Quantity	Cost ($)
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0
	$0.00	$0.00	0.0	$0

Total Materials Cost for this Task = $0

D. Total Direct Cost for this task

Equipment Cost + Labor Cost + Materials Cost = $168,115

VII. REVEGETATION *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to the lead agency and/or the Department.

Current Site Condition:

- Currently 133 acres are disturbed with an additional 42.7 acres anticipated over the next 12 months. Reclamation has not begun.

Reclamation Plan Performance Standard (End Use):

- Undeveloped open space used for seasonal grazing.

Describe Tasks:

- Spread 6" of topsoil and broadcast seed 175.7 acres with non-invasive, weed-free seed mix.

(add additional pages as needed)

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VII. REVEGETATION *(use multiple sheets as needed)*

Spread 6" of Topsoil and Broadcast Seeding

(↑ Describe Revegetation Activity Being Estimated)

Methods to be used:

A. Equipment - List equipment to complete identified task. For large reclamation projects, separate mine areas.

Equipment	Unit of Measure	$/Unit	# of Units	Cost ($)
CAT D9R Dozer [5175]	HR	$257.30	208.0	$53,518
CAT 14G Grader [3180]	HR	$119.99	208.0	$24,958
CAT 623F Scraper [1703]	HR	$211.56	416.0	$88,009
Water Truck [36-48]	HR	$64.07	208.0	$13,327
Full Size Pickup [00-06]	HR	$27.42	208.0	$5,703
		$0.00	0.0	$0

Total Equipment Cost for this Task = $185,515

B. Labor - List all labor categories to complete identified task.

Labor Category	$/Hour (prevailing wage)	Labor Surcharge /HR (where applicable) (enter % of wage) 0.0%	# of Hours	Cost ($)
Dozer & Scraper Operator [GRP3 - A1]	$80.04	$0.00	624.0	$49,945
Blade Operator [GRP2 - A1]	$81.52	$0.00	208.0	$16,956
Teamster [GRP3]	$64.92	$0.00	208.0	$13,503
Laborer [GRP3 -A2]	$57.34	$0.00	208.0	$11,927
Foreman [GRP1 - A1]	$83.05	$0.00	416.0	$34,549

Total Labor Cost for this Task = $126,880

C. Materials - List all materials required to complete identified task

Item/Plant Species	Unit of measure	$/Unit	Sales tax (enter local rate in %) 0.0%	Quantity	Cost ($)
Broadcast Seeding Native Weed-Free Mix	Acre	$1,530.00	$0.00	175.7	$268,821
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0
		$0.00	$0.00	0.0	$0

Total Materials Cost for this Task = $268,821

D. Total Direct Cost for this task

Equipment Cost + Labor Cost + Materials Cost = $581,216

VIII. MISCELLANEOUS COSTS *(use multiple sheets as needed)*

Provide documentation showing that rates, prices, and wages are available locally to all persons, including the lead agency and/or the Department.

Examples of this type of cost may include temporary storage of equipment and materials off site, special one-time permits (i.e. transportation permits for extra wide overweight loads, etc.), decommissioning a process mill (i.e. decontamination of equipment), disposal of warehouse inventories, well abandonnment, remediation of fueling and waste oil storage sites, septic system removal, costs to prepare closure and monitoring reports, site security, preserving potable water and maintaining utilities, etc.

Item/Task	Quantity	$/Unit	Cost ($)
Survey Crew	1.0	$500.00	$500
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0
	0.0	$0.00	$0

Total Miscellaneous Costs = $500

IX. MONITORING COSTS

Monitoring Task	$/Visit	# of Visits/Year	# of Monitoring Years	Cost ($)
Foreman [GRP1-A1] QTY: 4HRS	$332.20	1.0	3.0	$997
Full Size Pickup [00-06] QTY:4 HRS	$109.68	1.0	3.0	$329
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0
	$0.00	0.0	0.0	$0

Total Monitoring Costs = $1,326

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X. SUMMARY OF COSTS

This section shall be used to summarize all the cost sheets in one place.

(V) Total of all Plant Structures & Equipment Removal Costs	$	16,988
(VI) Total of all Primary Reclamation Activities Costs	$	168,115
(VII) Total of all Revegetation Costs	$	581,216
(VII) Total of all Miscellaneous Costs	$	500
(IX) Total of all Monitoring Costs	$	1,326
Total of Direct Costs	$	**768,145**

XI. SUPERVISION / PROFIT & OVERHEAD / CONTINGENCIES / MOBILIZATION

(A) Supervision (4.7 %)		$	36,368
(B) Profit/Overhead (9.4 %)		$	72,429
(C) Contingencies (7.0 %)		$	53,770
(D) Mobilization (5.0 %)		$	38,407
Total of Indirect Costs		$	**200,975**
Total of Direct and Indirect Costs		$	**969,120**
(E) Lead Agency and/or Dept. of Conservation Administrative Costs	10%	$	96,912

Total Estimated Cost of Reclamation $ **1,066,032**

Attachment C
Approved Financial Assurance Cost Estimate

California Mine ID No. 91-34-0048
Bond No. 8205-56-52
Permit No. #RC-06-224
Reclamation Plan Name/No. N/A

DEPARTMENT OF CONSERVATION
DIVISION OF MINE RECLAMATION
and

CITY OF RANCHO CORDOVA
(Name of LEAD AGENCY)

RECLAMATION PERFORMANCE BOND INCREASE/DECREASE RIDER

(Public Resources Code §2773.1)

To be attached to and form a part of Surety Company Bond number 8205-56-52, written by Federal Insurance Company as SURETY, on behalf of Granite Construction Company as PRINCIPAL, in the penal sum of Eight Hundred Seventy Seven Thousand Six Hundred Thirty Nine 00/100 DOLLARS ($ 877,639.00), in favor of CITY OF RANCHO CORDOVA (Name of LEAD AGENCY) and the Department of Conservation, Division of Mine Reclamation and executed on February 1, 2008 (Date).

Whereas, the above-named Principal has a permit of a surface mining operation, number #RC-06-224, approved by the City (*select one*) of CITY OF RANCHO CORDOVA dated on March 26, 1999, and renewals and revisions numbered and dated December 12, 2002 pursuant to the application of the Principal, and/or claims a vested right,

and/or

Whereas, the City of (*select one*) CITY OF RANCHO CORDOVA or, in the alternative, the State Mining and Geology Board approved reclamation plan number N/A, dated N/A, and renewals and amendments numbered and dated N/A pursuant to the application of the Principal;

and

Whereas, said bond and rider shall cover any and all mined lands affected or to be affected by the surface mining operation under the above-mentioned permit and/or the reclamation plan, and renewals and amendments respectively, since the date of the issuance of the permit and/or the reclamation plan,

Now, therefore, the amount of this bond is Increased (*select one*) by: One Hundred Eighty Eight Thousand Three Hundred Ninety Three 00/100 Dollars ($ 188,393.00), to a total penal sum of One Million Sixty Six Thousand Thirty Two 00/100 Dollars ($ 1,066,032.00), to cover the Additional (*select one*) cost of reclaiming all affected mined lands for the payment of which sum we hereby jointly and severally bind ourselves, our successors and assigns. It is further understood and agreed that all other terms and conditions of this bond shall remain unchanged.

California Mine ID No. 91-34-0048
Bond No. 8205-56-52
Permit No. #RC-06-224
Reclamation Plan Name/No. N/A

IN WITNESS THEREOF, the Principal and Surety have hereunto set their signatures and seals as of the dates set forth below.

PRINCIPAL

Date: 03/08/2021

Granite Construction Company
(Company - Permittee [Principal])

By: _____
(Corporate Officer/Partners/Sole Proprietor)

Kenneth B. Olson
Typed or Printed Name

Title: Vice President

SURETY

I declare, under penalty of perjury, under the laws of the State of California, that I have executed the foregoing rider under an unrevoked Power of Attorney.

Federal Insurance Company
(Surety Company)

By: _____
(Signature of Attorney-in-Fact for Surety)

Isabel Barron
Typed or Printed Name

Title: Attorney In Fact

Executed in Watsonville, CA (City and State) on 03/08/2021 (Date)
under the laws of the State of California.

Where one signs by virtue of a Power of Attorney for a Surety Company, such fully executed Power of Attorney must be filed with this bond.

Please identify the agent acting on behalf of the surety who will accept notices, papers, and other documents, if applicable.

Agent: Alliant Insurance Services, Inc. Title:
Address: 100 Pine Street, 11th Floor - San Francisco, CA 94111
Phone Number: 415-403-1427 Email Address: N/A

California Mine ID No. 91-34-0048
Bond No. 8205-56-52
Permit No. #RC-06-224
Reclamation Plan Name/No. N/A

COMPLETED NOTORIZED ACKNOWLEDGMENT OF PERMITTEE [PRINCIPAL]
[Attach loose notarial certificate]

COMPLETED NOTARIZED ACKNOWLEDGMENT OF SURETY
[Attach loose notarial certificate]

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

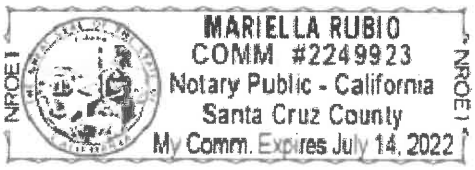
State of California
County of Santa Cruz)

On March 8, 2021 before me, Mariella Rubio, Notary Public
(insert name and title of the officer)

personally appeared Kenneth B. Olson,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature _____ (Seal)
Mariella Rubio, Notary Public

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

ACKNOWLEDGMENT

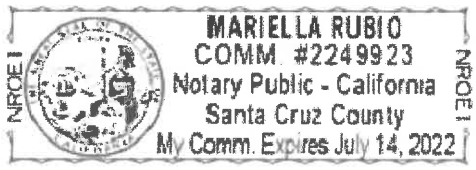
State of California
County of Santa Cruz)

On March 8, 2021 before me, Mariella Rubio, Notary Public
(insert name and title of the officer)

personally appeared Isabel Barron,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



Signature _____ (Seal)
Mariella Rubio, Notary Public

CHUBB

Power of Attorney

Federal Insurance Company | Vigilant Insurance Company | Pacific Indemnity Company
Westchester Fire Insurance Company | ACE American Insurance Company

Know All by These Presents, that **FEDERAL INSURANCE COMPANY,** an Indiana corporation, **VIGILANT INSURANCE COMPANY,** a New York corporation, **PACIFIC INDEMNITY COMPANY,** a Wisconsin corporation, **WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** corporations of the Commonwealth of Pennsylvania, do each hereby constitute and appoint Isabel Barron, Jigisha Desai, John D. Gilliland, Maria Gomez, Roberto J. Rivera-Rodriquez, Mariela Rubio, Ashley Stinson and Tobi Stonich Telesco of Watsonville, California ----------

each as their true and lawful Attorney-in-Fact to execute under such designation in their names and to affix their corporate seals to and deliver for and on their behalf as surety thereon or otherwise, bonds and undertakings and other writings obligatory in the nature thereof (other than bail bonds) given or executed in the course of business on behalf of GRANITE CONSTRUCTION INCORPORATED and all Subsidiaries alone or in joint venture as principal, in connection with bids, proposals or contracts to or with the United States of America, any State or political subdivision thereof or any person, firm or corporation. And the execution of such bond or obligation by such Attorney-in-Fact in the Company's name and on its behalf as surety thereon or otherwise, under its corporate seal, in pursuance of the authority hereby conferred shall, upon delivery thereof, be valid and binding upon the Company.

In Witness Whereof, said **FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY** and **ACE AMERICAN INSURANCE COMPANY** have each executed and attested these presents and affixed their corporate seals on this **10th** day of **December, 2020.**

Dawn M. Chloros, Assistant Secretary

Stephen M. Haney, Vice President

STATE OF NEW JERSEY
County of Hunterdon SS.

On this **10th** day of **December, 2020** before me, a Notary Public of New Jersey, personally came Dawn M. Chloros and Stephen M. Haney, to me known to be Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY, the companies which executed the foregoing Power of Attorney, and the said Dawn M. Chloros and Stephen M. Haney, being by me duly sworn, severally and each for herself and himself did depose and say that they are Assistant Secretary and Vice President, respectively, of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY and know the corporate seals thereof, that the seals affixed to the foregoing Power of Attorney are such corporate seals and were thereto affixed by authority of said Companies; and that their signatures as such officers were duly affixed and subscribed by like authority.

Notarial Seal

KATHERINE J. ADELAAR
NOTARY PUBLIC OF NEW JERSEY
No. 2316685
Commission Expires July 16, 2024

Notary Public

CERTIFICATION

Resolutions adopted by the Boards of Directors of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, and PACIFIC INDEMNITY COMPANY on August 30, 2016; WESTCHESTER FIRE INSURANCE COMPANY on December 11, 2006; and ACE AMERICAN INSURANCE COMPANY on March 20, 2009:

"RESOLVED, that the following authorizations relate to the execution, for and on behalf of the Company, of bonds, undertakings, recognizances, contracts and other written commitments of the Company entered into in the ordinary course of business (each a "Written Commitment"):

(1) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise.

(2) Each duly appointed attorney-in-fact of the Company is hereby authorized to execute any Written Commitment for and on behalf of the Company, under the seal of the Company or otherwise, to the extent that such action is authorized by the grant of powers provided for in such person's written appointment as such attorney-in-fact.

(3) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to appoint in writing any person the attorney-in-fact of the Company with full power and authority to execute, for and on behalf of the Company, under the seal of the Company or otherwise, such Written Commitments of the Company as may be specified in such written appointment, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(4) Each of the Chairman, the President and the Vice Presidents of the Company is hereby authorized, for and on behalf of the Company, to delegate in writing to any other officer of the Company the authority to execute, for and on behalf of the Company, under the Company's seal or otherwise, such Written Commitments of the Company as are specified in such written delegation, which specification may be by general type or class of Written Commitments or by specification of one or more particular Written Commitments.

(5) The signature of any officer or other person executing any Written Commitment or appointment or delegation pursuant to this Resolution, and the seal of the Company, may be affixed by facsimile on such Written Commitment or written appointment or delegation.

FURTHER RESOLVED, that the foregoing Resolution shall not be deemed to be an exclusive statement of the powers and authority of officers, employees and other persons to act for and on behalf of the Company, and such Resolution shall not limit or otherwise affect the exercise of any such power or authority otherwise validly granted or vested."

I, Dawn M. Chloros, Assistant Secretary of FEDERAL INSURANCE COMPANY, VIGILANT INSURANCE COMPANY, PACIFIC INDEMNITY COMPANY, WESTCHESTER FIRE INSURANCE COMPANY and ACE AMERICAN INSURANCE COMPANY (the "Companies") do hereby certify that

(i) the foregoing Resolutions adopted by the Board of Directors of the Companies are true, correct and in full force and effect,
(ii) the foregoing Power of Attorney is true, correct and in full force and effect.

Given under my hand and seals of said Companies at Whitehouse Station, NJ, this March 8, 2021

Dawn M. Chloros, Assistant Secretary

IN THE EVENT YOU WISH TO VERIFY THE AUTHENTICITY OF THIS BOND OR NOTIFY US OF ANY OTHER MATTER, PLEASE CONTACT US AT:
Telephone (908) 903-3493 Fax (908) 903-3656 e-mail: surety@chubb.com

Attachment D
Approved Mining and Reclamation Permit

CITY OF RANCHO CORDOVA

RESOLUTION NO. 137-2016

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING A RENEWAL OF THE SURFACE MINING AND RECLAMATION PLAN PERMIT FOR THE GRANITE CONSTRUCTION MINING OPERATION, PROJECT NO. RC-06-224A

WHEREAS, Granite Construction (hereinafter referred to as Applicant) operates a surface mining and reclamation operation in the City under an existing Surface Mining and Reclamation Plan Permit ("Existing Permit"); and

WHEREAS, The Existing Permit was for a term of 10 years; and

WHEREAS, the Applicant filed an application with the City of Rancho Cordova (hereinafter referred to as City) to approve a renewal of the Existing Permit (hereinafter, the "Permit Renewal" or the "Project") for a period of 5 years with optional 5 year renewal thereafter (subject to City review and approval) according to the attached exhibits, and

WHEREAS, under the Permit Renewal, (a) there would be no increase proposed in annual or total production levels, methods of mining, hours of operation, area subject to mining, truck traffic, transportation patterns or mining depths authorized under the Existing Permit; (b) the extension of time is for limited duration; and (c) the proposed extension of time will not affect the end use (undeveloped open space) or scope of reclamation under the Existing Permit; and

WHEREAS, the City Council is the appropriate authority to hear and take action on the Permit Renewal; and

WHEREAS, the City Council has considered the requirements of California Public Resources Code Section 2777, California Code of Regulations Section 2502(d), and Rancho Cordova Municipal Code, Title 20, Chapter 20.04; and

WHEREAS, the City Council considered the Applicant's request at a duly published public hearing on December 5, 2016 and received a staff report and public testimony at the public hearing.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA HEREBY RESOLVES AS FOLLOWS:

1. Approve the Permit Renewal with accompanying diagrams (**Exhibit 1A**) with Conditions of Approval/MMRP (**Exhibit 1B**) for the Granite Construction RC-06-224A as attached, and based on the following findings:

   A. California Environmental Quality Act

   Finding: No new environmental analysis is required for the Permit Renewal pursuant to California Environmental Quality Act (CEQA), Public Resources section 21166 and CEQA Guidelines Section 15162.

   Evidence: A Final Mitigated Negative Declaration (FMND) was prepared and adopted for the Existing Permit. The FMND mitigated measures are included within the

Mitigation Monitoring Report Plan for the Permit Renewal (**Exhibit 1B**). There are no changes proposed to the application for renewal of the permit, and there are no changes proposed for annual or total production levels, methods of mining, hours of operation, area subject to mining, truck traffic, transportation patterns, or mining depths authorized under the Existing Permit. On the basis of this evidence, the Final Mitigated Negative Declaration, the Conditions of Approval and Mitigation Measures, comments received, and the whole record, there is no substantial evidence that the Project will have a new or substantially more severe significant adverse impact on the environment.

B. Surface Mining and Reclamation Act

Finding: The following findings shall be made to approve surface mining operation, per Section 20.04.090 of the Municipal Code.

1) The Reclamation Plan complies with Surface Mining and Reclamation Act ("SMARA"), Public Resources Code §2772 and §2773, and any other applicable provisions.

Evidence: The plan was approved in 2007 and therefore is consistent with the City's Mining Ordinance, as certified by the State Mines and Geology Board.

2) The Reclamation Plan complies with applicable requirements of State regulations (CCR§§3500-3505, and §§3700-3713).

Evidence: The Reclamation Plan was specifically composed to meet the City's Surface Mining Ordinance certified by the State Mines and Geology Board on July 23, 2004. The standards and performance measures have been adhered to, and Conditions of Approval/Mitigation Monitoring Reporting Program have been developed to ensure compliance with the Surface Mining Ordinance.

3) The Reclamation Plan will restore the mined lands to a usable condition that is readily adaptable for alternative land uses that are consistent with this Chapter and either (i) the City's General Plan and any applicable resource plan or element or (ii) probable future uses anticipated by the City to be adopted in future amendments to the City's General Plan, which uses are identified in findings made on approval of the Reclamation Plan.

Evidence: The Reclamation Plan would restore the mined land in accordance with the standards in Ordinance 22-2004 and implemented by the Re-vegetation Management Plan adopted as part of the Mining Permit. The Management Plan provides for reseeding and re-vegetation of annual grasses and tree replanting characteristic to the surrounding area. Maintenance will be provided according to the specifications in the Management Plan on an on-going basis, until the mining operation is closed.

The General Plan of the City of Rancho Cordova anticipates the mining operation would produce lands capable of development and develop according to the proposed Rio Del Oro Specific Plan. Low density residential and support commercial are anticipated for the area, along with parks, schools and wetland preserves.

4) The approved Reclamation Plan was adopted pursuant SMARA based upon environmental review under CEQA and the City environmental review guidelines, and which concluded that any significant adverse impacts from reclamation of the surface mining operations would be mitigated to the extent feasible.

Evidence: A Final Mitigated Negative Declaration for the Existing Permit, including the Reclamation Plan, was approved according to the Guidelines of the California Environmental Quality Act.

5) The Reclamation Plan requires that land and/or resources to be reclaimed will be restored to a condition that is compatible with, and blends in with, the surrounding natural environment, topography, and other resources, or that suitable off-site development will compensate for related disturbance to resource values.

Evidence: The Reclamation Plan requires that reclaimed land will be left in a condition to support future urban development. The original condition of the site was severely impacted by gold dredging in the early part of this century. The dredged tailings will be flattened and left in a condition that would allow subsequent site grading to accommodate future development.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 5th day of December, 2016.

AYES: Budge, McGarvey, Sander, Skoglund, Terry

NOES: None

ABSENT: None

ABSTAIN: None

David M. Sander, Mayor

ATTEST:

Mindy Cuppy, MMC, City Clerk

~RIO DEL ORO MINING PROJECT~
MINING OPERATION & RECLAMATION PLAN

1.0 INTRODUCTION

Granite Construction Company ("Granite") is seeking entitlements for its *Rio Del Oro* Mining Project (the "Project"), which is situated within a parcel currently owned by Aerojet-General Corporation ("GenCorp"). This document, together with the referenced exhibits and appendices, constitutes the formal Reclamation Plan for the site. Approval of the Project is sought from the lead agency, the City of Rancho Cordova (the "City").

This Reclamation Plan was prepared in accordance with:

- The Surface Mining and Reclamation Act (SMARA) of 1975, as amended (Public Resources Code § 2772 et seq.);
- The State Mining and Geology Board regulations for surface mining and reclamation practice (California Code of Regulations (CCR) Title 14 Chapter 8, Article 14, Chapter 8, Article 1, § 3500 et seq.; and
- The City of Rancho Cordova City Code Chapter 20.04 (Surface Mining & Reclamation).

Reclamation, as defined by SMARA, is the combined process of land treatments that minimize adverse environmental effects on surface mining, so that mined lands are reclaimed to a beneficial end use that is readily adaptable to alternative end uses. This Reclamation Plan describes a process that will minimize environmental impacts during and resulting from mining, implementing reclamation activities as soon as possible, and return the mined lands to a condition suitable for grazing.

1.1 NAMES AND ADDRESSES OF OWNER, OPERATOR AND AGENT

Property Owner

Name:	Aerojet – General Corp
Contact:	Dave Hatch
Address:	620 Coolidge Drive, Ste. 100
City, Zip:	Folsom, CA 95630-3181
Phone:	916-351-8584

Operator / Applicant

Name:	Granite Construction Company
Contact:	Grant J. Williams
Address:	P.O. Box 15287
City, Zip:	Sacramento, CA 95851
Phone:	916-855-4400

Operator's Agent

Name:	Diepenbrock - Harrison
Contact:	Mark Harrison
Address:	400 Capitol Mall, Ste. 1800
City, Zip:	Sacramento, CA 95814
Phone:	916-492-5000

1.2 LOCATION

The 1,300 acre proposed Project site is situated within a 2,526 acre parcel owned by GenCorp. Approximately 600 acres of the mining area is planned to be disturbed as part of this application. The actual disturbed acreage may be more or less depending on market conditions and on-site aggregate availability. The site is fully located within the City of Rancho Cordova ("City") at 12300 White Rock Road, approximately 4,800 feet east of Sunrise Boulevard, and 5,100 feet north of Douglas Road. The Project site is bordered by Teichert's Grantline mining site to the west, vacant land owned by Aerojet to the south; Teichert Grantline's mining processing plant and Tsakopoulos-Bachman's industrial property to the east; and GenCorp's mining/industrial property to the north. The nearest designated residential area is located approximately 3,100 feet east of the proposed Project site. Exhibit A is a site location and vicinity map, depicting the location of the proposed mining operation.

1.2.1 Assessor's Parcel Number

The Project is located on a portion of Assessor's Parcel Number 072-0370-070-0000.

1.2.2 Township, Range, Section, Quadrangle

The Project site is located on the Buffalo Creek USGS 7.5 minute quadrangle map in Townships 8 North and 9 North, Range 7 East and Sections 3, 4, 5, 32, 33, and 34 MDBM. Please see Exhibit B, depicting the Project site and its vicinity.

1.2.3 Latitude, Longitude

The Project site is located at approximate Latitude 38.58 North and Longitude 121.22 West.

1.2.4 Claim Descriptions

The Project will get a California Mine ID number after approval of the Project by the City and State. An Aerojet SPA Implementation Permit will serve as the "Mining Permit" or "Site Approval."

2.0 DESCRIPTION OF ENVIRONMENTAL SETTING

Reclamation procedures must be designed within the constraints of the Project and the surrounding environment. The following sections describe the environmental elements that are pertinent to the design of an effective Reclamation Plan. Section 3.0 will describe the mining Project in relationship to the reclamation of the site.

2.1 SITE ACCESS

Access to the site is available most directly from White Rock Road. However, trucks may occasionally enter and leave the site onto Douglas Road.

2.2 TOPOGRAPHIC MAP

Exhibit B depicts the site's location on the 7.5-minute Buffalo Creek quadrangle map.

2.3 GEOLOGY, GENERAL

The site is located in the eastern portion of Sacramento County, an area covered with a significant number of cobble tailings as a result of early gold dredging activities conducted principally by the Natomas Company from about 1900 to 1960. Many of these tailings are visible above ground in large linear piles, although the dredgers had the capability to dig to depths of up to approximately 100 feet, and thus much of the tailings are underground as well.

2.3.1 Site-Specific Geology

Geology of the site consists of American River gravels that have been mined for gold and aggregate value during the late 1800's through the 1960's. Past dredging operations significantly disturbed the natural geologic state of the site, leaving linear mounds of cobble tailing throughout the property. These tailing

piles vary from 5 to 75 feet in height with typical base widths in the range of 100 to 300 feet and consist of approximately 60-70% rounded cobbles of varying geologic composition (metamorphic, volcanic) and 30-40% fine sediment and clay. Between the piles the geology consists of fine grained soils and clays known locally as "slickens."

The proposed mining operation will remove these mounds and the end result will be a site with ground configuration similar to the natural configuration of the site prior to gold dredging operations. A 1941 USGS topographic map shows that the natural terrain drained toward the southwest with elevations of approximately 200 feet along the eastern boundary of the site to elevations of approximately 150 feet within the southwestern area of the site. Thus, the natural terrain consisted of relatively flat grounds with slopes of approximately 1-2%.

2.3.2 Material Being Mined

The applicant proposes to mine dredge tailings, consisting of cobbles (up to approximately 12-inches in diameter) intermixed with sand and gravel. All material mined at the *Rio Del Oro* site will be screened and crushed into various products by a portable plant. Excess fine aggregate material may be used to reclaim the excavation areas to their proposed reclaimed elevations.

2.3.3 Geologic Cross-Section

Refer to Exhibit H for the Mining Plan which depicts a typical mining cross-section.

2.3.4 Slope Stability

Mining and reclamation slopes will be based on a slope evaluation performed by Wallace Kuhl and Associates, Inc. The slope evaluation has been included as part of the application package. The composition of the slope material will vary across the Project site. Slopes with an overall height of less than twenty (20) feet will be excavated to a maximum 1:1 (horizontal:vertical) inclination. To protect private property and existing improvement from possible damage caused by slope movement, slopes excavated to a 1:1 inclination will have a set back maintained equal to the height of the slope (from the top of the slope to the property line or improvement).

For worker and equipment safety, slopes greater than 20 feet in height will be excavated at no steeper than 1½:1 (horizontal: vertical) inclination to avoid potential rock falls.

Final reclamation slopes will be constructed at a maximum 2:1 inclination (horizontal:vertical). Any fills placed to achieve the reclaimed slopes will be compacted in accordance with prudent geotechnical engineering practice (i.e. 90% compaction relative to the ASTM D1557 maximum dry unit weight).

2.3.5 Seismicity

The site is not located within an area of active seismicity.

2.4 HYDROLOGY, GENERAL

2.4.1 Site Specific Hydrology

There are no major streams or creeks traversing the subject site. As mentioned above, past mining disturbed the natural state of the site and left linear mounds of cobble tailings throughout the property. Due to the creation of these mounds, the site's natural drainage patterns have been heavily modified. Because the site contains coarse dredge tailings, water infiltration is high, surface runoff is minimal and confined to the closed valleys between tailing mounds.

2.4.2 Groundwater Contamination

The subject site is located within the area known as the Inactive Rancho Cordova Test Site (IRCTS), which was historically used for aerospace and industrial activities by it previous owners, the Aerojet Corporation and the Douglas Aircraft Company (DAC), which became the McDonnell Douglas Corporation (MDC); and their tenants. Although the Department of Toxic Substances Control (DTSC) has issued an Imminent and Substantial Endangerment Determination and Consent Order for threat site in 1994, DTSC has expressly recognized that large portions of the proposed *Rio Del Oro* Project area were never used for aerospace or industrial activities due to quantity-distance requirements for energetic materials (rocket fuel). As such, the vast majority of the targeted aggregate was not impacted by these past activities and is not contaminated. This area is not included in the DTSC cleanup order.

Relevant agencies have agreed that aerospace and other industrial activities were not conducted on-site. However, some aerospace/ industrial activities did impact limited portions of the *Rio Del Oro* Project site, and these activities contaminated the soil, as discussed below. Also, DTSC and the Regional Water Quality Control Board (RWQCB) have detected contaminated groundwater beneath the IRCTS property and to the west near Mather Field and south of Douglas Road. The 1994 Order requires Aerojet and McDonnell Douglas to investigate the sources and extent of contaminated groundwater pollution

emanating from the eastern part of the IRCTS site, and to develop interim remedial measures to contain and prevent any groundwater contamination from migrating off-site.

It is important to note, however, that any contamination in the groundwater has no relationship to and will not impact the proposed mining operation activities or vice versa. During 2005, the average depth to groundwater was 114 feet below existing grade (beg), based on measurements from the uppermost well completion at 39 locations within the project site during April and October 2005. The depths to groundwater varied from 66 to 144 feet beg (median: 121 feet beg) across the site with shallowest groundwater in the northeastern corner and deepest groundwater along the western boundary. The seasonal depth fluctuations were less than 3.5 feet beg at 37 locations (average: 1.6 feet beg). The monitor well locations are being flagged appropriately and protected from damage by the mining operation. Aggregate around a well will be removed by a backhoe or by similarly small equipment. The protective casing around the well will be reset and the new top-of-casing (TOC) elevation determined by a licensed surveyor.

Mining and processing will only use water for dust suppression. Water will be supplied from one of two sources: 1) the County water line located north of White Rock Road; or 2) Boeing's EX-25 Facility (GET A water).

2.5 SOIL RESOURCES

2.5.1 Map and Units

Most of the surrounding area is mapped by the Natural Resources Conservation Service (NRCS) as Xerothents, dredge tailings, 2-50% slopes. The Xerothents unit contains three hydric inclusions: river wash and Xerofluents, associated with floodplain channels, and slickens associated with depressions.

Additionally, the mining operation will not be conducted on prime agricultural lands.

2.5.2 Soil Contamination

Soil contamination is not expected to be present in the coarse dredge tailings proposed for mining. Impacted (contaminated) areas will either be excluded from the mining operation, treated, or removed from the site. Eight environmental constraint areas have been identified, based on investigations by GenCorp and/or MDC, because of historical aerospace or industrial activities

that left residual chemicals of concern (COCs) in the soils. These impacted soils have not been found in this area.

Constraint Area A: GET F Sprayfield:

GET F Sprayfield is located in the northwestern corner of the project site and was operated by GenCorp from late 1984 through late 1990. The sprayfield was used as a discharge area for treated groundwater from the GET F South facility. Although the volatile organic chemicals (VOCs) were removed from the groundwater via air-stripping towers, perchlorate in the water was not affected by the treatment process. Previous sampling has detected perchlorate in the soil at concentrations below the residential remediation goal (7.8 milligrams per kilogram). GenCorp is currently investigating the extent of the perchlorate in the soil.

The RDO Mining Application does not currently contemplate mining of Constraint Area A. GenCorp will evaluate the feasibility of various remedial options after completion of the field investigation. Perchlorate is quite soluble in water and easily digested by indigenous bacteria under anoxic conditions.

Constraint Area B: Propellant Burn Area:

Propellant Burn Area (PBA) is located near the northwestern corner of the project site and was operated by GenCorp and DAC during the late 1950s and early 1960s to destroy waste rocket propellants and chemicals. The area is primarily defined by VOCs and perchlorate at depths beyond the proposed mining project. The central flat- or low-lying areas were impacted by perchlorate and/or dioxins/furans. GenCorp removed over 8,600 tons of dioxin-impacted soils during 2005 and is expected to complete the work during 2006. GenCorp is evaluating remedial options for perchlorate in soils, including bioremediation, flushing, capping and other options.

The Rio Del Oro Mining Application does not currently contemplate mining of Constraint Area B.

Constraint Area C: Sigma Hog-out:

Sigma Hog-out area is located near the center of the project site and was created by DAC during the early 1960s at the Sigma Complex, a solid rocket motor test facility. The "hog-out" operation used high pressure water jets to remove solid fuel from rocket motors; and the perchlorate-laden water was discharged to ponds within a nearby dredge valley. The water infiltrated into the ground and migrated northward along the valley. MDC is evaluating

remedial options for perchlorate in soils, including bioremediation, flushing, and other options.

The coarse tailings can be included in the mining operation because perchlorate and other COCs did not impact the aggregate materials proposed for mining. GenCorp will be contacted prior to any mining within the Sigma Hog-out area to confirm the tailings that can be mined.

Constraint Area D: White Rock Dump #1:

White Rock Dump #1 (WRD1) is located near the center of the project site and was created during the 1950s on behalf of Sacramento County. Municipal trash was burned at WRD1 and the residual material pushed aside into two piles. The residual material is comprised of ash, clinker, rusty cans, bottles, ceramics, and other noncombustible debris. Lead and dioxins/furans are present in the ashy material. Sacramento County and Aerojet are working with DTSC and RWQCB to cover the dump with native soil to prevent future contact with the material.

Aggregate mining shall not occur within WRD1.

Constraint Area E: DM14 Area:

The DM14 area is located near the east-central side of the project site and was used by DAC during the late 1950s to assemble the "Genie" missile (Douglas Missile 14). Freon is present in deep soils and is associated with a sump that was connected to a water-curtain spray paint booth. MDC has shown that the Freon concentrations do not impact human health or the groundwater; and remedial action is not necessary.

The RDO Mining Application does not currently contemplate mining of Constraint Area E.

Constraint Area F: Rice Hull Ash Area:

Rice Hull Ash (RHA) area is located along the eastern boundary of the project site and was created during the 1950s and early 1960s by the Beagle Products Company. Rice hulls were transported to a dredge pit (RHA area), deposited in large piles, burned to produce RHA, and then packaged as an oil and grease absorbent. The RHA operation was apparently idle during the late 1960s through 1983, when Greasweep Western leased the RHA area from MDC to produce the Greasweep-brand absorbent. GenCorp became the lessor in 1984 until 2005 when Greasweep Western ceased operations.

The coarse tailings around the perimeter of the RHA area can be included in the mining operation but additional dust control water will be necessary due to the fine-grained nature of the RHA.

Constraint Area G: Alpha Complex:

Alpha Complex is located along the southeastern boundary of the project site and was used by DAC to test liquid rocket engines during the late 1950s and 1960s. VOCs were used to clean the engines and these solvents were discharged to the ground. MDC is currently operating a soil vapor extraction (SVE) system to remove VOCs from the deep soils.

The RDO Mining Application does not currently contemplate mining of Constraint Area G.

Constraint Area H: By-Dry Feed Products:

By-Dry Feed Products area is located along White Rock Road near the center of the project site. The area was developed along an access road to WRD1 and construction began in 1953. The area includes several old buildings and foundations of former structures which were reportedly used to make composts, feeds, fertilizers, and bone meal.

Clark Cattle Company currently uses the area as a base of operation for livestock grazing on the IRCTS. The buildings are used for an office, a repair shop, for storage of equipment, hay/straw and supplies, for the care of young cows and horses, and/or for other agricultural uses.

GenCorp completed an investigation of the By-Dry area during 2005 and found a deposit of ashy material along the western side of the area. The material was found to contain lead and dioxins/furans above regulatory guidelines for residential uses. GenCorp is planning to remove the ashy material to a Class II landfill during 2006 after DTSC approves a Removal Action Workplan.

The RDO Mining Application does not currently contemplate mining of Constraint Area H.

2.6 VEGETATION

A wetland delineation of *Rio Del Oro*, including the Project area, was first conducted by Gibson and Skordal in 1999 and subsequently verified by the US Army Corps of Engineers ("Corps") in January 2000. Due to the pending expiration of the original verification, the Project area was re-delineated in June 2004 by ECORP Consulting, Inc.

("ECORP"). A rare plant survey was conducted on the Rio Del Oro Site in May 2003 (updated 2006). ECORP recently prepared a detailed Biological Assessment and Oak Tree Survey for the Project area, which is included in the application package.

2.6.1 Description of Affected Areas

The *Rio Del Oro* Project site consists of cottonwood riparian woodland, oak woodland, and annual grassland habitat. Linear rock tailing rows, some reaching 75 feet in height, are scattered over the majority of the site. Historically, the site was used for gold mining operations. The mining activities consisted of dredging ancient alluvial deposits. The areas that were mined are marked today by alternating piles of tailings and lower areas where the finer sediment settled out.

Cottonwood riparian habitat occurs within depressions between rows of man-made rock tailings. These characteristic dredge tailings areas are characterized by riparian and shrub-like vegetation, including Fremont cottonwood (*Populus fremontii*), willow (*Salix sp.*), elderberry (*Sambucus mexicana*), and coyote brush (*Baccharis sp.*).

Separate from the tailings, a very small amount of annual grassland exists on the *Rio Del Oro* Project site. Within the annual grassland are ephemeral features including vernal pools and seasonal wetlands. The annual grassland community is comprised predominantly of non-native naturalized Mediterranean grasses. These include ripgut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), ryegrass (*Lolium multiflorum*), Mediterrainean barly (*Hordeum marinum*), and medusahead grass (*Taeniatherum caput-medusae*), other non-native herbaceous species include hairy hawk-bit (*Leontodon taraxacoides*), filaree (*Erodium botrys*), pineapple weed (*Chamomilla suaveolens*), and yellow star thistle (*Centaurea solstitialis*).

A list of plant species observed on the site (May 2003) is included in the Biological Resources Assessment.

2.6.2 Special Status Plant Species

ECORP biologists conducted surveys in May 2003 during the optimum blooming period for each of the potentially occurring special-status species. No special-status plants were observed within the *Rio Del Oro* Project area; however, populations of Greene's legenere (*Legenere limosa*, federal species of concern and CNPS 1B) were documented in the vernal pool complex in the southern portion of Rio Del Oro.

An oak tree inventory survey performed on September 29, 2004 by Sierra Nevada Arborists revealed 47 oak trees on site, all of which occur in dredged hollow areas, as opposed to tailings. A copy of the survey is included in the application package. At our request, ECORP reviewed and summarized the tree inventory report prepared by Sierra Nevada Arborists (2003) for the Rio Del Oro property, specifically as it relates to the *Rio Del Oro* Mining Project (see attached letter from ECORP dated April 11, 2006). The *Rio Del Oro* Mining Project site represents a subset of the Rio Del Oro Property.

ECORP identified thirty-five (35) native oak trees measuring at least six (6) inches in diameter at breast height (DBH) on the Rio Del Oro Mining Project site. Interior live oak (*Quercus wislizenii*) was the only native oak species present on site. To minimize the impacts to these native oaks, Granite proposes to implement the following measures in accordance with the County Tree Ordinance and General Plan policies:

1. *Obtain an oak tree removal permit from the County prior to Project implementation;* and
2. *Replace native oak trees with a DBH of 6 inches or greater that cannot be avoided by the Project at a ratio satisfactory to the County, or pay an in lieu fee to the County's Tree Preservation Fund.*

Specific requirements for other native trees (excluding cottonwoods) will be determined through coordination with the County and City on an as-needed basis.

2.7 WILDLIFE

ECORP recently prepared a Biological Assessment of the *Rio Del Oro* Project site. This assessment has been included in the application package.

2.7.1 Description of Habitats

Vegetation communities occur primarily within the low-lying areas between the tailing piles. Vegetation communities identified within the Project site can generally be grouped into three categories: woodland, scrub, and grassland communities.

Additionally, approximately 0.224 acres of jurisdictional wetlands (0.008 acre seasonal wetland swale, 0.047 acre seasonal wetland and 0.169 acre ephemeral drainage) exists within the *Rio Del Oro* Project site. In addition, 8.8 acres of non-jurisdictional wetlands were identified in the Project site. All wetlands will be fenced prior to Project initiation, and no mining or other activities will occur

within 100 feet of any wetlands until the appropriate approvals and permits are in place, unless the wetland is already adjacent to an existing road, which will continue to be used throughout the life of the Project.

In order to ensure that any significant impacts to the wetlands will be properly mitigated, the Project has two (2) general mining phases. Phase 1 includes mining the portions of the site that do not have any wetlands. Phase 2 will involve mining of the material located below and around the wetlands. Phase 2 activities will not commence until GenCorp obtains the required approvals and permits from the Corps, the U.S. Fish and Wildlife Service ("Service"), the Central Valley Water Quality Control Board ("Board"), and the California Department of Fish and Game (DFG); collectively referred to hereafter as the "Resource Agencies." It is anticipated that, at a minimum, these permits will require GenCorp to ensure "no net loss" of identified wetlands in accordance with state and federal requirements.

2.7.2 Special Status Wildlife Species

The seasonal wetlands and vernal pools on the Project site represent habitat for the federally-threatened vernal pool fairy shrimp (*Branchinecta lynchi*) and the federally-endangered vernal pool tadpole shrimp (*Lepidurus packardi*). Gibson and Skordal conducted wet season surveys during 2001 on the *Rio Del Oro* Project site. Vernal pool fairy shrimp were documented in two seasonal wetlands located within the *Rio Del Oro* Mining Project site on the 2005 verified delineation. Vernal pool tadpole shrimp were documented in five features located adjacent to, but not within, the Project site on the 2005 verified delineation. California linderiella were observed during both survey years in a variety of seasonal wetlands, ponds, and riparian wetlands (Gibson and Skordal 2000a, 2001). Midvalley fairy shrimp were not observed on-site during these survey efforts. The Corps, in consultation with the Service, is ultimately responsible in making the determination of potentially suitable habitat.

Gibson and Skordal conducted elderberry surveys on the *Rio Del Oro* Project site during July and August 2000. The elderberry plant (*Sambucus mexicana*) is the exclusive host plant of the federally-threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*). There are 266 elderberry plants located within the *Rio Del Oro* Project site. Evidence of Valley elderberry longhorn beetle occurrence (i.e., exit holes) was observed on 37 (14 percent) of these shrubs. A 100-foot buffer will be fenced around all elderberry bushes. All elderberry bush locations will be verified in the field prior to installation or moving of the portable plant so that no valley elderberry longhorn beetle habitat is affected during mining. All elderberry bushes will be fenced prior to Project initiation. No mining or other activities will occur within 100 feet of any elderberry bushes

until the appropriate approvals and permits are in place, unless the elderberry bush is already adjacent to an existing road, which will continue to be used throughout the life of the Project.

In order to ensure that any significant impacts to the elderberry bushes will be properly mitigated, the Project has two (2) general mining phases. Phase 1 includes mining the portions of the site that do not have any elderberry bushes. Phase 2 will involve mining of the material located below and around the elderberry bushes. Phase 2 activities will not commence until GenCorp obtains the required approvals and permits from the Resource Agencies listed above. It is anticipated that, at a minimum, these permits will require GenCorp to prevent the take of any species protected by the Endangered Species Act in accordance with state and federal requirements.

Plant communities on-site represent potentially suitable habitat for a number of regionally occurring special-status bird species. Potentially occurring special-status birds include nesting raptors (white-tailed kite, Cooper's hawk, Swainson's hawk, northern harrier, burrowing owl, and other common raptor species), nesting songbirds (loggerhead shrike, lark sparrow, and California thrasher), and wintering or migrant birds (sharp-shinned hawk, ferruginous hawk, golden eagle, merlin, and tricolored blackbird). The destruction of active migratory bird nests, including those of raptors, is a violation of the MBTA, and disruption or destruction of an active raptor nest is also a violation of California Fish and Game Code section 3503.5. Furthermore, the destruction of nests of special-status bird species would constitute a violation of the federal or California Endangered Species Acts, or other applicable laws, depending on the status of the species.

Prior to commencing mining activities, the Applicant will retain a qualified biologist to perform a pre-construction survey during nesting season, and not more than 12 months prior to the commencement of ground disturbing activities, to determine whether any special-status bird species potential nesting sites are present. The biologist shall survey the Project Site and within 100 feet of the project site boundaries. If active nests are not found during the pre-construction survey, further mitigation shall not be required at that time. If active nesting sites are discovered, the biologist shall submit the result to the Department of Fish and Game, and the Operator. Construction activities shall not take place within 500 feet of the raptor nests and 100 feet of other migratory birds until the young have fledged. Trees containing nests that must be removed as a result of Project activities shall be removed during the non-breeding season (September to January).

In the event that an occupied nest site of a protected bird species is discovered during Project tree removal operations, the Operator shall protect the nest tree, screening trees, and replacement trees, shall apply the provisions of 14 CCR 919.2(d), and shall immediately notify the Department of Fish and Game. Appropriate mitigations will be devised through consultation with the agencies and the Operator. The specific protection measures to be implemented will be based on the establishment of buffer zones, compliance with year round restrictions, and the established critical periods for each species.

2.8 AIR RESOURCES/CLIMATOLOGY

The *Rio Del Oro* mining Project plans to use a portable processing plant to minimize fugitive dust emissions associated with hauling aggregate material to the plant. A copy of the Air Pollution Control Plan prepared for the proposed operation, which will be submitted to the Sacramento Metropolitan Air Quality Management District, is included in the application package.

2.9 LAND USES AND AESTHETICS

2.9.1 Existing and Surrounding Land Uses

The proposed mining site is distant from any non-industrial uses. The Project site is surrounded by Teichert's Grantline mining site to the west, vacant land owned by Aerojet to the south; Teichert's Grantline mining processing plant and Tsakopoulos-Bachman's industrial property to the east; and Aerojet-General Corporation's mining/industrial property to the north. The nearest designated residential area is located approximately 3,100 feet southeast of the proposed site.

2.9.2 Visual Impact to These Areas

Because mining will occur in a relatively remote area, visual impacts of the operation will be minor. Additionally, natural re-vegetation will occur as mining is completed, thereby resulting in a low level of visual change to the landscape.

3.0 DESCRIPTION OF PROPOSED MINING OPERATION

The type and extent of mining will affect reclamation planning. The following sections describe the mining operations and identify the aspects of the operation that are pertinent to the design of an effective Reclamation Plan.

3.1 DIMENSIONS, ACREAGE

The 1,300-acre Project site is owned by GenCorp. Approximately 600 acres of the proposed mining area, consisting of dredge tailings, will be disturbed. The actual disturbed acreage may be more or less depending on market conditions and on-site aggregate availability. The applicant proposes to mine these tailings to an elevation of 155 to 180 feet.

3.2 INITIATION AND TERMINATION

Mining will commence immediately following approval of the Project and will continue for up to 10 years from the approval date. Therefore, the dates of initiation and termination are estimated as July 12, 2007 and July 12, 2017 respectively.

3.3 PRODUCTION SCHEDULE

Production rates will vary as a function of market demand. However, the estimated production rate from the mining proposed in this application is approximately 1.5 to 4 million cubic yards per year, with a total of approximately 5 to 11 million cubic yards to be mined. A portion of the mined and processed material may be used on-site for reclamation.

3.4 MINING PLAN, PHASING

The Project has two (2) general mining phases. Phase 1 includes mining the portions of the site that do not have any elderberry bushes or wetlands. All elderberry bushes and wetlands will be avoided until GenCorp obtains the required approvals and permits from the Resource Agencies. No mining or other activities will occur within 100 feet of any elderberry bushes or wetlands until the appropriate approvals and permits are in place, unless the elderberry bush or wetland is already adjacent to an existing road, which will continue to be used throughout the life of the Project. Phase 2 occurs after all required permits and approvals are obtained by GenCorp from the Resource Agencies related to mitigation of the elderberry bushes and wetlands. The material located below and around the elderberry bushes and wetlands will be mined in Phase 2. Environmental constraint areas C and F, which may be mined at some time in the future, will honor the overall phasing of the project. Constraint areas which contain elderberry or wetland species would not be mined in Phase 1.

It is estimated that Phase 1 will take approximately 6 to 8 years to complete, Phase 2 is expected to take 2 to 4 years to complete; although it is difficult to estimate the term of mining for each individual phase due to market fluctuations. Please see Exhibit H, Mining Plan, which depicts the progression of mining during the two phases. The nature of dredge tailings is such that material quality may vary from one row of cobbles

to the next. Therefore, due to material quality and other potential site development constraints, the operator must maintain flexibility to discontinue mining of one cobble row in exchange for beginning another. As mining progresses, reclamation will immediately follow extraction and load-out activities. Because the operator will be concurrently reclaiming tailing rows as part of its mining plan, a row-by-row reclamation plan is not feasible. In most cases, reclamation of a row of cobbles would begin prior to the completion of the mining of that row. Nonetheless, the operator proposes to submit a semi-annual, RDO Mining and Reclamation Status Report ("Status Report") which will include the following:

- Description of the proposed mining and reclamation areas for the following six months;
- Prior mining areas, the reclamation status of those areas, and an updated exhibit; and
- Representative cross-sections for areas of proposed disturbance.

Representative cross-sections for areas of proposed disturbance shall be included as part of the Status Report. The updated Status Report and exhibits will be submitted to the Director as a supplement to this Reclamation Plan.

Additionally, because Phase 2 is contingent on GenCorp permitting, there is a chance that Phase 2 may not be mined. Under this scenario, the site topography at the end of Phase 1 would be the final site configuration. Site topography and typical cross-sections, excluding those areas that would fall under Phase 2, will be provided with each semi-annual letter report.

Mining and site reclamation operations include:

- Removal of aggregate material by means of front-end loader, bulldozer, excavator, and/or scraper;
- Processing of the excavated material with a portable crushing and screening plant; and
- As the mining progresses across a phase, the excavated areas will be reclaimed to final reclamation grades. Minor finished grading and slope contouring will be performed with motor graders, scrapers or bulldozers.

3.5 PROCESSING

All processing of mined material will occur at the *Rio Del Oro* Project site. A portable crushing and screening plant will be used to process the material. A portion of the mined material may be sold unprocessed.

3.6 WATER REQUIREMENTS

Water requirements for this site will be limited to that necessary for dust control of the material itself and the unpaved access/haul roads. The estimated use is 50,000 to 200,000 gallons per day (depending on the material's in place moisture as well as the hours of operation). Water will be supplied from one of two sources: 1) the County municipal water line located on the north side of White Rock Road; or 2) Boeing's groundwater extraction and treatment (GET) system along Douglas Road at extraction well EX-25. A water truck will transport water to the active portions of the mining site.

The EX-25 GET facility is located along Douglas Road near the intersection with the IRCTS Beta Complex entrance road. The GET facility discharges treated groundwater to Morrison Creek to the north under a NPDES permit. EX-25 currently operates at approximately 400 gallons per minute; and the discharge of treated groundwater would continue when Granite does not use the water.

3.6.1 Waste Water

No waste water will be produced or disposed of as a part of this mining operation at the mining site.

3.6.2 Drinking Water

Potable water will be brought to the site to provide safe drinking water for employees.

3.6.3 Sewage Disposal

One existing septic system is currently used on a limited basis by the Clark Cattle Company at the By-Dry area; and an inactive septic system is located at both the DM14 area and at the Sigma Complex. During operations, portable toilets will be brought to the site and maintained on a regular schedule.

3.7 ENERGY REQUIREMENTS

Energy requirements for the proposed mining operation are limited to that needed to extract, transport and process materials.

Petroleum fuels and lubricants are required for the vehicles used to mine the aggregate material, the portable crushing and screening plant, the equipment used to reclaim the mined areas, and the equipment used to load out the construction aggregate products. The scale loadout area will require electric power (which may be temporarily provided with a diesel generator. Petroleum fuels and lubricants may be stored onsite.

3.8 NOISE AND EMISSIONS

Mining Operations will include the use of bulldozer(s), front-end loader(s) or excavator(s), scraper(s), water truck(s), motor grader(s), and a portable crushing and screening processing plant. These mining operations may affect noise and emissions.

3.8.1 Noise

Noise is generally defined as "unwanted sound." Mineral resource extraction, hauling, screening loading and other site activities will create noise. Brown and Buntin Associates (BBA), acoustical and noise consultants, have been retained by the applicant to conduct noise studies and prepare a technical noise report for the proposed Project. The Noise Analysis has been included as part of the application.

As mentioned previously, the nearest proposed off-site residences are located approximately 3,100 feet east of the Project site. The nearest off-site active non-residential structures are industrial facilities, located within approximately 200 feet of the Project boundary. This area is zoned SPA. Additionally, substantial sources of ambient noise exist in the vicinity of the Project site, including traffic noise from White Rock Road and frequent jet landings at Mather Field.

3.8.2 Dust, Odors, Vehicular Emissions

Minimal soil disturbance is expected to occur as a result of mining operations because no topsoil removal is required to access the dredge tailings. However, water trucks will be used to maintain a moist aggregate and haul road surface, thereby minimizing fugitive dust. The portable plant will limit the travel distance between the mining operations and processing operations, thus decreasing fugitive dust emissions. Additional dust controls on the processing plant itself will consist of enclosures, wet suppression (water sprayers), and bag houses. In addition, the revegetation which will occur as part of the reclamation activities will help to control dust. A copy of the Air Pollution Control Plan prepared for the proposed operation, which will be submitted to the Sacramento Metropolitan Air Quality Management District, has been included in the application submittal.

3.9 HOURS OF OPERATION/NUMBER OF EMPLOYEES

The City Zoning Code limits the hours for all mining operations unless modified by the conditions of approval or a subsequent entitlement granted by the Zoning Administrator. The hours allowed by Code are 6:00 a.m. to 10:00 p.m., Monday through Friday, and 6:00 a.m. until 3:00 p.m. on Saturdays. The applicant requests permission to

operate on a 24 hours per day, 7 days per week basis, if required. The Applicant believes this request is reasonable given the remoteness of the site and the fact that the proposed mining operation is distant from any residential use.

The number of employees working on-site at any one time is anticipated to be twelve (12).

3.10 TRANSPORTATION

This Project is expected to generate an average of 500 truck trips per day. The actual number of truck trips depends on overall market conditions. Transportation during concurrent reclamation activities will not add appreciably to the mining effects. Trucks will enter and leave the site from White Rock Road and occasionally from Douglas Road.

3.11 HAZARDOUS MATERIALS

The project will not involve the handling, storage, or transportation of hazardous materials. Any trash generated on site will be hauled off to a local landfill.

A Hazardous Materials Business Plan (HMBP) will be prepared for this site. All plant employees shall be trained according to the HMBP. The HMBP includes criteria for identification of potential hazardous sites and discusses the timing, course of action, and responsibilities of interested parties. The HMBP will also address contamination from both the aerospace and industrial activities and potential contamination above and beyond the expected occasional cans, empty drums, cables, and other items that were associated with the historic dredger mining operations.

In the unlikely event that potentially hazardous materials are encountered during the mining operations, Granite will contact GenCorp and the Department of Toxic Substances Control (DTSC) within 24 hours to determine whether the materials are, in fact, hazardous. No operations will occur within the potentially contaminated area until clearance is received from GenCorp and DTSC.

If the contamination from a known constraint area is found to be more extensive or different than indicated by the existing data, the constraint areas will be expanded to reflect the more extensive area. The constraint area restrictions as outlined in the Reclamation Plan shall apply to the more extensive constraint areas.

Additionally, no mining waste will be generated by this project. All processed materials will be sold or used on site for reclamation. No waste water will be generated on site since water will only be used for dust suppression. Portable toilets will be used on site and will be maintained on a regular schedule.

3.12 MAINTENANCE AND FUELS

Any petroleum fuels or lubricants stored on site will be kept in the staging/sales area. Fuel will be stored in above-ground containers with secondary containment as required by law. An approved Spill Prevention, Control, and Countermeasures (SPCC) Plan will guide reporting, control, and cleanup activities in the event of a spill on-site.

Equipment fueling will be accomplished using mobile fuel trucks which will come on-site to service equipment. All rubber-tired equipment will be fueled in a designated area which will have an impermeable base. Fueling and maintenance activities associated with track-mounted equipment shall be conducted with proper safeguards to prevent hazardous materials releases. Absorbent booms will be stored in the fueling/maintenance area to allow rapid response and containment of any spills during maintenance activities.

4.0 DESCRIPTION OF PROPOSED RECLAMATION

This Reclamation Plan outlines typical reclamation activities and site-specific techniques required before mining, during mining, and at final site reclamation. These measures were developed to:

- Comply with local and State laws, regulations, and mitigation measures;
- Minimize wind and water erosion;
- Blend the mined lands into the surrounding landscape; and
- Return the site to a beneficial end use.

Reclamation objectives include controlling drainage, stabilizing soils, lessening the time needed for the vegetation of the site to recover, and providing an environment conducive to natural reestablishment of vegetation. Appendix C is the Revegetation and Grazing Management Plan for the Reclamation Plan.

4.1 SUBSEQUENT USES

After the proposed mining is complete, the land will be undeveloped open space and will be used for seasonal grazing, similar to the grazing which currently occurs on the property and adjacent properties. Ultimately, the site may also be used for urban/industrial development in the future. The removal of cobbles from the site makes it more viable for ultimate urban development.

4.2 IMPACT ON FUTURE MINING

The proposed Project calls for returning the land to its existing use of grazing. The reclamation will not detrimentally affect the feasibility of future mining in the area. Only the tailings within the proposed area will be mined.

4.3 RECLAMATION SCHEDULE

Reclamation of the site will occur concurrently with mining operations. As mining progresses, reclamation will immediately follow extraction and load-out activities. Because the operator will be concurrently reclaiming tailing rows as part of its mining plan, a row-by-row reclamation plan is not feasible. In most cases, reclamation of a row of cobbles would begin prior to the completion of the mining of that row. Please refer to Exhibit I for a description of the Reclamation Plan. The dredging operation discarded wire rope, empty lubricant drums, and possibly other metallic debris into the tailings. This debris will be stockpiled and sent to a scrap yard and/or landfill when a load of material has accumulated.

4.4 POST-MINING TOPOGRAPHY

4.4.1 Slope Stability

The proposed mining plan will return the subject property to a condition more like its natural state, by removing most of the man-made dredge tailing mounds. The undisturbed boundaries of the dredged area indicate that the natural terrain once sloped from elevations of approximately 190 feet along the north and east edges of the site to elevations of approximately 155 feet along the south and west edges of the site. Thus, the natural terrain consisted of relatively flat ground with slopes of approximately 1-2%. All side slopes will be reclaimed at a maximum 2:1 (horizontal:vertical) inclination per geotechnical recommendation.

4.4.2 Drainage

As discussed above, the site's natural drainage patterns were heavily modified by previous gold dredging operations. No interim drainage swales or ponds are necessary because the site consists of coarse dredge tailings and water infiltration is high. While the final grade of the mined area will be lower than adjacent ground, it will not create a drainage issue for the following reasons: 1) the area being mined has high water infiltration because it consists of previously disturbed dredge tailings and fines; and, 2) there is no through drainage in the area of the site where mining is taking place. Furthermore, it should be noted

that the original mining and Reclamation Plan also provided for drainage through infiltration as well.

4.4.3 Deposition of Old Equipment

Mobile equipment will primarily be used for mining, processing, and reclamation. Only mobile equipment will be used in this mining and processing operation. All scale facilities and ancillary facilities will be removed from the site upon completion of mining.

4.5 RESOILING

No overburden exists in the tailing area to be mined. However, fine material will be placed over the cobble area for reclamation. Pursuant to the Revegetation and Grazing Management Plan attached as Appendix C, fine material will be placed to provide a minimum of 6-inches of soil as necessary.

4.6 REVEGETATION

A Revegetation and Grazing Management Plan is attached as Appendix A. This plan describes soil and site preparation, revegetation, erosion control and management, noxious weed management, test plots and reclamation monitoring and performance standards.

4.7 EROSION AND SEDIMENT CONTROL

No overburden exists in the tailings areas to be mined. The cobble rows will be mined slightly below the grade of the surrounding ground. The excavated areas will be sloped to contain any sediment or runoff. Stockpile locations will typically be within the excavation areas. The reclaimed areas will be hydroseeded on a periodic basis, but not longer than six (6) months after operations within a cobble row are complete. The scale area will be graded to drain to a detention basin. Erosion control management is described in Appendix A, Revegetation and Grazing Management Plan. Revegetation efforts will comply with the standards set forth in the Revegetation and Grazing Management Plan.

A Storm Water Pollution Prevention Plan has been prepared for this site despite the fact that no storm water is expected to discharge offsite. Performance standards and BMPs for erosion and sediment control, drainage, and diversion structures are included in the SWPPP.

A basin design memo from Cunningham engineering is included as an appendix in the SWPPP. Per the memo, in the event of a 100-year annual rainfall distribution, at the end

of the water year, the pond will b e 52% full. The storm water retention basin for the Staging/Sales Site shall be constructed to comply with the design memo. Inlet locations and specifications are included in the SWPPP. An emergency spillway was not included in the design because the top of the basin is surrounded by cobble.

4.8 PUBLIC SAFETY

The proposed mining site is relatively distant from non-industrial uses. As stated previously, the nearest planned residential development is located approximately 3,100 feet east of the proposed site. As such, public health and safety will not be impacted.

Reclamation of this site will involve the creation of open space/grazing area by leaving the previously mined site "as is." As such, no hazardous materials will be utilized in this process. Additionally, although TCE, a contaminant, has been found in groundwater beneath the proposed mining site, this contamination is far beneath the surface (over 100 feet). Since the mining depths are above the groundwater table, there will be no disturbance of the groundwater. Accordingly, any contamination in the groundwater has no relationship to proposed mining activities and vice versa.

4.9 PERFORMANCE STANDARDS

SMARA Section 2772 (a) requires that the Reclamation Plan establish "site-specific criteria for evaluating compliance with the approved Reclamation Plan, including topography, revegetation, and sediment and erosion control." The following discussion sets forth minimum site criteria, or performance standards, for the various aspects of site reclamation. Monitoring of reclamation performance standards will be conducted by a qualified individual or group, agreed upon by the applicant and the City. The attached Revegetation and Grazing Management Plan describes specific reclamation monitoring and performance standards for this plan. In addition, the City of Rancho Cordova, pursuant to City Code Section 20.040.070 (d) provides the following standards:

> (d) Unless otherwise Specified in the approved Reclamation Plan, the reclamation of mined lands shall be carried out in accordance with the following requirements:
>
> **1. Reclamation Timing**
>
> a. The reclamation of mined lands shall occur as soon as practical following completion of mining operation at successive locations within the mining site as required by the schedule in the approved Reclamation Plan.

b. The reclamation of lands shall occur as soon as practical following completion of mining operations, except where the permanent reclaimed condition of mined lands cannot be achieved within one year due to the regulatory approvals (e.g., compliance with the California Environmental Quality Act) required for the ultimate land use contemplated or proposed for the property (e.g. urban development). In such case only interim reclamation, pursuant to section 20.040.070(c), need be accomplished within one year, and final reclamation shall be completed as soon as it is possible to complete the reclamation in compliance with the above regulatory approvals, but in no case, shall reclamation take more than three years.

2. Disposal of Overburden and Mining Waste

a. Permanent piles or dumps of overburden and waste rock placed on the land shall be made stable, shall not restrict natural drainage without provision for diversion, and shall have an overall smooth or even profile subject to the satisfaction of the of the City Engineer. Where practical, such permanent piles or dumps shall be located in the least visible location at the mining site.

b. Old equipment and inert mining wastes shall be removed or buried subject to the approval of the hearing officer.

c. Toxic materials shall be removed from the site or permanently protected to prevent leaching into the underlying groundwater, to the satisfaction of the Planning Department.

3. Re-vegetation

a. All permanently exposed lands that have been denuded by mining operations shall be re-vegetated to provide ground cover sufficient to control erosion from such lands.

b. All plantings shall be established and maintained in good horticultural condition. The re-vegetation shall be able to survive under natural conditions.

c. Re-vegetation methods shall take into account the topography and existing growth patterns and mixes of flora present at and adjacent to the site of mining operations in order to create a more natural appearance. Plantings shall avoid rigid, geometric patterns and shall utilize natural scatterings.

d. Where the ultimate intended or proposed use of mined lands would be a level of development inconsistent with extensive permanent vegetation, the amount of vegetation required for reclamation need not be more than sufficient to prevent erosion.

4. Re-soiling

a. Re-soiling measures shall take into consideration the quality of soils which may be required to sustain plant life pursuant to any re-vegetation that the hearing officer may require in its approval of the applicant's Reclamation Plan.

b. Coarse, hard material shall be graded and covered with a layer of finer material or weathered waste. A soil layer shall then be placed on this prepared surface. Where quantities of available soils are inadequate to provide cover, native materials shall be upgraded to the extent feasible for this purpose.

5. Final Slopes

a. Final slopes shall be engineered and contoured so as to be geologically stable, to control the drainage there from, and to blend with the surrounding topography where practical. On the advice of the City Engineer, the Planning Department may require the establishment of terrace drains to control drainage and erosion.

b. Final slopes shall not be steeper than two feet horizontal to one foot vertical (2:1) unless the applicant can demonstrate to the Planning Department's satisfaction that a steeper slope will not:

(1) Reduce the effectiveness of re-vegetation and erosion control measures where they are necessary;

(2) Be incompatible with the alternate future uses approved by the commission of the site; and

(3) Be hazardous to persons that may utilize the site under the alternate future uses approved for the site.

6. Drainage, Erosion, and Sediment Control

a. Any temporary stream or watershed diversion shall be restored to its state prior to any surface mining activities unless the Planning

Department deems otherwise based on recommendations from the City Engineer.

b. Stream bed channels and stream banks affected by surface mining shall be rehabilitated to a condition which would minimize erosion and sedimentation, except that such rehabilitation need not attempt to restore or mimic natural conditions where the contemplated or proposed ultimate use of the reclaimed property would be inconsistent with the maintenance of restored or rehabilitated stream bed channels and stream banks.

c. Re-vegetation and re-grading techniques shall be designed and executed so as to minimize erosion and sedimentation. Drainage shall be provided to natural outlets or interior basins designed for water storage, with such basins subject to the approval of the City Engineer. In addition, final excavation shall eliminate potholes and similar catchments so as to prevent potential breeding areas for mosquitoes.

d. The final grading and drainage of the site shall be designed in a manner to prevent discharge of sediment above natural levels existent prior to mining operations.

e. Silt basins which will store water during periods of surface runoff shall be equipped with sediment control and removal facilities and protected spillways designed to minimize erosion when such basins have outlet to lower ground.

f. No condition shall remain after reclamation which will or could lead to degradation of groundwater quality below applicable standards to the Regional Water Quality Control Board or any other agency with jurisdiction over water quality.

7. Backfilling and Grading

a. Subject to the approval of the City Engineer, backfilled and graded areas shall be placed to avoid excessive settlement and toe the degree necessary to accommodate anticipated future uses.

b. Materials used in the refilling (if necessary) shall be of a quality suitable to prevent contamination and/or pollution of groundwater. If materials for backfilling and grading are obtained from an area other than the site of surface mining operations, such materials shall be

included and the approximate quantities identified in the applicant's Reclamation Plan.

8. **Reservoirs, ponds, lakes or any body of water created as a feature of the Reclamation Plan shall be approved by the City Engineer and the Planning Department.**

4.10 MAINTENANCE, MONITORING, AND REMEDIAL MEASURES

Pursuant to CCR Section 2773(a), the success of reclamation will be monitored for three years, or until performance standards are met, provided that, during the last two years, there has been no human intervention, including for example, irrigation, fertilization, or weeding. Remedial measures will be implemented as necessary to achieve the performance standards.

4.11 REPORTING

Once the reclamation activities for a phase have been completed, monitoring activities will commence and will continue until the City is satisfied that performance standards have been met. Reporting of the progress of reclamation will be relayed to the City on an annual basis.

Pursuant to SMARA Section 2774(b), the City shall conduct an annual inspection of the mining operation to determine compliance with SMARA. The City shall notify the Director within 30 days of the date of completion of the inspection that the inspection has been conducted.

5.0 COST OF RECLAMATION

A reclamation cost estimate is provided in Appendix B.

6.0 APPLICANT STATEMENT OF RESPONSIBILITY

The Applicant's Statements of Responsibility and Lead Agency Certification are provided as Appendix C.

LEAD AGENCY CERTIFICATION

I, the undersigned, hereby certify that this reclamation plan complies with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et seq. and 3700 et seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, and with the requirements of the Surface Mining and Reclamation Act, Sections 2710 et seq.

Signed this _____ day of _____, 20___.

Planning Director _____

STATEMENT OF RESPONSIBILITIES

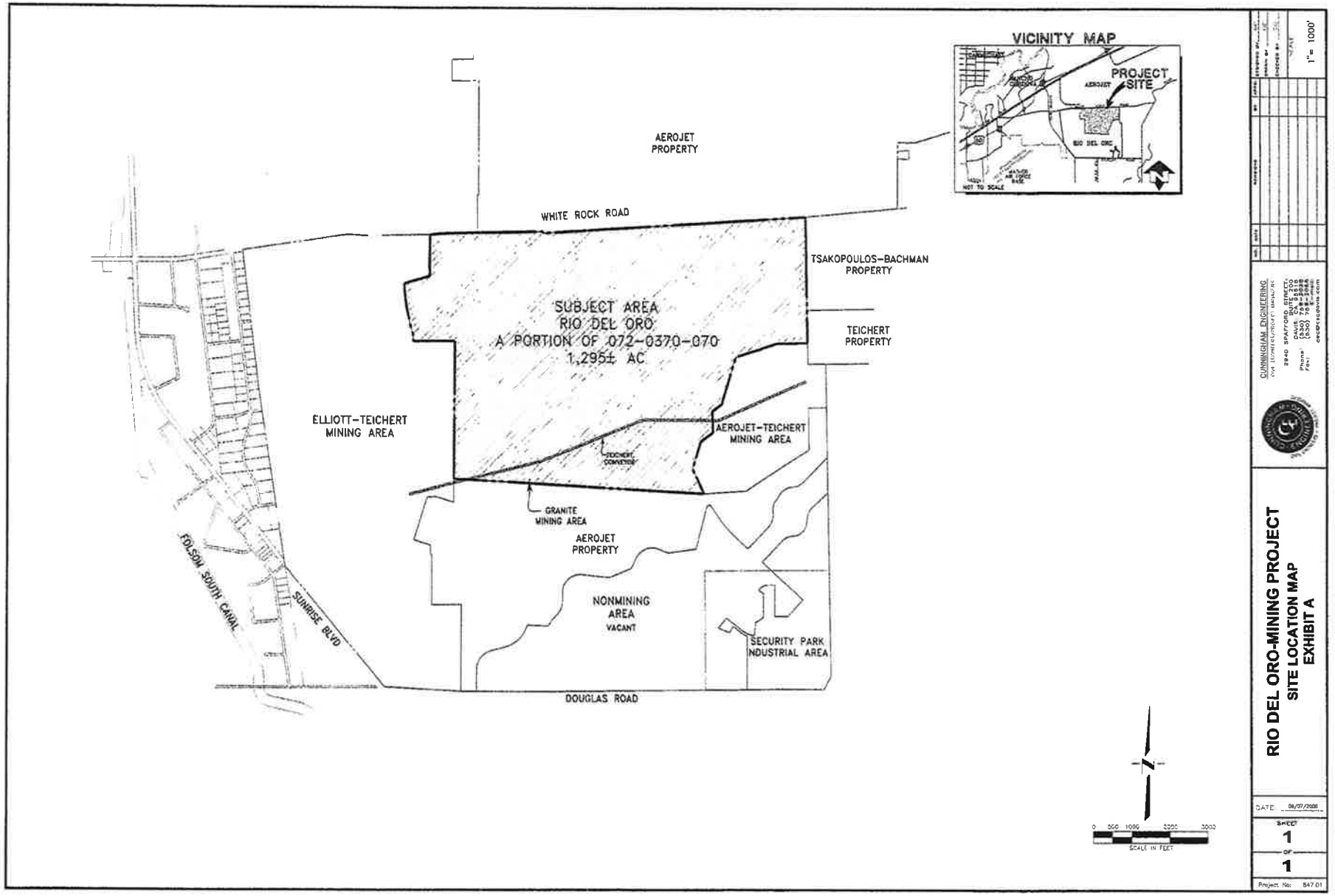
I, the undersigned, hereby agree to accept full responsibility for reclamation of all mined lands as described and submitted herein and in conformance with the applicable requirements of Articles 1 and 9 (commencing with Sections 3500 et seq. and 3700 et seq., respectively) of Chapter 8 of Division 2 of Title 14 of the California Code of Regulations, the Surface Mining and Reclamation Act commencing with Section 2710 et seq., and with any modifications requested by the administering agency as conditions of approval.

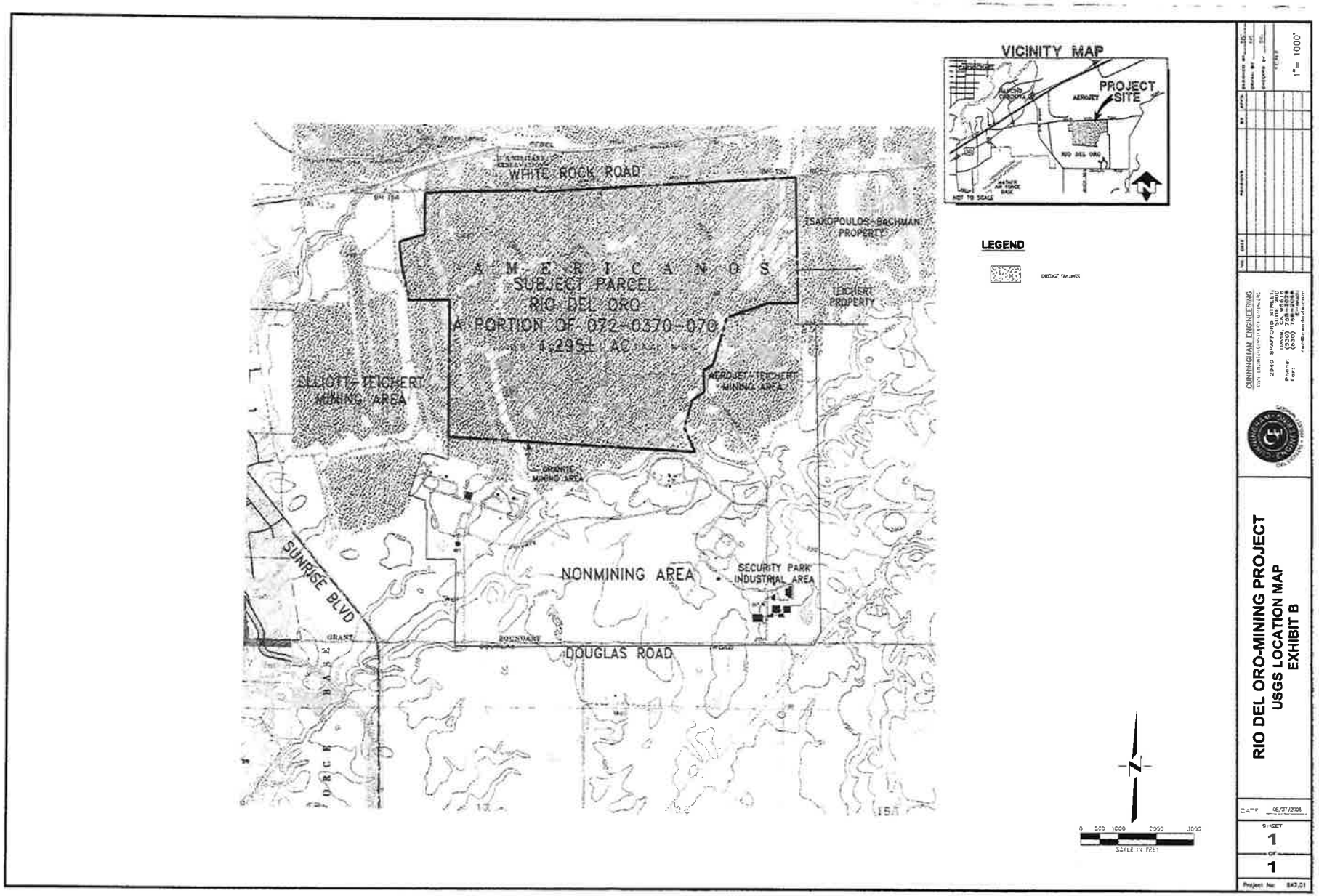
Signed this 3 day of July, 2007.

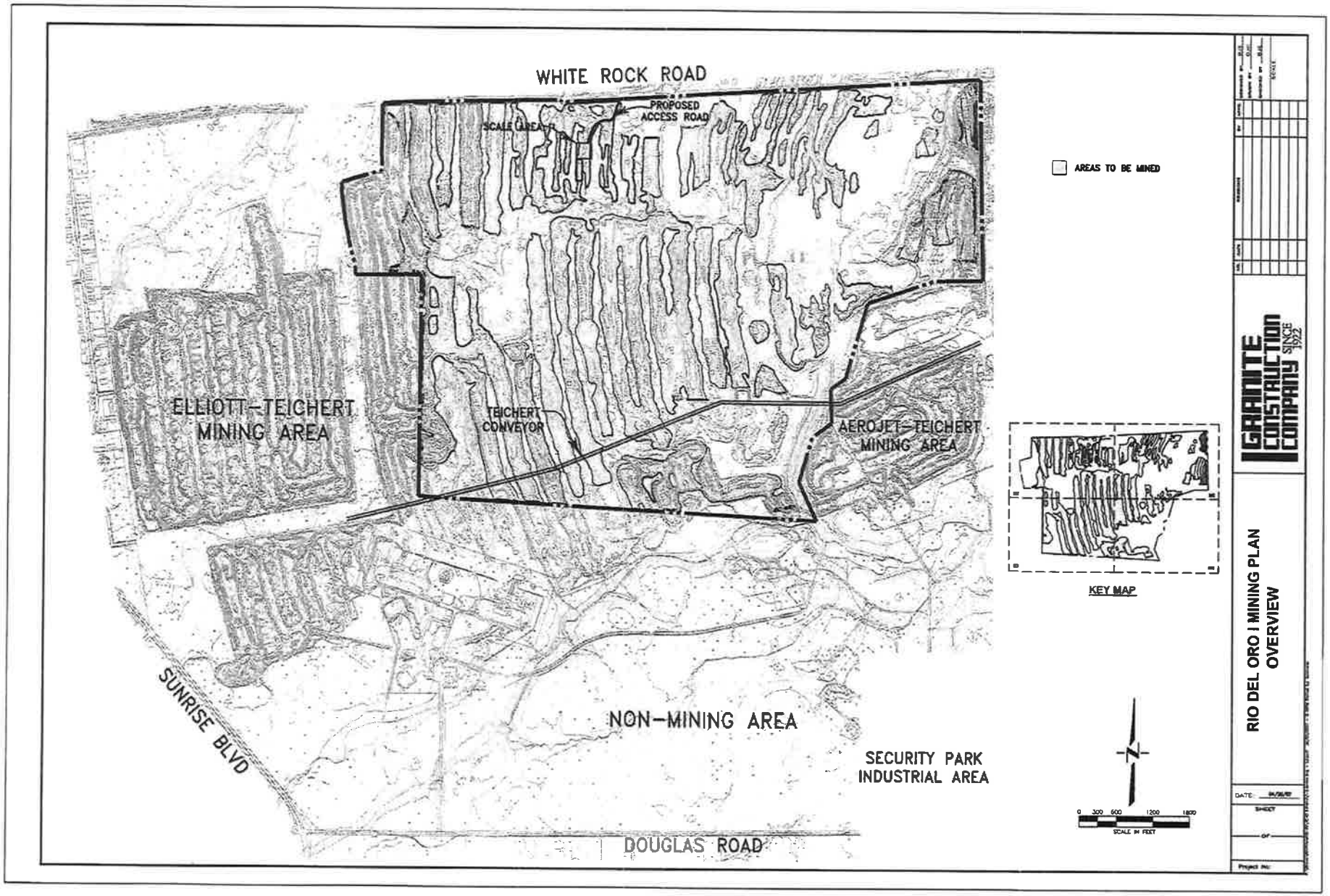
Mine Operator or Operator's Agent _____

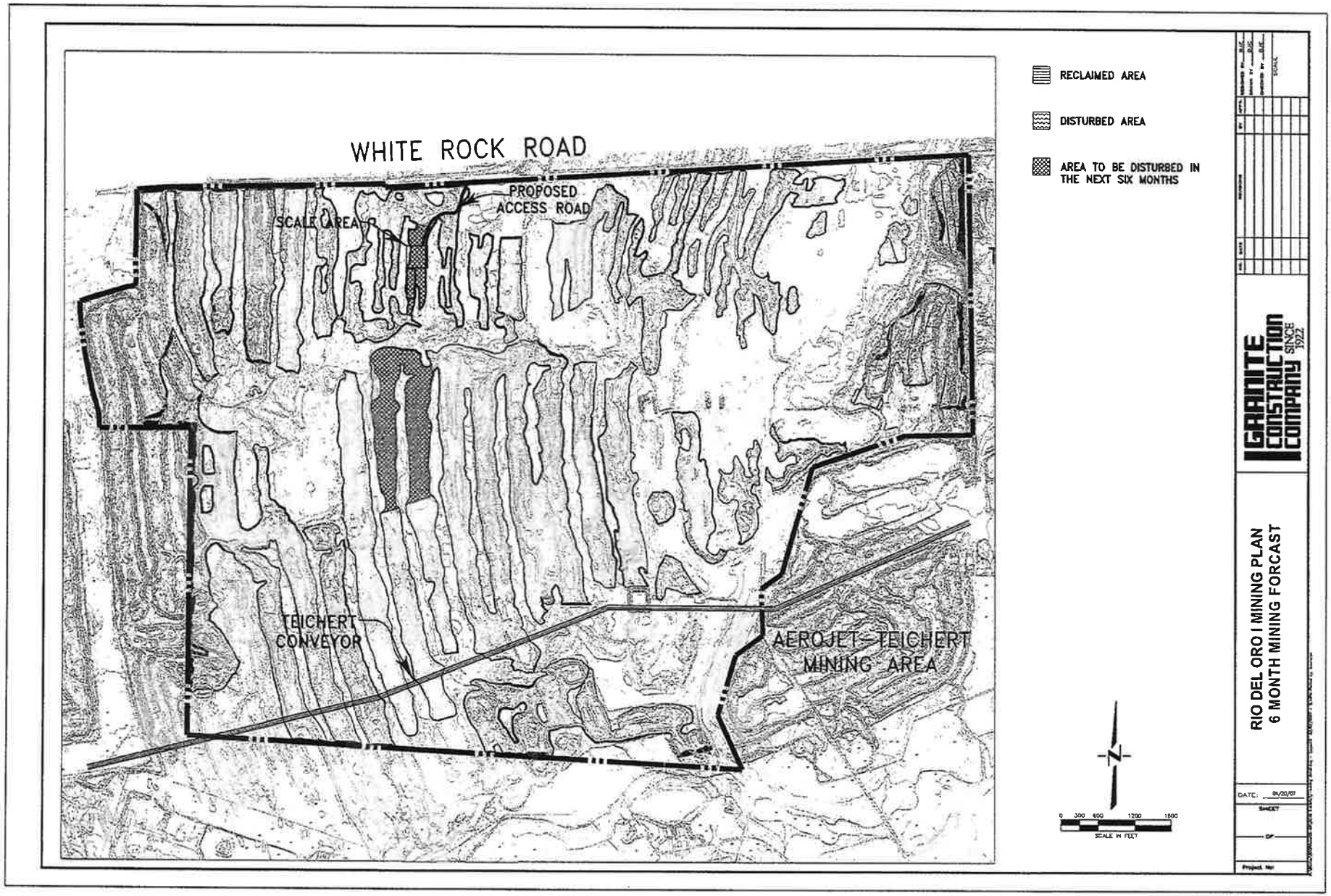
Rio Del Oro Mining Project-Plan Table of Contents:

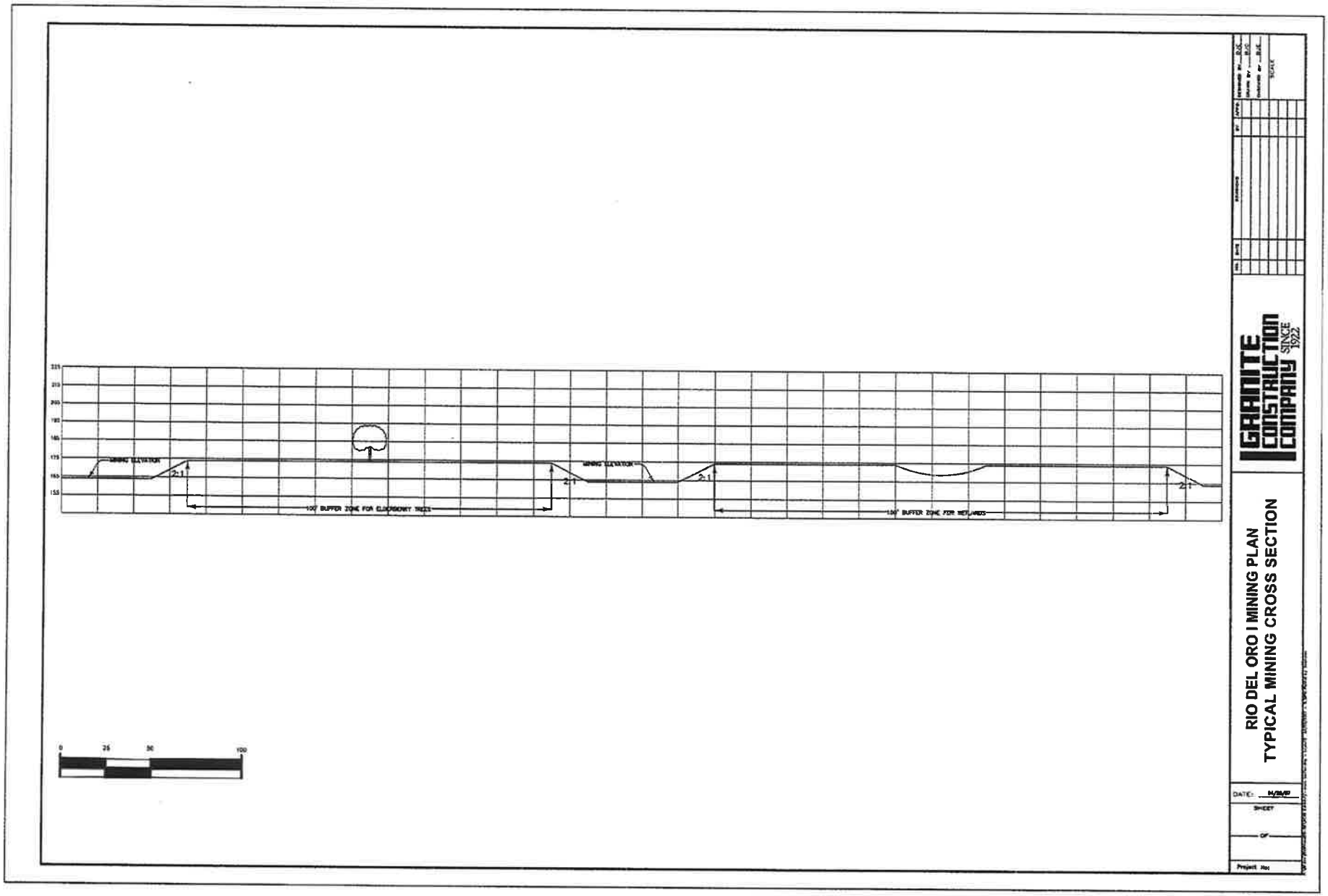
1. Project Site Location Map-Exhibit A
2. USGS Location Map-Exhibit B
3. Overview
4. 6 Month Forecast
5. Typical Mining Cross Section
6. Well and Water Supply Map-Exhibit D
7. Existing Site Conditions-Exhibit E
8. Staging/Sales Site-Exhibit G
9. Mining Plan-Exhibit H (Sheets M1 through M4)
10. Mining Plan Scale Area and Access Road Detail
11. Reclamation Plan-Exhibit I (Sheets R1 through R4)
12. 500' Radius Ownership Map-Exhibit C

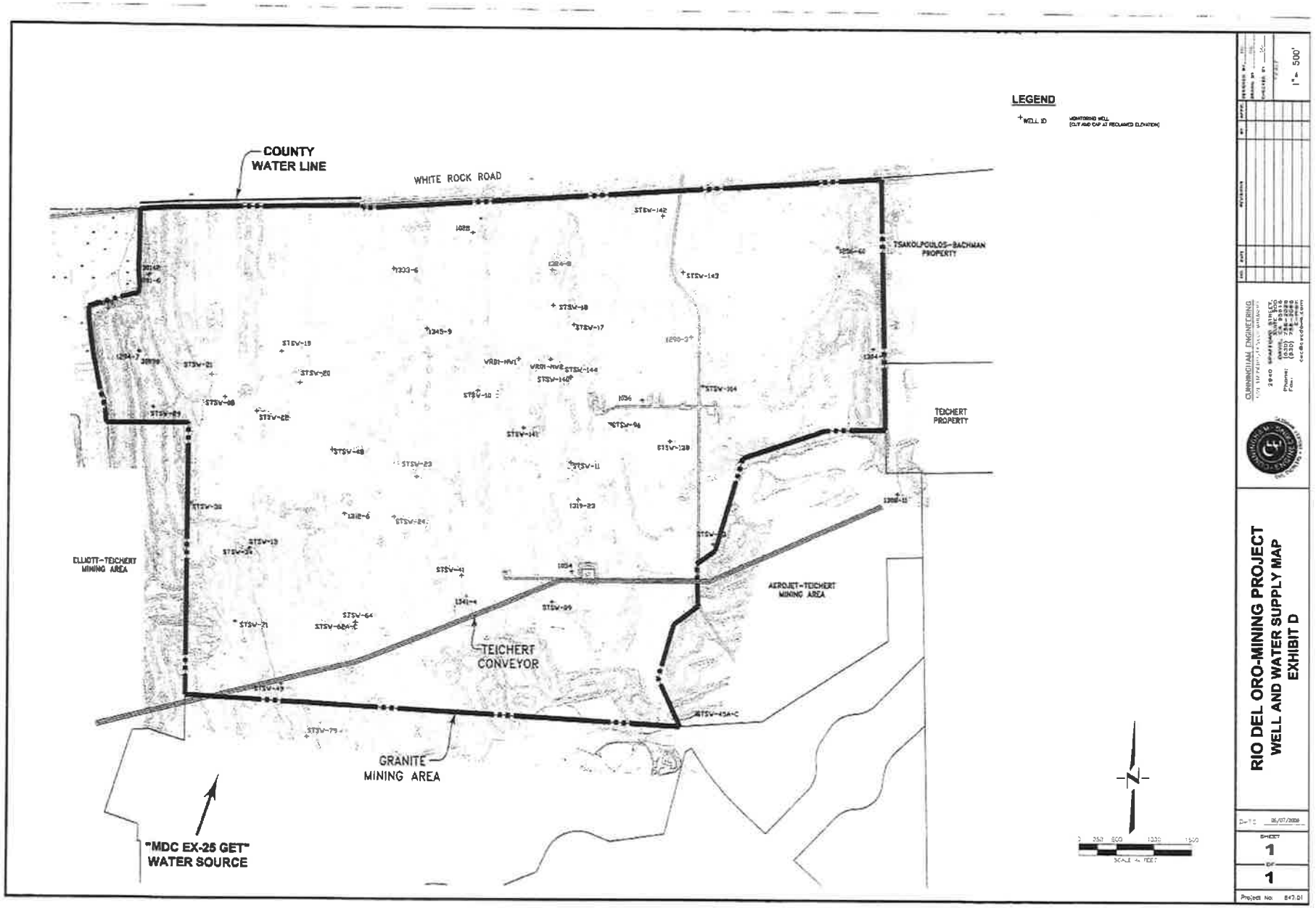

VICINITY MAP
PROJECT SITE
AEROJET PROPERTY
WHITE ROCK ROAD
TSAKOPOULOS–BACHMAN PROPERTY
SUBJECT AREA
RIO DEL ORO
A PORTION OF 072-0370-070
1,295± AC
TEICHERT PROPERTY
ELLIOTT–TEICHERT MINING AREA
AEROJET–TEICHERT MINING AREA
GRANITE MINING AREA
AEROJET PROPERTY
NONMINING AREA
VACANT
SECURITY PARK INDUSTRIAL AREA
FOLSOM SOUTH CANAL
SUNRISE BLVD
DOUGLAS ROAD
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO-MINING PROJECT
SITE LOCATION MAP
EXHIBIT A
DATE 06/07/2006
SHEET 1 OF 1
Project No: 847.01

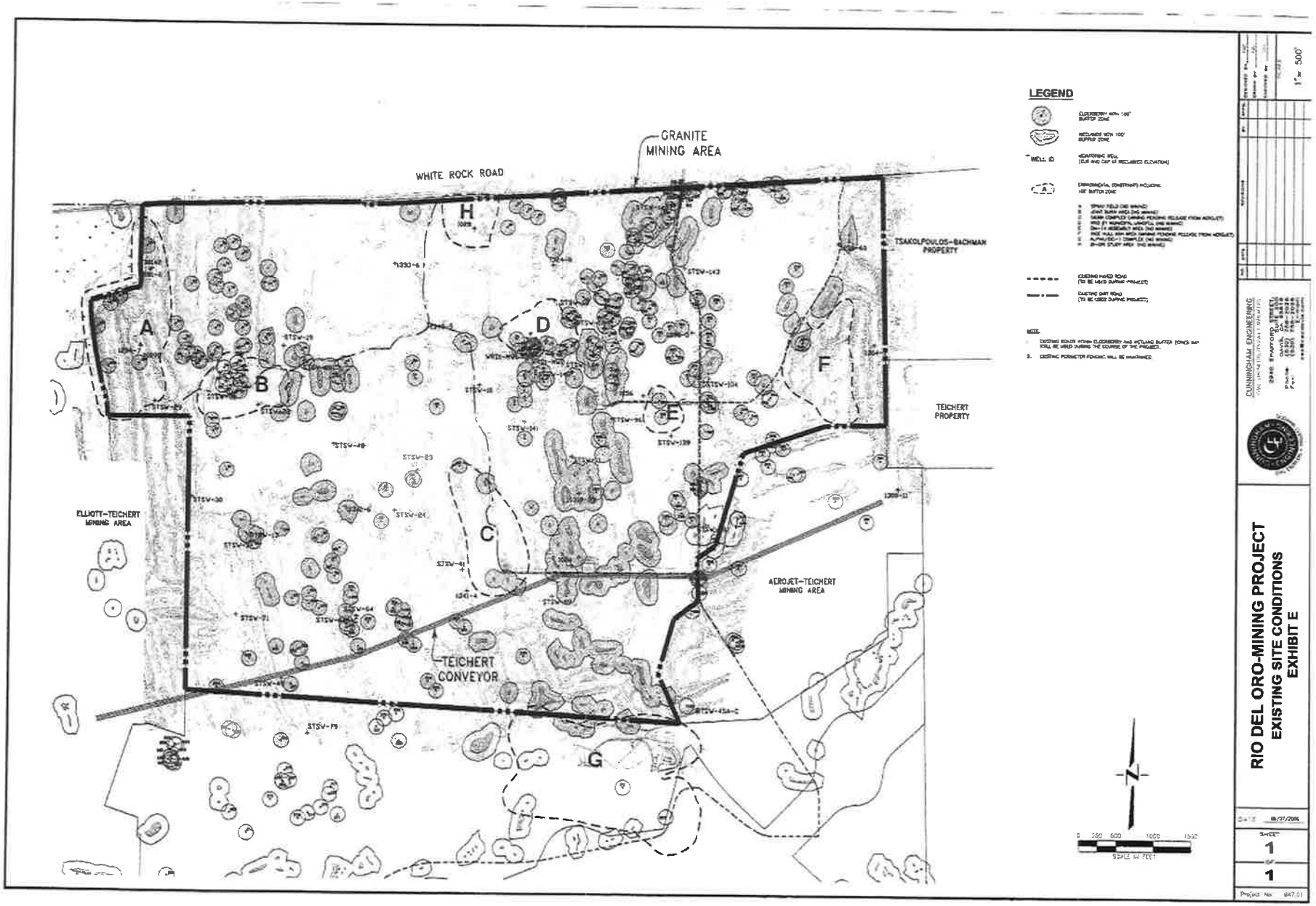

VICINITY MAP
PROJECT SITE
NOT TO SCALE
WHITE ROCK ROAD
TSAKOPOULOS-BACHMAN PROPERTY
AMERICANOS
SUBJECT PARCEL
RIO DEL ORO
A PORTION OF 072-0370-070
1,295± AC
TEICHERT PROPERTY
ELLIOTT-TEICHERT MINING AREA
AGGREGATE-TEICHERT MINING AREA
GRANITE MINING AREA
NONMINING AREA
SECURITY PARK INDUSTRIAL AREA
SUNRISE BLVD
DOUGLAS ROAD
LEGEND
DREDGE TAILINGS
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO-MINING PROJECT
USGS LOCATION MAP
EXHIBIT B
DATE 06/07/2006
SHEET 1 OF 1
Project No: 847.01

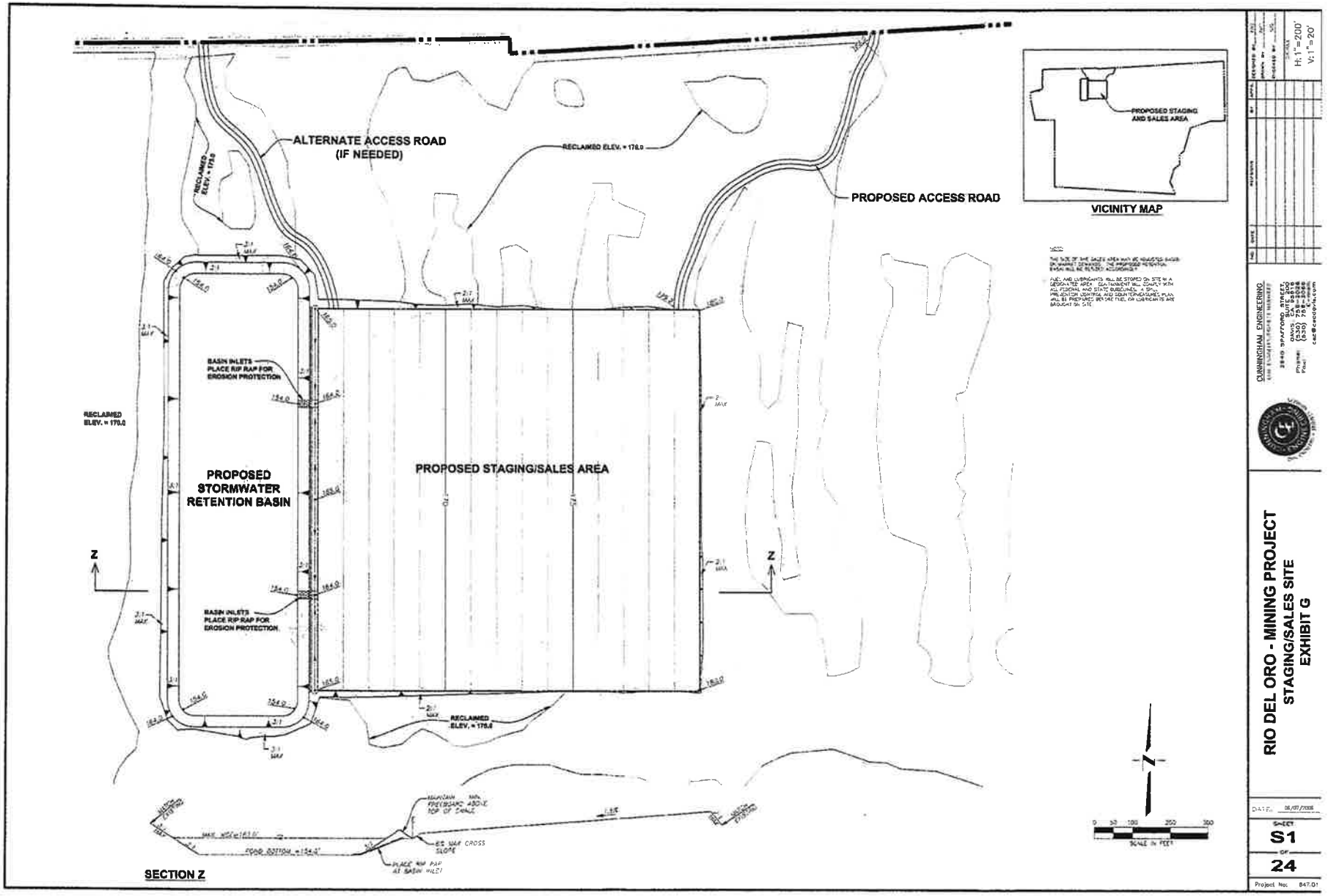

WHITE ROCK ROAD
PROPOSED ACCESS ROAD
SCALE AREA
AREAS TO BE MINED
ELLIOTT-TEICHERT MINING AREA
TEICHERT CONVEYOR
AEROJET-TEICHERT MINING AREA
KEY MAP
SUNRISE BLVD
NON-MINING AREA
SECURITY PARK INDUSTRIAL AREA
DOUGLAS ROAD
0 300 600 1200 1800
SCALE IN FEET
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
OVERVIEW
DATE:
SHEET
OF
Project No:

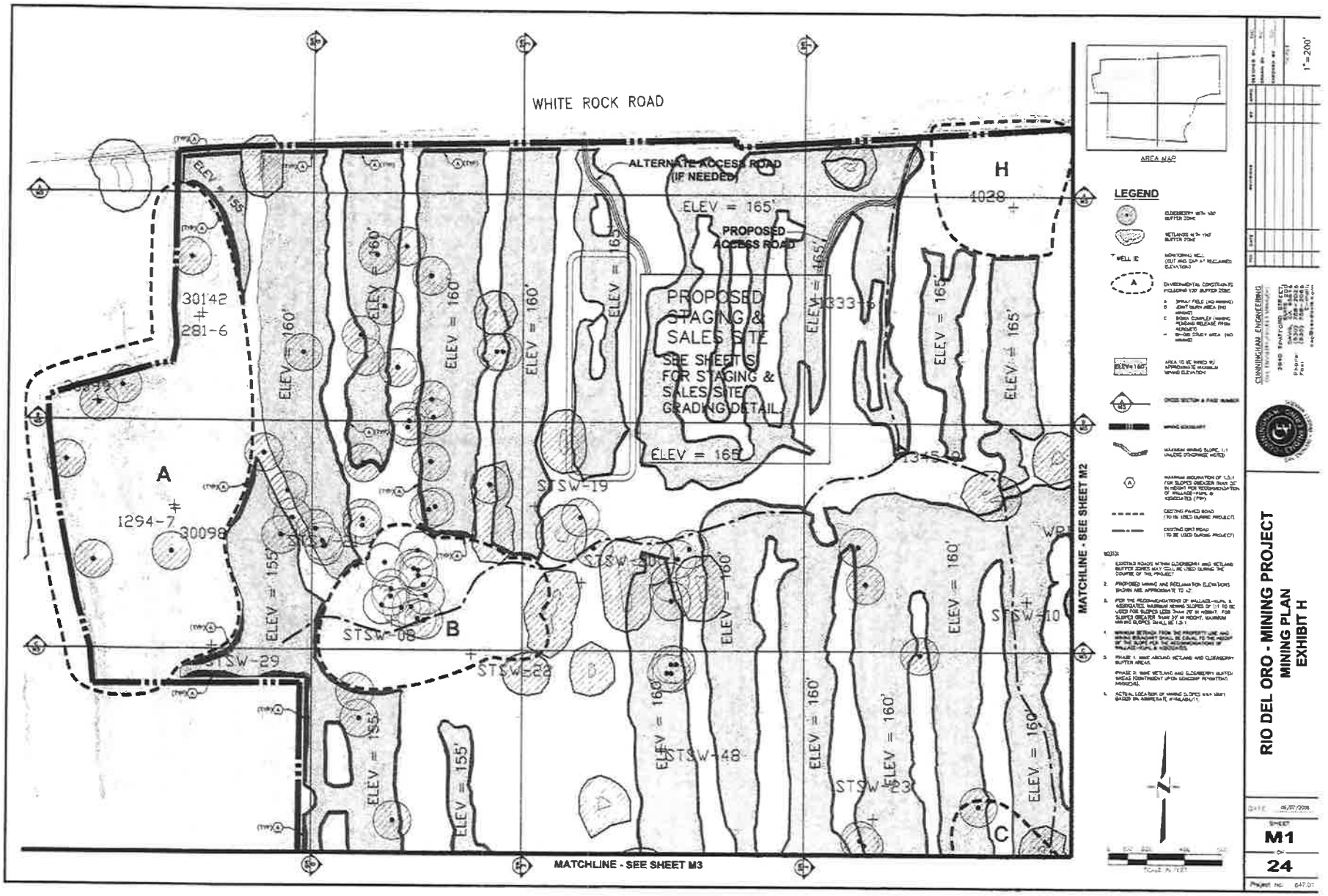

WHITE ROCK ROAD
PROPOSED ACCESS ROAD
SCALE AREA
TEICHERT CONVEYOR
AEROJET - TEICHERT MINING AREA
RECLAIMED AREA
DISTURBED AREA
AREA TO BE DISTURBED IN THE NEXT SIX MONTHS
N
0 300 600 1200 1800
SCALE IN FEET
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
6 MONTH MINING FORCAST
DATE:

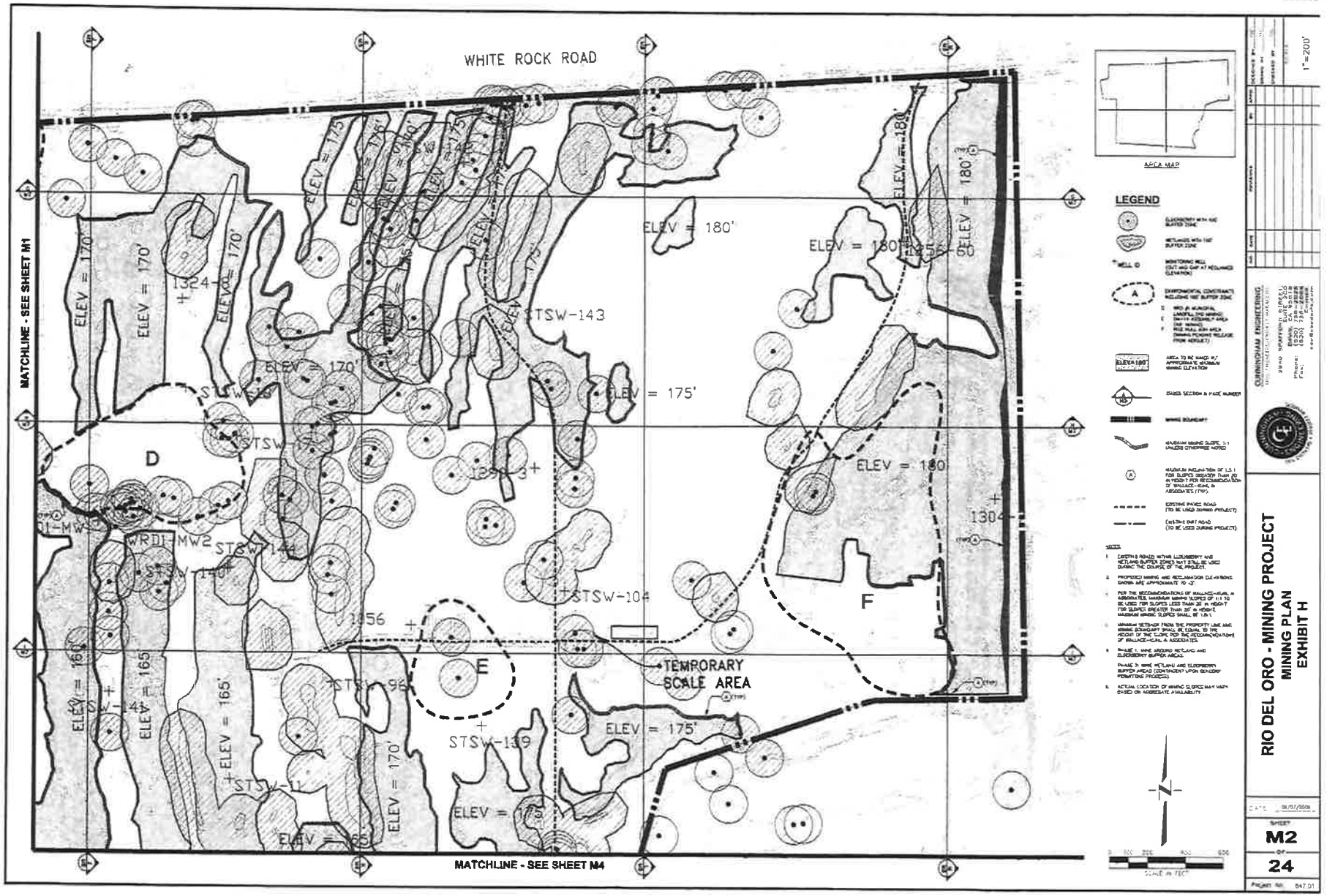

MINING ELEVATION
2:1
100' BUFFER ZONE FOR ELDERBERRY TREES
MINING ELEVATION
2:1
2:1
100' BUFFER ZONE FOR WETLANDS
2:1
0
25
50
100
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
TYPICAL MINING CROSS SECTION
DATE:
SHEET
OF
Project No:

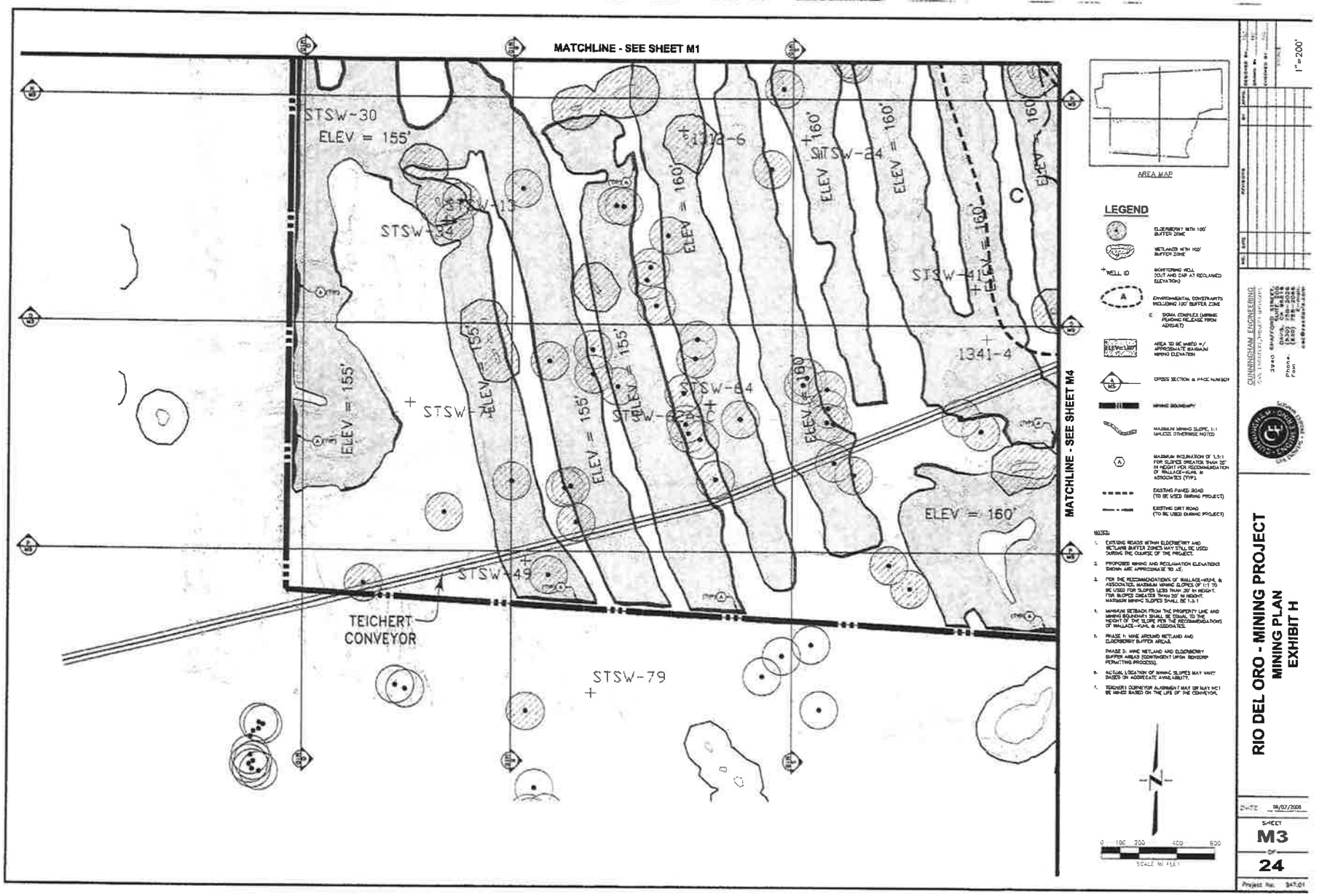

LEGEND
WELL ID
COUNTY WATER LINE
WHITE ROCK ROAD
TSAKOLPOULOS-BACHMAN PROPERTY
TEICHERT PROPERTY
ELLIOTT-TEICHERT MINING AREA
AEROJET-TEICHERT MINING AREA
TEICHERT CONVEYOR
GRANITE MINING AREA
"MDC EX-25 GET" WATER SOURCE
1" = 500'
CUNNINGHAM ENGINEERING
RIO DEL ORO-MINING PROJECT
WELL AND WATER SUPPLY MAP
EXHIBIT D
06/07/2022
SHEET 1 OF 1
Project No. 847.01

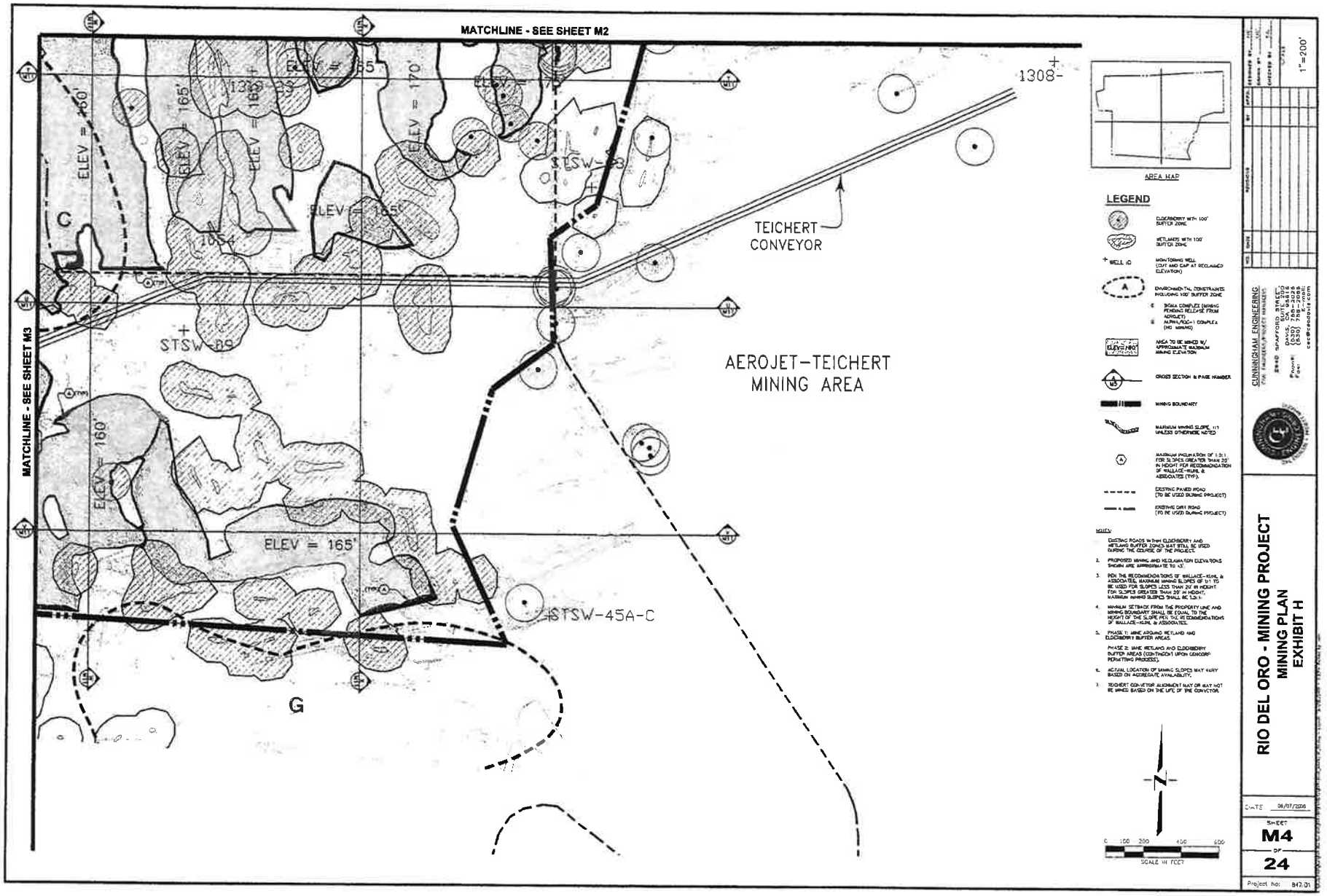

GRANITE MINING AREA
WHITE ROCK ROAD
TSAKOLPOULOS-BACHMAN PROPERTY
TEICHERT PROPERTY
ELLIOTT-TEICHERT MINING AREA
AEROJET-TEICHERT MINING AREA
TEICHERT CONVEYOR
A
B
C
D
E
F
G
H
LEGEND
RIO DEL ORO-MINING PROJECT
EXISTING SITE CONDITIONS
EXHIBIT E
CUNNINGHAM ENGINEERING
1" = 500'
SCALE IN FEET

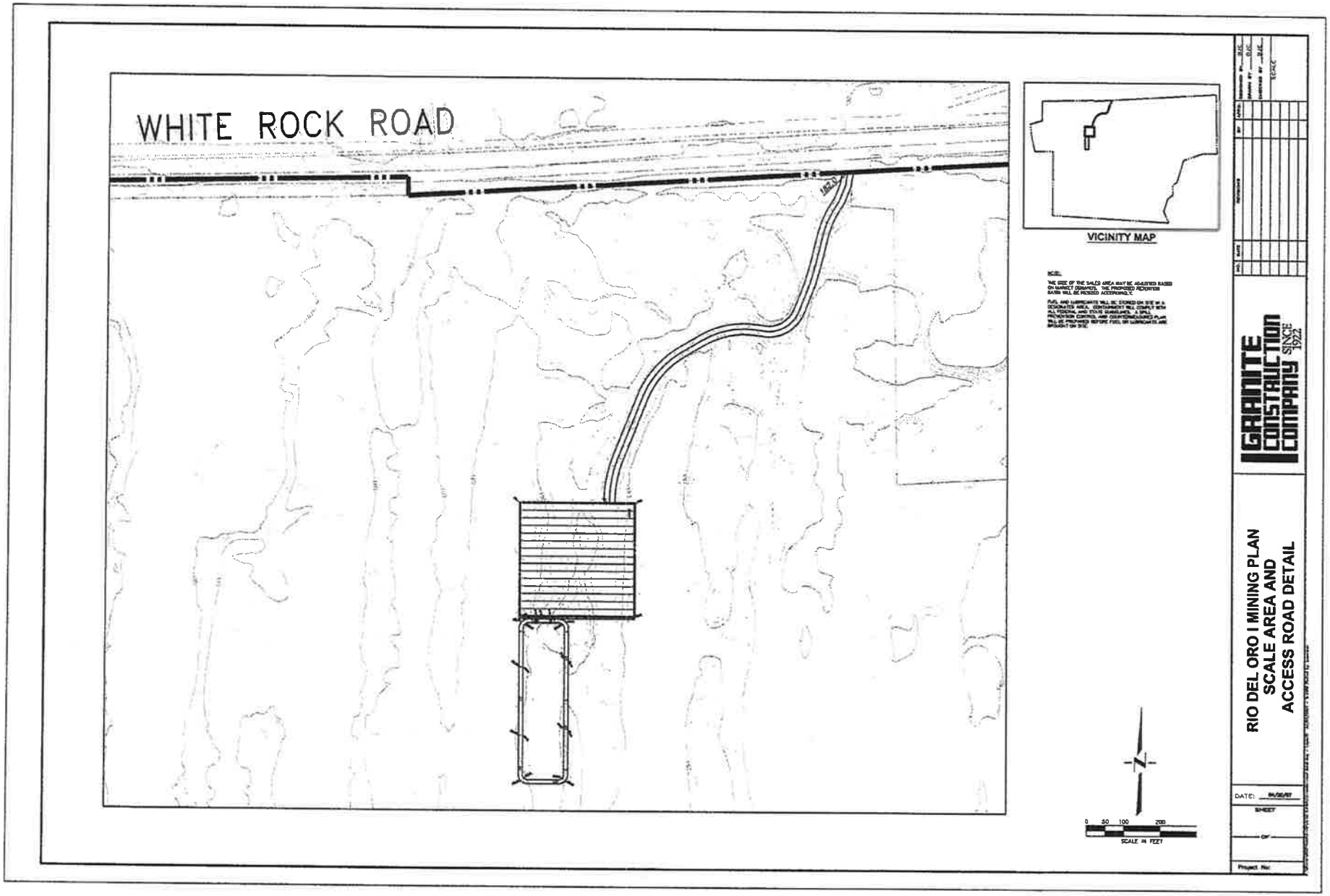

ALTERNATE ACCESS ROAD
(IF NEEDED)
RECLAIMED ELEV. = 170.0
PROPOSED ACCESS ROAD
PROPOSED STAGING AND SALES AREA
VICINITY MAP
BASIN INLETS
PLACE RIP RAP FOR
EROSION PROTECTION
PROPOSED
STORMWATER
RETENTION BASIN
PROPOSED STAGING/SALES AREA
RECLAIMED
ELEV. = 170.0
Z
Z
SECTION Z
FREEBOARD ABOVE
TOP OF DIKE
FLOW BOTTOM = 154.0'
PLACE RIP RAP
AT BASIN INLET
0 50 100 200 300
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO - MINING PROJECT
STAGING/SALES SITE
EXHIBIT G
SHEET
S1
OF
24
Project No: 847.01

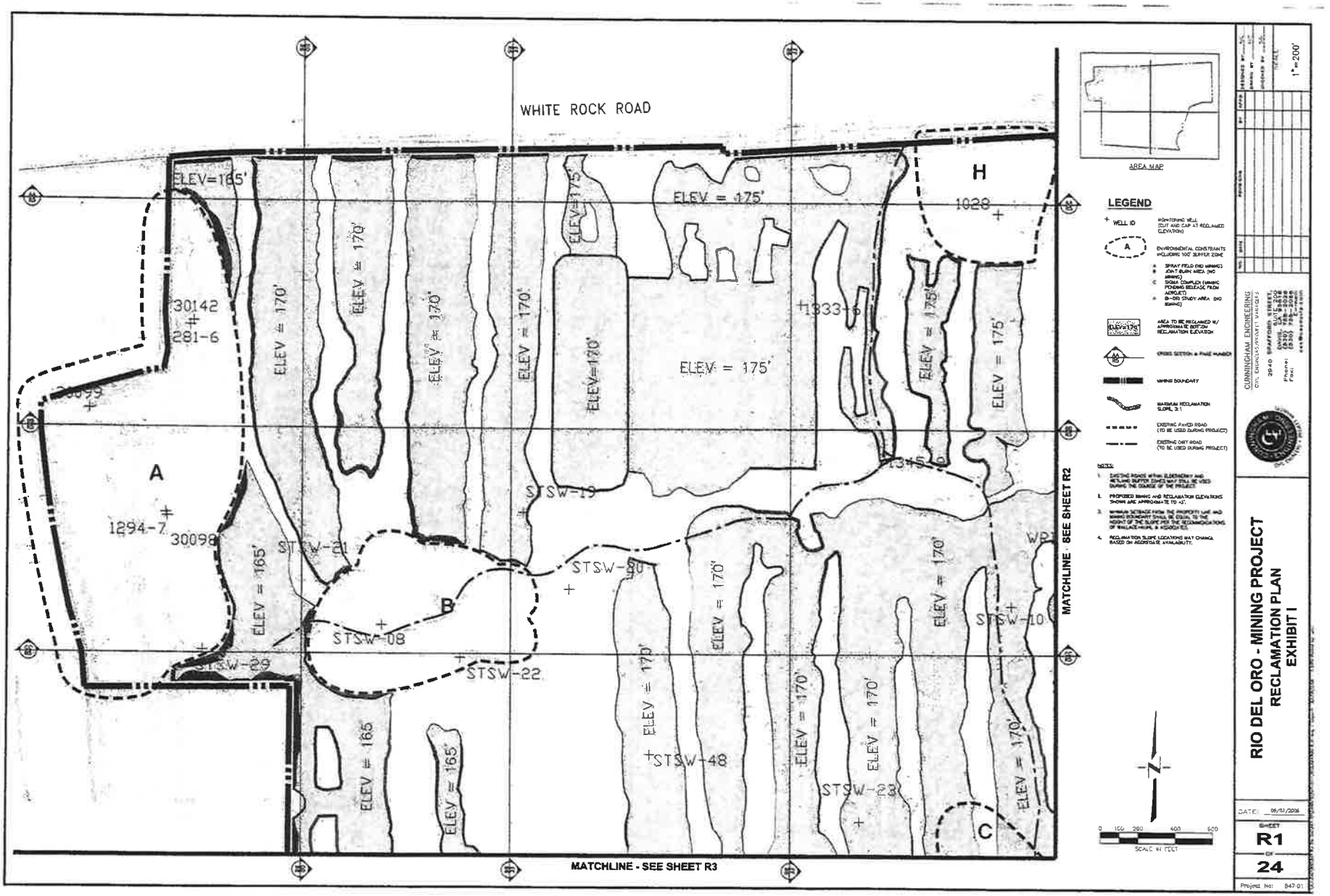

WHITE ROCK ROAD
ALTERNATE ACCESS ROAD (IF NEEDED)
PROPOSED ACCESS ROAD
PROPOSED STAGING & SALES SITE
SEE SHEET S FOR STAGING & SALES SITE GRADING DETAIL
ELEV = 165'
ELEV = 160'
ELEV = 155'
A
B
C
H
STSW-08
STSW-29
STSW-19
STSW-48
STSW-23
STSW-10
MATCHLINE - SEE SHEET M2
MATCHLINE - SEE SHEET M3
AREA MAP
LEGEND
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
M1
24

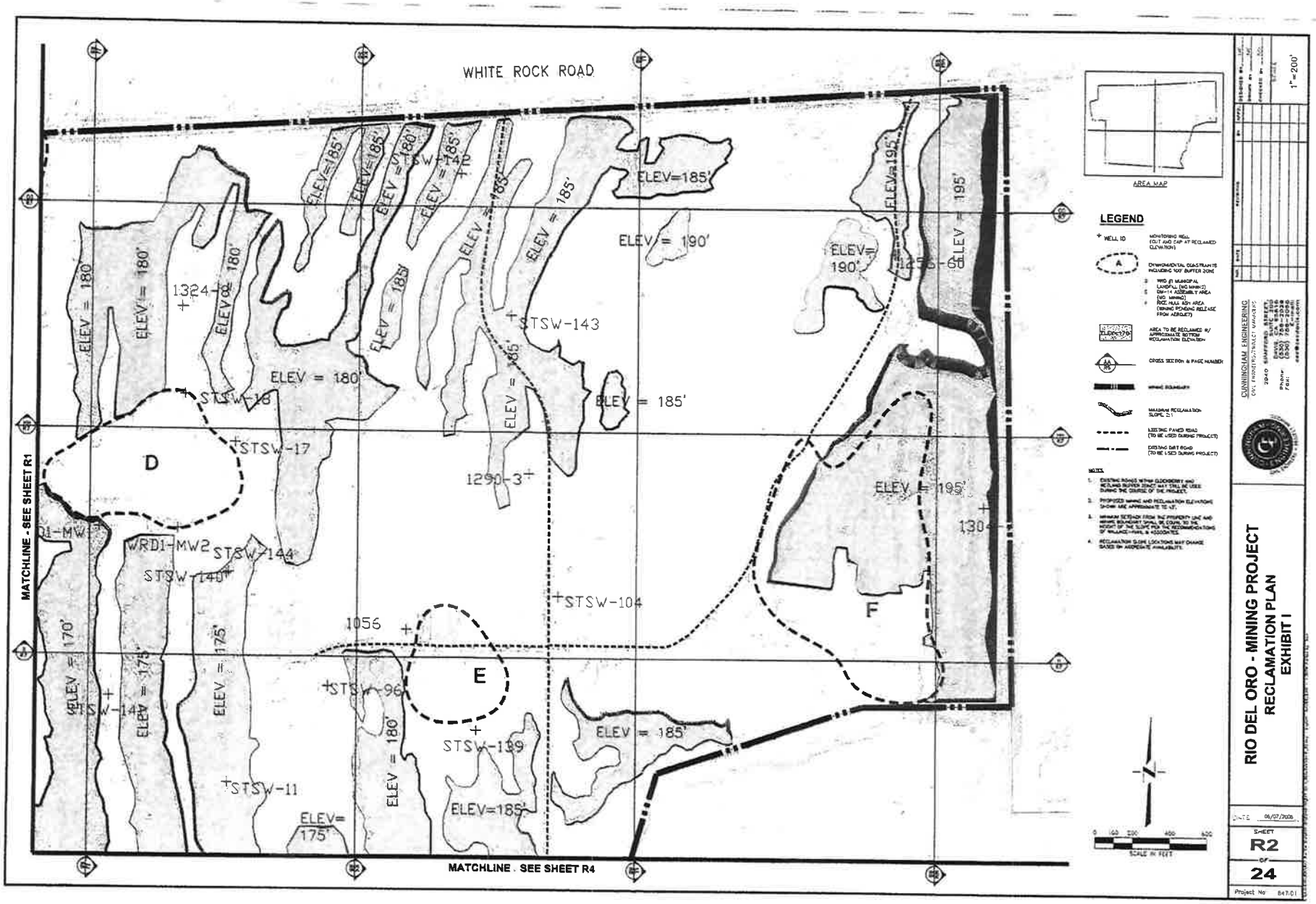

WHITE ROCK ROAD
MATCHLINE - SEE SHEET M1
MATCHLINE - SEE SHEET M4
TEMPORARY SCALE AREA
LEGEND
AREA MAP
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
M2
24

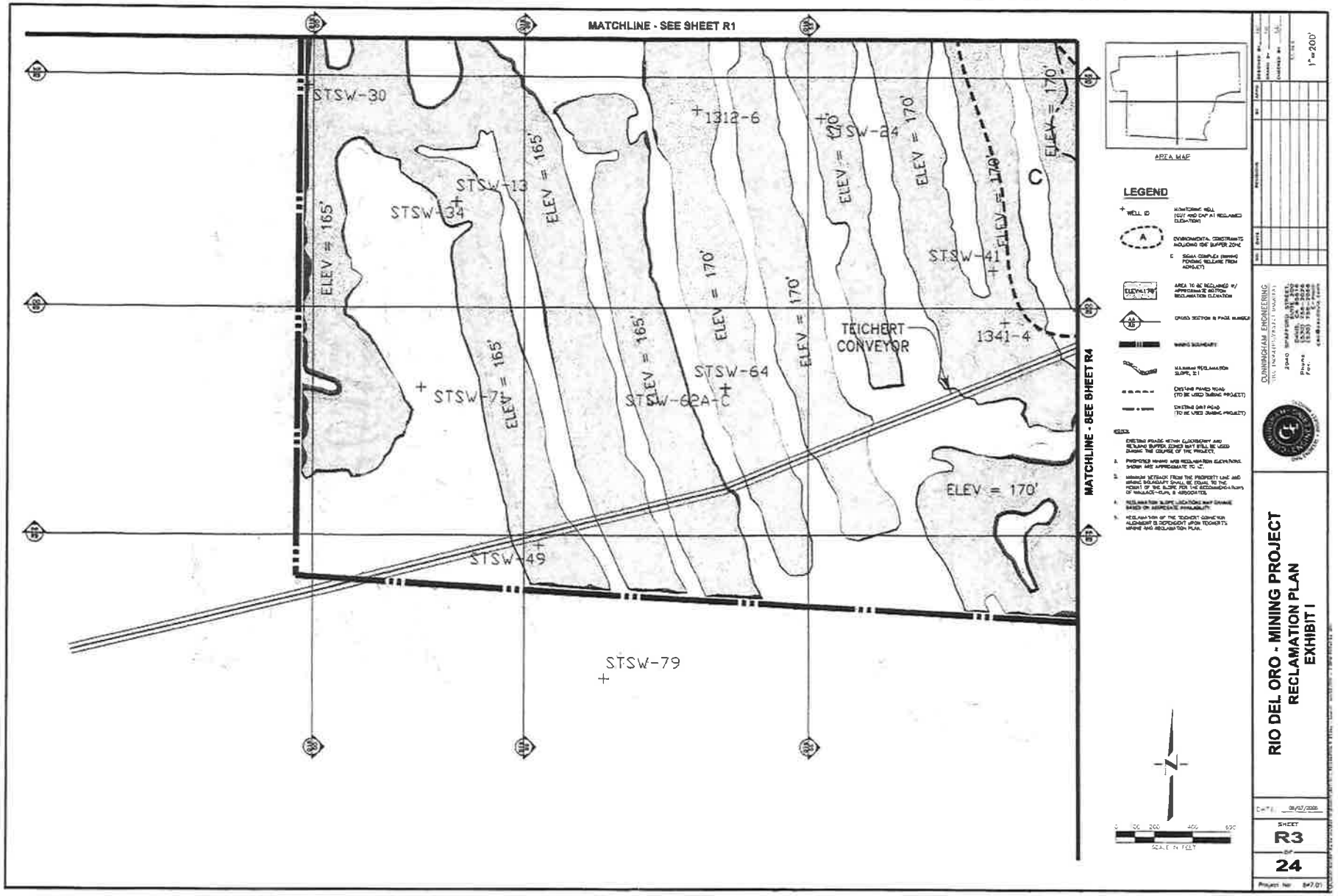

MATCHLINE - SEE SHEET M1
MATCHLINE - SEE SHEET M4
STSW-30
ELEV = 155'
STSW-24
STSW-49
STSW-79
TEICHERT CONVEYOR
ELEV = 160'
1341-4
AREA MAP
LEGEND
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
SHEET
M3
OF
24
1" = 200'
CUNNINGHAM ENGINEERING

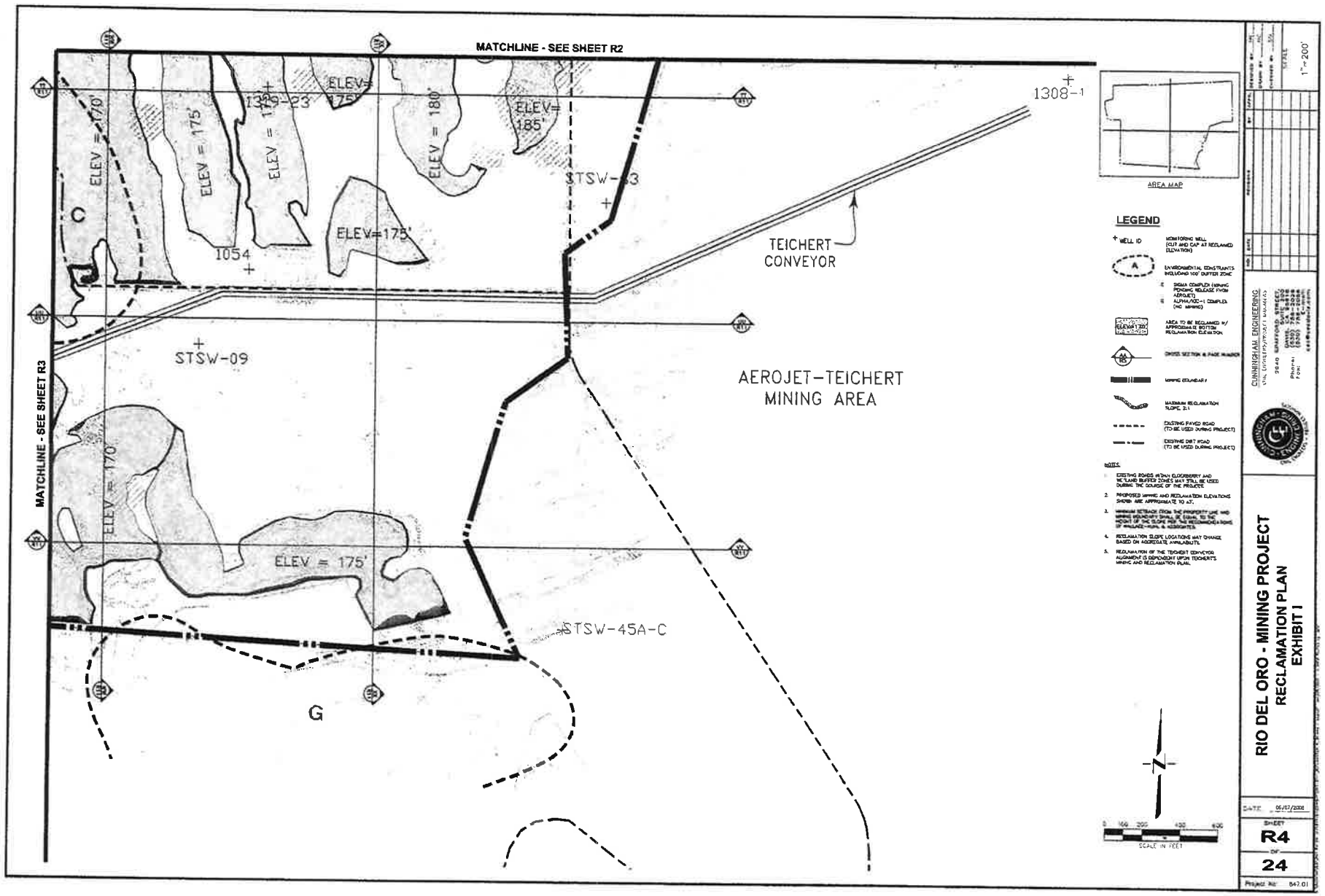

MATCHLINE - SEE SHEET M2
MATCHLINE - SEE SHEET M3
ELEV = 155'
ELEV = 170'
ELEV = 165'
ELEV = 160'
1308
STSW-88
STSW-89
STSW-45A-C
TEICHERT CONVEYOR
AEROJET-TEICHERT MINING AREA
C
G
AREA MAP
LEGEND
SCALE IN FEET
0 100 200 400 600
1"=200'
CUNNINGHAM ENGINEERING
RIO DEL ORO - MINING PROJECT
MINING PLAN
EXHIBIT H
DATE 04/07/2006
SHEET M4 OF 24
Project No: 842.01

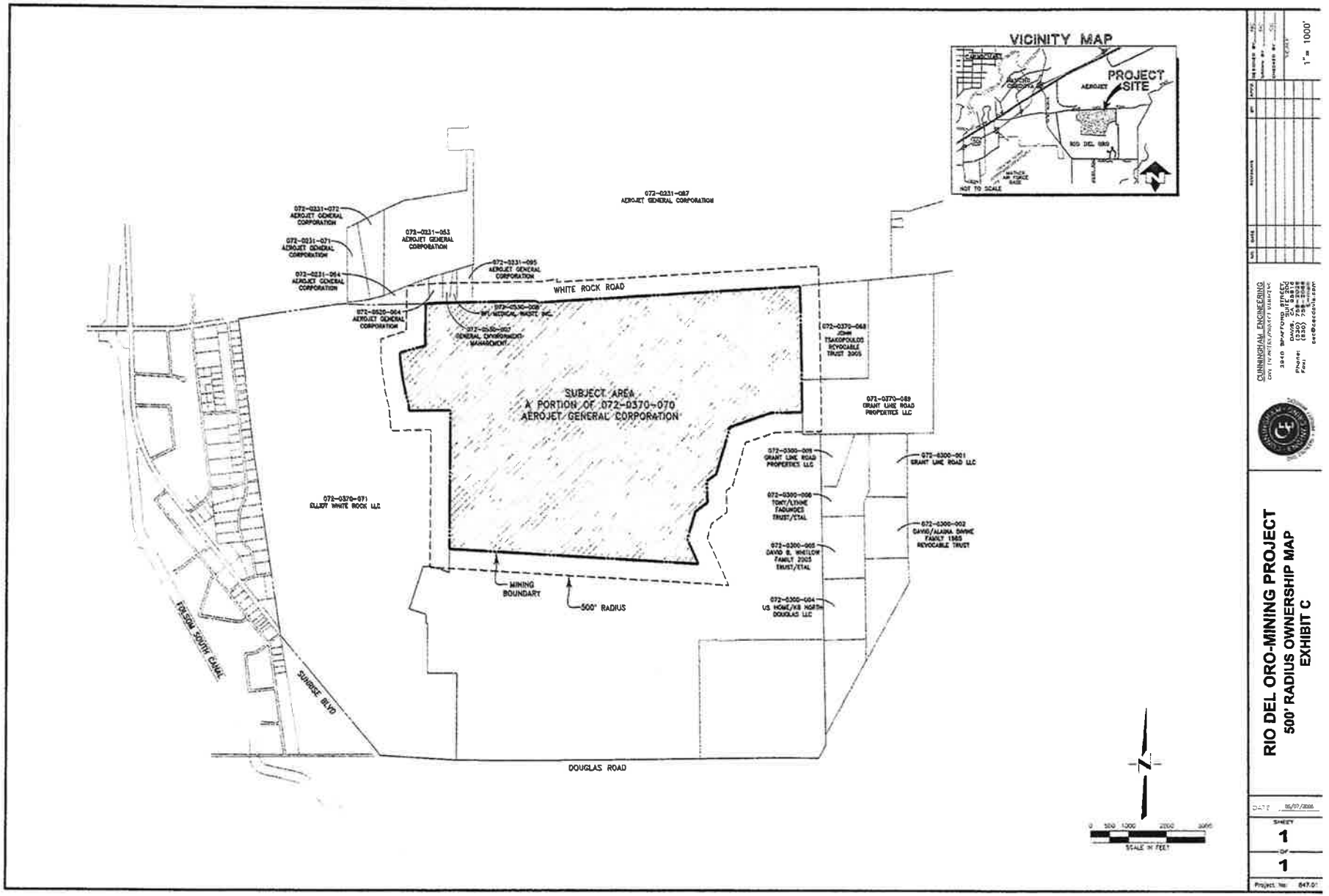

WHITE ROCK ROAD
VICINITY MAP
SCALE IN FEET
GRANITE CONSTRUCTION COMPANY SINCE 1922
RIO DEL ORO I MINING PLAN
SCALE AREA AND
ACCESS ROAD DETAIL
DATE:
SHEET
OF
Project No:


WHITE ROCK ROAD
ELEV=165'
ELEV = 170'
ELEV = 175'
30142
281-6
1294-7
30098
A
B
C
H
1028
1333-6
1345-6
STSW-19
STSW-21
STSW-08
STSW-22
STSW-48
STSW-23
STSW-10
WP1
MATCHLINE - SEE SHEET R2
MATCHLINE - SEE SHEET R3
AREA MAP
LEGEND
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
CUNNINGHAM ENGINEERING
1"=200'
DATE: 08/31/2006
SHEET R1 OF 24
Project No: 847.01


WHITE ROCK ROAD
MATCHLINE - SEE SHEET R1
MATCHLINE . SEE SHEET R4
AREA MAP
LEGEND
D
E
F
STSW-18
STSW-17
STSW-143
STSW-144
STSW-140
STSW-104
STSW-96
STSW-139
STSW-11
WRD1-MW1
WRD1-MW2
1324
1290-3
1056
1304
ELEV = 180'
ELEV = 185'
ELEV = 190'
ELEV = 195'
ELEV = 175'
ELEV = 170'
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
CUNNINGHAM ENGINEERING
SHEET
R2
OF
24
Project No 847.01


MATCHLINE - SEE SHEET R1
MATCHLINE - SEE SHEET R4
STSW-30
STSW-13
STSW-34
STSW-7
STSW-49
STSW-79
STSW-64
STSW-62A
STSW-24
STSW-41
1312-6
1341-4
TEICHERT CONVEYOR
ELEV = 165'
ELEV = 170'
AREA MAP
LEGEND
SCALE IN FEET
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
SHEET
R3
OF
24


MATCHLINE - SEE SHEET R2
MATCHLINE - SEE SHEET R3
ELEV = 170'
ELEV = 175'
ELEV = 175'
ELEV = 180'
ELEV = 185'
ELEV = 175'
ELEV = 170'
ELEV = 175'
1308-1
1054
STSW-23
STSW-09
STSW-45A-C
TEICHERT CONVEYOR
AEROJET-TEICHERT MINING AREA
C
G
AREA MAP
LEGEND
WELL ID
MONITORING WELL (CUT AND CAP AT RECLAIMED ELEVATION)
ENVIRONMENTAL CONSTRAINTS INCLUDING 100' BUFFER ZONE
SIGMA COMPLEX (MINING PENDING RELEASE FROM AEROJET)
ALPHA/100-1 COMPLEX (NO MINING)
AREA TO BE RECLAIMED W/ APPROXIMATE BOTTOM RECLAMATION ELEVATION
CROSS SECTION & PAGE NUMBER
MINING BOUNDARY
MAXIMUM RECLAMATION SLOPE 2:1
EXISTING PAVED ROAD (TO BE USED DURING PROJECT)
EXISTING DIRT ROAD (TO BE USED DURING PROJECT)
NOTES:
1. EXISTING ROADS WITHIN FLOODPLAIN AND WETLAND BUFFER ZONES MAY STILL BE USED DURING THE COURSE OF THE PROJECT.
2. PROPOSED MINING AND RECLAMATION ELEVATIONS SHOWN ARE APPROXIMATE TO ±5'.
3. MINIMUM SETBACK FROM THE PROPERTY LINE AND MINING BOUNDARY SHALL BE EQUAL TO THE HEIGHT OF THE SLOPE PER THE RECOMMENDATIONS OF RELIANCE - FORM 4 ASSOCIATES.
4. RECLAMATION SLOPE LOCATIONS MAY CHANGE BASED ON AGGREGATE AVAILABILITY.
5. RECLAMATION OF THE TEICHERT CONVEYOR ALIGNMENT IS DEPENDENT UPON TEICHERT'S MINING AND RECLAMATION PLAN.
SCALE IN FEET
CUNNINGHAM ENGINEERING
RIO DEL ORO - MINING PROJECT
RECLAMATION PLAN
EXHIBIT I
DATE 05/07/2008
SHEET R4
OF 24
Project No: 847.01


VICINITY MAP
PROJECT SITE
NOT TO SCALE
072-0231-087
AEROJET GENERAL CORPORATION
072-0231-072
AEROJET GENERAL CORPORATION
072-0231-053
AEROJET GENERAL CORPORATION
072-0231-071
AEROJET GENERAL CORPORATION
072-0231-095
AEROJET GENERAL CORPORATION
072-0231-064
AEROJET GENERAL CORPORATION
WHITE ROCK ROAD
072-0520-004
AEROJET GENERAL CORPORATION
072-0370-068
JOHN TSAKOPOULOS REVOCABLE TRUST 2005
SUBJECT AREA
A PORTION OF 072-0370-070
AEROJET GENERAL CORPORATION
071-0370-089
GRANT LINE ROAD PROPERTIES LLC
072-0300-009
GRANT LINE ROAD PROPERTIES LLC
072-0300-001
GRANT LINE ROAD LLC
072-0370-071
ELLIOT WHITE ROCK LLC
072-0300-006
TONY/ALYANE FADJUKOS TRUST/ETAL
072-0300-002
DAVID/ALAINA DAHNE FAMILY 1995 REVOCABLE TRUST
072-0300-005
DAVID B. WHITLOW FAMILY 2005 TRUST/ETAL
MINING BOUNDARY
500' RADIUS
072-0300-004
US HOME/KB HOME DOUGLAS LLC
FOLSOM SOUTH CANAL
SUNRISE BLVD
DOUGLAS ROAD
SCALE IN FEET
CUNNINGHAM ENGINEERING
3840 Bradford Street, Suite 200
Davis, CA 95618
Phone: (530) 758-3988
Fax: (530) 758-3989
cec@cecdavis.com
RIO DEL ORO-MINING PROJECT
500' RADIUS OWNERSHIP MAP
EXHIBIT C
1" = 1000'
SHEET 1 OF 1

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
1.	The applicant will meet in good faith to discuss the possible creation of a "Reclamation Authority" as authorized by the State of California.	Within 90 days of the approval date of the Mining Permit	Planning	
2.	The Granite Construction Mining and Reclamation Plan is approved by the Planning Commission as of July 26, 2007, subject to the Conditions of Approval/MMRP, Reclamation Plan and the Financial Assurance Cost Estimate. The Mining Permit is valid for ten, 10 years from the date of approval.	Expires 10 years from July 26,2007	Planning	
3.	The Applicant shall hold harmless the City, its Council Members, its Planning Commission, officers, agents, employees, and representatives from liability for any award, damages, costs and fees incurred by the City and/or awarded to any plaintiff in an action challenging the validity of this permit or any environmental or other documentation related to approval of this permit. Applicant further agrees to provide a defense for the City in any such action.	During all phases of the project	Planning	
4.	Granite Construction is authorized to operate on a 24 hours per day, 7 days per week basis. If during the mining, the City receives complaints regarding nighttime mining operations, the Planning Director shall evaluate the technical merits of the complaints and at his discretion shall work with the applicant to modify mining operations to ensure compliance with General Plan and Zoning Code standards. As necessary to resolve the conflict, the hours for the mining operations could be changed to operate at the normal time periods of 6:00 a.m. to 10:00 p.m., Monday through Friday, and 6:00 a.m. until 3:00 p.m. on Saturdays, only.	During all phases of the project	Planning	

Exhibit B

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
5.	The applicant shall mitigate the potential for track-out on-site. If track-out still occurs, the project applicant shall require paved streets adjacent to construction sites to be washed or swept daily to remove accumulated dust. This requirement shall be included as a note in the reclamation plan submittal.	During all phases of the project	Public Works	
6.	Maintain security fencing around the perimeter of the site, and provide warning/trespass signs to comply with the Zoning Code. All perimeter fencing shall be retained until post-reclamation development of the project site occurs.	During all phases of the project	Planning	
7.	Should the City Engineer determine that an unexpected and significant, project related traffic problem has occurred during the course of the mining operation and transfer of materials off-site, he/she will work with the applicant to implement appropriate mitigation measures. On-site mitigation shall be initially encouraged by the City such as truck metering or queuing. The operator shall agree to cooperate and pay its fair share as determined by the Public Works Director for the construction of off-site improvements, if needed.	During all phases of the project	Public Works	
8.	The proponent shall ensure the moisture content of the material being conveyed; if used in the future, to the processing plant is sufficient to avoid visible dust emissions from the loading and unloading points.	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
9.	In the unlikely event the mining operation encounters any former waste disposal area, mining activities shall immediately cease and the following agencies shall be contacted to determine the appropriate course of action: • Sacramento County Environmental Management Department, Environmental Health Division: (916) 875-8416. • State Department of Toxic Substances Control (916) 255-3601 • Central Valley Regional Water Quality Control Board: (916) 255-3000.	During all phases of the project	Planning	
10.	Mining equipment and any toxic substance associated with mining or reclamation operations shall be protected from flooding and from contact with surface water.	During all phases of the project	Planning	
11.	The discharge of wastewater (including aggregate process water) to surface waters or surface water drainage courses is prohibited.	During all phases of the project	Planning	
12.	No polluting substance or toxic compound shall be applied to the mining surface area. Any form of pollutant used on the site shall be contained and not disposed of onsite.	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Prior to Issuance of the Work Authorization Permit			
13.	Applicant shall pay the City any outstanding balance incurred by the City for the processing of the mining permit.	Prior to the issuance of the work authorization permit	Planning	
14.	The applicant shall comply with all the mitigation measures included in the Mitigated Negative Declaration adopted July 26, 2007 and pay the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is $10,000. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the proponent, and if the actual monitoring costs exceed the initial estimate, the proponent shall be responsible to pay the additional amount.	Prior to the issuance of the work authorization permit	Planning	
15.	Provide the City of Rancho Cordova with a performance bond in the amount of $644,928 made payable to the City of Rancho Cordova and the Department of Conservation of the State of California to financially guarantee reclamation of the property. The amount of the bond shall be subject to annual review and adjustment, pursuant to the requirements of the City's Mining Ordinance.	Prior to the issuance of the work authorization permit	Planning	
16.	The applicant and the City shall negotiate an agreement establishing the terms, conditions and method of determining the payment of a percentage of the retail sales (not to exceed 1% of the gross sales) generated by the sales of mined materials removed from the City and sold off-site.	Prior to the issuance of the work authorization permit	Finance	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
17.	The applicant shall be required to install signs, to the satisfaction of the Public Works Department, alerting the traveling public to trucks entering/exiting the property.	Prior to the issuance of the work authorization permit	Public Works	
18.	The applicant shall enter into an agreement with the City to address damages and impacts to City roadways directly attributable to the project. Impacts include, but are not limited to; public improvements necessitated by the project and accelerated wear on public infrastructure. The form of the agreement may include a fee per unit of material hauled away from the site and/or a capital fee to the satisfaction of the Public Works Department. The applicant shall prepare a roadway condition assessment for the City's review prior to hauling material off-site which describes the current condition of the impacted City roadways.	Prior to the issuance of the work authorization permit	Public Works	
19.	All haul route exit drives shall be paved minimum 100-feet prior to the point of exit to public right-of-way and swept on a regular basis to the satisfaction of Public Works.	Prior to the issuance of the work authorization permit	Public Works	
20.	Obtain appropriate permits from Public Works and provide adequate drain facilities into the established flood control system, in accordance with the Sacramento County Improvement Standards. The drainage plan shall mitigate the increase in surface runoff into Morrison Creek and shall show Best Management Practices (BMPs) to prevent erosion and sedimentation in those swale areas.	Prior to the issuance of the work authorization permit	Water Resources-Drainage	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Prior to Certification of the Completion of the Reclamation Plan			
21	The project proponent shall prepare for approval by the Planning Director a Tree Replanting Plan representing the size, species, and location of trees to be planted in compliance with mitigation measure MM 4.2 of the Final Mitigated Negative Declaration. The plan shall seek to place trees within the vicinity of the project and consistent with whatever use is planned for or located on the property.	Prior to Final Certification of the Reclamation Plan	Planning	

Mitigation Measures

Section 2		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
MM 1.1	The project proponent shall ensure that night time lighting levels be maintained at the minimum level necessary to provide for security and safety at the project site. All night time lighting shall be shielded and aimed appropriately to prevent any direct upward illumination or light directed at adjacent properties. If the City receives complaints from any residents of adjacent areas of nuisance lights, the project proponent shall take immediate action to prevent lights from producing significant light or glare at adjacent properties. All on-site stationary lighting shall comply with this requirement throughout the entirety of operation of the project. Vehicle and all other mobile equipment lights (except for any lights mounted on the mobile processing plant) are exempt from this requirement for safety reasons. However, the use of high beams shall be limited within 1,500 feet of the western boundary of the project site to those times when they are required for safety reasons. Signs visible to truck drivers shall be posted along any haul roads within 1,500 feet of the western boundary of the project site that state that high beams are to be used only as required for safety. All drivers shall be notified of this requirement prior to operating on-site.	Throughout project operation once homes are occupied within the Rio Del Oro project or within 1,500 feet of any portion of the project site.	City of Rancho Cordova Planning Department and Code Enforcement Department.	
MM 3.1a	The project proponent shall require that the operators water all haul roads and all exposed soils at least twice daily during construction, mining and reclamation activities.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1b	The project proponent shall require that the operators limit vehicle speed for on-site construction vehicles to 15 miles per hour on any unpaved roadways at all times. Signs stating the speed limit and that dust control measures are in effect shall be placed at each entrance/exit of the site and along all haul roads. Truck and equipment operators shall be notified that dust abatement is a concern and of the 15 mph speed limit.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1c	The project proponent shall require that, when transporting materials by truck during mining and reclamation activities, loads shall be covered or two feet of freeboard shall be maintained by the operator. Compliance with this measure shall be enforced by both the City and the project foreman.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1d	The project proponent shall ensure that all exposed soil existing after mining of the project site is seeded with non-invasive species and mulched with certified weed-free straw mulch immediately after mining. The amount of exposed soil at any one time shall me minimized as much as possible. Seeding and straw mulching shall be conducted as the project progresses, immediately following regrading of the soil. All seeding shall be conducted according to California Stormwater Quality Association (CASQA) guidelines, as shown in their California Stormwater BMP Handbook (EC-4). All straw mulch application shall be conducted according to CASQA guidelines, as shown in their California Stormwater BMP Handbook (EC-6). All seeded and mulched areas shall be inspected daily to ensure dust is controlled during the establishment period. Water shall be applied to any areas known or suspected to generate dust during any high wind events (winds greater than 15 miles per hour).	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1e	The project proponent shall provide a plan for approval by the City and the Sacramento Metropolitan Air Quality Management District (SMAQMD) demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction and operation of the proposed project will achieve a fleet-averaged 20 percent NOx reduction and a 45 percent particulate reduction compared to the most recent CARB fleet average. The project proponent shall submit to the City and SMAQMD a comprehensive inventory of all off-road equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no activity occurs; and, The project proponent shall ensure that emissions from all off-road diesel powered equipment used on the proposed project sites does not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be performed at least weekly by a qualified third-party professional, and a monthly summary of the visual results shall be submitted to the City and SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site	Equipment Inventory shall be submitted prior to site disturbance. Remainder of measure shall be complied with throughout construction and operation of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

	inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulation. In the event construction equipment meeting the requirements set forth above is determined not to be available, the project proponent shall notify the City and SMAQMD. Upon verification that required low-emission construction equipment is not available, the City may waive this measure. This requirement shall be included as a note in all project construction plans.			
MM 3.1f	The project proponent shall offset excess emissions (to below the 65 lbs/day threshold of significance) by paying an off-site operational mitigation fee to the Sacramento Metropolitan Air Quality Management District (SMAQMD) Operational Mitigation Fee Program. The final amount of the fee is to be determined by SMAQMD in consultation with the project proponent during the stationary air quality permit process. The project proponent shall provide documentation of the payment of the fee to the City prior to site disturbance.	Prior to site disturbance.	SMAQMD in consultation with the City of Rancho Cordova Planning Department.	
MM 3.2	Mining conducted by the project proponent shall be phased such that aggregate located generally in the western portion of the project site is mined early in the process. Mining shall be phased so that mining generally progresses from west to east as much as possible during the project life. The project proponent shall coordinate with Elliott Homes and GenCorp Realty Investments to ensure that mining is phased to reduce impacts to new development.	Throughout all phases of the project.	City of Rancho Cordova Planning Department.	
MM 4.1a	Prior to each phase of construction or mining or any other site disturbance between the dates of March 1 and August 31, a determinate survey shall be conducted to determine if	All necessary surveys shall be provided to the	City of Rancho Cordova Planning	

Mitigation Measures

	active nesting by birds protected under the Migratory Bird Treaty Act (MBTA) or other special-status bird species is taking place. Surveys shall be conducted according to the following requirements: • The survey(s) shall be conducted by a qualified biologist or other equivalent professional • The survey(s) shall be conducted no more than 30 days and no less than 14 days prior to site disturbance to occur between March 1 and August 31 for each year the proposed project would operate. • The survey(s) shall include all areas within 250 feet of the project site. • A copy of the survey(s) shall be provided to the City of Rancho Cordova no less than 7 business days prior to site disturbance. If any special-status bird species are found to be nesting within the survey area, the project proponent shall immediately contact the City of Rancho Cordova Planning Department in order to determine the appropriate mitigation, if any, required to minimize impacts to nesting birds. No activity of any kind may occur within 250 feet of any nesting activity or as otherwise required following consultation with the City Planning Department and the California Department of Fish and Game until such time as the young have fledged. If all activities are to be completed outside the nesting season (identified above), determinate surveys shall not be required.	City of Rancho Cordova Planning Department no less than 7 days prior to site disturbance between March 1 and August 31 Surveys shall be repeated for each year the project plans to operate.	Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1b	The project proponent shall update determinate surveys for potentially occurring special-status species or their habitat using protocol acceptable to the regulatory agencies with authority over these species, or assume species presence within the area of project activity. • If any special-status species or their habitat are indicated or assumed, a detailed plan which describes the specific methods to be implemented to avoid and/or mitigate any project impacts upon special-status species to a less than significant level will be required. This detailed Special Status Species Avoidance/Mitigation Plan shall be prepared in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), and shall emphasize a multi-species approach to the maximum extent possible. The Special-Status Species Avoidance/Mitigation Plan shall be submitted to the City Planning Department for approval. • Where project impacts include take of a State listed animal species, a "2081-incidental take" permit shall be obtained from the CDFG and permit conditions implemented, pursuant to the California Endangered Species Act. Proof of such a permit shall be provided to the City of Rancho Cordova Planning Department prior to site disturbance. Determinate surveys for potentially occurring special-status species shall be conducted no more than three months prior to site disturbance. A copy of all determinate surveys shall be provided to the City Planning Department no less than seven days prior to site disturbance.	Determinate surveys shall be performed no more than three months prior to site disturbance. Any required avoidance/mitigation plans or permits listed above shall be provided to the City Planning Department prior to approval of improvement/grading plans or prior to site disturbance, whichever comes first.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1c	No disturbance, during any phase of the proposed project, within 100 feet of any wetlands or ephemeral drainages identified in the wetland delineation for the Rio Del Oro Specific Plan shall take place until such time as the approved mitigation is in place properly addressing the impacts to vernal pools and other seasonal habitats that support vernal pool fairy shrimp and vernal pool tadpole shrimp in such a manger that there will be no net loss of habitat (acreage and function) for these species in the Laguna Formation (pursuant to City Policy NR.2.1). The project proponent shall prepare and submit an annual Habitat Monitoring Report (HMR) to the City, which documents efforts to avoid sensitive habitat areas and the associated monitoring efforts. Included in the HMR will be the appropriate documentation of GenCorp's (or others) permitting and mitigation efforts. The project proponent will provide all required permits and approvals to the City before impacting sensitive habitat areas. The HMR shall also include a schedule of planned activities including the following: • The location of the proposed vernal pool and seasonal wetland habitat site(s) and a detailed map of showing the acreage, distribution, and type of wetlands to be created to ensure no net loss in wetland habitat acreage, values and functions. The compensation wetlands shall be designed to, at a minimum: meet or exceed the hydrophytic conditions and operating functions of the existing wetlands proposed for impact.	Prior to approval of grading and improvement plans and construction plans prior to any ground-disturbing activity.	City of Rancho Cordova Planning Department.	

Mitigation Measures

	• A monitoring plan to assess whether the compensation wetlands are functioning as intended. Specific performance standards for hydrologic, floral, and faunal parameters shall be proposed to determine success of the created wetlands. The monitoring plan shall specify the corrective measures/modifications to be implemented in the event that monitoring indicates that the performance standards are not being met. • A maintenance plan for the wetland preservation/mitigation areas describing the measures to be implemented to assure that they are maintained as wetland habitat in perpetuity. • A requirement that fencing be installed around all existing vernal pools that are within fifty feet of any haul route, spoil zone, stockpile zone, creation zone, or other construction area. The fencing shall be of high visibility material and limit access to the project site. Fencing shall be placed no closer than 10-feet to the delineated, verified perimeter of existing vernal pools. • A requirement that a qualified biological resources monitor, approved by the City be on the site(s) to ensure compliance with identified mitigation for the duration of all the proposed activities. The construction manager shall submit bi-annual compliance reports to City monitor for review for a period of five years. • The vernal pool and seasonal wetland habitat site shall be surveyed by a qualified biologist no more than 30 days prior to the onset of construction for the presence of raptor and federal and state listed bird nesting sites,			

Mitigation Measures

	unless it is determined that construction will occur outside of the breeding season for all species likely to occur on site or observed present. If active nesting sites are observed present all state and federal guidelines pertaining to active nesting sites shall be strictly adhered to in consultation with a qualified biologist. • The project proponent shall grant full access to the vernal pool and seasonal wetland habitat site to the City for the monitoring of construction activities and mitigation compliance. Access shall be granted during all construction activities and the City monitor may issue stop work orders if mitigation non-compliance is identified. • The project proponent shall specify that measures for reuse or disposal of excavated material are suitable for use at project site. The plan should minimize the elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan shall include specific information regarding the eventual reuse or disposal site, transportation method(s), disposal reuse management, and schedule. • A spill prevention and response plan to the satisfaction of the City. • A requirement that all disturbed areas be revegetated by the following methods: hydro seeding, drill seeding, or spreading of upland seed bearing soil. The method of revegetation shall be approved by a qualified wetland			

Mitigation Measures

	specialist and to the satisfaction of the City. • Incorporation of the use of non-toxic soil stabilizers according to manufacture's specifications to all inactive construction areas. Use non-toxic binders to exposed areas after cut and fill operations and hydro seeded areas. The vernal pool and seasonal wetland habitat site shall be watered as directed by the City of Rancho Cordova Department Public Works and the SMAQMD and the frequency shall be based on the type of operation, soil and wind exposure. The project proponent shall submit the proposed Habitat Monitoring Plan (HMP) to the City for endorsement prior to grading permit approval or any groundbreaking activity and initiation of mitigation activities (including mitigation land acquisition). Execution of mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of wetlands within the project site (to the standard set by City Policy NR.2.1).			
MM 4.1d	The project proponent may conduct construction or operation of the proposed project in those areas that lie more than 100 feet from any trees, elderberry shrubs, wetlands, or ephemeral drainages prior to the satisfaction of mitigation measure MM 4.1c providing that the standard set of best management practices are employed when working in areas within 250 feet of these features including:	All BMPs shall be shown on all plans for the proposed project prior to approval. Measure shall be complied with continuously until	City of Rancho Cordova Planning Department in consultation with the Public Works Department,	

Mitigation Measures

	• Implementation of erosion control measures during all construction and operation including installation of long-term erosion control devices such as straw wattles, hay bale check dams, and silt fencing as required; • Removal of cover vegetation as close as practicable to the time of construction or mining; • Confinement of construction equipment and associated activities to the areas to be mined (as shown in **Figure 2** and excluding those areas identified as "constraints areas" shown in **Figure 5**); • Reestablishment of stream bank contours following construction and installation of permanent erosion control as needed; • Prohibiting refueling of construction related equipment within 250-feet of the aquatic environment; • Maintenance of hazardous materials spill kits in proximity to all aquatic crossings; • Compliance with state and federal permits; • Performance of proper sediment control; • Formulation and adherence to a spill prevention and response plan; • Monitoring of construction and mining activities near specified features;	the end of the project or compliance with mitigation measure 4.1c.	Sacramento County Department of Water Resources, and the California Regional Water Quality Control Board.	

Mitigation Measures

	• Removal of all construction and operational spoils, remaining materials and miscellaneous litter for proper off-site disposal; and • Post-construction monitoring and supplemental revegetation of all disturbed areas. These requirements shall be conducted according to City standards and to California Stormwater Quality Association standards. These measures can be included in the Stormwater Pollution Prevention Plan (SWPPP) required by the Public Works Department, the County Department of Water Resources, and/or the California Regional Water Quality Control Board. While these measures may be combined with a SWPPP, the project proponent shall ensure that all BMPs required in this measure are complied with throughout the life of the project, regardless of the requirement or contents of a SWPPP. A qualified biological or stormwater monitor shall be contracted for monitoring of the condition and quality of these measures throughout the life of the project. Quarterly reports shall be submitted to the City Planning Department throughout the life of the project, indicating the presence, use, condition, and replacement (as needed) of all protective BMPs. If the conditions of mitigation measure 4.1d are met, either through the actions of the project proponent or compliance with mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS by the project proponent for that project, the requirements of this measure will be considered met and the conditions of any actions conducted pursuant to measure			

Mitigation Measures

	4.1d or 3.10-1a shall be followed instead.			
MM 4.1e	No project activity shall proceed within 100 feet of areas containing VELB habitat (i.e., elderberry shrubs) until a BO has been issued by USFWS, and the project proponent has abided by all pertinent conditions in the BO relating to the proposed project, including conservation and minimization measures, intended to be completed before on-site action. Conservation and minimization measures are likely to include preparation of supporting documentation that describes methods for relocation of existing shrubs and maintaining existing shrubs and other vegetation in the preserve. Relocation of existing elderberry shrubs and planting of new elderberry seedlings shall be implemented on a no-net-loss basis. Detailed information on monitoring success of relocated and planted shrubs and measures to compensate (should success criteria not be met) would also likely be required in the BO. Ratios for mitigation of VELB habitat will ultimately be determined through the ESA Section 7 consultation process with USFWS, but shall be a minimum of "no net loss." A VELB mitigation plan is currently being developed through ESA Section 7 consultation with USFWS. The mitigation plan will also address the proposed delisting of VELB and any mitigation to be implemented if the delisting occurs prior to project implementation due to requirements under CEQA. Implementation of this plan would satisfy mitigation requirements for the removal of elderberry savanna, a sensitive habitat as identified by DFG, as well as single elderberry shrubs. A copy of the USFWS-approved mitigation plan shall be submitted to the City before the approval of any grading or improvement plans or any ground-disturbing activities within 100 feet of VELB habitat.	Prior to the approval of grading permits or any ground-disturbing activity within 100 feet of VELF habitat.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.	

Mitigation Measures

	Should delisting of VELB occur, a mitigation plan that would compensate for the removal of elderberry savanna, a sensitive habitat as identified by DFG, would still be required. The mitigation plan shall be submitted to and approved by DFG and the City before the approval of any grading or improvement plans or any ground-disturbing activities that would affect elderberry savanna for all project phases. Execution of mitigation measure 3.10-4b of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of elderberry shrubs within the project site.			
MM 4.1f	The project proponent shall ensure that constraints Area B shown in **Figure 5** is expanded to include the whole of the area to be dedicated as elderberry preserve according to the Rio Del Oro Specific Plan EIR/EIS, as shown on Exhibit 3.10-3 of that document. Updated plans showing this expanded constraints area shall be submitted to the City Planning Department for review and approval prior to initiation of any site disturbance within 250 feet of existing Elderberry shrubs on the project site.	Prior to site disturbance within 250 feet of any Elderberry shrub on the project site.	City of Rancho Cordova Planning Department.	
MM 4.2	Prior to any site disturbance, a certified arborist or similarly qualified professional, approved by the City, shall conduct a full tree survey for the project site. The tree survey shall indicate the size, species, and general health of all trees located on the project site that exceed 6 inches diameter at breast height (dbh). If any native oaks or other native trees of 6 inches or greater dbh, multi-trunk native oaks or native	Prior to approval of grading permits and prior to any site disturbance.	City of Rancho Cordova Planning Department.	

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	trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a qualified professional to be in good health are found to exist in the project site, such trees shall be avoided if feasible. If such trees cannot feasibly be avoided, the project proponent shall do one of the following prior to site disturbance within 100 feet of any on-site trees: • All such trees that will be removed or otherwise damaged by project implementation shall be replaced at an inch-for-inch ratio. A replacement tree planting plan shall be prepared by a qualified professional or licensed landscape architect and shall be submitted to the City for approval before removal of trees; or • The project proponent shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City by a method comparable to an inch-by-inch replacement. The mitigation plan shall be subject to City approval. If the City adopts a tree preservation ordinance at any time in the future, any future project activities shall be subject to that ordinance instead. If mitigation measure 3.10-3 of the Rio Del Oro Specific Plan EIR/EIS is satisfied, and the actions conducted pursuant to that measure include the proposed project site and the trees within, this measure shall be considered met and no further action is required.			
MM 5.1a	The project proponent shall ensure that throughout all phases of the proposed project no mining activities or other ground disturbance occur within 150 feet of any structures or equipment located on-site as a result of historic rocket testing, including concrete pads associated with those	Coordination with Planning Department staff shall occur prior to any ground	City of Rancho Cordova Planning Department.	

Mitigation Measures

	activities. These structures are located in the general area of "Environmental Constraints Area C", as identified by the project proponent. The project proponent shall coordinate with Planning Department staff to ensure that activities are excluded from the proper portions of the project site prior to site disturbance in order to ensure that no activities take place in these locations. All on-site employees and truck drivers shall be notified of those areas to be avoided prior to working on the site.	disturbance on-site. Measure shall be in force throughout all phases of the proposed project.		
MM 5.1b	The City Planning Department shall be notified immediately if any cultural resources (e.g. prehistoric or historic artifacts, structural features, unusual amounts of bone or shell, fossils, or architectural remains) are uncovered during construction. All construction must stop immediately in the vicinity of the find and an archaeologist that meets the Secretary of the Interiors Professional Qualifications Standards in prehistoric or historical archaeology or a paleontologist shall be retained by the project proponent to evaluate the finds and recommend appropriate action. The recommendations of the archaeologist and/or the paleontologist shall be implemented prior to continuing construction.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 5.2	The City Planning Department shall be notified immediately if any human remains are uncovered during construction. All construction must stop immediately in the vicinity of the remains. The Planning Department shall notify the County Coroner according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in State CEQA Guidelines 15064.5(d-e) shall be followed.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	

Mitigation Measures

MM 6.1	As mining occurs on the project site, all tailing piles over 20 feet in height shall be cut at a slope of 1.5 horizontal to 1 vertical or shallower. At no time shall mining activity on such piles allow the slope to exceed that amount. If slopes cut at 1.5 to 1 appear to exhibit signs of potential failure (small localized slides, other signs of slope erosion, etc.) then mining shall continue at a grade of 2 feet horizontal to 1 foot vertical, or shallower, thereafter.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 7.1a	As construction and operation of the proposed project occurs, all debris, trash, refuse, and abandoned, discarded, and/or out-of-service items shall be removed from the proposed project sites and deposited off-site in an appropriate disposal facility and in a timely manner. No storage of any these materials shall occur on those portions of the site designated as environmentally sensitive areas/receptors (e.g. wetlands).	Measure shall be implemented throughout all phases of construction and operation. All such materials shall be completely removed prior to release of any portion of the site for other uses.	City of Rancho Cordova Planning Department.	
MM 7.1b	If any underground storage tanks (UST) are discovered during construction activities, the City Planning Department must be contacted and all construction activities within 500 feet of the UST shall cease immediately. The UST shall be removed as required by the County Environmental Management Department (EMD), Hazardous Materials Division. In addition, groundwater and soil investigation for contamination and remediation in the tank vicinity shall be conducted if required by the EMD.	Measure shall be implemented throughout all phases of construction and operation.	City of Rancho Cordova Planning Department.	

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MM 7.2a	No site disturbance shall occur within areas D or G of the Environmental Constraints Areas, as shown in Figure 5 for the project at any time. No improvements of roads or other infrastructure existing in those areas shall be conducted unless clearance for such activity is provided by the City, the Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board (CRWQCB) after adequate review of the proposed action and its environmental impacts are assessed by all parties. New truck travel roads, either permanent or temporary, shall not be constructed within these areas at any time. Nor shall any existing roads within these areas be used during mining operations unless those roads are cleared for such use by the DTSC and CRWQCB.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department, in consultation with the California Department of Toxic Substances Control and the California Regional Water Quality Control Board.	
MM 7.2b	No site disturbance shall occur within areas A, B, C, E, F, or H of the Environmental Constraints Area, as shown in **Figure 5**, until such time as the Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (CRWQCB) has released those areas for mining. Documentation stating that those areas are safe for mining and that clearance has been given by both the DTSC and GenCorp must be provided to the City at least 10 days prior to initiation of mining activities or other site disturbance in those areas.	Throughout all phases of the proposed project.	California Department of Toxic Substances Control and the California Regional Water Quality Control Board, in consultation with the City of Rancho Cordova.	
MM 7.3	No activities that include the use of open flame or sparks, such as welding or burning of waste materials, shall be conducted except in areas previously cleared by mining and devoid of vegetation or within the "sales and staging" area of	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department and	

Mitigation Measures

	the project site (as shown in Figure 4). Operations that could ignite fires shall be surrounded by a fire buffer of at least 15 feet on all sides. This buffer shall provide protection to any flammable materials including existing vegetation. Operations that could ignite fires shall not be conducted during any high wind events (winds generally in excess of 15 miles per hour). The project proponent shall ensure that spark arrestors are installed and operating normally within the exhaust system of all engines in mining and processing vehicles and equipment at all times. All vehicles used on the project site shall be equipped with fire extinguishers and all on-site personnel shall receive training in their use and application. An Emergency Communication Plan shall be developed for the proposed project that describes clear procedures to follow in the event of a fire on the project site. A copy of this plan shall be provided to the City of Rancho Cordova Planning Department for reference purposes prior to the initiation of mining activities.		the Sacramento Metropolitan Fire District.	
MM 8.1	The project proponent shall have a licensed professional engineer evaluate the structural integrity of the crossings of Morrison Creek on the private road north of Douglas Road in order to determine whether the crossings will handle the increased loads associated with the proposed project. Final design and specifications of any improvement of the crossings required is to be approved by the licensed engineer and submitted to the City for review and approval. All required permits shall be obtained for any improvement, including but not limited to a Streambed Alteration Agreement from the California Regional Water Quality Control Board.	Prior to use of the southern access road to Douglas Road.	City of Rancho Cordova Public Works Department.	

Mitigation Measures

	Improvements to the crossings are the full financial responsibility of the project proponent. Improvements must be constructed prior to use of the access road to Douglas Road. If this access road is not to be used by the project, no improvement of the crossings is required.			
MM 8.2	The project proponent shall include the specific BMPs in the Stormwater Pollution Prevention Plan (SWPPP) for the proposed project. Additionally, these BMPs shall be implemented throughout the operation of the proposed project. All BMPs shall be executed to the level of standard published by the California Stormwater Quality Association's Construction Stormwater BMP Handbook. BMPs to be utilized shall include, but are not limited to: • NS-8 Vehicle and Equipment Cleaning; • NS-8 Vehicle and Equipment Fueling; • NS-10 Vehicle and Equipment Maintenance; • WM-1 Material Delivery and Storage; • WM-2 Material Use; • WM-3 Stockpile Management; • WM-4 Spill Prevention and Control; • WM-5 Solid Waste Management; and, • WM-6 Hazardous Waste Management.	Measures shall be included in the SWPPP for the project and on all improvement, grading, or mining plans. All measures shall be implemented throughout all phases of the proposed project.	City of Rancho Cordova Public Works Department in coordination with the County of Sacramento Department of Water Resources.	
MM 11.1	Upon occupation of one or more residences in the Rio Del Oro Specific Plan area to the west of the project site, the project proponent shall ensure that no mining or aggregate processing is conducted within the following minimum distances from the nearest occupied residences: • No mining may occur within 840 feet of the nearest occupied residence in the daytime. No mining may occur within 1,560 feet of the nearest occupied residence in the	Throughout operation of the proposed project upon occupation of one or more homes to be constructed in the Rio Del Oro	City of Rancho Cordova Planning Department.	

Mitigation Measures

	nighttime. • No aggregate processing may occur within 1,270 feet of the nearest occupied residence in the daytime. No aggregate processing may occur within 2,155 feet of the nearest occupied residence in the nighttime. These minimum distances may be revised by the City of Rancho Cordova in the event that the project proponent provides additional data, prepared by a qualified noise professional, which shows that noise levels at or below current City Noise Standards would be, or actually are, experienced at the nearest occupied residence from mining and/or processing operations. Mining operations and aggregate processing may be conducted within these minimum distances only under the following conditions: • The project proponent shall incorporate temporary noise barriers such as berms or product stockpiles of a sufficient height to block sight lines between occupied homes and processing/mining operations. All temporary noise barriers shall be shown on project plans and submitted to the City Planning Department for review and approval prior to construction. • The project proponent shall provide an acoustical analysis prepared by a qualified noise professional showing that the temporary noise barriers are sufficient to reduce noise at the project boundary below current City noise standards of 55 dB L_{eq} daytime/45 dB L_{eq} nighttime.	Specific Plan area.		
MM 11.2a	The project proponent shall ensure that the Douglas Road access point is utilized only between the hours of 7:00 AM and 6:00 PM on weekdays and 8:00 AM and 6:00 PM on	Throughout all phases of the proposed project.	City of Rancho Cordova Planning	

Mitigation Measures

	weekends. The gate at that access point shall remain locked outside of those hours to discourage unauthorized use.		Department in consultation with the Sacramento Metropolitan Fire District.	
MM 11.2b	Prior to the occupation of homes in any portion of the Rio Del Oro or Westborough developments, the project proponent shall post signage visible to residents providing a name, address, and 24-hour phone number for information and/or complaints regarding the mining activities of the proposed project. Placement of the signage immediately adjacent to White Rock Road is considered sufficiently visible. Signage shall also include the address and main phone number for the City Planning Department. Signage meeting the above requirements shall also be installed prior to site disturbance at the entrance at Douglas Road in a location plainly visible from Douglas Road.	Signage shall be posted prior to occupation of homes within the Rio Del Oro or Westborough projects.	City of Rancho Cordova Planning Department.	
MM 15.1	The project proponent shall ensure that no trucks traveling to or from the proposed project via the Douglas Road access point utilize the intersection of Sunrise Boulevard and Douglas Intersection between the hours of 7:00 AM and 9:00 AM and between the hours of 4:00 PM and 6:00 PM, except when required by local projects served by the proposed project. All drivers shall be notified of this requirement in writing prior to operation to and from the project site. The project proponent shall post signage at the Douglas Road access point that clearly notifies drivers both entering and leaving the site of the time restriction.	Throughout operation of the proposed project.	City of Rancho Cordova Planning Department and Public Works Department.	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
1.	The applicant, Granite Construction Company shall meet with City staff prior to the issuance of the Project RC06-224A work authorization permit, July 26, 2017 to review the conditions of approvals and Mitigation Monitoring Plan.	Prior to July 26, 2017	Planning/ Public Works	
2.	The Granite Construction Mining and Reclamation Plan is approved by the City Council as of July 26, 2007, subject to the Conditions of Approval/MMRP, Reclamation Plan and the Financial Assurance Cost Estimate. The Mining Permit is valid for 5 years from the date of July 26, 2017 (original mining permit end date) with an optional 5 year renewal thereafter.	Expires 5 years from July 26, 2017 with an optional 5 year renewal thereafter	Planning	
3.	The Applicant shall hold harmless the City, its Council Members, officers, agents, employees, and representatives from liability for any award, damages, costs and fees incurred by the City and/or awarded to any plaintiff in an action challenging the validity of this permit or any environmental or other documentation related to approval of this permit. Applicant further agrees to provide a defense for the City in any such action.	During all phases of the project	Planning	
4.	Granite Construction is authorized to operate on a 24 hours per day, 7 days per week basis. If during the mining, the City receives complaints regarding nighttime mining operations, the Planning Director shall evaluate the technical merits of the complaints and at his discretion shall work with the applicant to modify mining operations to ensure compliance with General Plan and Zoning Code standards. As necessary to resolve the conflict, the hours for the mining operations could be changed to operate at the normal time periods of 6:00 a.m. to 10:00 p.m., Monday through Friday, and 6:00 a.m. until 3:00 p.m. on Saturdays, only.	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
5.	The applicant shall mitigate the potential for track-out on-site. If track-out still occurs, the project applicant shall require paved streets adjacent to construction sites to be washed or swept daily to remove accumulated dust. This requirement shall be included as a note in the reclamation plan submittal.	During all phases of the project	Public Works	
6.	Maintain security fencing around the perimeter of the site, and provide warning/trespass signs to comply with the Zoning Code. All perimeter fencing shall be retained until post-reclamation development of the project site occurs.	During all phases of the project	Planning	
7.	Should the City Engineer determine that an unexpected and significant, project related traffic problem has occurred during the course of the mining operation and transfer of materials off-site, he/she will work with the applicant to implement appropriate mitigation measures. On-site mitigation shall be initially encouraged by the City such as truck metering or queuing. The operator shall agree to cooperate and pay its fair share as determined by the Public Works Director for the construction of off-site improvements, if needed.	During all phases of the project	Public Works	
8.	The proponent shall ensure the moisture content of the material being conveyed; if used in the future, to the processing plant is sufficient to avoid visible dust emissions from the loading and unloading points.	During all phases of the project	Planning	
9.	In the unlikely event the mining operation encounters any former waste disposal area, mining activities shall immediately cease and the following agencies shall be contacted to determine the appropriate course of action: • Sacramento County Environmental Management Department,	During all phases of the project	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Environmental Health Division: (916) 875-8416. • State Department of Toxic Substances Control: (916) 255-3601. • Central Valley Regional Water Quality Control Board: (916) 255-3000.			
10.	Mining equipment and any toxic substance associated with mining or reclamation operations shall be protected from flooding and from contact with surface water.	During all phases of the project	Planning	
11.	The discharge of wastewater (including aggregate process water) to surface waters or surface water drainage courses is prohibited.	During all phases of the project	Planning	
12.	No polluting substance or toxic compound shall be applied to the mining surface area. Any form of pollutant used on the site shall be contained and not disposed of onsite.	During all phases of the project	Planning	
	Prior to Issuance of the Work Authorization Permit			
13.	Applicant shall pay the City any outstanding balance incurred by the City for the processing of the mining permit.	Prior to the issuance of the Project RC06-224A work authorization permit	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
14.	The applicant shall comply with all the mitigation measures included in the Mitigated Negative Declaration adopted July 26, 2007 and pay the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is $10,000. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the proponent, and if the actual monitoring costs exceed the initial estimate, the proponent shall be responsible to pay the additional amount.	Prior to the issuance of the Project RC06-224A work authorization permit	Planning	
15.	A performance bond made payable to the City of Rancho Cordova and the Department of Conservation of the State of California to financially guarantee reclamation of the property. The amount of the bond shall be subject to annual review and adjustment, pursuant to the requirements of the City's Mining Ordinance.	Prior to the issuance of the Project RC06-224A work authorization permit	Planning	
16.	The applicant and the City shall negotiate an agreement establishing the terms, conditions and method of determining the payment of a percentage of the retail sales (not to exceed 1% of the gross sales) generated by the sales of mined materials removed from the City and sold off-site.	Prior to the issuance of the Project RC06-224A work authorization permit	Finance	
17.	The applicant shall be required to install signs, to the satisfaction of the Public Works Department, alerting the traveling public to trucks entering/exiting the property.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	
18.	The applicant shall enter into an agreement with the City to address damages and impacts to City roadways directly attributable to the project.	Prior to the issuance of the	Public Works	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Impacts include, but are not limited to; public improvements necessitated by the project and accelerated wear on public infrastructure. The form of the agreement may include a fee per unit of material hauled away from the site and/or a capital fee to the satisfaction of the Public Works Department. The applicant shall prepare a roadway condition assessment for the City's review prior to hauling material off-site which describes the current condition of the impacted City roadways.	Project RC06-224A work authorization permit		
19.	All haul route exit drives shall be paved minimum 100-feet prior to the point of exit to public right-of-way and swept on a regular basis to the satisfaction of Public Works.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	
20.	Obtain appropriate permits from Public Works and provide adequate drain facilities into the established flood control system, in accordance with the Sacramento County Improvement Standards. The drainage plan shall mitigate the increase in surface runoff into Morrison Creek and shall show Best Management Practices (BMPs) to prevent erosion and sedimentation in those swale areas.	Prior to the issuance of the Project RC06-224A work authorization permit	Water Resources-Drainage	
	Prior to Certification of the Completion of the Reclamation Plan			
21.	The project proponent shall prepare for approval by the Planning Director a Tree Replanting Plan representing the size, species, and location of trees to be planted in compliance with mitigation measure MM 4.2 of the Final Mitigated Negative Declaration. The plan shall seek to place trees within the vicinity of the project and consistent with whatever use is planned for or located on the property.	Prior to Final Certification of the Completion of the Reclamation Plan	Planning	

Conditions of Approval

Section 1		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Supplemental Conditions to the Permit Renewal RC-06-224A			
22.	Prior to operations under the permit renewal, the applicant shall execute a Roadway Impact and Truck Management Program Agreement that will satisfy Condition No. 7 and Condition No. 18 of the original permit and the terms of a Truck Management Plan Operational Agreement executed between the City and County of Sacramento.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	
23.	Truck access to Highway 50 shall be from Sunrise Boulevard and not from Zinfandel Drive. With the exception of local deliveries, no through trips shall be allowed on White Rock Road west of Sunrise Boulevard	During all phases of the project	Public Works	
24.	Prior to operations under the permit renewal, the applicant shall execute a Payment Agreement that will satisfy Condition No. 16 of the original permit.	Prior to the issuance of the Project RC06-224A work authorization permit	Public Works	

Mitigation Measures

Section 2		Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
MM 1.1	The project proponent shall ensure that night time lighting levels be maintained at the minimum level necessary to provide for security and safety at the project site. All night time lighting shall be shielded and aimed appropriately to prevent any direct upward illumination or light directed at adjacent properties. If the City receives complaints from any residents of adjacent areas of nuisance lights, the project proponent shall take immediate action to prevent lights from producing significant light or glare at adjacent properties. All on-site stationary lighting shall comply with this requirement throughout the entirety of operation of the project. Vehicle and all other mobile equipment lights (except for any lights mounted on the mobile processing plant) are exempt from this requirement for safety reasons. However, the use of high beams shall be limited within 1,500 feet of the western boundary of the project site to those times when they are required for safety reasons. Signs visible to truck drivers shall be posted along any haul roads within 1,500 feet of the western boundary of the project site that state that high beams are to be used only as required for safety. All drivers shall be notified of this requirement prior to operating on-site.	Throughout project operation once homes are occupied within the Rio Del Oro project or within 1,500 feet of any portion of the project site.	City of Rancho Cordova Planning Department and Code Enforcement Department.	
MM 3.1a	The project proponent shall require that the operators water all haul roads and all exposed soils at least twice daily during construction, mining and reclamation activities.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1b	The project proponent shall require that the operators limit vehicle speed for on-site construction vehicles to 15 miles per hour on any unpaved roadways at all times. Signs stating the speed limit and that dust control measures are in effect shall be placed at each entrance/exit of the site and along all haul roads. Truck and equipment operators shall be notified that dust abatement is a concern and of the 15 mph speed limit.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1c	The project proponent shall require that, when transporting materials by truck during mining and reclamation activities, loads shall be covered or two feet of freeboard shall be maintained by the operator. Compliance with this measure shall be enforced by both the City and the project foreman.	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	
MM 3.1d	The project proponent shall ensure that all exposed soil existing after mining of the project site is seeded with non-invasive species and mulched with certified weed-free straw mulch immediately after mining. The amount of exposed soil at any one time shall me minimized as much as possible. Seeding and straw mulching shall be conducted as the project progresses, immediately following regrading of the soil. All seeding shall be conducted according to California Stormwater Quality Association (CASQA) guidelines, as shown in their California Stormwater BMP Handbook (EC-4). All straw mulch application shall be conducted according to CASQA guidelines, as shown in their California Stormwater BMP Handbook (EC-6). All seeded and mulched areas shall be inspected daily to ensure dust is controlled during the establishment period. Water shall be applied to any areas known or suspected to generate dust during any high wind events (winds greater than 15 miles per hour).	During all phases of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

MM 3.1e	The project proponent shall provide a plan for approval by the City and the Sacramento Metropolitan Air Quality Management District (SMAQMD) demonstrating that the heavy-duty (>50 horsepower) off-road vehicles to be used in the construction and operation of the proposed project will achieve a fleet-averaged 20 percent NOx reduction and a 45 percent particulate reduction compared to the most recent CARB fleet average. The project proponent shall submit to the City and SMAQMD a comprehensive inventory of all off-road equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during the project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no activity occurs; and, The project proponent shall ensure that emissions from all off-road diesel powered equipment used on the proposed project sites does not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be performed at least weekly by a qualified third-party professional, and a monthly summary of the visual results shall be submitted to the City and SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site	Equipment Inventory shall be submitted prior to site disturbance. Remainder of measure shall be complied with throughout construction and operation of the project.	City of Rancho Cordova Planning Department and SMAQMD.	

Mitigation Measures

	inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulation. In the event construction equipment meeting the requirements set forth above is determined not to be available, the project proponent shall notify the City and SMAQMD. Upon verification that required low-emission construction equipment is not available, the City may waive this measure. This requirement shall be included as a note in all project construction plans.			
MM 3.1f	The project proponent shall offset excess emissions (to below the 65 lbs/day threshold of significance) by paying an off-site operational mitigation fee to the Sacramento Metropolitan Air Quality Management District (SMAQMD) Operational Mitigation Fee Program. The final amount of the fee is to be determined by SMAQMD in consultation with the project proponent during the stationary air quality permit process. The project proponent shall provide documentation of the payment of the fee to the City prior to site disturbance.	Prior to site disturbance.	SMAQMD in consultation with the City of Rancho Cordova Planning Department.	
MM 3.2	Mining conducted by the project proponent shall be phased such that aggregate located generally in the western portion of the project site is mined early in the process. Mining shall be phased so that mining generally progresses from west to east as much as possible during the project life. The project proponent shall coordinate with Elliott Homes and GenCorp Realty Investments to ensure that mining is phased to reduce impacts to new development.	Throughout all phases of the project.	City of Rancho Cordova Planning Department.	
MM 4.1a	Prior to each phase of construction or mining or any other site disturbance between the dates of March 1 and August 31, a determinate survey shall be conducted to determine if	All necessary surveys shall be provided to the	City of Rancho Cordova Planning	

	active nesting by birds protected under the Migratory Bird Treaty Act (MBTA) or other special-status bird species is taking place. Surveys shall be conducted according to the following requirements: • The survey(s) shall be conducted by a qualified biologist or other equivalent professional. • The survey(s) shall be conducted no more than 30 days and no less than 14 days prior to site disturbance to occur between March 1 and August 31 for each year the proposed project would operate. • The survey(s) shall include all areas within 250 feet of the project site. • A copy of the survey(s) shall be provided to the City of Rancho Cordova no less than 7 business days prior to site disturbance. If any special-status bird species are found to be nesting within the survey area, the project proponent shall immediately contact the City of Rancho Cordova Planning Department in order to determine the appropriate mitigation, if any, required to minimize impacts to nesting birds. No activity of any kind may occur within 250 feet of any nesting activity or as otherwise required following consultation with the City Planning Department and the California Department of Fish and Game until such time as the young have fledged. If all activities are to be completed outside the nesting season (identified above), determinate surveys shall not be required.	City of Rancho Cordova Planning Department no less than 7 days prior to site disturbance between March 1 and August 31. Surveys shall be repeated for each year the project plans to operate.	Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1b	The project proponent shall update determinate surveys for potentially occurring special-status species or their habitat using protocol acceptable to the regulatory agencies with authority over these species, or assume species presence within the area of project activity. • If any special-status species or their habitat are indicated or assumed, a detailed plan which describes the specific methods to be implemented to avoid and/or mitigate any project impacts upon special-status species to a less than significant level will be required. This detailed Special Status Species Avoidance/Mitigation Plan shall be prepared in consultation with the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG), and shall emphasize a multi-species approach to the maximum extent possible. The Special-Status Species Avoidance/Mitigation Plan shall be submitted to the City Planning Department for approval. • Where project impacts include take of a State listed animal species, a "2081-incidental take" permit shall be obtained from the CDFG and permit conditions implemented, pursuant to the California Endangered Species Act. Proof of such a permit shall be provided to the City of Rancho Cordova Planning Department prior to site disturbance. Determinate surveys for potentially occurring special-status species shall be conducted no more than three months prior to site disturbance. A copy of all determinate surveys shall be provided to the City Planning Department no less than seven days prior to site disturbance.	Determinate surveys shall be performed no more than three months prior to site disturbance. Any required avoidance/mitigation plans or permits listed above shall be provided to the City Planning Department prior to approval of improvement/grading plans or prior to site disturbance, whichever comes first.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game.	

Mitigation Measures

MM 4.1c	No disturbance, during any phase of the proposed project, within 100 feet of any wetlands or ephemeral drainages identified in the wetland delineation for the Rio Del Oro Specific Plan shall take place until such time as the approved mitigation is in place properly addressing the impacts to vernal pools and other seasonal habitats that support vernal pool fairy shrimp and vernal pool tadpole shrimp in such a manger that there will be no net loss of habitat (acreage and function) for these species in the Laguna Formation (pursuant to City Policy NR.2.1). The project proponent shall prepare and submit an annual Habitat Monitoring Report (HMR) to the City, which documents efforts to avoid sensitive habitat areas and the associated monitoring efforts. Included in the HMR will be the appropriate documentation of GenCorp's (or others) permitting and mitigation efforts. The project proponent will provide all required permits and approvals to the City before impacting sensitive habitat areas. The HMR shall also include a schedule of planned activities including the following: • The location of the proposed vernal pool and seasonal wetland habitat site(s) and a detailed map of showing the acreage, distribution, and type of wetlands to be created to ensure no net loss in wetland habitat acreage, values and functions. The compensation wetlands shall be designed to, at a minimum: meet or exceed the hydrophytic conditions and operating functions of the existing wetlands proposed for impact.	Prior to approval of grading and improvement plans and construction plans prior to any ground-disturbing activity.	City of Rancho Cordova Planning Department.	

	• A monitoring plan to assess whether the compensation wetlands are functioning as intended. Specific performance standards for hydrologic, floral, and faunal parameters shall be proposed to determine success of the created wetlands. The monitoring plan shall specify the corrective measures/modifications to be implemented in the event that monitoring indicates that the performance standards are not being met. • A maintenance plan for the wetland preservation/mitigation areas describing the measures to be implemented to assure that they are maintained as wetland habitat in perpetuity. • A requirement that fencing be installed around all existing vernal pools that are within fifty feet of any haul route, spoil zone, stockpile zone, creation zone, or other construction area. The fencing shall be of high visibility material and limit access to the project site. Fencing shall be placed no closer than 10-feet to the delineated, verified perimeter of existing vernal pools. • A requirement that a qualified biological resources monitor, approved by the City be on the site(s) to ensure compliance with identified mitigation for the duration of all the proposed activities. The construction manager shall submit bi-annual compliance reports to City monitor for review for a period of five years. • The vernal pool and seasonal wetland habitat site shall be surveyed by a qualified biologist no more than 30 days prior to the onset of construction for the presence of raptor and federal and state listed bird nesting sites,			

Mitigation Measures

	unless it is determined that construction will occur outside of the breeding season for all species likely to occur on site or observed present. If active nesting sites are observed present all state and federal guidelines pertaining to active nesting sites shall be strictly adhered to in consultation with a qualified biologist. • The project proponent shall grant full access to the vernal pool and seasonal wetland habitat site to the City for the monitoring of construction activities and mitigation compliance. Access shall be granted during all construction activities and the City monitor may issue stop work orders if mitigation non-compliance is identified. • The project proponent shall specify that measures for reuse or disposal of excavated material are suitable for use at project site. The plan should minimize the elapsed time between excavation and reuse and provide adequate stockpile coverage and protection from wind and water erosion during the entire storage period. If excavated material is unsuitable for reuse at the project site, the plan shall include specific information regarding the eventual reuse or disposal site, transportation method(s), disposal reuse management, and schedule. • A spill prevention and response plan to the satisfaction of the City. • A requirement that all disturbed areas be revegetated by the following methods: hydro seeding, drill seeding, or spreading of upland seed bearing soil. The method of revegetation shall be approved by a qualified wetland			

	specialist and to the satisfaction of the City. • Incorporation of the use of non-toxic soil stabilizers according to manufacture's specifications to all inactive construction areas. Use non-toxic binders to exposed areas after cut and fill operations and hydro seeded areas. The vernal pool and seasonal wetland habitat site shall be watered as directed by the City of Rancho Cordova Department Public Works and the SMAQMD and the frequency shall be based on the type of operation, soil and wind exposure. The project proponent shall submit the proposed Habitat Monitoring Plan (HMP) to the City for endorsement prior to grading permit approval or any groundbreaking activity and initiation of mitigation activities (including mitigation land acquisition). Execution of mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of wetlands within the project site (to the standard set by City Policy NR.2.1).			
MM 4.1d	The project proponent may conduct construction or operation of the proposed project in those areas that lie more than 100 feet from any trees, elderberry shrubs, wetlands, or ephemeral drainages prior to the satisfaction of mitigation measure MM 4.1c providing that the standard set of best management practices are employed when working in areas within 250 feet of these features including:	All BMPs shall be shown on all plans for the proposed project prior to approval. Measure shall be complied with continuously until	City of Rancho Cordova Planning Department in consultation with the Public Works Department,	

Mitigation Measures

	• Implementation of erosion control measures during all construction and operation including installation of long-term erosion control devices such as straw wattles, hay bale check dams, and silt fencing as required; • Removal of cover vegetation as close as practicable to the time of construction or mining; • Confinement of construction equipment and associated activities to the areas to be mined (as shown in **Figure 2** and excluding those areas identified as "constraints areas" shown in **Figure 5**); • Reestablishment of stream bank contours following construction and installation of permanent erosion control as needed; • Prohibiting refueling of construction related equipment within 250-feet of the aquatic environment; • Maintenance of hazardous materials spill kits in proximity to all aquatic crossings; • Compliance with state and federal permits; • Performance of proper sediment control; • Formulation and adherence to a spill prevention and response plan; • Monitoring of construction and mining activities near specified features;	the end of the project or compliance with mitigation measure 4.1c.	Sacramento County Department of Water Resources, and the California Regional Water Quality Control Board.	

	• Removal of all construction and operational spoils, remaining materials and miscellaneous litter for proper off-site disposal; and • Post-construction monitoring and supplemental revegetation of all disturbed areas. These requirements shall be conducted according to City standards and to California Stormwater Quality Association standards. These measures can be included in the Stormwater Pollution Prevention Plan (SWPPP) required by the Public Works Department, the County Department of Water Resources, and/or the California Regional Water Quality Control Board. While these measures may be combined with a SWPPP, the project proponent shall ensure that all BMPs required in this measure are complied with throughout the life of the project, regardless of the requirement or contents of a SWPPP. A qualified biological or stormwater monitor shall be contracted for monitoring of the condition and quality of these measures throughout the life of the project. Quarterly reports shall be submitted to the City Planning Department throughout the life of the project, indicating the presence, use, condition, and replacement (as needed) of all protective BMPs. If the conditions of mitigation measure 4.1d are met, either through the actions of the project proponent or compliance with mitigation measure 3.10-1a of the Rio Del Oro Specific Plan EIR/EIS by the project proponent for that project, the requirements of this measure will be considered met and the conditions of any actions conducted pursuant to measure			

Mitigation Measures

	4.1d or 3.10-1a shall be followed instead.			
MM 4.1e	No project activity shall proceed within 100 feet of areas containing VELB habitat (i.e., elderberry shrubs) until a BO has been issued by USFWS, and the project proponent has abided by all pertinent conditions in the BO relating to the proposed project, including conservation and minimization measures, intended to be completed before on-site action. Conservation and minimization measures are likely to include preparation of supporting documentation that describes methods for relocation of existing shrubs and maintaining existing shrubs and other vegetation in the preserve. Relocation of existing elderberry shrubs and planting of new elderberry seedlings shall be implemented on a no-net-loss basis. Detailed information on monitoring success of relocated and planted shrubs and measures to compensate (should success criteria not be met) would also likely be required in the BO. Ratios for mitigation of VELB habitat will ultimately be determined through the ESA Section 7 consultation process with USFWS, but shall be a minimum of "no net loss." A VELB mitigation plan is currently being developed through ESA Section 7 consultation with USFWS. The mitigation plan will also address the proposed delisting of VELB and any mitigation to be implemented if the delisting occurs prior to project implementation due to requirements under CEQA. Implementation of this plan would satisfy mitigation requirements for the removal of elderberry savanna, a sensitive habitat as identified by DFG, as well as single elderberry shrubs. A copy of the USFWS-approved mitigation plan shall be submitted to the City before the approval of any grading or improvement plans or any ground-disturbing activities within 100 feet of VELB habitat.	Prior to the approval of grading permits or any ground-disturbing activity within 100 feet of VELF habitat.	City of Rancho Cordova Planning Department in consultation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service.	

Mitigation Measures

	Should delisting of VELB occur, a mitigation plan that would compensate for the removal of elderberry savanna, a sensitive habitat as identified by DFG, would still be required. The mitigation plan shall be submitted to and approved by DFG and the City before the approval of any grading or improvement plans or any ground-disturbing activities that would affect elderberry savanna for all project phases. Execution of mitigation measure 3.10-4b of the Rio Del Oro Specific Plan EIR/EIS would constitute compliance with this measure and no additional action will be required, provided that the actions conducted pursuant to mitigation measure 3.10-1a included mitigation for loss of elderberry shrubs within the project site.			
MM 4.1f	The project proponent shall ensure that constraints Area B shown in **Figure 5** is expanded to include the whole of the area to be dedicated as elderberry preserve according to the Rio Del Oro Specific Plan EIR/EIS, as shown on Exhibit 3.10-3 of that document. Updated plans showing this expanded constraints area shall be submitted to the City Planning Department for review and approval prior to initiation of any site disturbance within 250 feet of existing Elderberry shrubs on the project site.	Prior to site disturbance within 250 feet of any Elderberry shrub on the project site.	City of Rancho Cordova Planning Department.	
MM 4.2	Prior to any site disturbance, a certified arborist or similarly qualified professional, approved by the City, shall conduct a full tree survey for the project site. The tree survey shall indicate the size, species, and general health of all trees located on the project site that exceed 6 inches diameter at breast height (dbh). If any native oaks or other native trees of 6 inches or greater dbh, multi-trunk native oaks or native	Prior to approval of grading permits and prior to any site disturbance.	City of Rancho Cordova Planning Department.	

	trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a qualified professional to be in good health are found to exist in the project site, such trees shall be avoided if feasible. If such trees cannot feasibly be avoided, the project proponent shall do one of the following prior to site disturbance within 100 feet of any on-site trees: • All such trees that will be removed or otherwise damaged by project implementation shall be replaced at an inch-for-inch ratio. A replacement tree planting plan shall be prepared by a qualified professional or licensed landscape architect and shall be submitted to the City for approval before removal of trees; or • The project proponent shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City by a method comparable to an inch-by-inch replacement. The mitigation plan shall be subject to City approval. If the City adopts a tree preservation ordinance at any time in the future, any future project activities shall be subject to that ordinance instead. If mitigation measure 3.10-3 of the Rio Del Oro Specific Plan EIR/EIS is satisfied, and the actions conducted pursuant to that measure include the proposed project site and the trees within, this measure shall be considered met and no further action is required.			
MM 5.1a	The project proponent shall ensure that throughout all phases of the proposed project no mining activities or other ground disturbance occur within 150 feet of any structures or equipment located on-site as a result of historic rocket testing, including concrete pads associated with those	Coordination with Planning Department staff shall occur prior to any ground	City of Rancho Cordova Planning Department.	

Mitigation Measures

	activities. These structures are located in the general area of "Environmental Constraints Area C", as identified by the project proponent. The project proponent shall coordinate with Planning Department staff to ensure that activities are excluded from the proper portions of the project site prior to site disturbance in order to ensure that no activities take place in these locations. All on-site employees and truck drivers shall be notified of those areas to be avoided prior to working on the site.	disturbance on-site. Measure shall be in force throughout all phases of the proposed project.		
MM 5.1b	The City Planning Department shall be notified immediately if any cultural resources (e.g. prehistoric or historic artifacts, structural features, unusual amounts of bone or shell, fossils, or architectural remains) are uncovered during construction. All construction must stop immediately in the vicinity of the find and an archaeologist that meets the Secretary of the Interiors Professional Qualifications Standards in prehistoric or historical archaeology or a paleontologist shall be retained by the project proponent to evaluate the finds and recommend appropriate action. The recommendations of the archaeologist and/or the paleontologist shall be implemented prior to continuing construction.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 5.2	The City Planning Department shall be notified immediately if any human remains are uncovered during construction. All construction must stop immediately in the vicinity of the remains. The Planning Department shall notify the County Coroner according to Section 7050.5 of California's Health and Safety Code. If the remains are determined to be Native American, the procedures outlined in State CEQA Guidelines 15064.5(d-e) shall be followed.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	

Mitigation Measures

MM 6.1	As mining occurs on the project site, all tailing piles over 20 feet in height shall be cut at a slope of 1.5 horizontal to 1 vertical or shallower. At no time shall mining activity on such piles allow the slope to exceed that amount. If slopes cut at 1.5 to 1 appear to exhibit signs of potential failure (small localized slides, other signs of slope erosion, etc.) then mining shall continue at a grade of 2 feet horizontal to 1 foot vertical, or shallower, thereafter.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department.	
MM 7.1a	As construction and operation of the proposed project occurs, all debris, trash, refuse, and abandoned, discarded, and/or out-of-service items shall be removed from the proposed project sites and deposited off-site in an appropriate disposal facility and in a timely manner. No storage of any these materials shall occur on those portions of the site designated as environmentally sensitive areas/receptors (e.g. wetlands).	Measure shall be implemented throughout all phases of construction and operation. All such materials shall be completely removed prior to release of any portion of the site for other uses.	City of Rancho Cordova Planning Department.	
MM 7.1b	If any underground storage tanks (UST) are discovered during construction activities, the City Planning Department must be contacted and all construction activities within 500 feet of the UST shall cease immediately. The UST shall be removed as required by the County Environmental Management Department (EMD), Hazardous Materials Division. In addition, groundwater and soil investigation for contamination and remediation in the tank vicinity shall be conducted if required by the EMD.	Measure shall be implemented throughout all phases of construction and operation.	City of Rancho Cordova Planning Department.	

Mitigation Measures

MM 7.2a	No site disturbance shall occur within areas D or G of the Environmental Constraints Areas, as shown in Figure 5 for the project at any time. No improvements of roads or other infrastructure existing in those areas shall be conducted unless clearance for such activity is provided by the City, the Department of Toxic Substances Control (DTSC), and the California Regional Water Quality Control Board (CRWQCB) after adequate review of the proposed action and its environmental impacts are assessed by all parties. New truck travel roads, either permanent or temporary, shall not be constructed within these areas at any time. Nor shall any existing roads within these areas be used during mining operations unless those roads are cleared for such use by the DTSC and CRWQCB.	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department, in consultation with the California Department of Toxic Substances Control and the California Regional Water Quality Control Board.	
MM 7.2b	No site disturbance shall occur within areas A, B, C, E, F, or H of the Environmental Constraints Area, as shown in **Figure 5**, until such time as the Department of Toxic Substances Control (DTSC) and the California Regional Water Quality Control Board (CRWQCB) has released those areas for mining. Documentation stating that those areas are safe for mining and that clearance has been given by both the DTSC and GenCorp must be provided to the City at least 10 days prior to initiation of mining activities or other site disturbance in those areas.	Throughout all phases of the proposed project.	California Department of Toxic Substances Control and the California Regional Water Quality Control Board, in consultation with the City of Rancho Cordova.	
MM 7.3	No activities that include the use of open flame or sparks, such as welding or burning of waste materials, shall be conducted except in areas previously cleared by mining and devoid of vegetation or within the "sales and staging" area of	Throughout all phases of the proposed project.	City of Rancho Cordova Planning Department and	

Mitigation Measures

	the project site (as shown in Figure 4). Operations that could ignite fires shall be surrounded by a fire buffer of at least 15 feet on all sides. This buffer shall provide protection to any flammable materials including existing vegetation. Operations that could ignite fires shall not be conducted during any high wind events (winds generally in excess of 15 miles per hour). The project proponent shall ensure that spark arrestors are installed and operating normally within the exhaust system of all engines in mining and processing vehicles and equipment at all times. All vehicles used on the project site shall be equipped with fire extinguishers and all on-site personnel shall receive training in their use and application. An Emergency Communication Plan shall be developed for the proposed project that describes clear procedures to follow in the event of a fire on the project site. A copy of this plan shall be provided to the City of Rancho Cordova Planning Department for reference purposes prior to the initiation of mining activities.		the Sacramento Metropolitan Fire District.	
MM 8.1	The project proponent shall have a licensed professional engineer evaluate the structural integrity of the crossings of Morrison Creek on the private road north of Douglas Road in order to determine whether the crossings will handle the increased loads associated with the proposed project. Final design and specifications of any improvement of the crossings required is to be approved by the licensed engineer and submitted to the City for review and approval. All required permits shall be obtained for any improvement, including but not limited to a Streambed Alteration Agreement from the California Regional Water Quality Control Board.	Prior to use of the southern access road to Douglas Road.	City of Rancho Cordova Public Works Department.	

Mitigation Measures

	Improvements to the crossings are the full financial responsibility of the project proponent. Improvements must be constructed prior to use of the access road to Douglas Road. If this access road is not to be used by the project, no improvement of the crossings is required.			
MM 8.2	The project proponent shall include the specific BMPs in the Stormwater Pollution Prevention Plan (SWPPP) for the proposed project. Additionally, these BMPs shall be implemented throughout the operation of the proposed project. All BMPs shall be executed to the level of standard published by the California Stormwater Quality Association's Construction Stormwater BMP Handbook. BMPs to be utilized shall include, but are not limited to: • NS-8 Vehicle and Equipment Cleaning; • NS-8 Vehicle and Equipment Fueling; • NS-10 Vehicle and Equipment Maintenance; • WM-1 Material Delivery and Storage; • WM-2 Material Use; • WM-3 Stockpile Management; • WM-4 Spill Prevention and Control; • WM-5 Solid Waste Management; and, • WM-6 Hazardous Waste Management.	Measures shall be included in the SWPPP for the project and on all improvement, grading, or mining plans. All measures shall be implemented throughout all phases of the proposed project.	City of Rancho Cordova Public Works Department in coordination with the County of Sacramento Department of Water Resources.	
MM 11.1	Upon occupation of one or more residences in the Rio Del Oro Specific Plan area to the west of the project site, the project proponent shall ensure that no mining or aggregate processing is conducted within the following minimum distances from the nearest occupied residences: • No mining may occur within 840 feet of the nearest occupied residence in the daytime. No mining may occur within 1,560 feet of the nearest occupied residence in the	Throughout operation of the proposed project upon occupation of one or more homes to be constructed in the Rio Del Oro	City of Rancho Cordova Planning Department.	

	nighttime. • No aggregate processing may occur within 1,270 feet of the nearest occupied residence in the daytime. No aggregate processing may occur within 2,155 feet of the nearest occupied residence in the nighttime. These minimum distances may be revised by the City of Rancho Cordova in the event that the project proponent provides additional data, prepared by a qualified noise professional, which shows that noise levels at or below current City Noise Standards would be, or actually are, experienced at the nearest occupied residence from mining and/or processing operations. Mining operations and aggregate processing may be conducted within these minimum distances only under the following conditions: • The project proponent shall incorporate temporary noise barriers such as berms or product stockpiles of a sufficient height to block sight lines between occupied homes and processing/mining operations. All temporary noise barriers shall be shown on project plans and submitted to the City Planning Department for review and approval prior to construction. • The project proponent shall provide an acoustical analysis prepared by a qualified noise professional showing that the temporary noise barriers are sufficient to reduce noise at the project boundary below current City noise standards of 55 dB L_{eq} daytime/45 dB L_{eq} nighttime.	Specific Plan area.		
MM 11.2a	The project proponent shall ensure that the Douglas Road access point is utilized only between the hours of 7:00 AM and 6:00 PM on weekdays and 8:00 AM and 6:00 PM on	Throughout all phases of the proposed project.	City of Rancho Cordova Planning	

Mitigation Measures

	weekends. The gate at that access point shall remain locked outside of those hours to discourage unauthorized use.		Department in consultation with the Sacramento Metropolitan Fire District.	
MM 11.2b	Prior to the occupation of homes in any portion of the Rio Del Oro or Westborough developments, the project proponent shall post signage visible to residents providing a name, address, and 24-hour phone number for information and/or complaints regarding the mining activities of the proposed project. Placement of the signage immediately adjacent to White Rock Road is considered sufficiently visible. Signage shall also include the address and main phone number for the City Planning Department. Signage meeting the above requirements shall also be installed prior to site disturbance at the entrance at Douglas Road in a location plainly visible from Douglas Road.	Signage shall be posted prior to occupation of homes within the Rio Del Oro or Westborough projects.	City of Rancho Cordova Planning Department.	
MM 15.1	The project proponent shall ensure that no trucks traveling to or from the proposed project via the Douglas Road access point utilize the intersection of Sunrise Boulevard and Douglas Intersection between the hours of 7:00 AM and 9:00 AM and between the hours of 4:00 PM and 6:00 PM, except when required by local projects served by the proposed project. All drivers shall be notified of this requirement in writing prior to operation to and from the project site. The project proponent shall post signage at the Douglas Road access point that clearly notifies drivers both entering and leaving the site of the time restriction.	Throughout operation of the proposed project.	City of Rancho Cordova Planning Department and Public Works Department.	

Attachment E
Quarterly Routine BMP Inspection Form

Quarterly Routine BMP Inspection Form

Areas Inspected	Applicable (Yes/No)	Notes
Aggregate Stockpiles		
Aggregate processing		
Returned Rubble		
Aggregate Mining		
Truck & Equip Wash		
Equipment Painting Areas		
Sand Blasting		
Vehicle/Equipment Maintenance Shop		
Air Compressors		
Battery Storage		
Used Brake Pads		
Lubricant Storage		
AST fuel and fueling		
Haz Material Storage		
Haz Waste Storage		
Garbage Dumpsters		
Paved Parking & Outside Storage		
Unpaved parking & outside storage		
Boneyard/surplus equipment storage		
Storm water Collection		
Offsite trackout		
Offsite cleanout of trucks		

Have identified corrective actions been implemented to correct deficiencies noted during

inspection? Yes ☐ No ☐

Date corrective Action completed: _____

Signature:_____ Date:_____

California
Department of Conservation
Division of Mine Reclamation

Gavin Newsom, Governor
David Shabazian, Director

March 18, 2022

June Cowles
City of Rancho Cordova
Planning Department
2729 Prospect Drive
Rancho Cordova, CA 95670

Sent electronically to: jcowles@cityofranchocordova.org

INTERIM MANAGEMENT PLAN
WHITE ROCK / RIO DEL ORO MINE (CA MINE ID #91-34-0048)

Dear June Cowles:

The Department of Conservation's Division of Mine Reclamation (Division) received an Interim Management Plan (IMP) for the White Rock / Del Oro (Mine) on February 21, 2022. The City of Rancho Cordova (City) is the lead agency under the Surface Mining and Reclamation Act of 1975 (SMARA; Public Resources Code [PRC] Section 2710 et seq.). The City submitted the IMP pursuant to PRC Section 2770(h)(2)(A). The Mine is operated by Granite Construction (Operator) and became idle on January 1, 2022.

Division Staff have reviewed the IMP submittal and have no comments at this time.

The Division looks forward to receiving the City's 30-days' notice that it intends to approve the IMP pursuant to PRC Section 2770(h)(4)(F).

Questions regarding this letter can be directed to Anji Amachree at 916-764-9086. Please note that the Division receives electronic correspondences at DMR-Submittals@conservation.ca.gov.

Sincerely,

DocuSigned by:
Anji Amachree
18D1557FDF0D48C...
Anji Amachree, GIT
Geologist
Engineering & Geology Unit

DocuSigned by:
David Rader
512788529A2445E...
David Rader, PG
Manager
Engineering & Geology Unit

ec: Candice Longnecker, Designated Agent; Candice.longnecker@gcinc.com

MEMORANDUM

ITEM 9.4.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: Adam Lindgren, City Attorney

SUBJECT: **A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AND ON BEHALF OF COMMISSIONS AND COMMITTEES CREATED BY THE CITY COUNCIL PURSUANT TO GOVERNMENT CODE SECTION 54952(B) CONFIRMING THE STATE OF EMERGENCY UNDER GOVERNMENT CODE SECTION 8625, RECOGNIZING CONTINUED MEASURES TO PROMOTE SOCIAL DISTANCING, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE CITY FOR THE PERIOD FROM APRIL 7, 2022 TO MAY 7, 2022**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution would allow the City Council and the City's other legislative bodies to continue to meet via teleconference ("virtually") in a manner substantially similar to the manner in which they have met during the COVID-19 pandemic, if a proclaimed State of Emergency remains in effect and other requirements are satisfied.

BACKGROUND

All meetings of the City Council and the City's other legislative bodies are open and public, as required by the Ralph M. Brown Act, Government Code section 54950 et seq., so that any member of the public may attend, participate, and watch the City's legislative bodies conduct their business. On March 17, 2020, in response to the COVID-19 pandemic, Governor Newsom issued Executive Order N-29-20 suspending certain provisions of the Ralph M. Brown Act in order to allow local legislative bodies to conduct virtual meetings to slow the spread of COVID-19. As a result of Executive Order N-29-20, City Staff set up virtual meetings for the City Council and other City legislative bodies. On June 11, 2021, Governor Newsom issued Executive Order N-08-21, which, effective September 30, 2021, ended the provisions of Executive Order N-29-20 that allowed local legislative bodies to conduct meetings telephonically or by other means.

On September 16, 2021, Governor Newsom signed Assembly Bill 361 ("AB 361"), which allows local legislative bodies to continue to conduct meetings via teleconferencing under

specified conditions. AB 361 took effect upon the expiration of Executive Order N-29-20 on October 1, 2021. On September 20, 2021, the City Council held a meeting in compliance with AB 361's requirements for remote meetings.

In order for AB 361 to remain effective for meetings of the City's legislative bodies, the City Council is required to make specified findings every 30 days. AB 361 allows a legislative body to continue holding meetings utilizing teleconferencing without complying with the standard teleconferencing requirements if a State of Emergency is proclaimed under Government Code section 8625, the City has reconsidered the emergency conditions, and if the local Public Health Officer continues to recommend social distancing measures to protect the public's health and safety during local government meetings. These conditions are present.

Governor Newsom's March 4, 2020 Proclamation of Emergency related to the COVID-19 pandemic is still in effect. The potential spread of COVID-19 continues to threaten public health and safety during indoor public gatherings, including indoor gatherings of the Rancho Cordova City Council and other Rancho Cordova legislative bodies. In addition, the Sacramento County Public Health Officer continues to recommend teleconferencing or social distancing to protect the public's health and safety during local government meetings.

SUMMARY

The attached Resolution makes the required findings that the current conditions exist to allow teleconference meetings pursuant to AB 361 for the City Council and on behalf of all of the legislative bodies commissions and committees created by the City Council pursuant to Government Code section 54952(b). This will allow members of the public to safely observe and participate in local government meetings during the pandemic.

If a meeting is held via teleconference under AB 361, the following requirements apply:

1.Notices and agenda requirements remain the same under the Brown Act;

2.No physical location is required for public attendance or public comment.However, the public must be able to access and participate in the meeting through a call-in or an internet-based service, and instructions for how to participate must appear in the posted notices or agenda;

3.Teleconference meetings must protect the statutory and constitutional rights of the parties and the public;

4.If there is any disruption of the call-in or internet-based service, the agency must suspend the meeting until the problem is fixed;

5.Legislative bodies may allow public comments to be submitted prior to a meeting but must also allow the public to participate in real time through call-in or internet-based service;

6.If an internet-based service requires registration through a third-party, individuals can be required to register with the third-party to participate in the meeting; and

7.When providing a public comment period, whether after each item or during a general comment period, a legislative body must allow reasonable time for members of the public to comment and must also include reasonable time for members to register with a third-party host if applicable.

FISCAL IMPACT AND FUNDING SOURCE

The cost of continued remote access to Council meetings and the meetings of other City committees.

ATTACHMENT(S)

1. Resolution

CITY OF RANCHO CORDOVA

CITY COUNCIL RESOLUTION NO. XX-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AND ON BEHALF OF COMMISSIONS AND COMMITTEES CREATED BY THE CITY COUNCIL PURSUANT TO GOVERNMENT CODE SECTION 54952(b) CONFIRMING THE STATE OF EMERGENCY UNDER GOVERNMENT CODE SECTION 8625, RECOGNIZING CONTINUED MEASURES TO PROMOTE SOCIAL DISTANCING, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE CITY FOR THE PERIOD FROM April 7, 2022 TO May 7, 2022

WHEREAS, the City is committed to preserving and promoting public access and participation in meetings of the legislative bodies; and

WHEREAS, all meetings of the City are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the City conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, on September 20, 2021 the City held a meeting during a state of emergency under Government Code section 8625 and during a period of recommended social distancing by state and local officials while complying with Government Code section 54953(e)(2); and

WHEREAS, the City is required to make certain findings every thirty (30) days to continue teleconferencing under Government Code section 54953(e)(3), including reconsideration of the state of emergency declared by the Governor pursuant to Government Code section 8625, and State or local officials continue to impose or recommend measures to promote social distancing; and

WHEREAS, the City continues to experience emergency conditions due to COVID-19, specifically, the highly transmissible SARS-CoV-2 B.1.617.2 (“Delta”) continues to threaten public health and safety during indoor public gatherings; and

WHEREAS, the City Council has considered the circumstances of the Governor’s state of emergency proclamation pursuant to Government Code section 8625, which remains active; and

WHEREAS, on July 30, 2021, the Sacramento County Health Officer issued an order requiring all individuals, regardless of vaccination status, to wear a mask while indoors in public spaces; and

WHEREAS, the Centers for Disease Control and Prevention ("CDC") continues to recommend physical distancing of at least six feet (6') from others outside of the household; and

WHEREAS, the Sacramento County Health Officer's order incorporates the CDC's guidance for vaccinated and unvaccinated people; and

WHEREAS, the State has issued an order in effect to February 15, 2022 requiring everyone in California to wear a mask in indoor public spaces and workplaces; and

WHEREAS, the City Council, acting as a legislative body pursuant to Government Code section 54952(a) and for the benefit of the commissions, committees, and other bodies that were created by the City Council pursuant to Government Code section 54952(b) (collectively referred to as the "Legislative Bodies"), does hereby find that the Legislative Bodies shall continue to conduct their meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that the Legislative Bodies shall continue to comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953 as a consequence of the ongoing state of emergency and the continued social distancing measures required by local officials.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES HEREBY RESOLVE AS FOLLOWS:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Affirmation that Local Emergency Persists. The City Council hereby considers the conditions of the state of emergency pursuant to Government Code section 8625 and proclaims that a local emergency persists throughout the City, affirms the Sacramento Health Order's required and recommended measures to promote social distancing, and finds that the conditions continue to exist pursuant to Government Code section 54953(e)(3) to allow the Legislative Bodies to use teleconferencing to hold public meetings in accordance with Government Code section 54953(e)(2) to ensure members of the public have continued access to safely observe and participate in local government meetings.

Section 3. Remote Teleconference Meetings. City Staff are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, continuing to conduct open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 4. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective until the earlier of (i) May 7, 2022 or such time the City Council adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of City may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova, this 4th day of April 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Donald Terry, Mayor

ATTEST:

_____
Stacy Leitner, CMC
City Clerk

MEMORANDUM

ITEM 9.5.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: Darcy Goulart, Planning Manager

SUBJECT: **PLANNING COMMISSION NOMINATION AND SELECTION**

RECOMMENDATION

Continue the Planning Commission Member nomination and selection to the April 18, 2022 Regular City Council meeting.

RESULT OF RECOMMENDED ACTION

The items would be continued to the April 18, 2022 Regular City Council meeting.

BACKGROUND

At the regular meeting on March 21, 2022, the City Council continued this discussion to April 4, 2022 to provide additional time to complete the conflict of interest information gathering and review. It was indicated that it would be important that all Council members be present for the final selection. Not all five Council members will be present for the April 4th meeting and therefore, staff is requesting that this discussion be continued to the April 18th City Council meeting.

FISCAL IMPACT AND FUNDING SOURCE

There is no fiscal impact.

ATTACHMENT(S)

None

MEMORANDUM

ITEM 10.1.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: Elizabeth Sparkman, Community Development Director
Dalia Fadl, Principal Engineer

SUBJECT: **A RESOLUTION CREATING SPECIAL TAX AREA ZONE 33 AND INTRODUCING AND WAIVING THE FIRST READING OF AN ORDINANCE ESTABLISHING A SPECIAL TAX FOR TRANSIT-RELATED SERVICES FOR THE GRANTLINE 220 PROJECT**

RECOMMENDATION

Adopt the Resolution creating special transit tax area Zone 33; and to introduce and waive the first reading of the Ordinance, establishing a special tax for transit-related services for the Grantline 220 project.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution and Ordinance would assist the City in meeting the costs of providing transit-related services by creating a special tax area Zone 33 and establishing a special tax for transit-related services for the Grantline 220 project.

BACKGROUND

The City Council adopted Resolution No. 141-2005 on November 7, 2005, providing for a special tax for transit-related services to be imposed upon new development within the City. Pursuant to that Resolution, a property owner approves a special tax on the parcels within a subdivision or project. The City Council then adopts a resolution creating a zone that encompasses the subdivision or project and an ordinance establishing the special tax.

The City Council, on June 7, 2021, adopted a resolution approving the Grantline 220 project, a 219-acre mixed-use community south of Douglas Road and east of Grantline Road. This annexation consists of the entire project area, currently owned by Lennar Homes. The provision of funding to provide transit-related services by approving a special tax was made a condition of approval for the project.

This item will establish tax area Zone 33, the boundaries of which will be contiguous to the boundaries of the Grantline 220 project- see Attachment 2. In addition to creating the special tax, the Ordinance will also set the date for the transit-related services tax election, which will

be held on May 24, 2022, at which time the ballot(s) will be tabulated by the City Clerk, and the results be declared at the City Council meeting on June 20, 2022.

FISCAL IMPACT AND FUNDING SOURCE

There is no fiscal impact to the General Fund. Funds collected by this tax will be used to fund transit-related services.

ATTACHMENT(S)

1. Resolution
2. Exhibit A to the Resolution
3. Ordinance
4. Exhibit A to the Ordinance
5. Exhibit B to the Ordinance- Property Land Use Catagory

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, CREATING SPECIAL TAX AREA ZONE 33 FOR THE GRANTLINE 220 PROJECT

WHEREAS, it is the intention of the City Council to create Zone 33 within the City of Rancho Cordova Transit-Related Services Special Tax Area and authorize an election; and

WHEREAS, it is the intention of the City Council to adopt an ordinance establishing a special tax for transit-related services within Zone 33; and

WHEREAS, the City recognizes the need for increased transit-related services in Zone 33 and the difficulty of funding the current or increased level of services with revenues now available; and

WHEREAS, it is the intention of the City Council to direct the City Clerk to conduct an election by mail ballot pursuant to Elections Code Section 4000 and to be held on the earliest date permitted by law; and

WHEREAS, the City Council, on June 7, 2021, adopted a resolution approving the Grantline 220 project, a 219-acre mixed use community south of Douglas Road and east of Grantline Road. The provision of funding to provide transit-related services by approving a special tax was made a condition of approval for the project. This will be accomplished by the property owner(s) participation in the transit-related services special tax area; and

WHEREAS, the transit-related services tax as inflated to Fiscal Year 2021-2022 is $119.94 per low density residential dwelling unit or low density residential dwelling unit equivalent, $95.94 per medium density residential dwelling unit or medium density residential dwelling unit equivalent, $71.96 per high density residential dwelling unit or high density residential dwelling unit equivalent, $3,075.01 per retail and service commercial acre, $2,643.26 per commercial mixed use or office acre, and $710.15 per light industrial acre, subject to an annual inflator formula based on the Consumer Price Index for the San Francisco-Oakland-San Jose Area, or six percent, whichever is less. Multi-family residential units on a single parcel shall be assessed on a proportionately equivalent basis (e.g., a two-unit attached housing structure, such as a duplex, would be deemed to consist of two residential parcels for purposes of the transportation tax); and

WHEREAS, for the purposes of this Resolution, a “voter” entitled to vote on the creation of Zone 33 is a person who owns real property within Zone 33, as shown on the last equalized assessment role prepared by the Sacramento County Assessor’s Office, at the time that the City Council submits an ordinance authorizing the imposition of a transit-related services tax to the voters of Zone 33. At the time that the Council adopted this Resolution, there were zero (0) registered voters residing within Zone 33 and one property owner. Because the Transit-Related Services Special Tax will be imposed on property in Zone 33 and paid by the owner of the property, the Council finds that restricting the vote on the Transit-Related Services Special Tax to the property owner in Zone 33 is appropriate and consistent with the principles and requirements of California Constitution article XIIIC (Proposition 218).

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA as follows:

1. That portion of the City of Rancho Cordova shown on the Map, Exhibit A hereto is established as Zone 33 of the Rancho Cordova Transit-Related Services Special Tax Area.

2. That Ordinance, reviewed and approved by the City Council on the same date as the resolution, is to be presented for approval of the voters of Zone 33 by a mail ballot election, to be held on May 24, 2022. The ballot proposition shall read as follows:

"Shall Ordinance No. XX-2022 of the City Council of the City of Rancho Cordova be approved so as to authorize a special tax on property located in Zone 33 of the Rancho Cordova Transit-Related Services Special Tax Area to maintain the present level of transit-related services and provide additional funding for increased transit-related services?"

3. The City Clerk is directed to take all steps necessary to conduct the election required by this order. Said election shall be conducted by mailed ballot pursuant to Elections Code Section 4000 and shall be held May 24, 2022.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 4th day of April 2022 by the following vote:

AYES:

NOES:

ABSENT:

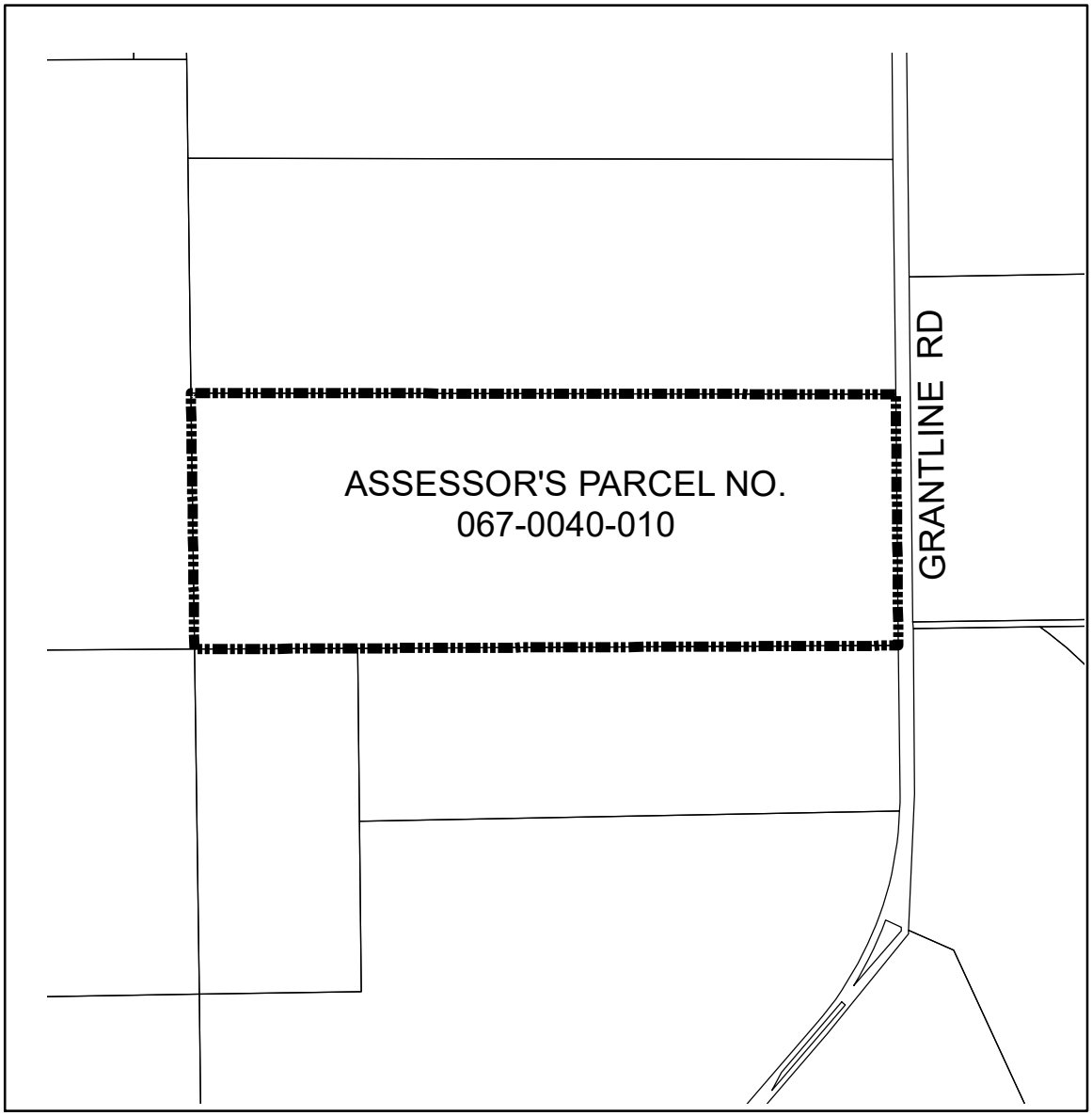
ABSTAIN:

ATTEST:

Donald Terry, Mayor

Stacy Leitner, CMC
City Clerk

CITY OF RANCHO CORDOVA
TRANSIT RELATED SERVICES SPECIAL TAX AREA
ANNEXATION 33
GRANTLINE 220 PROJECT



Legend

Annexation Boundary

CITY OF RANCHO CORDOVA

ORDINANCE NO. XX-2022

AN ORDINANCE OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, ESTABLISHING A SPECIAL TAX FOR TRANSIT-RELATED SERVICES FOR THE GRANTLINE 220 PROJECT SUBJECT TO VOTER APPROVAL

THE CITY COUNCIL OF THE CITY OF THE RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:

Section 1. Purpose, Intent and Authority.

It is of critical importance to the City Council of the City of Rancho Cordova that residents of and employees working in the City receive high quality transit-related services. In carefully reviewing the City's budget and revenue projections, it is clear to City staff that the City budget does not contain adequate funding to ensure the continued delivery of adequate high-quality transit-related services unless additional revenues are obtained.

It is the purpose and intent of this non-codified Ordinance to generate additional funds to pay for transit-related services by authorizing the levy of a tax on improved parcels of real property on the secured property tax roll of Sacramento County that are within Zone 33 of the Rancho Cordova Transit-Related Services Special Tax Area (the "Zone").

This tax is a special tax within the meaning of Section 4 of the Article XIIIA of the California Constitution. Because the burden of this tax falls upon property, this tax also is a property tax, but this tax is not determined according to nor in any manner based upon the value of property; this tax is levied on a parcel and use of property basis. Insofar as not inconsistent with this Ordinance or with legislation authorizing special taxes and insofar as applicable to a property tax that is not based on value, such provisions of the California Revenue and Taxation Code and of Article XIII of the California Constitution as relate to ad valorem property taxes are intended to apply to the collection and administration of this tax (Section 4 of this Ordinance), as authorized by law. This tax is not an ad valorem property tax; it is an excise tax on the use of property. Because the revenue from the tax may be used only to fund transit-related services, it is also a special tax.

The revenues raised by this tax are to be used solely for the purpose of providing transit-related services as are deemed necessary by the City Council for the benefit of the residents and/or employees of Zone 33.

At the time that the Council adopted this non- codified Ordinance, there were zero (0) registered voters residing in Zone 33 and one property owner. Because the Transit-Related Services Special Tax will be imposed on property in Zone 33 and paid by the owner of the property, the Council finds that restricting the vote on the Transit-Related Services Special Tax to property owners in Zone 33 is appropriate and consistent with the principles and requirements of California Constitution article XIIIC (Proposition 218).

Section 2. Definitions.

The following definitions shall apply throughout this Ordinance.

A. "Constant first year dollars" shall mean an actual dollar amount which, in years subsequent to the first fiscal year the tax is levied, shall have the same purchasing price as the base amount in first fiscal year dollars as measured by the Consumer Price Index. The base amount shall be the amount of tax per parcel as specified in Section 3(A) herein. The adjustments from actual to constant dollars shall be made by use of the Consumer Price Index, as specified in Section 3(B) herein.

B. "Consumer Price Index" means the Consumer Price Index for all Urban Consumers (CPI-U) for the San Francisco-Oakland-San Jose Area as published by the U.S. Department of Labor, Bureau of Labor Statistics. If the Consumer Price Index is discontinued or revised, such other government index or computation with which it is replaced shall be used in order to obtain substantially the same result as would be obtained if the Consumer Price Index had not been discontinued or revised.

C. “Fiscal year" means the period of July 1 through the following June 30.

D. “Parcel" means the land and any improvements thereon, designated by an assessor’s parcel map and parcel number and carried on the secured property tax roll of Sacramento County. For the purposes of this Ordinance, parcel does not include any land or improvements outside the boundaries of Zone 33, nor any land or improvements owned by any governmental entity.

E. “Rancho Cordova Transit-Related Services Special Tax Area" means all the properties within the jurisdictional limits of the City of Rancho Cordova.

F. “Rancho Cordova Transit-Related Services Special Tax Area Zone 33 (the “Zone”) means that portion of the incorporated area of the City of Rancho Cordova located within the boundaries as shown on the map Exhibit A.

G. “Transit-Related Services” means providing, operating, maintaining and subsidizing transit services and all supporting facilities, infrastructure, programs and incentives that benefit the residents of the Rancho Cordova Transit-Related Services Special Tax Area, and shall be calculated and set according to the methodology described in Engineer’s Report County Service Area No. 10 and Benefit Zone No. 2 County of Sacramento, November 18, 2004, which established the methodology for the original service charge for Benefit Zone No. 2.

H. “Voter” means a person who owns real property within Zone 33, as shown on the last equalized assessment role prepared by the Sacramento County Assessor’s Office, at the time that the City Council adopts an ordinance authorizing the imposition of a transit-related services tax to the voters of Zone 33.

Section 3. Amount and Level of Taxes.

The tax per year on each parcel in the Zone shall not exceed the amount applicable to the parcel, as specified below.

A. For First Fiscal Year:

The tax per year for the first fiscal year (July 1, 2022 through June 30, 2023) shall be the amount of Tax per Parcel for a Land Use Code Category as set forth on Exhibit B hereto. The use code assigned to each parcel shall be reviewed and updated periodically. Rates in Exhibit B shall be calculated and set according to the methodology described in Engineer's Report County Service Area No. 10 and Benefit Zone No. 2 County of Sacramento, November 18, 2004, which established the methodology for the original service charge for Benefit Zone No. 2.

B. For Subsequent Fiscal Years:

In order to keep the tax on each parcel in constant first year dollars for each fiscal year subsequent to the first fiscal year, the tax per year shall be adjusted as set forth below to reflect any increase in the Consumer Price Index beyond the first fiscal year the tax is levied.

In June or July of each year, City Council shall determine the amount of taxes to be levied upon the parcels in Zone 33 for the then current fiscal year, as set forth below.

For each Land Use Category on Exhibit B, the tax per year on each parcel for each fiscal year subsequent to the first fiscal year shall be an amount determined as follows:

Tax Per Parcel For then Current Fiscal Year	=	Tax Per Parcel For Immediately Preceding Fiscal Year	X Consumer Price Index from April of immediately Preceding Fiscal Year to April of then Current Fiscal Year **OR** 6 percent, whichever is less

Provided, however, that in no event shall the tax per parcel for any fiscal year be less than the amount established for the first fiscal year.

C. Nature of Tax Levy.

The taxes levied on each parcel pursuant to this Article shall be a charge upon the parcel and shall be due and collectible as set forth in Section 4, below.

Section 4. Collection and Administration.

A. Taxes as Liens Against the Property.

The amount of taxes for each parcel each year shall constitute a lien on such property, in accordance with Revenue and Taxation Code Section 2187, and shall have the same effect as an ad valorem real property tax lien until fully paid.

B. Collection.

The taxes on each parcel shall be billed on the secured roll tax bills for ad valorem property taxes and are to be collected in the same manner in which Sacramento County collects secured roll ad valorem property taxes. Insofar as feasible and insofar as not inconsistent with this Ordinance, the times and procedures regarding exceptions, due dates,

installment payments, corrections, cancellations, refunds, late payments, penalties, liens, and collections for secured roll ad valorem property taxes (as established by Sacramento County) shall be applicable to the collection of this tax. Notwithstanding anything to the contrary in the foregoing, as to this tax:

1. The secured roll tax bills shall be the only notices required for this tax, and

2. The homeowners and veterans exemptions shall not be applicable because such exemptions are determined by dollar amount of value.

C. Costs of Administration by County.

The reasonable costs incurred by the County officers collecting and administering this tax shall be deducted from the collected taxes.

D. Use of Tax Revenue.

The revenue collected from the tax imposed by this ordinance shall be placed into a separate account and may be used only to fund transit-related services, including the costs of administering and collecting the tax and enforcing the provisions of this ordinance. Revenue from the tax may be used for transit-related services citywide.

E. Refunds.

1. Whenever the amount of any tax, interest or penalty has been overpaid or paid more than once or has been erroneously or illegally collected or received by the City pursuant to this ordinance, it may be refunded as provided in this Section.

2. No refund may be made except upon a written claim verified by the person who paid the tax or by his or her guardian or conservator or the executor or administrator of his or her will or estate and stating the grounds upon which the claim is made. All claims filed pursuant to this subsection must be presented within one year after payment of the amount for which the claimant is seeking a refund.

3. No order of a refund may be made until a written claim therefor has been presented in accordance with this subsection. No suit for money, damages or a refund may be brought against the City until a written claim therefor has been presented to the City and has been acted upon or has been deemed rejected by the City, in accordance with this subsection. Only the person who filed the claim may bring such a suit, and if another person should do so, judgment shall not be rendered for the plaintiff.

F. Initiatives to Affect Tax.

Consistent with the California Constitution (art. XIIIC, § 3) the tax imposed by this ordinance may be affected by initiative. The procedures for qualification of such an initiative and the election on a qualified initiative shall be consistent with the California Constitution (art. 2, sec. 8), the California Elections Code (Chapter 3 of Division 9), and the Municipal Code. The minimum number of signatures necessary to qualify an initiative to affect the tax approved by this ordinance shall be equal to 5 percent of the votes in the City for all

candidates for Governor at the last gubernatorial election. The election on a qualified initiative to affect the tax shall be a regular citywide election. An initiative affecting the tax shall be approved only if at least two-thirds of the votes cast on the measure are in favor of its approval.

Section 5. Severability Clause.

If any article, section, subsection, sentence, phrase of clause of this Ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portion of this Ordinance. The voters of Zone 33 hereby declare that they would have adopted the remainder of this Ordinance, including each article, section, subsection, sentenced phrase or clause, irrespective of the invalidity of any other article, section, subsection, sentence, phrase or clause.

Section 6. Effective Date and Posting.

This Ordinance shall take effect immediately upon its approval by two-thirds of the voters voting within the Zone in an election to be held on May 24, 2022 so that taxes shall first be collected hereunder for the tax year beginning July 1, 2023.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the _____ of _____ 2022 by the following vote:

AYES:

NOES:

ABSENT:

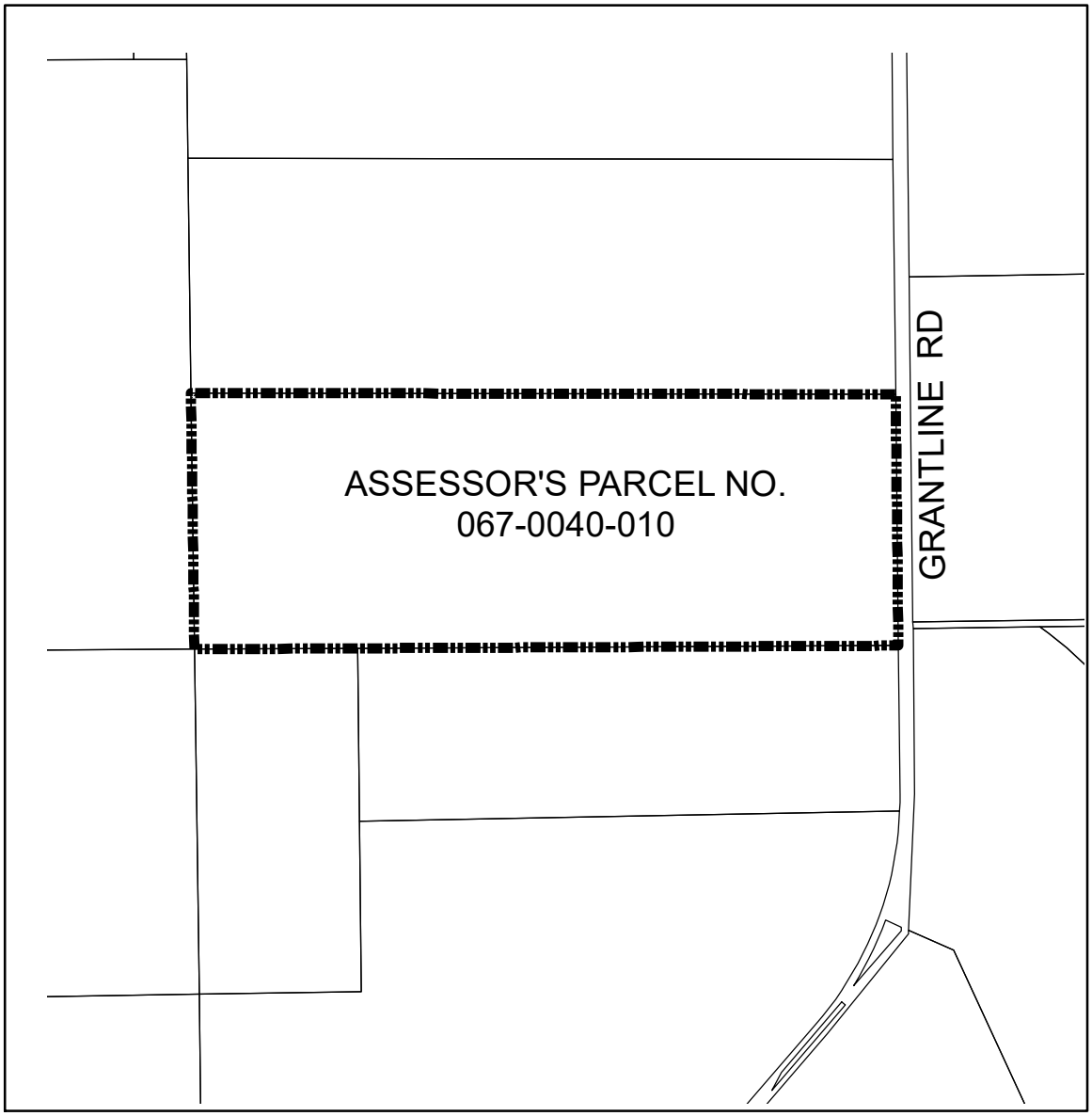
ABSTAIN:

_____
Donald Terry, Mayor

ATTEST:

_____
Stacy Leitner, CMC
City Clerk

CITY OF RANCHO CORDOVA
TRANSIT RELATED SERVICES SPECIAL TAX AREA
ANNEXATION 33
GRANTLINE 220 PROJECT



Legend

Annexation Boundary

Amount of Tax per Parcel by Land Use Category

A. Residential Dwelling Units

As adjusted for inflation from the original base year, the amount of Tax per Parcel for fiscal year 2021-2022 for Residential Land Use Categories shall be $119.94 per low density residential dwelling unit or low density residential dwelling unit equivalent, $95.94 per medium density residential dwelling unit or medium density residential dwelling unit equivalent, or $71.96 per high density residential dwelling unit or high density residential dwelling unit equivalent (Multi-family residential units on a single parcel shall be assessed on a proportionately equivalent basis (e.g., a two-unit attached housing structure, such as a duplex, would be deemed to consist of two residential parcels for purposes of the Transit-Related Services Special Tax).

B. Non-Residential

As adjusted for inflation from the original base year, the amount of Tax per Parcel for fiscal year 2021-2022 for Non-Residential Land Use Categories (except Recreational and Agricultural) shall be $3,075.01 per retail and service commercial acre, $2,643.26 per commercial mixed use or office commercial acre, and $710.15 per light industrial acre.

C. Inflator Formula

The tax is subject to an annual inflator formula based on the Consumer Price Index for all Urban Consumers (CPI-U) for the San Francisco-Oakland-San Jose Area, or six percent, whichever is less.

MEMORANDUM

ITEM 10.2.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: Elizabeth Sparkman, Community Development Director
Dalia Fadl, Principal Engineer

SUBJECT: **A RESOLUTION DECLARING A PROTEST HEARING AND AUTHORIZING THE MAILING OF PROPERTY OWNER BALLOT RELATING TO THE IMPOSITION OF THE ANNUAL STORMWATER UTILITY FEE FOR THE GRANTLINE 220 PROJECT**

RECOMMENDATION

Adopt the Resolution.

RESULT OF RECOMMENDED ACTION

Adoption of the Resolution would declare the results of the property owner protest and, if there exists less than a majority protest, authorize the mailing of a ballot to the property owner to approve the levy of the fee to pay for maintenance of storm drainage and flood protection systems for the Grantline 220 project. The action also sets 1:30 p.m. on May 10, 2022 in the office of the City Clerk, as the time and date for the ballot tabulation for the matter**.**

BACKGROUND

The Grantline 220 project has a condition of approval which requires funding for operation and maintenance of the storm drainage system. This condition will be satisfied by the participation in the new Stormwater Utility Fee for storm drainage and flood protection services which is the subject of tonight's action.

The property owner of the Grantline 220 project has requested the City annex the project to the City's Stormwater Utility Fee pursuant to the California Health and Safety Code Section 5471 et seq. to provide the method of financing for storm drainage and flood protection services required to meet the condition.

On March 21 2022 Council adopted a resolution which established Procedures for the Conduct of a Protest Hearing and Balloting Relating to a Stormwater Utility Fee (the "Procedures") and designated April 4, 2022, at 5:30 p.m. as the time and place for hearing protests in connection with the annual Stormwater Utility Fee for the Grantline 220 project.

DISCUSSION

The property owner has submitted a petition and waiver for the City to institute the proceedings to participate in the Stormwater Utility Fee. This annexation to the Stormwater Utility Fee will include the project generally known as the Grantline 220 project, see Attachment 2. The maintenance services to be funded include the furnishing of services and materials for the ordinary and usual operation, maintenance, and servicing of the storm drain and flood protection systems.

Attachment 1 is the Resolution declaring the results of the property owner protest and authorizing the mailing of the property owner ballot, as required by Article XIII D of the California Constitution (also known as Proposition 218). The Resolution sets forth the tabulation of ballots on May 10, 2022, at 1:30 p.m. in the office of the City Clerk. The results of the mailed ballot election will be presented to City Council at their regularly scheduled meeting June 6, 2022, and additional actions will be recommended based on the ballot results.

A “Rate Analysis Report” was approved by City Council on September 4, 2014, by Resolution 103-2014 setting Fiscal Year 2014/2015 maximum annual Stormwater Utility Fee amount for each parcel proportionate to the estimated stormwater runoff for each parcel, see Attachment 3. The maximum annual fee will increase each subsequent Fiscal Year by the annual change in the Consumer Price Index (CPI), during the preceding year, for All Urban Consumers, for the San Francisco-Oakland-San Jose areas, published by the United States Department of Labor, Bureau of Labor Statistics. A sample of the Stormwater Utility Fees for Fiscal Year 2021-2022 are summarized in Attachment 4.

FISCAL IMPACT AND FUNDING SOURCE

There is no impact to the City’s General Fund. Funds collected by this fee will pay for maintenance of storm drainage and flood protection systems.

ATTACHMENT(S)

1. Resolution
2. Annexation Boundary Map
3. Stormwater (SWU) Rate and Analysis Report
4. Stormwater Utility Fee- Rate Sheet FY21-22

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, DECLARING THE RESULTS OF THE PROPERTY OWNER PROTEST AND AUTHORIZING THE MAILING OF A PROPERTY OWNER BALLOT RELATING TO THE IMPOSITION OF AN ANNUAL STORMWATER UTILITY FEE FOR THE GRANTLINE 220 PROJECT

WHEREAS, this Council has received petitions and waivers from the owners of not less than 100% of the area of land proposed to be annexed into the Stormwater Utility Fee; and

WHEREAS, on March 21, 2022, the City Clerk caused a notice of the time and place of the hearing thereon and on the proposed annexation to the Stormwater Utility Fee to be published and such public hearing was opened on April 4, 2022; and

WHEREAS, the Council adopted Resolution 103-2014 approving a written report entitled, "Rate Analysis Report", dated September 4, 2014 (the "Written Report") prepared by Harris & Associates and filed with the City Clerk containing a description of each parcel of real property within the City to which the Stormwater Utility Fee is applicable (collectively, the "Identified Parcels") and the amount of the Stormwater Utility Fee for each such Identified Parcel for Fiscal Year 2014-15. The Written Report is on file in the office of the City Clerk and is available for public inspection; and

WHEREAS, this Council adopted a resolution which established Procedures for the Conduct of a Protest Hearing and Balloting Relating to a Stormwater Utility Fee (the “Procedures”) and set the date of public hearing; and

WHEREAS, this Council has conducted the public hearing and all interested persons have been afforded the opportunity to be heard, and the City Council has considered all protests against the annexation to the Stormwater Utility Fee; and

WHEREAS, there was no majority protest of the owner of the Identified Parcel subject to the Proposed Stormwater Utility Fee.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA as follows:

1. The foregoing recitals are true and correct.

2. The City Clerk is hereby authorized and directed to mail a property owner ballot in accordance with law and the Procedures.

3. The date of the ballot tabulation shall be May 10, 2022 at 1:30 pm.

4. The date of the Council Meeting to report the results of the mailed ballot election shall be June 6, 2022 at 5:30 or as soon thereafter as the matter may be heard.

5. The City Council hereby designates Elizabeth Sparkman, Community Development Director,

telephone number, (916) 851-8714 to answer inquiries regarding the ballot proceedings and procedural or technical matters.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on 4th day of April 2022 by the following vote:

AYES:

NOES:

ABSENT:

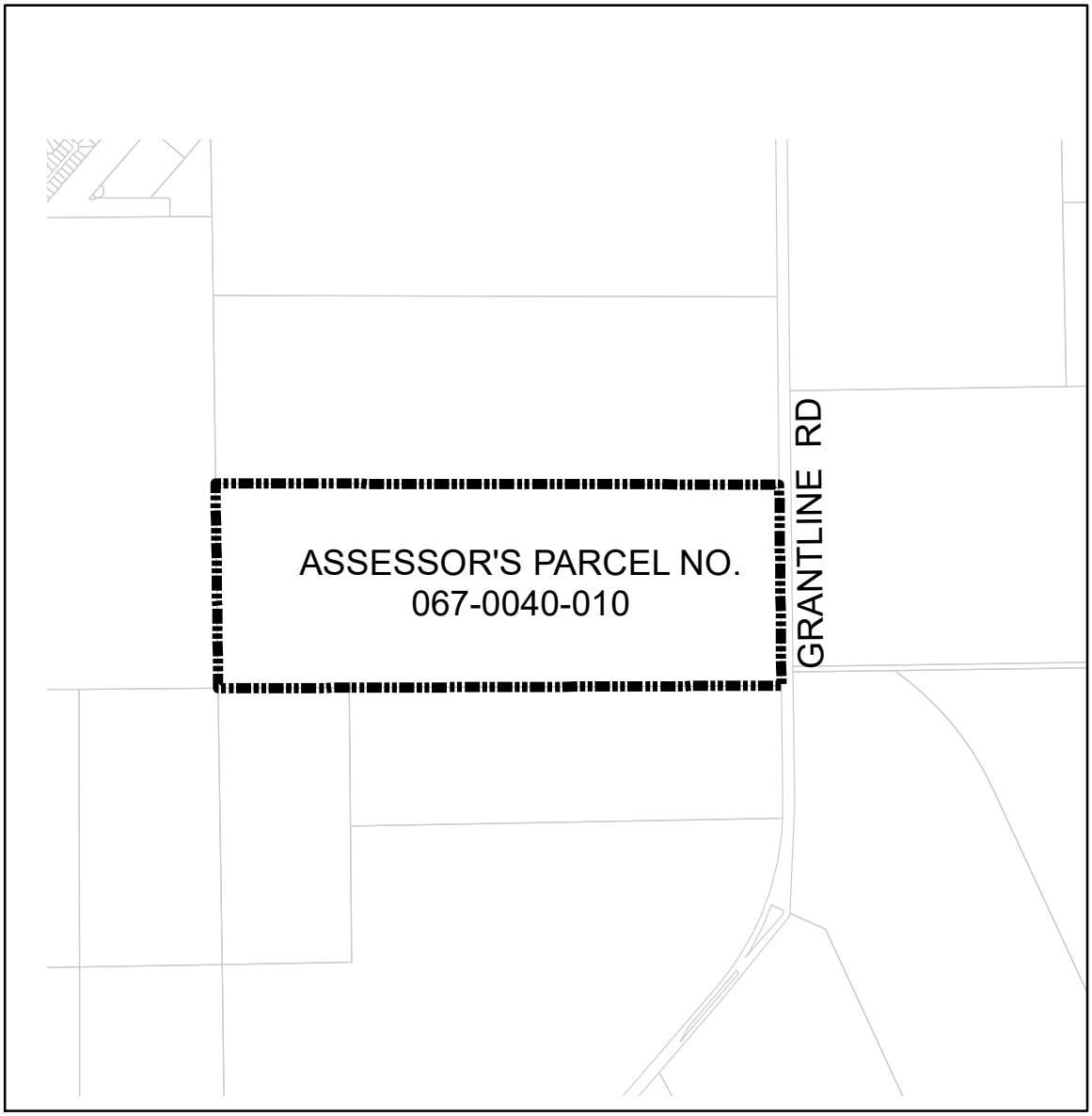
ABSTAIN:

ATTEST:

_____
Donald Terry, Mayor

_____
Stacy Leitner, CMC
City Clerk

CITY OF RANCHO CORDOVA
STORMWATER UTILITY FEE AREA
ANNEXATION 34
GRANTLINE 220 PROJECT



Legend

Annexation Boundary

Harris & Associates℠

SHAPING THE FUTURE ONE PROJECT AT A TIME℠

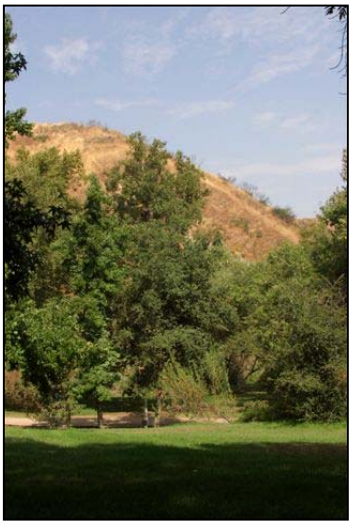
Rate Analysis Report

for the

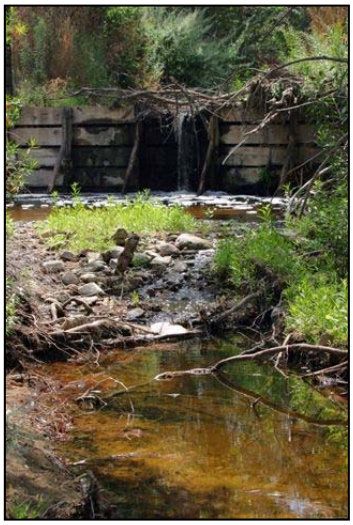
Stormwater Utility Fee

For the

City of Rancho Cordova







August 7, 2014

Introduction

The City of Rancho Cordova (City) is detaching from the County of Sacramento fee and is creating their own Stormwater Utility Fee, which is being levied per the California Health and Safety Code Section 5471 et seq.

The purpose of this Rate Analysis Report is to:

- Review the Stormwater Utility Fee and improvements to be funded.
- Review the requirements of Article XIIID of the State Constitution (Proposition 218) relating to requirements for apportioning the costs associated with the City's stormwater runoff system.
- Analyze and recommend an appropriate rate structure and provide estimated rates based on cost data information provided by the City.

Proposition 218 Requirements

This fee must comply with the provisions of Article XIIID of the California Constitution (Proposition 218). Section 6 of Proposition 218 has the following requirements for all "new, extended, imposed or increased" fees and charges:

1) "Revenues derived from the fee or charge shall not exceed the funds required to provide the property-related service."

2) "Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed."

3) "The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel."

4) "No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question. Fees or charges based on potential or future use of service are not permitted. Standby charges, whether characterized as charges or assessments, shall be classified as assessments and shall not be imposed without compliance with [the assessment section of this code]."

5) "No fee or charge may be imposed for general governmental services including, but not limited to, police, fire, ambulance or library services where the service is available to the public at large in substantially the same manner as it is to property owners."

Background Information

In accordance with the Federal Clean Water Act of 1972, the United States Environmental Protection Agency (EPA) is required to establish regulations setting forth National Pollution Discharge Elimination System (NPDES) permit standards. The enactment of 1987 amendments to the Federal Clean Water Act (Act) of 1972 imposes permit requirements for discharge of storm waters. The Act allows the EPA to delegate its NPDES permitting authority to states with an approved environmental regulatory program. The State of California is one of the delegated states.

The responsibility for implementing various NPDES permits in the State of California has been delegated to the State Water Resources Control Board (SWRCB). The SWRCB administers NPDES authority through its nine Regional Boards. As an NPDES permittee, the City is required to manage stormwater pollution within its jurisdiction.

In order to provide for the safety of the residents of the City and protect property in the City from the damage associated with flooding and to meet the requirements of the NPDES permit, it is necessary to design, construct, operate, maintain, improve and replace storm drainage facilities which collect storm and surface water runoff and convey and treat such runoff in a safe manner to an acceptable point of discharge. It is also necessary to inspect, monitor, and take enforcement action related to illegal dumping, and illicit discharges. In order to properly fund such facilities and activities, the City has determined that it is necessary to impose on all developing properties in Rancho Cordova a user charge for storm drainage service.

Based on the 2030 General Plan and current specific plan areas, Rancho Cordova is expected to develop as shown in Table 1 below. The proposed boundary for the stormwater utility is shown in Appendix A.

Table 1 – Land Use

	Land Use/ Zoning Description	Total Acres	Total Units
Residential:			
LDR	SF (2.1-6.0 DU/AC)	2,635	13,156
	MD (6.1-12 DU/AC)	322	2,524
MDR	MD (6.1-18.0 DU/AC)	1,852	13,231
	MD (14.0-29.9 DU/AC)	60	885
HDR	HD (18.1-40.0 DU/AC)	192	4,372
	HD (30+ DU/AC)	30	825
	Residential Total	**5,090**	**34,993**
Non-Residential:			
VC	Village Commercial	202	
LTC	Local Town Center	134	
RTC	Regional Town Center	172	
BP	Business Park	158	
MP	Industrial Park	283	
Education:			
HS/MS	High School/Middle School	356	
MS	Middle School	20	
ES	Elementary School	102	
Open Space & Public:			
CP	Community Park	313	
P/QP	Public/Quasi Public	37	
NP	Neighborhood Park	194	
SWD	Storm Water Detention	186	
WP	Wetland Preserve	745	
DP	Drainage Parkway	270	
PR	Private Recreation	63	
OS	Open Space	168	
OS/P	Open Space/Preserve	279	
LC	Landscape Corridors	123	
GB	Green Belts	54	
ROW	Right-of-way	596	
BR/WP	Reservoir / Wetland Preserve	528	
S	Sewer Lift Station / Utility Substa	14	
	Vacant (unknown dev plan)	595	
	Total Non-residential	5,590	
	Total Residential & Non-Res	**10,680**	

A more detailed land use table by development area is shown in Appendix D.

This development is expected to require significant stormwater drainage and flood control facilities. Based on the development area and improvements that were required in four (4) recent developments

within the County of Sacramento, Table 2 summarizes the improvements that are expected once development is complete.

Table 2 – Expected Improvements

Infrastructure Type	Quantity	
Inlets	6,400	LF
Manholes	4,460	LF
66" Pipe	3,950	LF
60" Pipe	10,280	LF
54" Pipe	11,140	LF
48" Pipe	10,210	LF
42" Pipe	28,620	LF
36" Pipe	42,420	LF
30" Pipe	51,050	LF
27" Pipe	540	LF
24" Pipe	91,960	LF
21" Pipe	2,230	LF
18" Pipe	100,300	LF
15" Pipe	101,300	LF
12" Pipe	529,890	0
10" Pipe	4,170	0
Creeks and Channels	80	AC
Basins	320	AC

Services Funded

Expenditures from the revenue generated from the Stormwater Utility Fee are intended to comply with the requirements set forth in the NPDES permit. The activities and services funded by this fee include, but are not limited to:

1. Administration and oversight of the requirements set forth in the NPDES permit to City departments, developments, and local agencies.
2. Respond to and investigate incidents of illicit discharges and illegal connections to the storm drain system.
3. Periodically inspect facilities for proper handling of materials, chemicals, pollutants, garbage, waste, and debris and prevent any discharges to the storm drain system.
4. Regularly clean and maintain catch basins, the flowline, and storm drainage facilities.
5. Installation and maintenance of water quality devices required to keep pollutants out of the storm drain system.
6. Discourage illegal dumping or discharge of pollutants into the storm drain system by stenciling all City-owned catch basins with a "No Dumping" message.
7. Augment public education and outreach programs in regards to the proper use and function of the storm drainage system and the receiving waters.

8. Develop programs to promote, publicize, and facilitate public reporting of illicit discharges to the storm drain system.

9. Encourage the proper disposal of household hazardous waste (HHW) to prevent the improper disposal to the storm drain system or to the sewer system.

10. Discourage the improper disposal of litter, garden clippings, leaves, and pet waste into the street or the storm drain system.

11. Capital replacement of storm drainage and flood control improvements at the end of the expected useful life for such improvements.

Rate Structure Analysis

Section 6.b of Article XIIID of the State Constitution (Proposition 218) states that:

> "The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel."
>
> and
>
> "No fee or charge may be imposed for a service unless that service is actually used by, or immediately available to, the owner of the property in question."

By definition, all properties that shed stormwater into the City's stormwater drainage system use, or are served by, the City's stormwater drainage system. The amount of use attributed to each parcel is measurable by the amount of storm runoff contributed by the property, which is directly proportional to the amount of impervious area on a parcel (such as buildings and concrete). The more impervious area on a property, the more storm runoff the property generates, the more demand placed on the storm drain system.

The amount each parcel uses the stormwater drainage system is computed by the following formula:

(Parcel Area) x (Impervious Percentage) = Drainage Units

The typical percent impervious (% Impervious) for land uses in the City, have been applied for the purposes of estimating the runoff generated by each property. These are shown in Appendix B.

The more Drainage Units a parcel has, the more storm run-off it generates, and the more it uses and impacts the stormwater drainage system.

It is standard practice to relate other land uses to a developed single family residential (SFR) parcel, instead of working exclusively with drainage units. The median size of a SFR parcel will be approximately 0.16 acre. Therefore, it makes sense to relate all parcels to this median residential property. The runoff from a 0.16-acre SFR parcel is set equal to one Drainage Measurement Unit (DMU) and this base DMU is calculated as follows:

(0.16 acres of area) x 50% = 0.0800 Impervious Area = 1 DMU

Single Family Residential Parcels

As a SFR property increases in size over the median parcel size, the typical percentage of impervious area decreases, as shown in Appendix B. Conversely, as a SFR parcel decreases in size below the median parcel size, the typical percentage of impervious area increases, and such increase is typically proportional to the decrease in size. Therefore, SFR properties are separated into five (5) groups. The median parcel area for each group was used and their DMUs are calculated as follows:

SFR Category	DMU/ Formula
SFR1 – SFR parcels 0.16 acres or less	1.00 DMU
SFR2 – SFR parcels 0.17 - 0.25 acres	1.10 DMUs
SFR3 – SFR parcels 0.26 – 0.33 acres	1.175 DMUs
SFR4 – SFR parcels 0.34 – 0.50 acres	1.25 DMUs
SFR5 – SFR parcels greater than 0.50 acres	$1.25 + \frac{[(\text{acres} - 0.50) \times 5\%]}{0.0800} = \text{DMUs}$

Multi-Family Residential Parcels

Multi-Family Residential (MFR) units (including condominiums) are split into categories by the density, or number of dwelling units per acre (DU/Ac) as follows:

MFR Category	Density	% Impervious
MFR1 - High Density	Greater than 18 DU/Ac	75%
MFR 2 - Med Density	10 – 18 DU/Ac	70%

$$\frac{\text{Acreage} \times \%\text{Impervious}}{0.0800} = \text{DMUs}$$

Condominium unit parcel areas are calculated by dividing the total area of the condominium complex (which includes the common area) by the number of condominium units, and the total imperviousness of the entire complex is attributed to each individual condo parcel in the complex. (This divides the runoff of the entire complex to each of the individual units.) Because these condominium common areas are taken into consideration in this manner, they are exempt from the charge.

Non- Residential Parcels

All non-residential parcel DMUs will be based on the impervious area (runoff coefficient) table shown in Exhibit B, using the following formula:

$$\frac{\text{Acreage} \times \%\text{Impervious}}{0.0800} = \text{DMUs}$$

All parcels draining into Rancho Cordova Stormwater Utility Fee-maintained drainage infrastructure are proposed to be charged the same user fee rate per DMU for stormwater runoff treatment. The Rancho Cordova Stormwater Utility Fee is proposed in perpetuity.

For the purposes of this report, City-maintained drainage infrastructure includes streets, pipes, inlets, outlets, and natural drainage courses. Parcels related to these types of property uses are exempt from the runoff charge, as they are part of the infrastructure being funded. Also exempt from the runoff charge is Caltrans right-of-way, because Caltrans handles its own runoff under a separate NPDES permit.

Drainage units may be adjusted based on appeal from the property owner. See the Appeals Process below.

Table 3, below, provides a preliminary summary of DMUs for the various land uses in Rancho Cordova.

Table 3 – Drainage Measurement Unit Summary Table

Landuse Description	Number of Units	Total Area (acres)	Impervious Area (acres)	DMUs
SINGLE FAMILY RESIDENTIAL (SFR1)	15,107	2,028		15,107.00
SINGLE FAMILY RESIDENTIAL (SFR2)	13,790	2,776		15,169.00
SINGLE FAMILY RESIDENTIAL (SFR3)	14	4		16.45
SINGLE FAMILY RESIDENTIAL (SFR4)				-
SINGLE FAMILY RESIDENTIAL (SFR5)				-
MULTI-FAMILY RESIDENTIAL (MFR1)	6,082	282		2,639.06
COMMERCIAL		666	499	6,240.00
INDUSTRIAL		283	226	2,830.00
SCHOOLS		478	239	2,985.00
PRIVATE RECREATION		63	16	195.31
PARKS/GREENBELTS		561	140	1,752.47
PUBLIC		51	15	190.13
TOTAL	**34,993**	**7,190**		**47,124**

Cost Estimate

Table 4 below shows the estimated costs to maintain infrastructure in the developing areas. Unit costs for maintenance were derived using budget information provided by the County, since the County currently maintains the storm drainage system. The budget information is shown in Appendix C.

Table 4 – Estimated Costs

	Estimated Quantity	Unit	Cost ($/unit)	Frequency	Total Cost/Year
Maintenance Costs:					
Trunk Lines (larger than 24") - TV Lines	158210	LF	$ 7.50	25 years	$ 47,463.00
Drainage Lines 10"-24" Cleaning	829850	LF	$ 3.00	10 years	$ 248,955.00
Drainage Lines 10"-24" TV	829850	LF	$ 7.50	25 years	$ 248,955.00
Creek and Channel Maintenance and Repair	65070	LF	$ 0.75	1 year	$ 49,009.83
Pipe Repairs	998920	LF	$ 0.45	1 year	$ 451,380.43
Creeks and Channels Mowing	80	AC	$6,825	1 year	$ 546,000.00
Creeks and Channels Herbicides	80	AC	$680	1 year	$ 54,400.00
HydroMod Basin Maintenance	320	AC	$4,830	1 year	$ 1,545,600.00
Basin De-silt	320	AC	$1,000	25 years	$ 12,800.00
Basins Herbicides	320	AC	$761	1 year	$ 243,360.00
Replacement Costs:					
Inlets	6400	EA	$2,000	75 years	$170,667
Manholes	4460	EA	$3,500	75 years	$208,133
66" Pipe	3950	LF	$550	100 years	$21,725
60" Pipe	10280	LF	$475	100 years	$48,830
54" Pipe	11140	LF	$400	100 years	$44,560
48" Pipe	10210	LF	$325	100 years	$33,183
42" Pipe	28620	LF	$275	100 years	$78,705
36" Pipe	42420	LF	$225	100 years	$95,445
30" Pipe	51050	LF	$175	100 years	$89,338
27" Pipe	540	LF	$150	100 years	$810
24" Pipe	91960	LF	$125	100 years	$114,950
21" Pipe	2230	LF	$115	100 years	$2,565
18" Pipe	100300	LF	$105	100 years	$105,315
15" Pipe	101300	LF	$95	100 years	$96,235
12" Pipe	529890	LF	$85	100 years	$450,407
10" Pipe	4170	LF	$75	100 years	$3,128

Total:	$5,011,917
Annual Fee Administration:	$45,000
Operating (Cash Flow) Reserve (10% of Maintenance Costs):	$344,792
Estimated Total:	**$5,401,709**

Fee Calculations

The estimated annual costs for the proposed storm drain improvements are $5,401,709 as shown in Table 4 above. Dividing that by the total number of proposed DMU's in Rancho Cordova (47,124), the maximum estimated annual Stormwater Utility Fee rate is **$114.63 per DMU**.

This would be the proposed maximum fee rate for fiscal year 2014-15. The maximum rate will be increased each subsequent Fiscal Year by the annual change in the Consumer Price Index (CPI), during the preceding year, for All Urban Consumers, for the San Francisco-Oakland-San Jose areas, published by the United States Department of Labor, Bureau of Labor Statistics (or a reasonably equivalent index should the stated index be discontinued, as determined by the Director of Public Works).

The actual rate to be levied each year will be as approved by the City at a public hearing, after they consider an Annual Fee Report outlining the estimated annual costs of the program for the ensuing fiscal year.

Table 5 provides sample fee calculations for various land uses and parcel sizes.

Table 5 – Sample Calculations

Land Use Description	Total Area (acres)	Impervious Area (acres)	DMUs	Sample Fee
SINGLE FAMILY RESIDENTIAL (SFR1)	0.16		1.000	$ 114.63
SINGLE FAMILY RESIDENTIAL (SFR2)	0.22		1.100	$ 126.09
SINGLE FAMILY RESIDENTIAL (SFR3)	0.30		1.175	$ 134.69
SINGLE FAMILY RESIDENTIAL (SFR4)	0.40		1.250	$ 143.28
SINGLE FAMILY RESIDENTIAL (SFR5)	1.00		1.563	$ 179.10
MULTI-FAMILY RESIDENTIAL (MFR1)	5.00	3.75	46.875	$ 5,373.12
COMMERCIAL[1]	1.00	0.75	9.375	$ 1,074.62
INDUSTRIAL	1.00	0.80	10.000	$ 1,146.27
SCHOOLS	5.00	2.50	31.250	$ 3,582.08
PRIVATE RECREATION	1.00	0.25	3.125	$ 358.21
PARKS/GREENBELTS	2.00	0.20	2.500	$ 286.57
PUBLIC	2.00	0.60	7.500	$ 859.70

[1] Average of Downtown and Neighborhood Commercial as shown in Appendix B

The Preliminary Charge Roll, which is a listing of each parcel to be charged a fee and its proposed maximum fee for FY 2014-15, is on file in the office of the City Clerk.

Appeals Process

If a property owner disagrees with the calculation of his or her fee, based on the parcel area and estimated impervious percentage assigned to the property, then the property owner may appeal the calculation as follows:

1. Property owner must provide written documentation explaining the reason why the charge should be changed. This documentation must include:
    a. The name, phone number, mailing address, and email address, if available, of the property owner.
    b. The Assessor's Parcel Number (APN) of the property in question.
2. If additional documentation is required or insufficient documentation was submitted, a representative of the Department of Public Works (Staff) will notify the property owner in writing.
3. Once Staff has determined that sufficient documentation has been submitted, Staff will perform the initial review. Staff will notify the property owner in writing within four (4) weeks from the time sufficient documentation was submitted as to whether or not the fee amount will be changed.
    a. If the determination is to change the fee amount, then the new fee amount will be documented within the City's fee database.

b. If the determination is that the fee should not be changed, the property owner can appeal Staff's decision to the Director of Public Works. The appeal must be made in writing and returned no later than four (4) weeks from the date of mailing of Staff's initial review decision. The Director of Public Works will notify the property owner in writing within four (4) weeks from the date of receipt of the appeal as to whether or not the fee amount will be changed.

   If the owner of any parcel shall have reason to feel that the computation of the DMU for his/her parcel is not correct, that person may file an appeal with the Director of Public Works in the manner prescribed by the Director of Public Works. The Director of Public Works will consider all data provided by the appellant and shall render a decision in writing. The decision of the Director of Public Works will be final with respect to City action on the appeal.

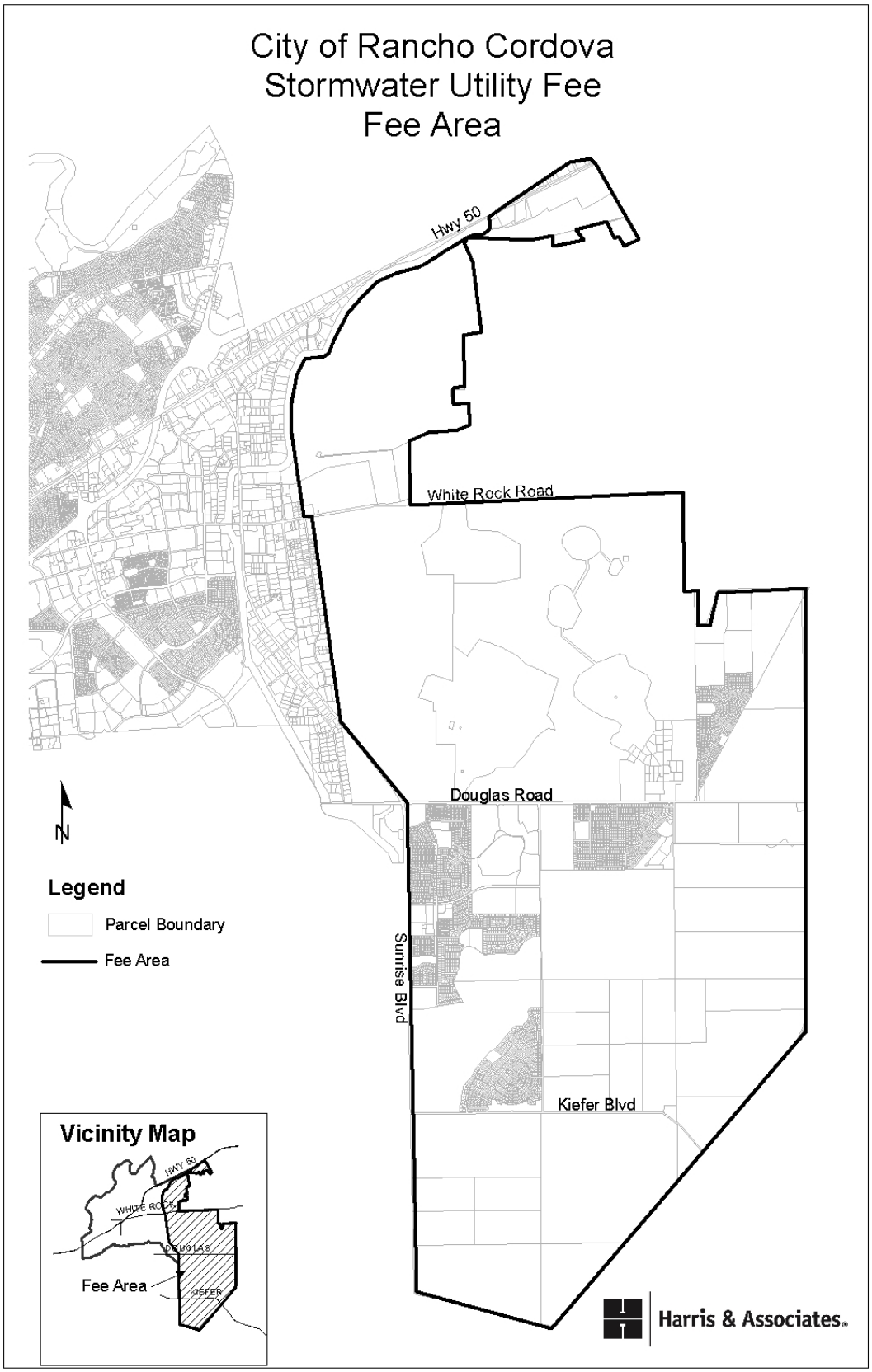
Appeals will be accepted annually up until June 30 for inclusion on the following fiscal year's property tax roll submittal. However, if an appeal is granted by Staff or the Director of Public Works that does not permit inclusion for the following fiscal year's property tax roll submittal, a reimbursement will be provided to the property owner by the City.

Respectfully submitted:

Harris & Associates

Dennis A. Anderson
Senior Project Manager

APPENDIX A


City of Rancho Cordova
Stormwater Utility Fee
Fee Area
Hwy 50
White Rock Road
Douglas Road
Sunrise Blvd
Kiefer Blvd
N
Legend
Parcel Boundary
Fee Area
Vicinity Map
HWY 50
WHITE ROCK
DOUGLAS
KIEFER
Fee Area
Harris & Associates

APPENDIX B

Runoff Coefficient

Land Use		Impervious
Single Family Residential	less than 0.166 acres	50%
Single Family Residential	0.166 acres to 0.250 acres	40%
Single Family Residential	0.251 acres to 0.330 acres	30%
Single Family Residential	0.331 acres to 0.500 acres	25%
Single Family Residential	Over 0.500 acres (excluding the first 0.500 acres)	5%
High-Density Residential (including Apartments and Mobile Home Parks)		75%
Condominiums		70%
Commercial Downtown Areas[1]		80%
Commercial Neighborhood Areas		70%
Industrial		80%
Schools		50%
Parks		25%
Greenbelts		10%

Footnotes:

[1] City of Rancho Cordova Municipal Code Chapter 15.

Sources:

1. Yolo County City/County Drainage Manual, February 2010.
2. Stormwater Quality Design Manual for the Sacramento and South Placer Regions, May 2007.

Appendix C

Cost Information

County of Sacramento/City of Rancho Cordova
Current Storm Drain Maintenance Costs

Pipe Repair Costs

Budget Classification		Repair Type	Actual Expenditures for FY 11/12	FY 13/14 Budget
County North	OCUO	Drain Line Upgrade or Repair	$ 630,912.90	$ 630,912.90
	OFFO	Fence Repair	$ 19,343.41	$ 19,343.41
	OHKO	Inlet Outfall Repair	$ 455,724.02	$ 455,724.02
	OMSO	Erosion Control	$ 26,189.60	$ 26,189.60
	OY8O	Manhole Repair	$ 63,362.44	$ 63,362.44
	RAMP	ADA Compliant Ramp	$ -	$ -
	Overhead	36.39%	$ 435,026.56	$ 435,026.56
		Total Budget=	**$ 1,630,558.93**	**$ 1,630,558.93**
County South	OCUO	Drain Line Upgrade or Repair	$ 105,317.24	$ 105,317.24
	OFFO	Fence Repair	$ 35,802.01	$ 35,802.01
	OHKO	Inlet Outfall Repair	$ 214,660.90	$ 214,660.90
	OMSO	Erosion Control	$ -	$ -
	OY8O	Manhole Repair	$ 8,585.40	$ 8,585.40
	RAMP	ADA Compliant Ramp	$ -	$ -
	Overhead	23.51%	$ 85,667.45	$ 85,667.45
		Total Budget=	**$ 450,033.00**	**$ 450,033.00**
Rancho Cordova	OCUO	Drain Line Upgrade or Repair	$ 222,809.74	$ 229,850.53
	OFFO	Fence Repair	$ 26,326.14	$ 27,158.05
	OHKO	Inlet Outfall Repair	$ 224,877.26	$ 231,983.38
	OMSO	Erosion Control	$ -	$ -
	OY8O	Manhole Repair	$ 4,498.84	$ 4,641.00
	RAMP	ADA Compliant Ramp	$ -	$ -
	Overhead	23.51%	$ 112,504.88	$ 116,060.03
		Total Budget=	**$ 591,016.86**	**$ 609,692.99**
Total LF of Pipes				
		County	7,865,755	7,865,755
		Rancho Cordova	1,349,271	1,349,271
Cost/LF of pipe for Repairs				
		County	**$ 0.26**	**$ 0.26**
		Rancho	**$ 0.44**	**$ 0.45**

* Costs were increased for 12/13 based on comparing actual expenditures in 11/12 with actual expenditures in 12/13.

County of Sacramento/City of Rancho Cordova
Current Storm Drain Maintenance Costs

Creek and Channel Cleaning

Budget Classification		Repair Type	Actual Expenditures FY 11/12	FY 13/14 Budget
County	OCCO	Inspect Channels	$ 149,684.06	$ 149,684.06
	ODSO	Clean, Inspect trach Racks and Box Culverts	$ 203,337.83	$ 203,337.83
	OF8O	Sandbag Distribution	$ 5,184.60	$ 5,184.60
	OFCO	Drainage Response	$ 82,451.66	$ 82,451.66
	OFDO	Concrete Channel Cleaning Bobcat	$ 552,150.54	$ 552,150.54
	OHWO	Vegetation Removal County Forces		
	OJZO	Clean and Inspect Outfall Structures	$ 191,840.84	$ 191,840.84
	OLCO	Access Road Maintenance	$ -	$ -
	OLDO	Mowing		
	OMPO	Expose Pipe End Mechanically	$ 2,720.90	$ 2,720.90
	OMRO	Channel Cleaning Mechanical	$ 49,087.50	$ 49,087.50
	OORC	Rodent Control	$ 32,695.06	$ 32,695.06
	OTVD	Tree Removal	$ 79,463.44	$ 79,463.44
	OVDO	Dry Spoil Dumping	$ 8,137.34	$ 8,137.34
	OWCO	Weed Control Chemical		
	Overhead	36.39%	$ 493,691.29	$ 493,691.29
		Total Budget=	**$ 1,850,445**	**$ 1,850,445**
County	OCCO	Inspect Channels	$ 1,797.15	$ 1,797.15
	ODSO	Clean, Inspect trach Racks and Box Culverts	$ -	$ -
	OF8O	Sandbag Distribution	$ 2,464.80	$ 2,464.80
	OFCO	Drainage Response	$ 1,293.11	$ 1,293.11
	OFDO	Concrete Channel Cleaning Bobcat	$ 144,294.58	$ 144,294.58
	OHWO	Vegetation Removal County Forces		
	OJZO	Clean and Inspect Outfall Structures	$ -	$ -
	OLCO	Access Road Maintenance	$ 57,345.54	$ 57,345.54
	OLDO	Mowing		
	OMPO	Expose Pipe End Mechanically	$ -	$ -
	OMRO	Channel Cleaning Mechanical	$ 32,935.75	$ 32,935.75
	OORC	Rodent Control	$ -	$ -
	OTVD	Tree Removal	$ 214,736.46	$ 214,736.46
	OVDO	Dry Spoil Dumping	$ -	$ -

Budget Classification		Repair Type	Actual Expenditures FY 11/12	FY 13/14 Budget
	OWCO	Weed Control Chemical		
	Overhead	23.51%	$ 106,945.71	$ 106,945.71
		Total Budget=	**$ 561,813**	**$ 561,813**
Rancho Cordova	OCCO	Inspect Channels	$ -	$ -
	ODSO	Clean, Inspect trach Racks and Box Culverts	$ 413.30	$ 413.30
	OF8O	Sandbag Distribution	$ -	$ -
	OFCO	Drainage Response	$ -	$ -
	OFDO	Concrete Channel Cleaning Bobcat	$ 65,905.39	$ 65,905.39
	OHWO	Vegetation Removal County Forces		
	OJZO	Clean and Inspect Outfall Structures	$ -	$ -
	OLCO	Access Road Maintenance	$ -	$ -
	OLDO	Mowing		
	OMPO	Expose Pipe End Mechanically	$ -	$ -
	OMRO	Channel Cleaning Mechanical	$ -	$ -
	OORC	Rodent Control	$ -	$ -
	OTVD	Tree Removal	$ -	$ -
	OVDO	Dry Spoil Dumping	$ -	$ -
	OWCO	Weed Control Chemical		
	Overhead	23.51%	$ 15,592.45	$ 15,592.45
		Total Budget=	**$ 81,911**	**$ 81,911**
Total LF of Channels				
		Rancho Cordova (unlined)	74,628	74,628
		Rancho Cordova (lined)	37,562	37,562
		Total Rancho Cordova	**112,189**	**112,189**
		County (unlined)	1,677,768	1,677,768
		County (lined)	216,153	216,153
		Total County	**1,893,920**	**1,893,920**
Cost/LF of Channel for Cleaning:				
		County	**$ 1.27**	**$ 1.27**
		Rancho	**$ 0.73**	**$ 0.75**

* Costs were increased for 12/13 based on comparing actual expenditures in 11/12 with actual expenditures in 12/13.

County of Sacramento/City of Rancho Cordova
Current Storm Drain Maintenance Costs

Activity	Size/Location	Cost/LF	Frequency	Notes
Pipes/Channels				
Hydro Cleaning	6"-24"	$ 3.00	10 years	
TV Lines	all	$ 7.50	25 years	
Creek and Channel Cleaning	Rancho	$ 0.75	each year	Within SWU Budget
	Sac County	$ 1.27		
Pump Mainteance	Covered within budget			Per County Staff Assume no pumps in new areas.
Repairs	2 crews year round	SWU funds support this		
Hydromod Basin		**cost/ac**		
Maintenance		$ 4,830.00	annul	see detailed estimate
Herbicides		$ 325.00	2 x's/year	
Additional costs				
Pesticide Control Advisor		$ 20,000.00	annually	
Engineering admin support with regulatory agencies		10%	of maint costs/year	
Supervisors and managers		5%	of maint costs/year	

Hydromod Basin Maintenance

Basin Maintenance Costs	Cost per Acre
Trash Clean-up and Disposal (4 x's/year)	$ 1,200
Mowing (2 x's/year)	$ 200
Inspection 4 x's/year	$ 1,600
Erosion Repair	$ 800
Vegetation and Landscape Maintenance	$ 800
Sub-total	**$ 4,600**
Over-head Mark-up (5%)	$ 230
Total Cost	**$ 4,830**

Inspection Includes: Examine gates, fences and access ramp for damage and overgrown vegetation, check basin slopes for erosion, excess vegetation, debris and animal burros, check flow line for excess vegetation and sediment, check for eriosion at water line, large/floating debris, and excess vegetation. Check for debris, creacks and instructure, and erosion at inlets and outlets. Also check access control racks for debris and to snrue they are locked and secured. Check riprap at inlet weir

Appendix D

Detailed Land Use Data

ATTACHMENT 3

Storm Drain User Fee
City of Rancho Cordova
December 20, 2013

AC, Landuse & units derived from GIS/Aerials

		Arista Del Sol		Arboretum		Douglas 98		Douglas 103		Grantline 208		Montelena		Rio Del Oro		Suncreek		The Ranch (Sunridge)		Sunridge Lot J		Westborough		North Douglas II		Heritage Falls		Anatolia IV		Anatolia		Sunridge			
	Land Use/ Zoning Description	**AC**	**Units**	**AC**	**Units**	**AC**	**Units**	**AC**	**Units**	**AC**	**Units**	**AC 2012**	**Units 2012**	**AC**	**Units**	**AC 2013**	**Units 2012**	**AC 2013**	**Units 2012**	**Est.**	**Units 2013**	**AC**	**Units**	**AC**	**Units**	**AC**	**Units**	**AC**	**Units**	**GIS AC**	**GIS Units**	**GIS AC**	**GIS Units**	**Total Acres**	**Total Units**
Residential:																																			
LDR	SF (2.1-6.0 DU/AC)	35.3	176	144.8	698			3.7	14	44.7	276	71.4	388	1,518.5	7,593	179.4	899	142.3	694	35.8	179	347.2	1,580	17.70	153.00	72.20	303.00	21.60	203.00					2,635	13,156
	MD (6.1-12 DU/AC)															321.5	2,524																	322	2,524
MDR	MD (6.1-18.0 DU/AC)	83.8	556	290.0	2,334 [a]	94.2	528	28.2	287	42.8	227	54.4	402	256.0	2,048	43.7	286 [c]	105.4	685	17.5	192	146.8	1,389			92.10	525.00			450.8	2,831	146.4	941	1,852	13,231
	MD (14.0-29.9 DU/AC)			60.4	885																													60	885
HDR	HD (18.1-40.0 DU/AC)													98.0	1,960	44.2	980	12.2	378 *			30.4	922			6.80	132.00							192	4,372
	HD (30+ DU/AC)			29.5	825														* These may be Attached															30	825
	Residential Total	119.1	732	524.7	4,742	94.2	528	31.9	301	87.5	503	125.8	790	1,872.5	11,601	588.8	4,689	259.9	1,757	53.3	371	524.4	3,891	17.7	153	171	960	22	203	450.8	2,831	146.4	941	**5,090**	**34,993**
Non-Residential:																																			
VC	Village Commercial			16.9				19.5				16.6		20.0		22.0		13.5				93.3												202	
LTC	Local Town Center			30.4										20.0								83.5												134	
RTC	Regional Town Center			0.9										113.0		58.4																		172	
BP	Business Park	6.6		65.0										86.0																				158	
MP	Industrial Park													283.0																				283	
Education:																																			
HS/MS	High School/Middle School			72.6										78.0		110.9 [b]						94.0 [b]												356	
MS	Middle School													20.0																				20	
ES	Elementary School			21.2						10.6				54.0												5.50				10.8				102	
Open Space & Public:																																			
CP	Community Park	11.4		60.7						7.8				107.0		44.9		29.3				52.3												313	
P/QP	Public/Quasi Public			2.0								3.2		7.5		12.3						10.6								1.1				37	
NP	Neighborhood Park	3.1		3.8		8.2		5.2		3.4		20.8		67.5		17.0		8.6		6.4				0.71		17.20		3.70		21.2		7.0		194	
SWD	Storm Water Detention	4.0								15.0		9.6		39.0		53.5		24.3						4.00		17.40				9.5		9.6		186	
WP	Wetland Preserve	55.8						43.8		81.0		54.5		510.0																				745	
DP	Drainage Parkway													138.0		5.0						104.6				15.30						7.2		270	
PR	Private Recreation													54.0												4.20				4.3				63	
OS	Open Space			144.5										22.0										0.60		0.80								168	
OS/P	Open Space/Preserve													12.0		45.6		174.0				47.7												279	
LC	Landscape Corridors	1.1				2.8								82.0		19.2										2.70		1.30		13.4		0.7		123	
GB	Green Belts							2.6						51.0																				54	
ROW	Right-of-way	9.5		104.3				8.5		5.3		22.4		192.0		82.6		20.5		14.5		127.1				6.90		2.20						596	
BR/WP	Reservoir / Wetland Preserve			302.8												205.1								19.80										528	
S	Sewer Lift Station / Utility Substation			1.0																										6.6		6.4		14	
	Vacant (unknown dev plan)																													567.4		27.3		595	
	Total Non-residential	91.5		826.1		11.0		79.6		123.1		127.1		1,956.0		676.5		270.2		20.9		613.1		25.1	0.0	70.0	0.0	7.2	0.0	634.3		58.2		5,590	
	Total Residential & Non-Res	210.6	732.0	1,350.8	4,742.0	105.2	528.0	111.5	301.0	210.6	503.0	252.9	790.0	3,828.5	11,601.0	1,265.3	4,689.0	530.1	1,757.0	74.1	371.0	1,137.5	3,891.0	42.8	153.0	241.1	960.0	28.8	203.0	1,085.1	2,831.0	204.6	941.0	**10,680**	

Notes: All data is from recent plans received in Nov 2013 unless specified otherwise.

[a] Arboretum has 2 MD residential classifications. The first line is for 6.1-13.9 DU/AC (instead of 6.1-18)

[b] Acreage for all schools

[c] Suncreek has 2 MD residential classifications. The second line is for 12.1-18 DU/AC (instead of 6.1-18)

Includes April 2012 Amendment

AC estimated

Stormwater Utility Fee

Sample of the Stormwater Utility Fees for Fiscal Year 2021-2022:

Table 1

Land Use Description	Total Area (acres)	Sample Fee
Single Family Residential (SFR1)	0.16	$137.62
Single Family Residential (SFR2)	0.22	$151.38
Single Family Residential (SFR3)	0.30	$161.72
Single Family Residential (SFR4)	0.40	$172.02
Single Family Residential (SFR5)	1.00	$172.02
Multi-Family Residential (MFR1)	5.00	$1,204.35
Commercial	1.00	$1,290.39
Industrial	1.00	$1,376.43
Schools	5.00	$860.26
Private Recreation	1.00	$430.11
Parks/Greenbelts	2.00	$172.02
Public Property (with structures)	2.00	$516.14

MEMORANDUM

ITEM 11.1.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: Darcy Goulart, Planning Manager

SUBJECT: **GENERAL PLAN AMENDMENTS TO THE SAFETY ELEMENT FOR THE MULTI-JURISDICTIONAL LOCAL HAZARD MITIGATION PLAN AND THE LAND USE AND CIRCULATION ELEMENT FOR THE PRESERVE PROJECT; CERTIFICATION OF AN ENVIRONMENTAL IMPACT REPORT, A REZONE, DEVELOPMENT AGREEMENT, AND TENTATIVE SUBDIVISION MAP FOR THE PRESERVE PROJECT DD9835**

PRESERVE PROPERTY OWNERS:		
Grantline Rd. LLC 3001 I Street, Suite 300 Sacramento, CA 95816	David B Whitlow Family 2005 Trust 12525 Douglas Road Rancho Cordova, CA 95742	TDW Enterprises LP 3001 I Street, Suite 300 Sacramento, CA 95816
David/Alaina Divine 1985 Revocable Trust 9636 Clos Du Lac Circle Loomis, CA 95650		
PRESERVE APPLICANT/DEVELOPER: Winn Communities 3001 I Street, Ste 300 Sacramento, CA 95816		

PROJECT:	The Preserve applicant is seeking approval of the Preserve project, which includes 439 single family residential lots and various park, open space and preserve parcels on 279 acres.
FILE:	DD9835
LOCATION:	The Preserve project is 279-acres west of Grant Line Road, north of Douglas Road, just north of the North Douglas Subdivision. The General Plan Amendment to the Safety Element applies city-wide
APN:	073-0010-010 & 011 and 072-0300-001, 002, 005, and 008
ZONING	Agricultural 80 (AG-80) and Industrial Reserve (IR)

RECOMMENDATION

1. Adopt a Resolution Certifying The Preserve Environmental Impact Report and adopt the Findings of Fact and Statement of Overriding Considerations and Mitigation Monitoring Report Program and;

2. Adopt a Resolution approving a General Plan Amendment with associated exhibits, subject to the findings contained in the Resolution; and
3. Introduce and waive first reading of an Ordinance adopting the Rezone with associated exhibit, subject to the findings contained in the Ordinance; and
4. Adopt a Resolution approving a Tentative Subdivision Map with associated exhibits, subject to the findings contained in the Resolution; and
5. Introduce and waive first reading of an Ordinance adopting the Development Agreement for The Preserve Project, subject to the findings contained in the Ordinance.

RESULT OF RECOMMENDED ACTION

Adoption of the above-referenced resolutions and ordinances would permit development of The Preserve project and allow the applicant to submit for final maps and necessary improvement plans and building permits to begin construction of the proposed project and associated infrastructure. Additionally, approval of the General Plan Amendment would amend the Safety Element to include a link to the current (2021-2026) Multi-Jurisdictional Local Hazard Mitigation Plan, which was adopted on March 7, 2022.

SITE CHARACTERISTICS AND LOCATION

Currently, the 279.3-acre project site contains two single-family residences and associated outbuildings on the southern portion of the site, within parcels 072-0300-002 and -005. An orchard is located within the northeastern portion of the site within parcel 073-0010-011, and a third single-family residence and associated outbuildings are located on APN 072-0300-008. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal drainage corridors and wetlands. Additionally, Morrison Creek runs northeast to southwest through the project site.

Surrounding land uses include the Camden at Somerset Ranch residential subdivision directly to the south, vacant agricultural lands under a Williamson Act contract and a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, industrial/open space to the north, and vacant land approved for the development of the Rio Del Oro residential community immediately adjacent to the west.

Figure 1: Site Location

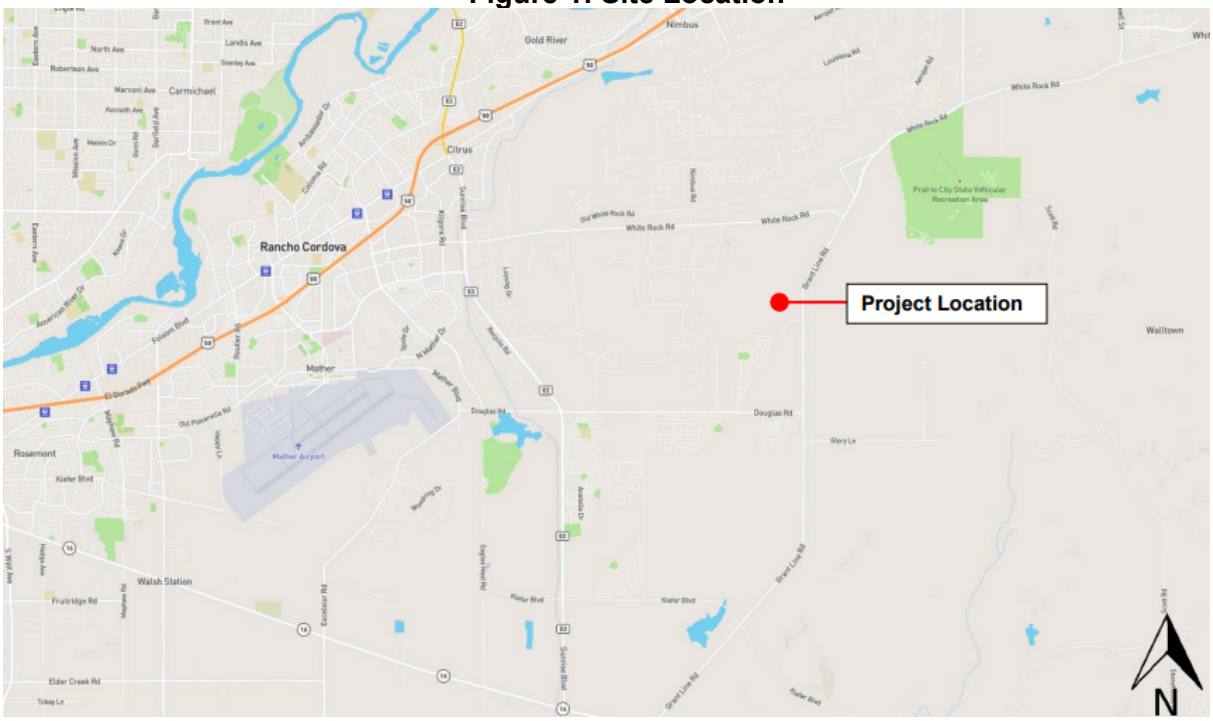
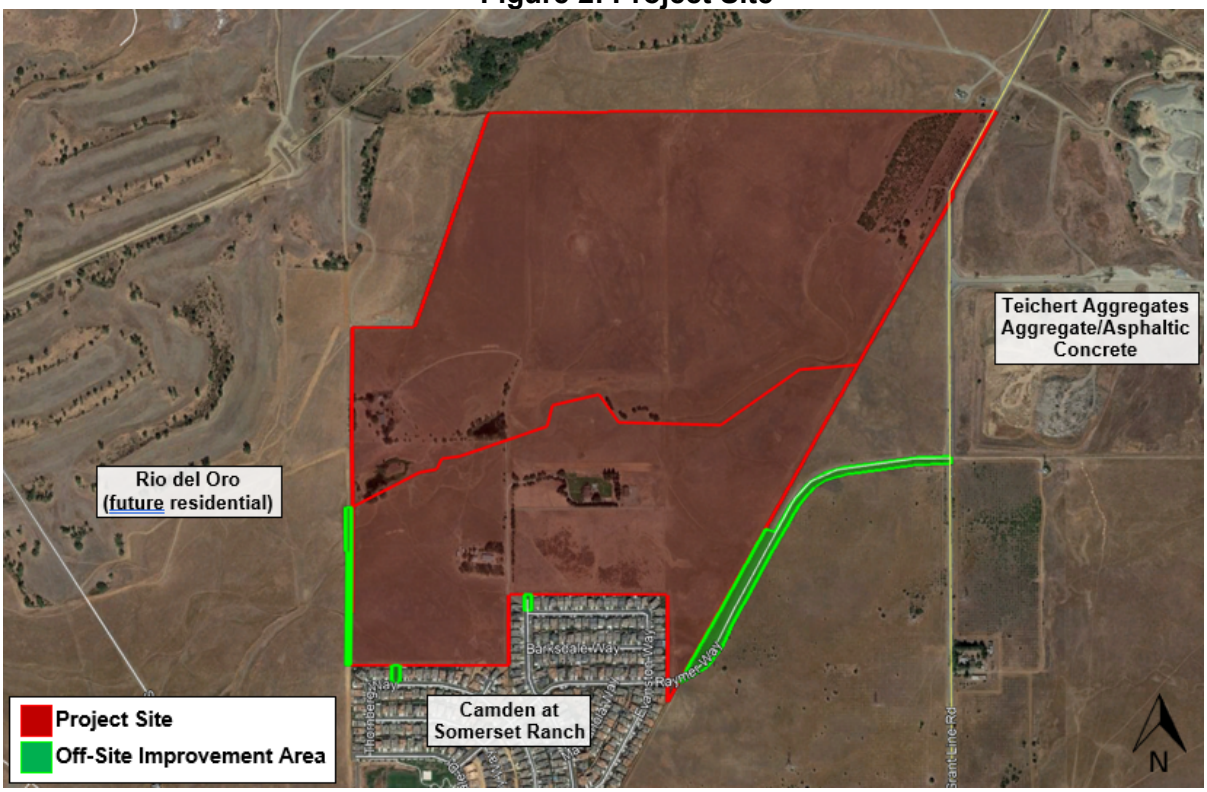


Figure 2: Project Site



GENERAL PLAN AMENDMENT (GPA)

Pursuant to Government Code Section 65358 (b), a General Plan shall be amended no more than four times in a calendar year. Each amendment may include more than one change to the General Plan. Therefore, the Resolution to amend the General Plan, includes amendments to three elements; one initiated by the City and two initiated by the Preserve project applicant.

Safety Element

On March 7, 2022, the City Council adopted the 2021-2026 Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). The LHMP assess natural hazards of concern to Sacramento County and Cities within; evaluates risk to life safety, public health, property, and the environment; and evaluates mitigation measures to reduce these risks and vulnerabilities, minimize losses, and increase community resilience. The LHMP Goals are as follows;

Goal 1: Minimize risk and vulnerability of the Sacramento County and Cities to the impacts of natural hazards and protect lives and reduce damages and losses to property, public health, economy, and the environment.
Goal 2: Improve public outreach, awareness, education, and preparedness for all hazards to minimize hazard related losses.
Goal 3: Improve the capabilities of the community to mitigate losses and to be prepared for, respond to, and recover from a disaster event.
Goal 4: Maintain FEMA Eligibility/Position Jurisdictions for Grant Funding.

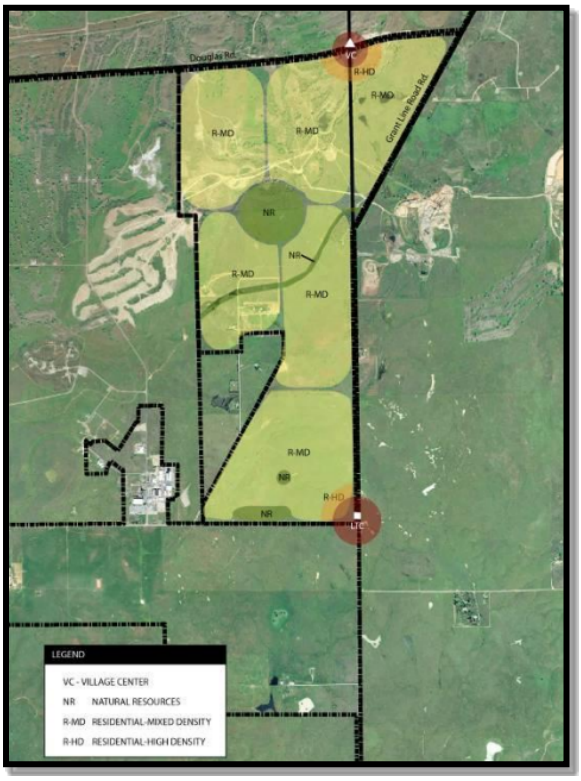
The LHMP includes an Action Plan for each City within Sacramento County that identifies actions to be completed under the current Hazard Mitigation Plan. Adoption of the current (2021-2026) Multi-Jurisdictional Local Hazard Mitigation Plan into the City of Rancho Cordova General Plan Safety Element includes revised language and a link to the current (2021-2026) LHMP as follows (Attachment 9):

“The Local Hazard Mitigation Plan (LHMP) for Sacramento County planning area was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and followed FEMA’s 2011 Local Hazard Mitigation Plan guidance. The LHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short and long-term strategies, involve planning, policy changes, programs, projects, and other activities. (Add a link to the LHMP)”

Land Use and Circulation Element

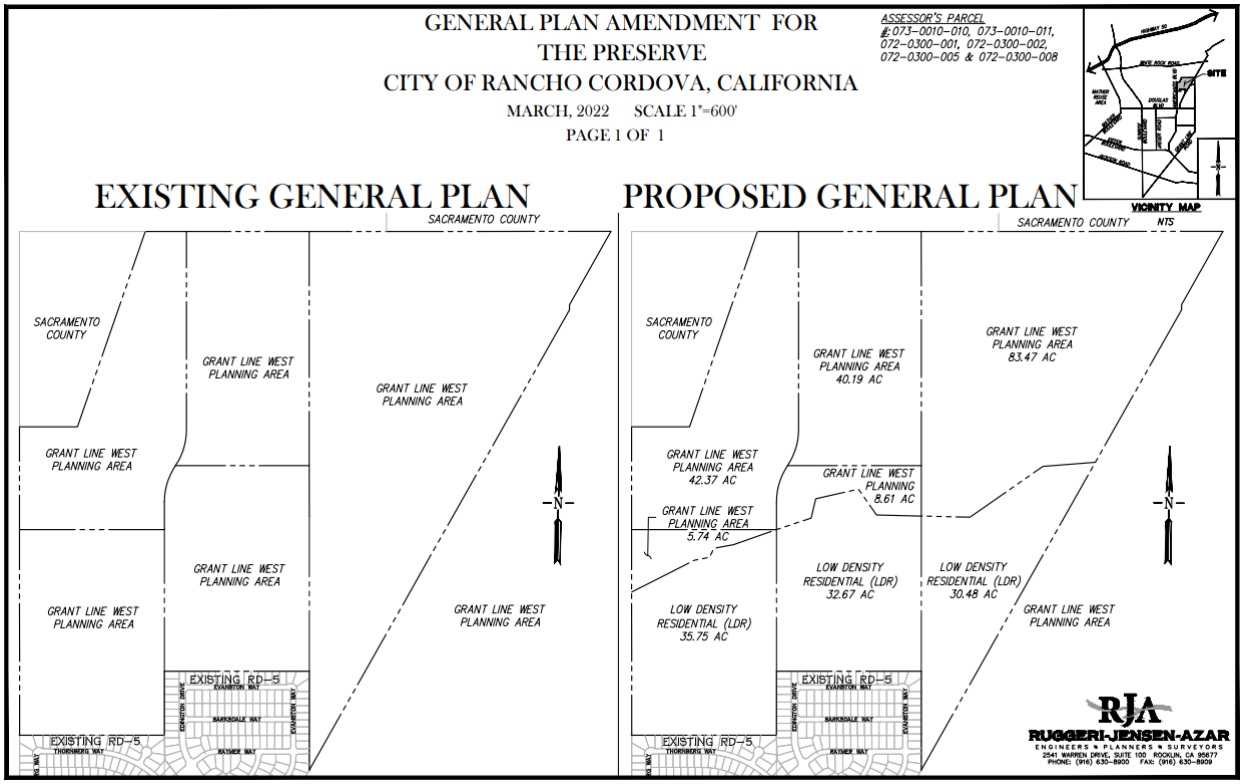
The Preserve project site is located within the Grant Line West Planning Area of the General Plan. At the time the General Plan was adopted, anticipated land use for the area included Residential Mixed Density and Natural Resources but was given a land use designation of Grant Line West Planning Area. The plan area has various environmental constraints such as mine tailings, Vernal pools and Morrison Creek. These features provide various challenges to developing the area to the conceptual plan shown in **Figure 3**, below.

Figure 3: Conceptual Land Plan



The Applicant is requesting a GPA to change the land use designation of a portion of the property from Grant Line West Planning Area to Low Density Residential **Figure 4**. This land use designation would result in lesser density than what was contemplated in the conceptual plan. However, it provides the greatest preservation of the various natural resources and habitats that were listed above.

Figure 4: General Plan Amendment Exhibit



The Applicant is also requesting that a portion of Centennial Drive that runs through the project site, as depicted in **Figure 5,** outlined by a red circle, be removed from Figure C-1 of the General Plan Circulation Element. The Centennial Drive Memorandum (included in Attachment 4 Draft EIR) prepared for the proposed project assessed the potential impacts that could result from modifying Centennial Drive, a future roadway included in the General Plan and depicted in the Circulation Element's Circulation Plan with Roadway System and Sizing map. If constructed as portrayed, Centennial Drive would consist of four lanes and run through the project site in an east-west direction. As noted in the Circulation Element, the City's future circulation system, of which Centennial Drive would be a part, has been designed to create a complete transportation network that links together all parts of the City's Planning Area through a variety of interconnected and overlapping modes and travel options. However, as part of the requested GPA, the stretch of Centennial Drive previously planned to run through the project site would not be constructed. Therefore, the Centennial Drive Memorandum evaluates the potential effects of eliminating the portion of Centennial Drive that would have run through the project site.

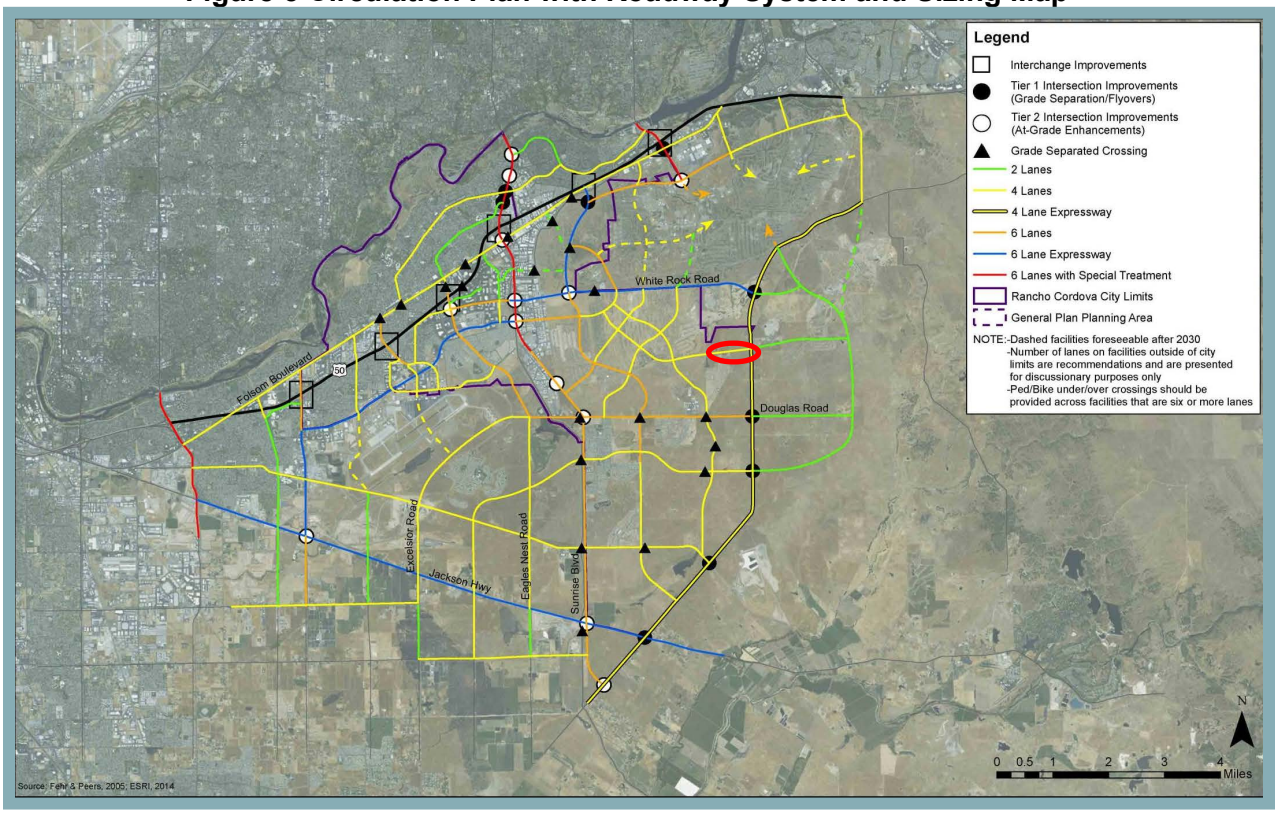
As part of analyzing the effects of modifying Centennial Drive, two versions of the City's Travel Demand Model (TDM) were run to predict 2035 traffic volumes along project vicinity roadways, the first version of the model without modifications to Centennial Drive and the second version with the stretch of Centennial Drive between Americanos Boulevard and Grant Line Road removed. The resulting volumes from the two model runs were compared. The largest daily volume increase as a result of modifying Centennial Drive would occur along White Rock Road, immediately west of Grant Line Road. The largest daily volume decrease would be along the stretch of Centennial Drive that would still be constructed, immediately west of Americanos Boulevard. Minimal daily volume differences would occur along Sunrise Boulevard and Rancho

Cordova Parkway. Volumes are expected to fluctuate between increasing by almost 6,500 daily vehicles along White Rock Road to decreasing by 6,600 daily vehicles along Centennial Drive. However, the Centennial Drive Memorandum concluded the change in daily volumes would not noticeably affect operations along any roadway segment.

Additionally, the Centennial Drive Memorandum included an LOS (Level of Service) analysis for select roadways in the vicinity of Centennial Drive, both with and without the Centennial Drive connection between Americanos Boulevard and Grant Line Road. Based on the evaluation, roadways are expected to operate in accordance with applicable LOS standards, both with and without the Centennial Drive connection between Americanos Boulevard and Grant Line Road. Furthermore, the Centennial Drive Memorandum included a follow-up LOS analysis of previously analyzed roadway segments from the Rio del Oro Specific Plan EIR to determine to what extent modifying Centennial Drive would affect the previously evaluated roadways' consistency with applicable LOS standards. The evaluation included analysis of SR 16. Based on the results, the modification of Centennial Drive would not result in any new inconsistencies with applicable LOS standards from what was previously identified in the Rio del Oro Specific Plan EIR.

The removal of Centennial Drive from the project site as depicted on Figure C-1 of the General Plan was thoroughly analyzed in the EIR. It was concluded that the removal of this section of Centennial Drive would not create inconsistencies with the roadway network LOS standards.

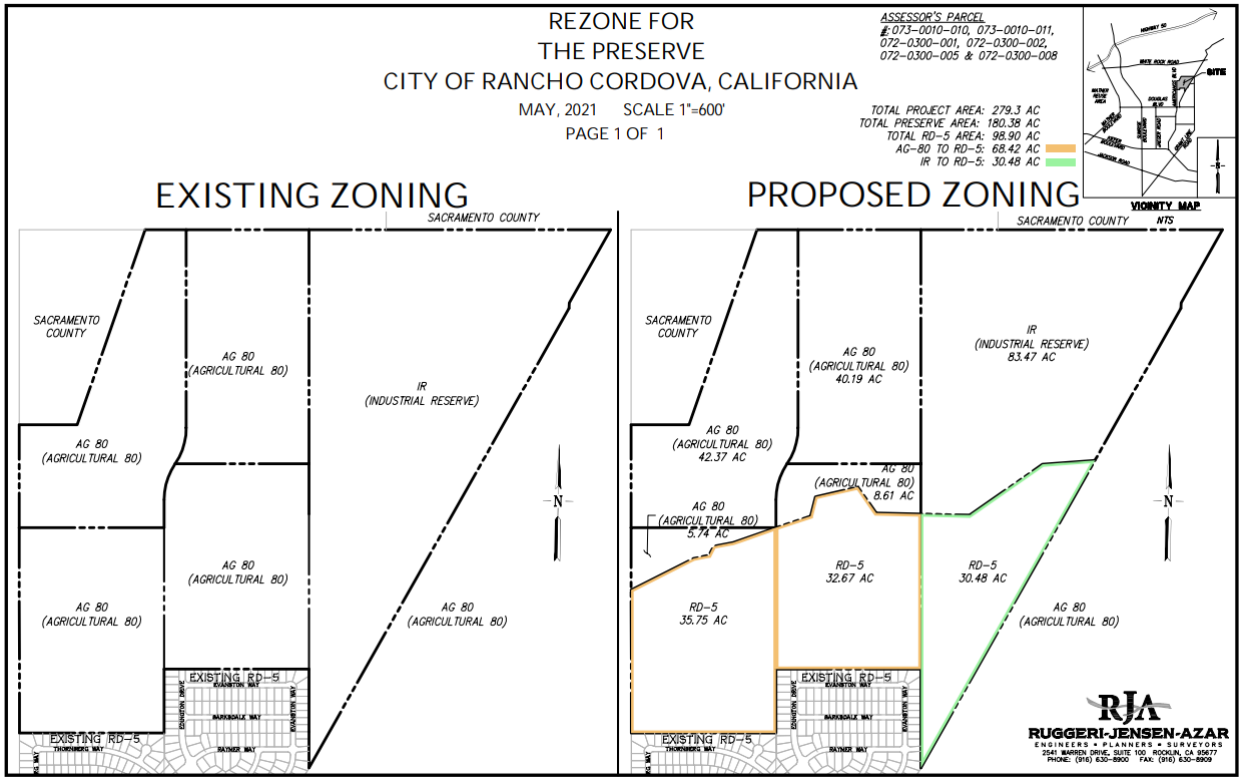
Figure 5 Circulation Plan with Roadway System and Sizing Map



REZONE (RZ)

The Applicant is seeking a rezone of 98.9 acres of the property from Agriculture 80 (AG-80) to RD-5. Per the Rancho Cordova Municipal Code (RCMC), this zone allows for residential development in the 4.1 to 5.0 dwelling units per acre range. The RD-5 zone is also a compatible zone with the General Plan land use designation of Low Density Residential. The residential development to the south has a zoning of RD-5 as well, with a similar overall density as the proposed project.

Figure 6: Rezone Exhibit



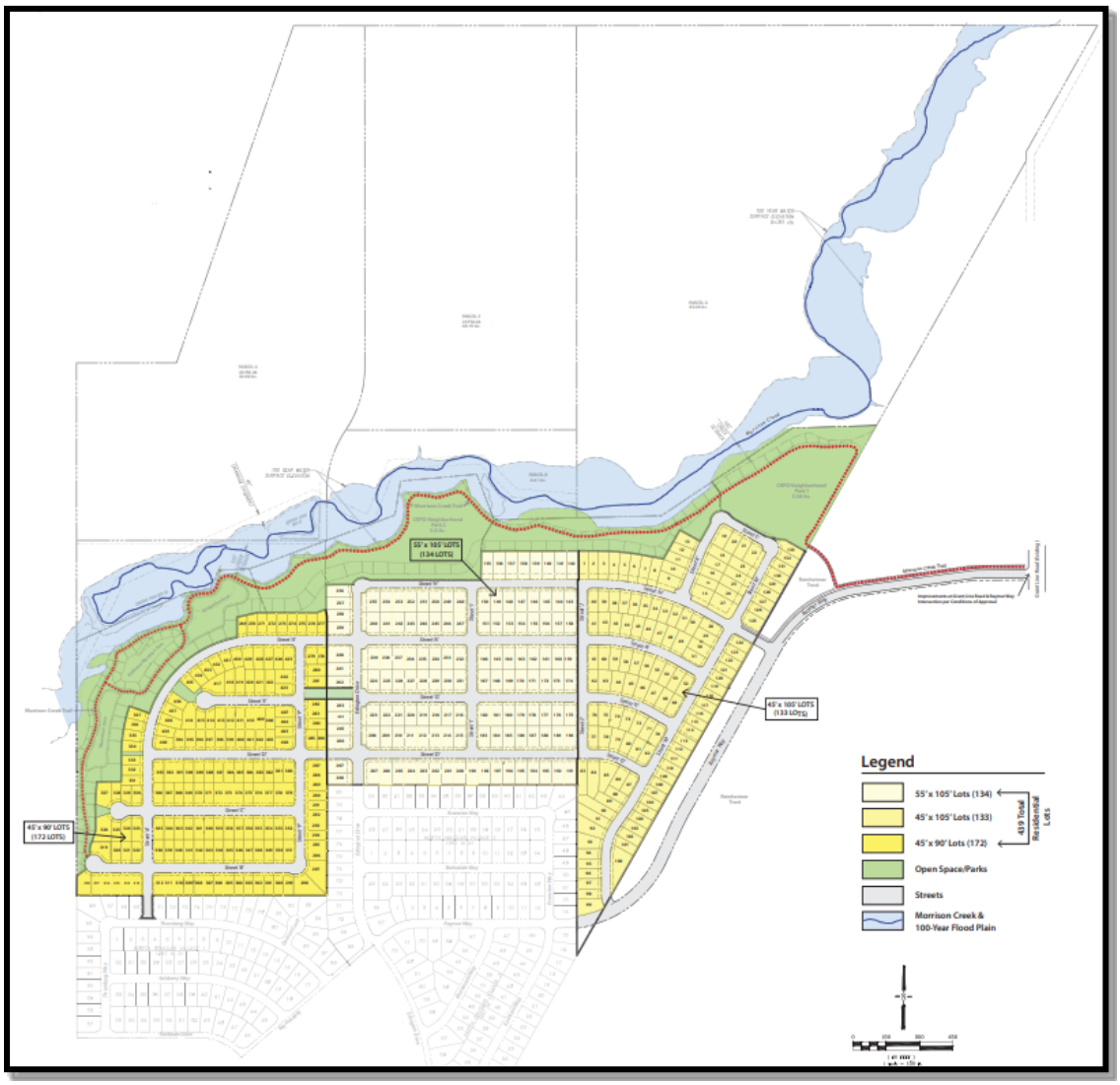
TENTATIVE SUBDIVISION MAP

The proposed project would include a Tentative Subdivision Map to subdivide the project site into 439 single-family residential lots as depicted in **Figure 7** (Attachment 13). Lots on the western portion of the project site would generally be a minimum of 4,050 square feet (sf) (45 feet x 90 feet), with larger lots at the corners of each block. Lots in the central portion of the site would generally be a minimum of 5,775 sf (55 feet x 105 feet) with corner lots and others being larger, and lots in the eastern portion of the site would generally be a minimum of 4,725 sf (45 feet x 105 feet). Overall, the proposed lots would range from a minimum of 4,050 sf to a maximum of 9,416 sf. The units would include either an 18- or 20-foot setback from the front of the residence to the street. In addition, the proposed project would establish a 100-foot setback from Morrison Creek and would include park areas, community spaces, green infrastructure, and open space/preserve areas.

The proposed project would include two entry points from Raymer Way, as well as connection to the existing Camden at Somerset Ranch subdivision by way of an extension of Edington

Drive and a new connection to Thornburg Way. The streets would be between 32 and 50-feet wide (curb to curb), which would allow for emergency vehicle access within the minimum 20-foot street width requirement. The internal circulation system would consist of several drive aisles with circulation to all residences within the subdivision. The proposed project would include construction of five-foot attached sidewalks and three-foot gutters along the majority of internal streets. Six-foot margins along the sides of each street would allow for street parking.

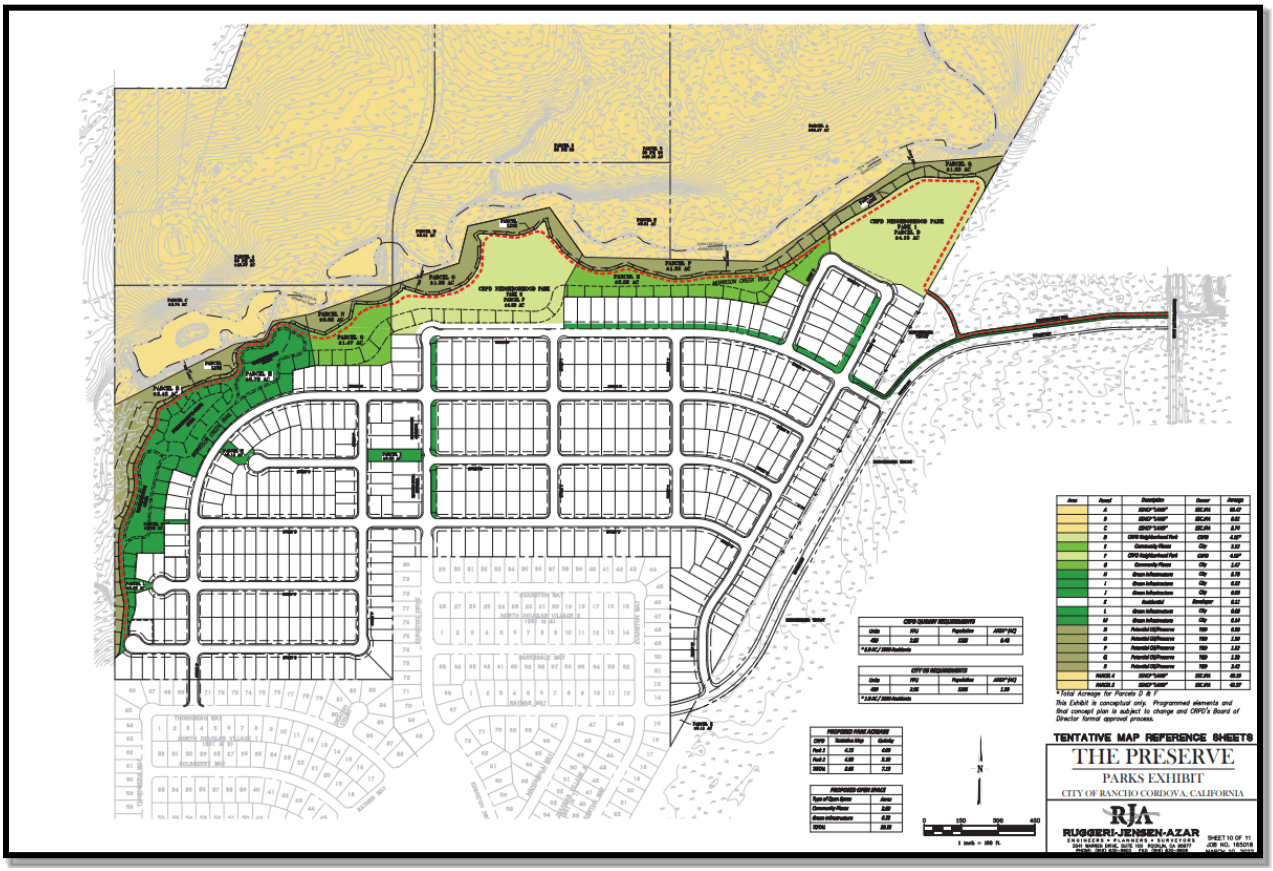
Figure 7: Tentative Subdivision Map



As part of the proposed project, 185.3 acres of undeveloped land on the northern parcels would be retained as open space/preserve. Morrison Creek would be undisturbed within the open space area. The proposed project would include measures to protect the vegetation and habitats within the 185.3 acres of open space/preserve, including but not limited to, preserve fencing and long-term funding for management of the preserve. The areas designated for open space would maintain the IR or AG-80 zoning designation and would not require an amendment.

A total of 8.65 acres are planned for two park areas located at the northern end of the development area. The parks would be managed by the Cordova Recreation and Park District. An additional 10.22 acres of land would be designated Community Spaces and Green Infrastructure, **Figure 8.**

Figure 8: Open Space and Park Exhibit



DEVELOPMENT AGREEMENT

The request also includes the adoption of a Development Agreement (DA) for the Preserve Project Under California law, development agreements grant ("vest") developers the right to proceed with development of a project in compliance with the local laws, terms, standards and requirements that are in effect at the time the City enters into the development agreement, subject to the limitations in the development agreement. Provided below is a summary of some of the more critical sections associated with the development of The Preserve Project. (Attachment 16 Development Agreement and Appendices).

- 4.1 Term – The terms of the DA is 20-years, with the option to extend by the Parties.
- 5.10 CC&R Enforcement and Property Maintenance Code – The Developer will record CC&R's against the individual parcels. These CC&R's include the City as a third-party beneficiary which gives the City the ability to enforce the duties and covenants if need be.
- 6 Park Development Fee and Community Places Fee Obligations – This section outlines the dedication and fee obligations of the Developer in regards to parks and community places.

- 8 Affordable Housing Plan – outlines the Developer's obligation for affordable housing which in this case is $6,264.48 per single-family dwelling. They do not have an acreage obligation due to the gross acres of the project site being less than 100 acres.

ENVIRONMENTAL

The City of Rancho Cordova circulated an Initial Study and Notice of Preparation (NOP) of an EIR for the Project on October 5, 2019 to trustee agencies, the State Clearinghouse (SCH # 2019100515), and the public. A scoping meeting was held on November 13, 2019 in the City of Rancho Cordova. Those present at the scoping meeting included representatives from the following: the City of Rancho Cordova, Raney Planning and Management, and the Project applicant team.

The City of Rancho Cordova published a public Notice of Availability (NOA) for the Draft EIR on November 9, 2021, inviting comment from the general public, agencies, organizations, and other interested parties. The NOA was filed with the State Clearinghouse and the County Clerk and was published in a local newspaper pursuant to the public noticing requirements of CEQA. The Draft EIR was available for public review and comment from November 9, 2021 to December 27, 2021.

The Draft EIR contains a description of the Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less-than-significant impact and provides analysis of potentially significant and significant impacts. The Draft EIR identified the following impacts that were determined to be significant and unavoidable, which requires the City Council to adopt a Statement of Overriding Considerations (Attachment 2):

Transportation

- Impact 4.10-2 Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Existing Plus Project conditions?

The City received eight comments on the Draft EIR during the public review period. Responses to each individual comment letter were prepared, and are available in Chapter 2, Responses to Comments, of the Final EIR. The Final EIR comprises the Draft EIR together with one additional volume that includes the comments on the Draft EIR submitted by interested public agencies, organizations, and members of the public; written responses to the environmental issues raised in those comments; revisions to the text of the Draft EIR reflecting changes made in response to comments and other information; and other minor changes to the text of the Draft EIR. No new information was received that would required recirculation of the Draft EIR under CEQA Guidelines section 15088.5. Attachment 4 Draft EIR and Appendices and Attachment 5 Final EIR and Appendices.

Habitat Conservation Plan

The City has adopted the South Sacramento Habitat Conservation Plan (SSHCP) in order to mitigate impacts on protected natural resources through a coordinated regional approach, which provides a variety of biological and economic benefits. The project is within the boundaries of the SSHCP and the Developer has applied for a Habitat Conservation Plan (HCP) permit with

the City. The Developer will pay the City a per-acre fee for impacts on protected natural resources, based upon the methodology established by the SSHCP. Prior to issuance of the SSHCP permit by the City, the Developer will obtain and have all necessary permits (federal, state, regional and/or local) to ensure compliance with the adopted SSHCP.

RECOMMENDED MOTIONS

1. Adopt a Resolution (Attachment 1) Certifying The Preserve Environmental Impact Report and adopting the Findings of Fact and Statement of Overriding Considerations (Attachment 2) and Mitigation Monitoring Report Program (Attachment 3) and;
2. Adopt a Resolution (Attachment 6) approving a General Plan Amendment with associated exhibits, subject to the findings contained in the Resolution (Attachments 7 through 9); and
3. Introduce and waive first reading of an Ordinance adopting the Rezone (Attachment 10) with associated exhibit (Attachment 11), subject to the findings contained in the Ordinance; and
4. Adopt a Resolution (Attachment 12) approving a Tentative Subdivision Map with associated exhibits Attachments 13 and 14), subject to the findings contained in the Resolution; and
5. Introduce and waive first reading of an Ordinance (Attachment 15) adopting the Development Agreement (Attachment 16) for The Preserve Project, subject to the findings contained in the Ordinance.

ATTACHMENT(S)

1. Resolution CEQA
2. Exhibit A to the Resolution - CEQA Findings
3. Exhibit B to the Resolution - MMRP
4. Draft EIR w. Appendices
5. The Preserve Final EIR
6. Resolution General Plan
7. Exhibit A to the Resolution - General Plan Land Use Map
8. Exhibit B to the Resolution - Circulation Element Figure
9. Exhibit C to the Resolution - Safety Element
10. Ordinance Rezone
11. Exhibit A to the Ordinance - Rezone Exhibit
12. Resolution Tentative Subdivision Map
13. Exhibit A to the Resolution - Project Plans
14. Exhibit B to the Resolution - COA
15. DA Ordinance
16. Exhibit A to the Ordinance - DA and Exhibits

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2022

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, CERTIFYING THE ENVIRONMENTAL IMPACT REPORT AND ADOPTING ENVIRONMENTAL FINDINGS, A STATEMENT OF OVERRIDING CONSIDERATION AND MITIGATION MEASURES AND A MITIGATION MONITORING AND REPORTING PROGRAM UNDER CEQA FOR THE PRESERVE PROJECT APPROVALS DD9835

WHEREAS, The Preserve ("Project") includes subdivision of 279.3 acres to develop 440 single-family residences and associated parks, open space areas, and infrastructure to support the community. Of the 279.3 acres within the project site, 185.3 acres of currently undeveloped land on the northern parcels would remain as open space following development of the Project. A total of 8.65 acres are planned for two park areas located at the northern end of the development area, and an additional 9.77 acres of land would be designated Community Space. Finally, 0.45-acre of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to the surrounding parks. Off-site improvements could be required, such as utility connection or road development to the east of the site boundary, as well as along Raymer Way up to the intersection with Grant Line Road. Other off-site improvements could include expansion of the roadway or modifications to Morrison Creek; and

WHEREAS, the environmental review of The Preserve Project commenced with the release of the Notice of Preparation on October 25, 2019 to public agencies and interested parties for consultation on the scope of the EIR; and

WHEREAS, a Draft Environmental Impact Report ("Draft EIR") was released for a 45-day public and agency review on November 9, 2021. The Draft EIR assesses the potential environmental effects of implementation of the Project, identifies means to eliminate or reduce potential adverse impacts, and evaluates a reasonable range of alternatives to the Project; and

WHEREAS, the City received eight comments on the Draft EIR during the public review period. Responses to each individual comment letter were prepared, and are available in Chapter 2, Responses to Comments, of the Final EIR. The Final EIR comprises the Draft EIR together with one additional volume that includes the comments on the Draft EIR submitted by interested public agencies, organizations, and members of the public; written responses to the environmental issues raised in those comments; revisions to the text of the Draft EIR reflecting changes made in response to comments and other information; and other minor changes to the text of the Draft EIR. No new information was received that would required recirculation of the Draft EIR under CEQA Guidelines section 15088.5**.** The Final EIR is hereby incorporated in this document by reference; and

WHEREAS, on April 4, 2022, the City Council held a public hearing on the Final EIR and Project approvals; and

WHEREAS, the Final EIR identified several potentially significant impacts that will be reduced to a less than significant level with specific mitigation measures. Approval of the Project will therefore require adoption of mitigation findings and a Mitigation Monitoring and Reporting Program; and

WHEREAS, the Final EIR, and the City Council April 4, 2022 staff report, regarding the Draft EIR and Final EIR, including the analysis of the public comments, reflect the City's independent judgement and analysis; and

WHEREAS, the location and custodian of the Draft EIR and Final EIR and other documents that constitute the record of proceedings for the Project is the City of Rancho Cordova Planning Department, 2729 Prospect Park Drive, Rancho Cordova, CA 95670. The Draft EIR and Final EIR and documents relating to the Project are available for review in the City Planning Department.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL FO THE CITY OF RANCHO CORDVOA, does hereby resolve as follows:

1. The foregoing recitals are true and correct and made a part of this resolution.

2. The City Council has reviewed and considered the Draft EIR and Final EIR (collectively, "Final EIR") as well as the public comments and staff's analysis of the comments.

3. Based on its review of the foregoing documents, the City Council makes and adopts the following findings relating to the CEQA review for the Project prior to approving the Project:

A. The Final EIR has been completed in compliance with CEQA and the CEQA Guidelines.

B. The City Council has independently reviewed and considered the information contained in Final EIR, prior to making its decision on the proposed Project.

C. The Final EIR reflects the City Council's independent judgment and analysis on the potential environmental impacts of the proposed Project. The Final EIR provides information to the decision makers and the public on the environmental consequences of the proposed Project.

D. The Final EIR adequately describes the proposed Project, its significant environmental impacts, mitigation measures, and a reasonable range of alternatives to the proposed Project.

4. The City Council hereby adopts all findings required under CEQA regarding environmental impacts of the Project, mitigation measures and alternatives, adopts a Statement of Overriding Considerations, and adopts a Mitigation Monitoring and Reporting Program (Exhibit B) set forth in the CEQA Findings of Fact and Statement of Overriding Considerations attached hereto as (Exhibit A); and incorporated herein by reference, all in compliance with the requirements of CEQA.

Effective Date: This Resolution shall become effective immediately upon its passage and adoption.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 4th day of April, 2022 by following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Donald Terry, Mayor

ATTEST:

_____
Stacy Leitner, CMC
City Clerk

FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS

FOR

THE PRESERVE PROJECT

REQUIRED UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT
(PUBLIC RESOURCES CODE, SECTION 21000 ET SEQ)

The California Environmental Quality Act (CEQA) requires the City of Rancho Cordova (City), as the CEQA lead agency to: 1) make written findings when it approves a project for which an environmental impact report (EIR) was certified, and 2) identify overriding considerations for significant and unavoidable impacts identified in the EIR.

These findings explain how the City, as the lead agency, approached the significant and potentially significant impacts identified in the EIR prepared for The Preserve Project (Project). The statement of overriding considerations identifies economic, social, technological, and other benefits of the Project that override any significant environmental impacts that would result from the Project.

As required under CEQA, the Final EIR describes the Project, adverse environmental impacts of the Project, and mitigation measures and alternatives that would substantially reduce or avoid those impacts. The information and conclusions contained in the EIR reflect the City's independent judgment regarding the potential adverse environmental impacts of the Project.

The Final EIR (which includes the Draft EIR, comments on the Draft EIR, responses to comments on the Draft EIR, and revisions to the Draft EIR) for the Project, examined alternatives to the Project that were not chosen as part of the approved Project (Part C. of this document). References to the Draft EIR in this document refer to the Draft EIR, as modified by the Final EIR.

The Findings of Fact and Statement of Overriding Considerations set forth below ("Findings") are presented for adoption by the City Council (Council) as the City's findings under CEQA (Public Resources Code, §21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, § 15000 et seq.) relating to the Project. The Findings provide the written analysis and conclusions regarding the Project's environmental impacts, mitigation measures, alternatives to the Project, and the overriding considerations, which in this Council's view, justify approval of the Project, despite its environmental effects.

CERTIFICATION OF THE FINAL EIR

The City Council of the City of Rancho Cordova (the "City Council") certifies that it has been presented with the Final EIR and that it has reviewed and considered the information contained in the Final EIR prior to making the following findings.

Pursuant to CEQA Guidelines Section 15090 (Title 14 of the California Code of Regulations, Section 15090) the City Council certifies that the Final EIR has been completed in compliance with CEQA and the State CEQA Guidelines. The City Council certifies the Final EIR for the Project as described above.

The City Council further certifies that the Final EIR reflects its independent judgment and analysis.

FINDINGS

Having received, reviewed, and considered the Final EIR and other information in the record of proceedings, the City Council hereby adopts the following findings in compliance with CEQA and the CEQA Guidelines:

Part A: Findings regarding the environmental review process and the contents of the Final EIR.

Part B: Findings regarding the significant environmental impacts of the Project and the mitigation measures for those impacts identified in the Final EIR and adopted as conditions of approval.

Part C: Findings regarding the reasonableness of the range of alternatives evaluated in the Final EIR.

Part D: Statement of Overriding Considerations.

The City Council certifies that these findings are based on full appraisal of all viewpoints, including all comments received up to the date of adoption of these findings, concerning the environmental issues identified and discussed in the Final EIR. The City Council adopts the findings and the statements in Parts A, B, C, and D for the Project.

In addition to the findings regarding environmental impacts and mitigation measures, Part E, below, identifies the custodian and location of the record of proceedings, as required by CEQA.

Part F describes the Mitigation Monitoring and Reporting Program for the Project. As described in Part F, the City Council hereby adopts the Mitigation Monitoring and Reporting Program as set forth in Exhibit A to these findings.

Part A. Environmental Review Process

Notice of Preparation and Scoping Meeting

On October 25, 2019, the City issued a Notice of Preparation announcing the intended preparation of the Draft EIR and describing its proposed scope. The Notice of Preparation had a 30-day review period until November 25, 2019. The City held a public scoping meeting for the Draft EIR on November 13, 2019, in Rancho Cordova City Hall, for the purpose of informing the public and receiving comments on the scope of the

environmental analysis to be prepared for the Project. No comments from the public were received at the scoping meeting.

The City received eight comment letters during the comment period on the Notice of Preparation, from State, regional, and local agencies and organizations.

Preparation of the EIR

The City completed the Draft EIR for the Project and, beginning on November 9, 2021, the City made the Draft EIR available for review and comment. A notice of availability was published and the period for receipt of comments on the Draft EIR remained open for 45 days. Copies of the Draft EIR document were made for review on the CEQA website at https://ceqanet.opr.ca.gov/2019100515/3, and at the City's website at https://www.cityofranchocorodova.org/departments/community-development/planning/ planning-division-document-library. During the comment period, the City received eight comment letters, from a State agencies, groups, and a local resident.

The Final EIR was completed and available to commenting public agencies on or before April 1, 2022.

The Final EIR contains all of the comments received during the public comment period, together with written responses to significant environmental issues raised in those comments, which were prepared in accordance with CEQA and the CEQA Guidelines.

The City Council finds and determines that the Final EIR provides adequate, good faith, and reasoned responses to all comments raising significant environmental issues.

Absence of Significant New Information

CEQA Guidelines Section 15088.5 requires that a lead agency recirculate an EIR for further review and comment when significant new information is added to the EIR after public notice is given of the availability of a Draft EIR, but before certification of the Final EIR. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to implement. Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The Guidelines provide examples of significant new information under this standard, which include the following:

1. A new significant environmental impact that would result from the Project (or any alternative) or from a new mitigation measure proposed to be implemented.

2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the significant environmental impacts of the Project (or an alternative), but the Project's proponents decline to adopt it.

4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Having reviewed all the information in the record, the City Council finds that no significant new information has been added to the Final EIR since public notice was given of the availability of the Draft EIR. No new or substantial changes to the Draft EIR were proposed as a result of the public comment process. The Final EIR responds to comments and makes only minor technical changes, clarifications or additions to the Draft EIR. The minor changes, clarifications, or additions to the Draft EIR do not identify any new significant impacts or substantial increase in the severity of any environmental impacts, and do not include any new mitigation measures that would have a potentially significant impact. Therefore, the City Council finds that recirculation of the EIR is not required.

Differences of Opinion Regarding the Impacts of the Project

In making its determination to certify the Final EIR and to approve the Project, the City Council recognizes that a range of technical and scientific opinion exists with respect to certain environmental issues. The City Council acknowledges that it has acquired an understanding of the range of this technical and scientific opinion by its review of the Draft EIR, the comments received on the Draft EIR and the responses to those comments in the Final EIR, as well as testimony, letters, and reports regarding the Final EIR and its own experience and expertise in these environmental issues. The City Council acknowledges that it has reviewed and considered, as a whole, the evidence and analysis presented in the Draft EIR, the evidence and analysis presented in the comments on the Draft EIR, the evidence and analysis presented in the Final EIR, the information submitted on the Final EIR, and the reports prepared by the experts who prepared the EIR, by the City’s consultants, and by staff, addressing those comments. The City Council acknowledges that it has gained a comprehensive and well-rounded understanding of the environmental issues presented by the Project. The City Council acknowledges that in turn, this understanding has enabled the City Council to make its decisions after weighing and considering the various viewpoints on these important issues. The City Council accordingly certifies that its findings are based on full appraisal of all of the evidence contained in the Final EIR, as well as the evidence and other information in the record addressing the Final EIR.

Part B. Impacts and Mitigation Measures

The City Council acknowledges that these findings provide the written analysis and conclusions of the City Council regarding the environmental impacts of the Project and the mitigation measures identified by the Final EIR and adopted by the City Council as conditions of approval for the Project.

1. Significant or Potentially Significant Impacts Mitigated to a Less-Than-Significant Level.

The following significant and potentially significant environmental impacts of the Project, including cumulative impacts, are being mitigated to a less-than-significant level and are set out below. Pursuant to Section 21081(a)(1) of CEQA and Section 15091(a)(1) of the CEQA Guidelines, as to each such impact, the City Council, based on the evidence in the record before it, finds that changes or alterations incorporated into the Project by means of conditions or otherwise, mitigate, avoid or substantially lessen these significant or potentially significant environmental impacts of the Project to a less-than-significant level. The basis for the finding for each identified impact is set forth below.

Air Quality, Greenhouse Gas Emissions, and Energy

Impact 4.1-3 Would the Project expose sensitive receptors to substantial pollutant concentrations?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.1-3 *Prior to the initiation of any ground-disturbing activities, the project applicant shall ensure that all heavy-duty off-road diesel-powered equipment to be used during the grading phase of construction of the proposed project (including owned, leased, and subcontractor equipment) shall be CARB Tier 4 or cleaner.*

In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid SMAQMD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.

The aforementioned requirements shall be noted on improvement plans and submitted for review and approval by the City of Rancho Cordova Community Development Department.

Finding: Implementation of Mitigation Measure 4.1-3 would reduce impacts related to exposure of nearby sensitive receptors to an increased concentration of diesel particulate matter to a less-than-significant level.

Impact 4.1-7 Would the Project lead to generation of greenhouse gas (GHG) emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.1-7 To achieve Tier 1, BMP 1, the project applicant shall commit to one of the following options:

A. All structures proposed as part of the project shall be construction without natural gas infrastructure; or

B. Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 571.93 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:

1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:

(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;

(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or

(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);

(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's

designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.

2. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*

Should the applicant select Option B, it is noted that the provisions of Mitigation Measure 4.1-9 still apply in full.

Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.

4.1-8 *To achieve Tier 2, BMP 2, all single-family residences included as part of the proposed project shall include EV ready infrastructure. Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.*

4.1-9 *To achieve Tier 2, BMP 3, off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:*

1. *Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:*

    (i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the

American Carbon Registry, and the Verified Carbon Standard;

(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or

(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);

(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.

2. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*

Finding: Implementation of Mitigation Measures 4.1-7, 4.1-8, and 4.1-9 would reduce operational GHG emissions to the level that the project's incremental contribution to this significant cumulative impact is less than cumulatively considerable.

Biological Resources

Impact 4.2-1 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.2-1(a) Prior to initiation of ground-disturbing activities within the Raymer Way Offsite, the project applicant shall comply with SSHCP AMM Plant-1 (Rare Plant Surveys). Though stinkbells is not considered an SSHCP Covered Species, the special-status plant surveys conducted per PLANT-1 shall identify whether the species is present in the survey area. If any special-status plant species are found to be present during the focused survey(s), Mitigation Measure 4.2-1(b) shall be implemented. If special-status plant species are not found to

be present during the focused survey(s), then no further action is required. A written summary of the survey results shall be submitted to the City of Rancho Cordova Community Development Department.

- ***PLANT-1 (Rare Plant Surveys):*** *If a Covered Activity project site contains modeled habitat for Ahart's dwarf rush (Juncus leiospermus var. ahartii), Bogg's Lake hedge-hyssop (Gratiola heterosepala), dwarf downingia (Downingia pusilla), Legenere (Legenere limosa), pincushion navarretia (Navarretia myersii), or Sanford's arrowhead (Sagittaria sanfordii), the Covered Activity project site will be surveyed for the rare plant by an approved biologist and following the California Department of Fish and Wildlife (CDFW) rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See Chapter 10 (of the SSHCP) for the process to submit survey information to the Plan Permittee and the Permitting Agencies.*

4.2-1(b) *If any SSHCP-covered plants are determined to be present within the Raymer Way Offsite, SSHCP PLANT-2 (Rare Plant Protection) shall be implemented. If any special-status plant species are determined to be present, a mitigation plan shall be prepared for review and approval by the City of Rancho Cordova; mitigation may include harvesting and transplanting of impacted bulbs into a preserved area with suitable habitat. Avoided areas containing species shall be fenced with orange construction fencing.*

- ***PLANT-2 (Rare Plant Protection):*** *If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs at the project site.*

Finding: Implementation of Mitigation Measures 4.2-1(a) and (b) would reduce impacts on special-status plant species to a less-than-significant level.

Impact 4.2-2 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on special-status invertebrates?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.2-2(a) *Prior to initiation of ground-disturbing activities, the project applicant shall submit a South Sacramento Habitat Conservation Plan (SSHCP) permit application package to the City of Rancho Cordova to request that the incidental take coverage provided by City's SSHCP Incidental Take Permit (ITP) be extended to the proposed activities. The City of Rancho Cordova shall review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency with a copy of the SSHCP requirements for tracking purposes. The project applicant shall be responsible for paying all SSHCP development fees associated with obtaining coverage from the City of Rancho Cordova. Any proposal to provide land in fee title, or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy.*

4.2-2(b) *The project applicant shall comply with SSHCP requirements and all relevant AMMs set forth in the SSHCP Permit obtained for the proposed project.*

4.2-2(c) *Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, or timed as required by the applicable permits if the proposed project is constructed in phases, the project applicant shall ensure that mitigation for impacts to aquatic features and other habitat for special-status species has been implemented through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, RWQCB, USFWS, CDFW, City, and South Sacramento Conservation Agency as appropriate, depending on agency jurisdiction.*

Finding: Implementation of Mitigation Measures 4.2-2(a), (b), and (c) would reduce impacts on special-status invertebrates to a less-than-significant level.

Impact 4.2-3 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on special-status amphibian species?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

Western Spadefoot

4.2-3(a) The project applicant shall comply with SSHCP AMMs WS-1 through WS-6.

- ***WS-1 (Western Spadefoot Work Window):*** *Ground-disturbing Covered Activities within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.*

- ***WS-2 (Western Spadefoot Exclusion Fencing):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high- visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below.*

- ***WS-3 (Western Spadefoot Monitoring):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17 [of the SSHCP]) in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction- related activities are taking place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below.*

- ***WS-4 (Avoid Western Spadefoot Entrapment):*** *If a Covered Activity occurs in western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the*

end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6 below.

- ***WS-5 (Erosion Control Materials in Western Spadefoot Habitat):*** *If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.*

- ***WS-6 (Western Spadefoot Encounter Protocol):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist.*

Western Pond Turtle

4.2-3(b) *Prior to initiation of ground-disturbing activities, pre-construction surveys shall be conducted per SSHCP AMM WPT-1. If western*

pond turtles are detected, WPT-2 through WPT-9 shall be implemented.

- ***WPT-1 (Western Pond Turtle Surveys):*** *If the SSHCP western pond turtle modeled habitat maps (Figure 3-19 [of the SSHCP]) show that modeled habitat for western pond turtle is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate western pond turtle aquatic habitat within the project footprint and within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-19 (of the SSHCP), western pond turtle aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water, freshwater marsh, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide those maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated western pond turtle habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as western pond turtle habitat is identified and fully avoided. Otherwise, Covered Activities must comply with WPT-2 through WPT-9. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information.*

- ***WPT-2 (Western Pond Turtle Work Window):*** *Maintenance and improvements to existing structures may occur throughout the year as long as western pond turtle habitat is identified and avoided, and movement of equipment is confined to existing roads. Otherwise, construction and ground-disturbing Covered Activities must be conducted outside of western pond turtle's active season. Construction and ground-disturbing activities will be initiated after May 1 and will commence prior to September 15. If it appears that construction activities may go beyond September 15, the appropriate Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1, to determine if additional measures are necessary to minimize take.*

- ***WPT-3 (Western Pond Turtle Monitoring):*** *If a Covered Activity is occurring in western pond turtle modeled habitat*

(Figure 3-19 [of the SSHCP]), an approved biologist experienced with western pond turtle identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for western pond turtle prior to construction activities. The approved biologist will also training construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western pond turtle enters an active construction zone (i.e., outside the buffer zone).

- ***WPT-4 (Western Pond Turtle Habitat Dewatering and Exclusion):*** *If construction activities will occur in western pond turtle aquatic habitat, aquatic habitat for the turtle will be dewatered and then remain dry and absent of aquatic prey (e.g., crustaceans and other aquatic invertebrates) for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to western pond turtle. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent turtles from attempting to burrow or move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Western pond turtle habitat outside construction fencing will be avoided by all construction personnel. The fencing and work area will be inspected by the approved biologist to ensure that the fencing is intact and that no turtles have entered the work area before the start of each work day. Fencing will be maintained by the contractor until completion of the project. If, after exclusion fencing and dewatering, western pond turtles are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will discuss the next best steps with the Implementing Entity and Wildlife Agencies.*

- ***WPT-5 (Avoid Western Pond Turtle Entrapment):*** *If a Covered Activity occurs within western pond turtle modeled*

habitat (Figure 3-19 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western pond turtle modeled habitat will be inspected for western pond turtle by the approved biologist prior to being moved.

- ***WPT-6 (Erosion Control Materials in Western Pond Turtle Habitat):*** *If erosion control (BMP-2) is implemented within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that turtles are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.*

- ***WPT-7 (Western Pond Turtle Modeled Habitat Speed Limit):*** *Covered Activity construction and maintenance vehicles will observe a 20-mile-per-hour speed limit within western pond turtle modeled upland habitat (Figure 3-19 [of the SSHCP]).*

- ***WPT-8 (Western Pond Turtle Encounter Protocol):*** *If a western pond turtle is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the turtle, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a western pond turtle or who finds one dead, injured, or*

entrapped must immediately report the incident to the approved biologist.

- ***WPT-9 (Western Pond Turtle Post-Construction Restoration):*** *After completion of ground- disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation and placing appropriate artificial or natural basking areas in waterways and wetlands. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.*

Finding: Implementation of Mitigation Measures 4.2-3(a) and (b) would reduce impacts on special-status amphibian species to a less-than-significant level.

Impact 4.2-4 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.2-4 *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs WBO-2 through WBO-7. If western burrowing owl is found within the survey area, WBO-3 through 7 shall be implemented as required based on the results of surveys conducted per WBO-2.*

- ***WBO-1 (Western Burrowing Owl Surveys):*** *Surveys within modeled habitat are required for both the breeding and non-breeding season. If the project site falls within modeled habitat, an approved biologist will survey the project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping will be conducted by the approved biologist while walking transects throughout the entire project site plus all accessible areas within a 250-foot radius from the project site. The centerline of these*

transects will be no more than 50 feet apart and will vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects will be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the project does not fully avoid the habitat, pre-construction surveys will be required. Burrowing owl habitat is fully avoided if project-related activities do not impinge on a 250- foot buffer established by the approved biologist around suitable burrows. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information.

- ***WBO-2 (Western Burrowing Owl Pre-Construction Surveys):*** *Prior to any Covered Activity ground disturbance, an approved biologist will conduct pre-construction surveys in all areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey will last a minimum of 3 hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped. Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction.*

- ***WBO-3 (Burrowing Owl Avoidance):*** *If western burrowing owl or evidence of western burrowing owl is observed on the project site or within 250 feet of the project site during pre-construction surveys, then the following will occur:*

  During Breeding Season: *If the approved biologist finds evidence of western burrowing owls within a project site during the breeding season (February 1 through August 31), all project-related activities will avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 250-foot buffer zone. Construction and other project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity and Wildlife Agencies prior to project construction based on the following criteria:*

  - *The Implementing Entity and Wildlife Agencies approve of the avoidance and minimization plan provided by the project applicant.*
  - *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).*
  - *The same approved biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.*

  If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies.

  If monitoring by the approved biologist indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The

approved biologist will excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies.

The Implementing Entity and Wildlife Agencies will respond to a request from the Third-Party Project Proponent to review the proposed construction monitoring plan within 21 days.

During Non-Breeding Season: *During the non-breeding season (September 1 through January 31), the approved biologist will establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer will be allowed. Construction activities within the non-disturbance buffer will be allowed if the following criteria are met to prevent owls from abandoning over- wintering sites:*

- *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).*
- *The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.*
- *If there is any change in owl foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer.*
- *If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity and Wildlife Agencies that an approved biologist excavate usable burrows and install one-way exclusionary devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue.*

Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

- ***WBO-4 (Burrowing Owl Construction Monitoring):*** *During construction of Covered Activities, 250-foot construction buffer zones will be established and maintained around any occupied burrow. An approved biologist will monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist will also train construction personnel*

on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.

- ***WBO-5 (Burrowing Owl Passive Relocation):*** *Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures described in this condition preclude work from continuing. Passive relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation will only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors will be in place for 48 hours to ensure that owls have left the burrow, and then the biologist will excavate the burrow to prevent reoccupation. Burrows will be excavated using hand tools only. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term.*

- ***WBO-6 (Burrowing Owl Timing of Maintenance Activities):*** *All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas will be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.*

- ***WBO-7 (Rodent Control):*** *Rodent control will be allowed only in developed portions of a Covered Activity project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.*

Finding: Implementation of Mitigation Measure 4.2-4 would reduce impacts related to the burrowing owl to a less-than-significant level.

Impact 4.2-5 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on raptors and nesting birds?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.2-5(a) Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs RAPTOR-2 through RAPTOR-4. Raptor surveys conducted per RAPTOR-2 shall include surveying for golden eagle although it is not a SSHCP Covered Species. If raptor species (including golden eagles) are found nesting within the survey area, RAPTOR-3 and RAPTOR-4 shall be implemented as required based on the results of surveys conducted per RAPTOR-2. The following AMMs do not apply to Swainson's hawk or burrowing owl, as specific AMMs have been developed for such covered raptor species and are included in separate mitigation measures.

- ***RAPTOR-2 (Raptor Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground- disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre-construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*

- ***RAPTOR-3 (Raptor Nest/Roost Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged.*

- ***RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring):*** *If project-related Covered Activities within the temporary nest*

disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).

4.2-5(b) *A qualified biologist shall conduct a preconstruction nesting bird survey of all areas associated with construction activities, and a 100-foot buffer around such areas, within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31). If active nests are found for any SSHCP Covered Species, the applicable SSHCP AMM(s) TCB-3 through -5, SWHA-3 through -4, WBO-3 through-6, and RAPTOR-3 through-4 shall be implemented. If active nests are found for any other species, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with the CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest, to be determined by a qualified biologist. Once the young are independent of the nest, further measures are not necessary.*

Finding: Implementation of Mitigation Measures 4.2-5(a) and (b) would reduce impacts on raptors and nesting birds to a less-than-significant level.

Impact 4.2-6 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on Swainson’s hawk?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.2-6 *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs SWHA-2 through SWHA-4. If Swainson's hawk nesting is found within the survey area during the pre-construction survey conducted per SWHA-2, then SWHA-3 and SWHA-4 shall be implemented as required based on the results of surveys conducted per SWHA-2.*

- ***SWHA-2 (Swainson's Hawk Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*

- ***SWHA-3 (Swainson's Hawk Nest Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25-mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.*

- ***SWHA-4 (Swainson's Hawk Nest Buffer Monitoring):*** *If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down*

construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).

Finding: Implementation of Mitigation Measure 4.2-6 would reduce impacts on Swainson's hawk to a less-than-significant level.

Impact 4.2-7 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on tricolored blackbird?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.2-7 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs TCB-2 through TCB-5. If tricolored blackbirds are found within the survey area during the pre-construction survey conducted per TCB-2, then TCB-3 through TCB-5 shall be implemented as required based on the results of surveys conducted per TCB-2.

- ***TCB-2 (Tricolored Blackbird Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys will be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*

- ***TCB-3 (Tricolored Blackbird Nest Buffer):*** *If active nests are found within the project footprint or within 500 feet of any project-related Covered Activity, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.*

- ***TCB-4 (Tricolored Blackbird Nest Buffer Monitoring):*** *If nesting tricolored blackbirds are present within the project footprint or within 500 feet of any project-related Covered Activity, then an approved biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).*

- ***TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves):*** *On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.*

Finding: Implementation of Mitigation Measure 4.2-7 would reduce impacts related to tricolored blackbirds to a less-than-significant level.

Impact 4.2-8 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on special-status bats?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.2-8 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs BAT-2 through BAT-4. Winter

hibernaculum surveys conducted per BAT-2 shall also include surveying for pallid bat although it is not an SSHCP Covered Species. If winter hibernacula of western red bat or pallid bat are found within the survey area, then BAT-3 through BAT-4 shall be implemented as required based on the results of surveys conducted per BAT-2.

- ***BAT-2 (Winter Hibernaculum Pre-Construction Surveys):*** *If the Third-Party Project Proponent elects not to avoid potential winter hibernaculum sites within the project footprint plus a 300-foot buffer, additional surveys are required. Prior to any ground disturbance related to Covered Activities, an approved biologist will conduct a pre-construction survey within 3 days of ground-disturbing activities within the project footprint and 300 feet of the project footprint to determine the presence of winter hibernaculum sites. Pre-construction surveys will be conducted during the winter hibernaculum season (November 1 through March 31). If a winter hibernaculum is present, then BAT-3 and BAT-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*

- ***BAT-3 (Winter Hibernaculum Buffer):*** *If active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will establish a 300-foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Implementing Entity and Wildlife Agencies concur.*

- ***BAT-4 (Bat Eviction Methods):*** *An approved biologist will determine if non-maternity and non-hibernaculum day and night roosts are present on the project site. If necessary, an approved biologist will use safe eviction methods to remove bats if direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided. If a winter hibernaculum site is present, Covered Activities will not occur until the hibernaculum is vacated, or, if necessary, safely evicted using methods acceptable to the Wildlife Agencies.*

Finding: Implementation of Mitigation Measures 4.2-8 would reduce impacts on special-status bats to a less-than-significant level.

Impact 4.2-9 Would the Project have a substantial adverse effect, either directly or through habitat modifications, on American badger?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.2-9 *A qualified biologist shall conduct a preconstruction survey for American badger within 14 days prior to commencement of construction, and results of the survey shall be provided to the City's Community Development Department. If badgers or dens with signs of recent badger use are detected (i.e., fresh scat, claw marks), CDFW shall be consulted and a non-disturbance buffer shall be established around any active dens. The den(s) shall be monitored daily by the qualified biologist during construction. Work shall not occur within the non-disturbance buffer until the qualified biologist determines that the badger(s) have left the work area, or as determined in consultation with CDFW.*

Finding: Implementation of Mitigation Measures 4.2-9 would reduce impacts on American badger to a less-than-significant level.

Impact 4.2-10 Would the Project have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.2-10(a) *Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that authorization pursuant to Clean Water Act (CWA) Section 404 from the U.S. Army Corps of Engineers (USACE) and CWA Section 401 from the Central Valley Regional Water Quality Control Board (RWQCB) is obtained. CWA Section 404 authorization is anticipated to be obtained through a Letter of Permission issued by USACE under the SSHCP ARP, and CWA Section 401 authorization is anticipated to be obtained through an individual Water Quality Certification issued by the RWQCB under the SSHCP ARP.*

The construction contractor shall adhere to all conditions outlined in the permits. The project applicant shall ensure that the proposed project replaces, restores, or enhances on a "no net loss" basis (in accordance with the USACE and the Central Valley RWQCB) the

acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded due to project implementation, either through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.

4.2-10(b) *Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that a CDFW 1602 Streambed Alteration Agreement has been obtained. The construction contractor shall adhere to all conditions outlined in the Streambed Alteration Agreement.*

4.2-10(c) *The project applicant shall comply with SSHCP AMM STREAM-2 and a 100-foot setback from Morrison Creek shall be established. Only allowed compatible uses described in the SSHCP shall be sited within the setback.*

- ***STREAM-2 (UDA Stream Setbacks):** A 100-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all streams listed in Table 5-1 (see Table 4.2-1 below) (see also Figure 2-4 [of the SSHCP]). If a stream reach supports woody riparian vegetation, the setback will be equal to the riparian edge plus 25 feet or will be the setback defined above, whichever is greater. If trails are located within the Stream Setback, the nearest edge of the trail will be located at least 50 feet from the top of the bank.*

Table 4.2-1
Stream Setback Minimum Requirements in the Urban Development Area

Stream	Minimum Setback (from the Top of Bank Measured in Aerial Perspective) on Both Sides of the Stream
Elder Creek	100 feet
Frye Creek	100 feet or as depicted as part of the NewBridge development project hardline Preserve (see SSHCP Appendix K)
Gerber Creek	100 feet
Morrison Creek	100 feet
Central Paseo	100 feet or as depicted as part of the Cordova Hills development project hardline Preserve (see SSHCP Appendix K)
Sun Creek	100 feet or as depicted as part of the Sun Creek development project hardline Preserve (see SSHCP Appendix K)

4.2-10(d) Implement Mitigation Measure 4.2-2(c).

Finding: Implementation of Mitigation Measures 4.2-10(a), (b), (c), and (d) would reduce impacts related to riparian habitats, other sensitive natural communities, or State or federally protected wetlands to a less-than-significant level.

Impact 4.2-12 Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.2-12 Prior to removal of any protected trees (as defined by Chapter 19.12 of the City's Municipal Code) within the project site and off-site improvement areas, a tree removal permit shall be procured from the City. In addition, tree species that are native to the Central Valley and Sierra Nevada foothills such as interior live oak (Quercus wislizeni), valley oak (Quercus lobata), blue oak (Quercus douglasii), Fremont cottonwood (Populus fremontii), black walnut (Juglans hindsii), and western redbud (Cercis occidentalis) shall be incorporated into the planned landscaping design in public spaces such as open space, parks, and parkways. Enough plantings of such native trees shall be incorporated into the landscaping such that the number of surviving native trees after five years is equal to or greater than the number of non-native trees removed. Landscaping plans detailing the tree species to be planted shall be provided to the City for approval prior to tree removal.

Finding: Implementation of Mitigation Measures 4.2-12 would reduce conflicts with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, to a less-than-significant level.

Impact 4.2-14 Would the Project result in cumulative loss of habitat for special-status species?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.2-14 Implement Mitigation Measures 4.2-1 through 4.2-11.

Finding: Implementation of Mitigation Measures 4.2-14 would reduce impacts related to the cumulative loss of habitat for special-status species to a less-than-cumulatively considerable level.

Cultural and Tribal Resources

Impact 4.3-2 Would the Project cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.3-2 *The following requirements shall be included through a notation on all project improvement plans prior to the issuance of grading permits, to the satisfaction of the City Engineer.*

In the event subsurface deposits believed to be cultural or human in origin are discovered during construction, all work shall halt within a 50-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- *If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and agency notifications are not required.*
- *If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the City of Rancho Cordova and applicable landowner. The project applicant shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Appropriate treatment measures that preserve or restore the character and integrity of a find may be, but are not limited to, processing materials for reburial, minimizing handling of historical objects, leaving objects in place within the landscape, construction monitoring of further construction activities, and/or returning objects to a location within the project area where they will not be subject to future impacts. Work shall not resume within the no-work radius until the applicant, through consultation, as appropriate, determines that the site either: 1) is not a historical resource under CEQA, as defined in Section*

15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to the City's satisfaction.

- *If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the City of Rancho Cordova and the Sacramento County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner shall notify the NAHC, which then shall designate a Native American Most Likely Descendant (MLD) for the proposed project (Section 5097.98 of the PRC). The designated MLD shall have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC shall mediate (Section 5097.94 of the PRC). If an agreement is not reached, the landowner shall rebury the remains where they shall not be further disturbed (Section 5097.98 of the PRC). The burial shall also include either recording the site with the NAHC or the appropriate information center, using an open space or conservation zoning designation or easement, or recording a reinternment document with Sacramento County (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to their satisfaction.*

Finding: Implementation of Mitigation Measure 4.3-2 would reduce impacts related to archeological resources or the disturbance of human remains to a less-than-significant level.

Impact 4.3-3 Would the Project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code (PRC) Section 21074?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.3-3(a) *Implement Mitigation Measures 4.3-2.*

4.3-3(b) *Prior to initiation of ground-disturbing activities associated with the proposed project, a consultant and construction worker tribal cultural*

resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training shall be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program shall include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential tribal cultural resources are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values. Documentation of the brochure and training program (i.e., a sign-in sheet) shall be submitted along with all applicable reports to the City's Community Development Department.

4.3-3(c) *Prior to the start of ground-disturbing activities associated with the proposed project, the project applicant and construction contractor(s) shall implement the following measures to minimize the potential for destruction of or damage to existing or previously undiscovered burials, archaeological, and tribal cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities:*

- *Native American monitors from culturally affiliated Native American Tribes shall be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any ground-disturbing activities begin.*
- *Native American representatives and Native American monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative shall recommend appropriate treatment of such sites or objects.*

Compliance with the aforementioned measures shall be documented and submitted with applicable reports to the City's Community Development Department.

4.3-3(d) *Develop a standard operating procedure, points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed.*

If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other project personnel during construction activities, work shall cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes shall assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations shall be documented in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with Wilton Rancheria regarding mitigation contained in the Public Resources Code Sections 21084.3(a) and (b) and CEQA Guidelines Section 15370 shall occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Finding: Implementation of Mitigation Measures 4.3-3(a), (b), (c), and (d) would reduce impacts related to tribal cultural resources to a less-than-significant level.

Geology and Soils/Mineral Resources

Impact 4.4-3 Would the Project be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.4-3 *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for review and approval by the Rancho Cordova Community Development Department. The report shall address and make recommendations on the following:*

A. Road, pavement, and parking area design;
B. Structural foundations, including retaining wall design (if applicable);
C. Grading practices;
D. Erosion/winterization;
E. Special problems discovered on-site, (i.e., open bodies of water, expansive/unstable soils, etc.); and
F. Slope stability.

Once approved by the Rancho Cordova Community Development Department, two copies of the final report shall be provided to the Rancho Cordova Community Development Department and one copy to the Rancho Cordova Building and Safety Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.

Finding: Implementation of Mitigation Measures 4.4-3 would reduce impacts related to the Project being located on an unstable geological unit, landslides, lateral spreading, subsidence, liquefaction, collapse, and expansive soil to a less-than-significant level.

Impact 4.4-5 Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.4-5 *Should construction or grading activities result in the discovery of unique paleontological resources, all work within the vicinity of the discovery shall cease. The City of Rancho Cordova Community Development Department shall be notified, and the resources shall be examined by a qualified paleontologist at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The paleontologist shall submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.*

Finding: Implementation of Mitigation Measure 4.4-5 would reduce impacts on unique paleontological resources or sites or unique geologic features to a less-than-significant level.

Hazards and Hazardous Materials

Impact 4.5-2 Would the Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.5-2(a) *Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall complete and submit, for both the underground storage units identified on APNs 073-0010-011 and 072-0300-008, a Consolidated Application For Authority to Remove Under Ground Storage Tanks to the Sacramento County Environmental Management Department (EMD) for review. Upon issuance of a permit (Authority Letter to Remove) from the EMD, removal of the UST shall proceed in accordance with all permit conditions, including, but not limited to, inspection, testing, and plan/report submittal requirements.*

4.5-2(b) *Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall retain a licensed contractor to remove the existing 55-gallon drum located on APN 072-0300-008, to the northeast of the existing residence. The drum shall be disposed of in accordance with all applicable federal, State, and local regulations related to the handling, transport, and disposal of hazardous waste. Proof of safe disposal shall be provided to the Community Development Department.*

4.5-2(c) *Prior to issuance of a demolition permit for any on-site structures, the project applicant shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the Community Development Department an asbestos and lead survey. If asbestos-containing materials or lead-containing materials are not discovered during the survey, further mitigation related to asbestos-containing materials or lead containing materials shall not be required. If asbestos-containing materials and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site asbestos-containing materials and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA)*

Administration regulations and disposed of in accordance with all CalEPA regulations, prior to the demolition and/or removal of the on-site structures. The plan shall include the requirement that work shall be conducted by a Cal-OSHA registered asbestos and lead abatement contractor in accordance with Title 8 CCR 1529 and Title 8 CCR 1532.1 regarding asbestos and lead training, engineering controls, and certifications. The applicant shall submit the work plan to the Community Development Department for review and approval. Materials containing more than one (1) percent asbestos that is friable are also subject to SMAQMD regulations. Removal of materials containing more than one (1) percent friable asbestos shall be completed in accordance with SMAQMD Rule 902.

4.5-2(d) *Prior to issuance of a demolition permit for any on-site structures, the project applicant shall retain the services of a licensed environmental professional to prepared a Phase II Environmental Assessment (ESA) for the project site. The Phase II ESA shall evaluate, at a minimum, potential lead contamination in the soils in the vicinity of the structures located on APN 072-0300-008, as well as potential termiticide contamination in the soils in the vicinity of the wooden structures located on APN 072-0300-002 and APN 072-0300-008. In the event that the lead and/or termiticide contamination is determined to occur, the project applicant shall implement all recommended measures in the Phase II ESA necessary to address such hazards. Such measures may include, but shall not be limited to, capping contaminated soil in place and deed-restricting the subject property, excavation and off-haul of contaminated soils by a licensed contractor, or other appropriate methods deemed acceptable by the Sacramento County Environmental Management Department (EMD).*

4.5-2(e) *Prior to Improvement Plan approval, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Sacramento County Environmental Management Department (EMD) for all on-site wells, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III), for review and approval by the EMD. In addition, prior to Improvement Plan approval, the project applicant shall ensure that any on-site septic systems are abandoned in compliance with applicable EMD standards. Verification of abandonment shall be ensured by the City of Rancho Cordova Community Development Department.*

4.5-2(f) *If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities at the*

project site, work shall stop in the area of potential contamination, and the type and extent of contamination shall be identified by a Registered Environmental Assessor (REA) or qualified professional. The REA or qualified professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations, relevant environmental screening levels for identified contaminants, whether the contaminants exceed ESLs, thus warranting remediation, and recommendations for appropriate handling and disposal. Site preparation or construction activities shall not recommence within the contaminated areas until any necessary remediation identified in the report is complete. The report and verification of proper remediation and disposal shall be submitted to the City of Rancho Cordova Community Development Department for review and approval.

Finding: Implementation of Mitigation Measures 4.5-2(a) through (f) would reduce impacts related to the release of hazardous materials into the environment to a less-than-significant level.

Hydrology and Water Quality

Impact 4.6-1 Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.6-1 Prior to the commencement of ground-disturbing activities, the project applicant shall submit, and obtain approval of, a Spill Prevention Countermeasure and Control Plan (SPCC) to the Sacramento County Environmental Management Department. The SPCC shall specify measures and procedures to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112.

Finding: Implementation of Mitigation Measure 4.6-1 would reduce impacts related to water quality during construction to a less-than-significant level.

Impact 4.6-2 Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations?

Mitigation Measures: The following mitigation measures have been adopted to address this impact:

4.6-2 *Prior to approval of final project improvement plans, the project applicant shall submit a detailed Best Management Practice (BMP) and water quality maintenance plan to the City for review and approval. The BMP and water quality maintenance plan shall meet the standards of the City's NPDES Permit (No. CAS0085324), the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, and the Stormwater Quality Design Manual for the Sacramento region. Site design measures, source control measures, hydromodification management, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the improvement plans.*

4.6-3 *Prior to approval of final project improvement plans, the project applicant shall submit a maintenance covenant to the City for review and approval. The maintenance covenant shall be recorded with the property deed and executed following property ownership to ensure the long-term maintenance of stormwater quality measures.*

Finding: Implementation of Mitigation Measures 4.6-2 and 4.6-3 would reduce impacts related to water quality during operations to a less-than-significant level.

Noise

Impact 4.8-1 Would the Project result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

4.8-1 *The following criteria shall be noted on project Improvement Plans. Improvement Plans shall be submitted to the City's Community Development Department for review and approval.*

- *Consistent with Section 6.68.090 of the Rancho Cordova Municipal Code, noise-generating construction activities shall be limited to the hours of 6:00 AM to 8:00 PM on weekdays and 7:00 AM to 8:00 PM on weekends.*

Finding: Implementation of Mitigation Measure 4.8-1 would reduce impacts related to the generation of a substantial temporary increase in ambient noise to a less-than-significant level.

Initial Study

Impact I-d: Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Mitigation Measures: The following mitigation measure has been adopted to address this impact:

I-1 *Prior to the approval of Improvement Plans and issuance of Building Permits for any development on the project site, the project applicant shall submit a lighting plan for the project to the City of Rancho Cordova Planning Division for review and approval. The lighting plan shall include, but not necessarily be limited to, the following provisions:*

- *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;*
- *Place and shield or screen flood and area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas and passing motorists;*
- *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash;*
- *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting motorists on nearby roadways; and*
- *The proposed location, mounting height, and aiming point of all outdoor lighting used during project operations and/or construction.*

Finding: Implementation of Mitigation Measure I-1 would reduce impacts related to light or glare to a less-than-significant level.

2. Significant and Unavoidable Impacts.

The following significant environmental impacts of the Project, including cumulative impacts, are unavoidable and cannot be mitigated in a manner that would reduce the significant impact to a less-than-significant level. Notwithstanding disclosure of these impacts, the City Council elects to approve the Project due to overriding considerations as set forth below in Part D, Statement of Overriding Considerations.

Transportation

Impact 4.10-2 Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Existing Plus Project conditions?

Mitigation Measures: The following mitigation measures have been adopted to address this impact to the extent feasible:

4.10-2(a) *Prior to approval of Improvement Plans, the project applicant shall include in the Improvement Plan submittal a Trail System Plan detailing the applicant's construction of a portion of the regional trail system in the vicinity of the project site. The Trail System Plan shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*

4.10-2(b) *Prior to the recording of a Final Map, the project applicant shall pay a fair share contribution to provide monetary support for the City's transportation services, as determined by the City of Rancho Cordova Community Development Department. The charges for residential and non-residential development will fund these transportation services as determined appropriate by the City Council. Supplemental transportation services may include, but are not limited to, the following:*

- *Transit Shuttle – shuttle for residents and/or employees between residential areas, employment centers, shopping and service centers and light rail stations and/or other public transit options;*
- *Guaranteed Ride Home – free taxi rides and rental cars for ride sharers in case of an emergency;*
- *Transit Subsidies – financial assistance to encourage residents and employees to use transit or other alternative transportation measures;*
- *Transportation Plans for employers and/or resident groups – plans which guide employers and resident groups on the implementation of trip reduction programs, such as ride share matching or other similar programs;*
- *Education Programs – various programs such as education of transit options, home office set up, alternative commute opportunities;*
- *Infrastructure Support – additional bike racks and lockers, transportation alternative and ride share informational boards/kiosks, and transit facilities;*
- *Transportation Coordinator Training and Support – instruction in mobility (transportation alternatives) for residential groups and work site coordinators; and*

- *Bicycle and Alternative Fuel Vehicle Incentives – incentives for purchasing new bicycles or alternative fuel vehicles.*

Finding: Implementation of Mitigation Measures 4.10-2(a) and (b) would ensure that the project applicant shall pay a fair share contribution to provide monetary support for the City's transportation services, as determined by the City of Rancho Cordova Community Development Department. The charges for residential and non-residential development will fund these transportation services as determined appropriate by the City Council. However, as the project site is located in a developing area with only vacant land and other residential communities, the area offers only limited alternatives to driving for work or shopping needs and restrictions are not placed on parking. In addition, the project site's limited access to transit and the inability to implement strategies related to employment and commuting further restricts the proposed project's ability to reduce vehicle miles traveled (VMT) per capita. Thus, although Mitigation Measures 4.10-2(a) and (b) would reduce the impact to the maximum extent feasible, the impact would not be reduced to a less-than-significant level. Thus, the impact remains significant and unavoidable.

The City Council acknowledges that in making these findings, the City Council has considered the opinions of other agencies and members of the public, including opinions that disagree with some of the analysis and significance thresholds used in the EIR. The City Council finds that the determination of significance thresholds is a judgment within the discretion of the City Council; the significance thresholds used in the EIR are supported by substantial evidence in the record, including the expert opinion of the EIR preparers and City staff; and the significance thresholds used in the EIR provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the Project.

In particular, the EIR relied on significance criteria for evaluating impacts that are tailored to this type of project. The criteria used in this EIR to determine whether an impact is or is not "significant" are based on (a) CEQA-stipulated "mandatory findings of significance" listed in CEQA Guidelines section 15065; (b) the relationship of the Project effect to the adopted policies, ordinances and standards of the City and of responsible agencies; and (c) commonly accepted practice and the professional judgment of the EIR authors and City staff.

A full explanation of the environmental findings and conclusions can be found in the Final EIR and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the Final EIR's determinations regarding the Project's impacts and mitigation measures designed to address those impacts. In making these findings, the City Council ratifies, adopts, and incorporates the analysis and explanation in the Final EIR, and ratifies, adopts, and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

The City Council adopts, and incorporates as conditions of approval of the Project, the mitigation measures set forth in the Mitigation Monitoring and Reporting Program

attached to these findings as Exhibit A to reduce or avoid the potentially significant and significant impacts of the Project. The City Council acknowledges that in adopting these mitigation measures, the City Council intends to adopt each of the mitigation measures recommended for approval by the Final EIR. Accordingly, in the event a mitigation measure recommended in the Final EIR has inadvertently been omitted from Exhibit A, such mitigation measure is hereby adopted and incorporated in the findings below by reference. In addition, in the event the language describing a mitigation measure set forth in Exhibit A fails to accurately reflect the mitigation measures in the Final EIR due to a clerical error, the language of the mitigation measure as set forth in the Final EIR shall control, unless the language of the mitigation measure has been specifically and expressly modified by these findings.

The City Council hereby finds that the adopted mitigation measures are changes or alterations that have been required in, or incorporated into, the Project which reduce or avoid significant effects on the environment to the maximum extent feasible.

Some comments on the Draft EIR requested minor modifications in mitigation measures identified in the Draft EIR or requested additional mitigation measures for impacts as to which the Draft EIR already identified mitigation measures that would reduce the identified impact to a less-than-significant level. Any modifications that were made to mitigation measures in response to such comments are denoted in Chapter 3, Revisions to DEIR Text, of the Final EIR.

Part C. Alternatives

Summary of Discussion of Alternatives in the Final EIR

The Final EIR evaluates three potential alternatives to the Project. The EIR examines the environmental impacts of each alternative in comparison with the Project and the relative ability of each alternative to satisfy Project Objectives.

Findings Relating to Alternatives

In making these findings, the City Council certifies that it has independently reviewed and considered the information on alternatives provided in the Final EIR, including the information provided in comments on the Draft EIR and the responses to those comments in the Final EIR. The Final EIR's discussion and analysis of these alternatives is not repeated in these findings, but the discussion and analysis of the alternatives in the Final EIR is incorporated in these findings by reference.

The Final EIR describes and evaluates in detail three alternatives to the Project. The City Council acknowledges that the reasons for the City Council's decision to approve the Project instead of the remaining alternatives are presented below. The City Council finds that the Project would satisfy the Project Objectives, and the remaining alternatives are unable to satisfy the Project objectives to the same degree as the Project. The City Council further finds that, on balance, none of the remaining alternatives has environmental advantages over the Project that are sufficiently great to justify approval of such an alternative instead of the Project, in light of each such alternative's inability to

satisfy the Project objectives to the same degree as the Project. Accordingly, the City Council determines to approve the Project instead of approving one of the remaining alternatives.

Description of Project Objectives

The Project Objectives are the following:

1. Consolidate the remaining parcels in the Grant Line West Planning Area of the City of Rancho Cordova General Plan in a manner that concentrates development south of Morrison Creek to avoid and minimize potential conflicts with the South Sacramento Habitat Conservation Plan.
2. Develop a residential mixed-density community that is consistent with the General Plan conceptual land use designation for the Grant Line West Planning Area.
3. Develop a residential community that is contiguous to and compatible with adjacent existing development and that provides a range of housing choices.
4. Utilize existing utility capacity for maximum efficiency.
5. Develop a residential community that can provide timely housing to help meet current demand during a period of housing shortages in the region and throughout the State.
6. Contribute to the overall bicycle and pedestrian connectivity of the City by building key components of the regional trail system and providing strong connections for both existing and future residents.
7. Enhance the City's network of parks, trails and open spaces for the enjoyment of all residents.

Discussion and Findings Relating to the Alternatives Evaluated in the Draft EIR

Chapter 6 of the Draft EIR evaluates the following three alternatives, which are summarized below:

- No Project Alternative;
- Reduced VMT Alternative; and
- Reduced Footprint Alternative.

<u>No Project Alternative.</u>

Under CEQA, a "no-project alternative" compares the impacts of proceeding with a proposed project with the impacts of not proceeding with the proposed project. A no-project alternative describes the environmental conditions in existence at the time the Notice of Preparation was published, along with a discussion of what would be reasonably

expected to occur at the site in the foreseeable future, based on current plans and consistent with available infrastructure and community services.

The No Project Alternative is defined in the Draft EIR as the continuation of the existing conditions of the project site, which currently contains two single-family residences and associated outbuildings in the southern portion of the site, an orchard in the northeastern portion of the site, and a third single-family residence and associated outbuildings located within the northwestern portion of the site. The remainder of the site consists of non-native grasses, scattered trees, and associated access roads. Because implementation of the No Project Alternative would result in the site remaining under current conditions, physical environmental impacts would not occur. Therefore, implementation of the No Project Alternative would result in fewer overall environmental impacts compared to that of the Project. However, the No Project Alternative would not meet any of the Project objectives.

On balance, the environmental benefits that might be achieved with this alternative are outweighed by its failure to achieve any of the Project Objectives, and the City Council rejects this alternative.

Reduced VMT Alternative.

The Reduced VMT Alternative was designed to reduce project-generated total VMT by reducing the number of residential units constructed as part of the proposed project from 440 to 376 units. The Reduced VMT Alterative would consist of 376 single-family residential lots on the same 98.9-acre development footprint. Lot sizes would be larger in size than those of the Project.

The Draft EIR determined that the Reduced VMT Alternative would be capable of fully or partially achieving the Project Objectives. The Alternative would result in similar impacts related to biological resources, cultural and tribal cultural resources, geology and soils/mineral resources, hazards and hazardous materials, hydrology and water quality, and land use and planning/population and housing as compared to the Project. In addition, the Alternative would result in fewer impacts related to air quality and GHG emissions, noise, public services and utilities, and transportation. However, although the Alternative would result in less severe impacts related to transportation relative to the Project, the impact would still be significant and unavoidable. As a result, the significant and unavoidable impacts determined for the Project would still be expected to occur under the Alternative.

Although the Alternative would generally achieve the Project Objectives, the significant and unavoidable impact determined for the Project would not be avoided. As such, the City Council rejects this alternative.

Reduced Footprint Alternative.

The Reduced Footprint Alternative would consist of reducing the size of the project site from 98.9 acres to 92.57 acres in order to avoid 6.33 acres of wetlands in the northwest section of the development area. Wetlands in the southern section of the

development area would still be impacted. The Alternative would still implement the 9.77 acres designated for community space to allow for the inclusion of the bio-retention and hydromodification areas in the northwest portion of the site. Retaining the community space would necessitate a reduction in the number of units developed in the western portion of the project site. The total units to be developed would be reduced from 440 units to 315 units.

The Draft EIR determined that the Reduced Footprint Alternative would be capable of fully or partially achieving the Project Objectives and would result in fewer impacts than the Project. The Alternative would result in similar impacts related to land use and planning/population and housing, and fewer impacts related to air quality and GHG emissions, biological resources, cultural and tribal cultural resources, geology and soils/mineral resources, hazards and hazardous materials, hydrology and water quality, noise, public services and utilities, and transportation. However, the significant and unavoidable impact determined for the Project related to transportation would still be expected to occur under the Alternative.

Although the Alternative would generally achieve the Project Objectives, the significant and unavoidable impact determined for the Project would not be avoided. As such, the City Council rejects this alternative.

Findings Regarding Reasonable Range of Alternatives

The City Council finds that the range of alternatives evaluated in the EIR reflects a reasonable attempt to identify and evaluate various types of alternatives that would potentially be capable of reducing the Project's environmental effects, while accomplishing most but not all of the Project Objectives. The City Council finds that the alternatives analysis is sufficient to inform the City Council and the public regarding the tradeoffs between the degree to which alternatives to the Project could reduce environmental impacts and the corresponding degree to which the alternatives would hinder the City's ability to achieve the Project objectives.

Part D. Statement of Overriding Considerations

Pursuant to CEQA Guidelines Section 15092, the City Council finds that in approving the Project it has eliminated or substantially reduced all significant and potentially significant effects of the Project on the environment where feasible, as shown in the EIR and described in these findings.

In the City Council's judgment, the Project and its benefits outweigh its unavoidable significant effect. The following Statement of Overriding Considerations identifies the reasons why, in the City Council's judgment, the benefits of the Project, as approved, outweigh its unavoidable significant effect.

Any one of the stated reasons is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason set forth in this Statement is supported by substantial evidence, the City Council finds that any individual reason is

separately sufficient. This Statement is supported by the substantial evidence set forth in the Draft EIR, Final EIR, and the findings set forth above, and in the documents incorporated by reference above.

The following considerations support approval of the Project:

1. The Project would provide citywide and regional economic benefits through tax revenues and project fees.

2. Considering the nature and size of the Project, a substantial amount of construction workers would likely be needed in construction of the proposed residential uses and other proposed improvements, thereby creating jobs for local residents. Additionally, building materials would likely be purchased in the area, stimulating the local economy and businesses.

3. The Project would provide additional housing opportunities in the City of Rancho Cordova. Based on the City's 2021-2029 Housing Element Update, the Regional Housing Needs Allocation (RHNA) for the years 2021-2029 would require 9,067 residences. The Project would contribute an additional 440 residential units to increase the City's housing supply, which would help the City satisfy its RHNA goals, as well as the goals of the California Housing Crisis Act of 2019 (Senate Bill No. 330).

4. The Project would include protective measures and funding to maintain the vegetation and habitats within the 185.3-acre open space area.

The City Council has considered these benefits and considerations and has considered the significant unavoidable environmental effects of the Project. The City Council has determined that the economic, legal, social, technological, and other benefits of the Project outweigh the identified impacts. The City Council has determined that the Project benefits set forth above override the significant and unavoidable environmental costs associated with the Project.

The City Council adopts the mitigation measures in the final Mitigation Monitoring and Reporting Program, incorporated by reference into these findings, and finds that any residual or remaining effects on the environment resulting from the Project, identified as significant and unavoidable in the Findings of Fact, are acceptable due to the benefits set forth in this Statement of Overriding Considerations. The City Council makes this Statement of Overriding Considerations in accordance with Section 15093 of the CEQA Guidelines in support of approval of the Project.

Part E. Record of Proceedings

Various documents and other materials constitute the record upon which the City Council bases these findings and the approvals contained herein. The location and custodian of these documents and materials is: City of Rancho Cordova Planning

Department, City of Rancho Cordova, 2729 Prospect Park Drive, Rancho Cordova, CA 95670.

Part F. Mitigation Monitoring and Reporting Program

In accordance with CEQA and the CEQA Guidelines, the City Council must adopt a mitigation monitoring and reporting program to ensure that the mitigation measures adopted herein are implemented. The City Council adopts the Mitigation Monitoring and Reporting Program for the Project (**Attachment 3** of the Project).

4. Mitigation Monitoring and Reporting Program

4. MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

Section 15097 of the California Environmental Quality Act (CEQA) requires all State and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a "mitigated negative declaration" or specified environmental findings related to an Environmental Impact Report (EIR).

The following is the Mitigation Monitoring and Reporting Program (MMRP) for The Preserve Project (proposed project). Unless otherwise noted, the cost of implementing the mitigation measures as prescribed by this MMRP shall be funded by the project applicant.

4.2 COMPLIANCE CHECKLIST

The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the EIR for the proposed project prepared by the City of Rancho Cordova. This MMRP is intended to be used by City staff and mitigation monitoring personnel to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the EIR that was prepared for the proposed project.

The Preserve Project EIR presents a detailed set of mitigation measures that will be implemented throughout the lifetime of the project. Mitigation is defined by CEQA Guidelines, Section 15370, as a measure that:

- Avoids the impact altogether by not taking a certain action or parts of an action;
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project; or
- Compensates for the impact by replacing or providing substitute resources or environments.

The MMRP will provide for monitoring of construction activities as necessary and in-the-field identification and resolution of environmental concerns.

Monitoring and documenting the implementation of mitigation measures will be coordinated by the City of Rancho Cordova. The table in Section 4.3 of this chapter identifies the mitigation measure, the monitoring action for the mitigation measure, the responsible party for the monitoring action, and timing of the monitoring action. The applicant will be responsible for fully understanding and effectively implementing the mitigation measures contained within the MMRP. The City will be responsible for monitoring compliance.

4.3 MITIGATION MONITORING AND REPORTING PROGRAM

The following table indicates the mitigation measure number, the impact the measure is designed to address, the measure text, the monitoring agency, implementation schedule, and an area for sign-off indicating compliance.

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
4.1 Air Quality, Greenhouse Gas Emissions, and Energy					
4.1-3	Expose sensitive receptors to substantial pollutant concentrations.	*4.1-3* *Prior to the initiation of any ground-disturbing activities, the project applicant shall ensure that all heavy-duty off-road diesel-powered equipment to be used during the grading phase of construction of the proposed project (including owned, leased, and subcontractor equipment) shall be CARB Tier 4 or cleaner.* *In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid SMAQMD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.* *The aforementioned requirements shall be noted on improvement plans and submitted for review and approval by the City of Rancho Cordova Community Development Department.*	City of Rancho Cordova Community Development Department	Prior to the initiation of any ground-disturbing activities	
4.1-7	Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable	*4.1-7* *To achieve Tier 1, BMP 1, the project applicant shall commit to one of the following options:*	City of Rancho Cordova Community Development Department	Prior to approval of final improvement plans	

MITIGATION MONITORING AND REPORTING PROGRAM
The Preserve Project

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	plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.	*A. All structures proposed as part of the project shall be construction without natural gas infrastructure; or* *B. Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 571.93 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:* *1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:* *(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the*			

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		American Carbon Registry, and the Verified Carbon Standard; *(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or* *(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);* *(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted*			

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		to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute. 2. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.* *Should the applicant select Option B, it is noted that the provisions of Mitigation Measure 4.1-9 still apply in full.* *Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development*			

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		Department prior to approval of final improvement plans.			
		4.1-8 To achieve Tier 2, BMP 2, all single-family residences included as part of the proposed project shall include EV ready infrastructure. Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.	City of Rancho Cordova Community Development Department	Prior to approval of final improvement plans	
		4.1-9 To achieve Tier 2, BMP 3, off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following: *1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:*	City of Rancho Cordova Community Development Department	Prior to approval of final improvement plans	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
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		(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard; *(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or* *(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);* *(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government*			

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Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		Code Section 12894 or its successor statute. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*			
4.2 Biological Resources					
4.2-1	Have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species.	*4.2-1(a) Prior to initiation of ground-disturbing activities within the Raymer Way Offsite, the project applicant shall comply with SSHCP AMM Plant-1 (Rare Plant Surveys). Though stinkbells is not considered an SSHCP Covered Species, the special-status plant surveys conducted per PLANT-1 shall identify whether the species is present in the survey area. If any special-status plant species are found to be present during the focused survey(s), Mitigation Measure 4.2-1(b) shall be implemented. If special-status plant species are not found to be present during the focused survey(s), then no further action is required. A written summary of the survey results shall be submitted to the City of Rancho Cordova Community Development Department.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground disturbing activities within the Raymer Way Offsite	

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		• ***PLANT-1 (Rare Plant Surveys):*** *If a Covered Activity project site contains modeled habitat for Ahart's dwarf rush (Juncus leiospermus var. ahartii), Bogg's Lake hedge-hyssop (Gratiola heterosepala), dwarf downingia (Downingia pusilla), Legenere (Legenere limosa), pincushion navarretia (Navarretia myersii), or Sanford's arrowhead (Sagittaria sanfordii), the Covered Activity project site will be surveyed for the rare plant by an approved biologist and following the California Department of Fish and Wildlife (CDFW) rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See Chapter 10 (of the SSHCP) for the process to submit survey information to the Plan Permittee and the Permitting Agencies.*			
		4.2-1(b) If any SSHCP-covered plants are determined to be present within the Raymer Way Offsite, SSHCP PLANT-2 (Rare Plant Protection) shall be implemented. If any special-status plant species are determined to be present, a mitigation plan shall be prepared for review	City of Rancho Cordova Community Development Department	Prior to commencement of ground-disturbing activities, if special-status plants are identified on-site	

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		and approval by the City of Rancho Cordova; mitigation may include harvesting and transplanting of impacted bulbs into a preserved area with suitable habitat. Avoided areas containing species shall be fenced with orange construction fencing. • ***PLANT-2 (Rare Plant Protection):*** *If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs at the project site.*			
4.2-2	Have a substantial adverse effect, either directly or through habitat modifications, on special-status invertebrates.	*4.2-2(a) Prior to initiation of ground-disturbing activities, the project applicant shall submit a South Sacramento Habitat Conservation Plan (SSHCP) permit application package to the City of Rancho Cordova to request that the incidental take coverage provided by City's SSHCP Incidental Take Permit (ITP) be extended to the proposed activities. The City of Rancho Cordova shall review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency with a copy of the SSHCP requirements for tracking purposes. The project applicant shall be*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		responsible for paying all SSHCP development fees associated with obtaining coverage from the City of Rancho Cordova. Any proposal to provide land in fee title, or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy.			
		4.2-2(b) The project applicant shall comply with SSHCP requirements and all relevant AMMs set forth in the SSHCP Permit obtained for the proposed project.	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities, and throughout construction period	
		4.2-2(c) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, or timed as required by the applicable permits if the proposed project is constructed in phases, the project applicant shall ensure that mitigation for impacts to aquatic features and other habitat for special-status species has been implemented through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, RWQCB, USFWS, CDFW, City, and South Sacramento Conservation Agency as appropriate, depending on agency jurisdiction.	City of Rancho Cordova Community Development Department	Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activities, or timed as required by the applicable permits if the proposed project is constructed in phases	

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4.2-3	Have a substantial adverse effect, either directly or through habitat modifications, on special-status amphibian species.	*Western Spadefoot* *4.2-3(a) The project applicant shall comply with SSHCP AMMs WS-1 through WS-6.* • ***WS-1 (Western Spadefoot Work Window):*** *Ground-disturbing Covered Activities within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.* • ***WS-2 (Western Spadefoot Exclusion Fencing):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high-visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No*	City of Rancho Cordova Community Development Department	Throughout the duration of the construction period	

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		project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below. • ***WS-3 (Western Spadefoot Monitoring):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17 [of the SSHCP]) in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction- related activities are taking place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below.* • ***WS-4 (Avoid Western Spadefoot Entrapment):*** *If a Covered Activity occurs in western spadefoot modeled*			

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		habitat (Figure 3-17 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6 below. • ***WS-5 (Erosion Control Materials in Western Spadefoot Habitat):*** *If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material*			

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		will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials. • ***WS-6 (Western Spadefoot Encounter Protocol):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and*			

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		California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist. *Western Pond Turtle* *4.2-3(b) Prior to initiation of ground-disturbing activities, pre-construction surveys shall be conducted per SSHCP AMM WPT-1. If western pond turtles are detected, WPT-2 through WPT-9 shall be implemented.* • ***WPT-1 (Western Pond Turtle Surveys):*** *If the SSHCP western pond turtle modeled habitat maps (Figure 3-19 [of the SSHCP]) show that modeled habitat for western pond turtle is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate western pond turtle aquatic habitat within the project footprint and within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-19 (of the SSHCP), western pond turtle aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water,*	City of Rancho Cordova Community Development Department	Prior to the initiation of ground-disturbing activities	

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		freshwater marsh, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide those maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated western pond turtle habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as western pond turtle habitat is identified and fully avoided. Otherwise, Covered Activities must comply with WPT-2 through WPT-9. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information. • ***WPT-2 (Western Pond Turtle Work Window):*** *Maintenance and improvements to existing structures may occur throughout the year as long as western pond turtle habitat is identified and avoided, and movement of equipment is confined to existing roads. Otherwise, construction and ground-disturbing Covered Activities must be conducted outside of western*			

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		pond turtle's active season. Construction and ground-disturbing activities will be initiated after May 1 and will commence prior to September 15. If it appears that construction activities may go beyond September 15, the appropriate Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1, to determine if additional measures are necessary to minimize take. • ***WPT-3 (Western Pond Turtle Monitoring):*** *If a Covered Activity is occurring in western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), an approved biologist experienced with western pond turtle identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for western pond turtle prior to construction activities. The approved biologist will also training construction personnel on the required avoidance procedures, exclusion fencing, and*			

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		protocols in the event that a western pond turtle enters an active construction zone (i.e., outside the buffer zone). • ***WPT-4 (Western Pond Turtle Habitat Dewatering and Exclusion):*** *If construction activities will occur in western pond turtle aquatic habitat, aquatic habitat for the turtle will be dewatered and then remain dry and absent of aquatic prey (e.g., crustaceans and other aquatic invertebrates) for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to western pond turtle. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent turtles from attempting to burrow or move under the fence into the construction area. In addition,*			

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		high-visibility fencing will be erected to identify construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Western pond turtle habitat outside construction fencing will be avoided by all construction personnel. The fencing and work area will be inspected by the approved biologist to ensure that the fencing is intact and that no turtles have entered the work area before the start of each work day. Fencing will be maintained by the contractor until completion of the project. If, after exclusion fencing and dewatering, western pond turtles are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will discuss the next best steps with the Implementing Entity and Wildlife Agencies. • ***WPT-5 (Avoid Western Pond Turtle Entrapment):*** *If a Covered Activity occurs within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end*			

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		of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western pond turtle modeled habitat will be inspected for western pond turtle by the approved biologist prior to being moved. • ***WPT-6 (Erosion Control Materials in Western Pond Turtle Habitat):*** *If erosion control (BMP-2) is implemented within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that turtles are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.* • ***WPT-7 (Western Pond Turtle Modeled Habitat Speed Limit):*** *Covered Activity construction and*			

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		maintenance vehicles will observe a 20-mile-per-hour speed limit within western pond turtle modeled upland habitat (Figure 3-19 [of the SSHCP]). • ***WPT-8 (Western Pond Turtle Encounter Protocol):*** *If a western pond turtle is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the turtle, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a western pond turtle or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist.*			

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		• ***WPT-9 (Western Pond Turtle Post-Construction Restoration):*** *After completion of ground- disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation and placing appropriate artificial or natural basking areas in waterways and wetlands. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.*			
4.2-4	Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl.	*4.2-4 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs WBO-2 through WBO-7. If western burrowing owl is found within the survey area, WBO-3 through 7 shall be implemented as required based on the results of surveys conducted per WBO-2.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		• ***WBO-1 (Western Burrowing Owl Surveys):*** *Surveys within modeled habitat are required for both the breeding and non-breeding season. If the project site falls within modeled habitat, an approved biologist will survey the project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping will be conducted by the approved biologist while walking transects throughout the entire project site plus all accessible areas within a 250-foot radius from the project site. The centerline of these transects will be no more than 50 feet apart and will vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects will be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership will be surveyed only if*			

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		access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the project does not fully avoid the habitat, pre-construction surveys will be required. Burrowing owl habitat is fully avoided if project-related activities do not impinge on a 250- foot buffer established by the approved biologist around suitable burrows. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information. • ***WBO-2 (Western Burrowing Owl Pre-Construction Surveys):*** *Prior to any Covered Activity ground disturbance, an approved biologist will conduct pre-construction surveys in all areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey will last a minimum of 3 hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before*			

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		sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped. Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction. • ***WBO-3 (Burrowing Owl Avoidance):*** *If western burrowing owl or evidence of western burrowing owl is observed on the project site or within 250 feet of*			

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		the project site during pre-construction surveys, then the following will occur: ***During Breeding Season:*** *If the approved biologist finds evidence of western burrowing owls within a project site during the breeding season (February 1 through August 31), all project-related activities will avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 250-foot buffer zone. Construction and other project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity and Wildlife Agencies prior to project construction based on the following criteria:*			

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		○ *The Implementing Entity and Wildlife Agencies approve of the avoidance and minimization plan provided by the project applicant.* ○ *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).* ○ *The same approved biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.* *If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies.* *If monitoring by the approved biologist indicates that the nest is abandoned*			

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		prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The approved biologist will excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies. *The Implementing Entity and Wildlife Agencies will respond to a request from the Third-Party Project Proponent to review the proposed construction monitoring plan within 21 days.* ***During Non-Breeding Season:*** *During the non-breeding season (September 1 through January 31), the approved biologist will establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer will be allowed. Construction activities within the non-disturbance buffer will be allowed if the following criteria are met to prevent owls from abandoning over- wintering sites:*			

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		○ *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).* ○ *The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.* ○ *If there is any change in owl foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer.* ○ *If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity and Wildlife Agencies that an approved biologist excavate usable burrows and install one-way exclusionary devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will*			

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		be removed and construction may continue. *Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.* • ***WBO-4 (Burrowing Owl Construction Monitoring):*** *During construction of Covered Activities, 250-foot construction buffer zones will be established and maintained around any occupied burrow. An approved biologist will monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist will also train construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.* • ***WBO-5 (Burrowing Owl Passive Relocation):*** *Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures*			

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		described in this condition preclude work from continuing. Passive relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation will only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors will be in place for 48 hours to ensure that owls have left the burrow, and then the biologist will excavate the burrow to prevent reoccupation. Burrows will be excavated using hand tools only. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term.			

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		• ***WBO-6 (Burrowing Owl Timing of Maintenance Activities):*** *All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas will be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.* • ***WBO-7 (Rodent Control):*** *Rodent control will be allowed only in developed portions of a Covered Activity project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.*			
4.2-5	Have a substantial adverse effect, either directly or through habitat modifications, on raptors and nesting birds.	*4.2-5(a) Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs RAPTOR-2 through RAPTOR-4. Raptor surveys conducted per RAPTOR-2 shall include surveying for golden eagle although it is not a SSHCP Covered Species. If raptor species (including golden eagles) are found nesting within the survey area, RAPTOR-3 and RAPTOR-4 shall be implemented as required based on the results of surveys conducted per RAPTOR-2. The following AMMs do not apply to Swainson's*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		hawk or burrowing owl, as specific AMMs have been developed for such covered raptor species and are included in separate mitigation measures. • ***RAPTOR-2 (Raptor Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground- disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre-construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*			

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		• ***RAPTOR-3 (Raptor Nest/Roost Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged.* • ***RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring):*** *If project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the*			

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		approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).			
		4.2-5(b) A qualified biologist shall conduct a preconstruction nesting bird survey of all areas associated with construction activities, and a 100-foot buffer around such areas, within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31). If active nests are found for any SSHCP Covered Species, the applicable SSHCP AMM(s) TCB-3 through -5, SWHA-3 through -4, WBO-3 through-6, and RAPTOR-3 through-4 shall be implemented. If active nests are found for any other species, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with the CDFW. The buffer shall be maintained until the fledglings are capable	City of Rancho Cordova Community Development Department	Within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31)	

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		of flight and become independent of the nest, to be determined by a qualified biologist. Once the young are independent of the nest, further measures are not necessary.			
4.2-6	Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk.	*4.2-6 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs SWHA-2 through SWHA-4. If Swainson's hawk nesting is found within the survey area during the pre-construction survey conducted per SWHA-2, then SWHA-3 and SWHA-4 shall be implemented as required based on the results of surveys conducted per SWHA-2.* • ***SWHA-2 (Swainson's Hawk Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies. • ***SWHA-3 (Swainson's Hawk Nest Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25-mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.* • ***SWHA-4 (Swainson's Hawk Nest Buffer Monitoring):*** *If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the*			

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		temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).			
4.2-7	Have a substantial adverse effect, either directly or through habitat modifications, on tricolored blackbird.	*4.2-7 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs TCB-2 through TCB-5. If tricolored blackbirds are found within the survey area during the pre-construction survey conducted per TCB-2, then TCB-3 through TCB-5 shall be implemented as required based on the results of surveys conducted per TCB-2.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		• ***TCB-2 (Tricolored Blackbird Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys will be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*			

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		• ***TCB-3 (Tricolored Blackbird Nest Buffer):*** *If active nests are found within the project footprint or within 500 feet of any project-related Covered Activity, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.* • ***TCB-4 (Tricolored Blackbird Nest Buffer Monitoring):*** *If nesting tricolored blackbirds are present within the project footprint or within 500 feet of any project-related Covered Activity, then an approved biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or*			

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		harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone). • ***TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves):*** *On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.*			
4.2-8	Have a substantial adverse effect, either directly or through habitat modifications, on special-status bats.	*4.2-8 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs BAT-2 through BAT-4. Winter hibernaculum surveys conducted per BAT-2 shall also include surveying for pallid bat although it is not an SSHCP Covered Species. If winter hibernacula of western red bat or pallid bat are found within the survey area, then BAT-3 through BAT-4 shall be implemented as required based on the results of surveys conducted per BAT-2.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		• ***BAT-2 (Winter Hibernaculum Pre-Construction Surveys):*** *If the Third-Party Project Proponent elects not to avoid potential winter hibernaculum sites within the project footprint plus a 300-foot buffer, additional surveys are required. Prior to any ground disturbance related to Covered Activities, an approved biologist will conduct a pre- construction survey within 3 days of ground-disturbing activities within the project footprint and 300 feet of the project footprint to determine the presence of winter hibernaculum sites. Pre-construction surveys will be conducted during the winter hibernaculum season (November 1 through March 31). If a winter hibernaculum is present, then BAT-3 and BAT-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.* • ***BAT-3 (Winter Hibernaculum Buffer):*** *If active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will establish a 300-*			

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		foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Implementing Entity and Wildlife Agencies concur. • ***BAT-4 (Bat Eviction Methods):*** *An approved biologist will determine if non-maternity and non-hibernaculum day and night roosts are present on the project site. If necessary, an approved biologist will use safe eviction methods to remove bats if direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided. If a winter hibernaculum site is present, Covered Activities will not occur until the hibernaculum is vacated, or, if necessary, safely evicted using methods acceptable to the Wildlife Agencies.*			
4.2-9	Have a substantial adverse effect, either directly or through habitat modifications, on American badger.	*4.2-9 A qualified biologist shall conduct a preconstruction survey for American badger within 14 days prior to commencement of construction, and results of the survey shall be provided to the City's Community Development Department. If badgers or dens with signs of recent badger use are detected (i.e., fresh scat, claw marks), CDFW shall be consulted and a non-disturbance buffer shall be established around any active dens. The den(s) shall be monitored daily by the qualified*	City of Rancho Cordova Community Development Department	Within 14 days prior to commencement of construction	

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		biologist during construction. Work shall not occur within the non-disturbance buffer until the qualified biologist determines that the badger(s) have left the work area, or as determined in consultation with CDFW.			
4.2-10	Have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	*4.2-10(a) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that authorization pursuant to Clean Water Act (CWA) Section 404 from the U.S. Army Corps of Engineers (USACE) and CWA Section 401 from the Central Valley Regional Water Quality Control Board (RWQCB) is obtained. CWA Section 404 authorization is anticipated to be obtained through a Letter of Permission issued by USACE under the SSHCP ARP, and CWA Section 401 authorization is anticipated to be obtained through an individual Water Quality Certification issued by the RWQCB under the SSHCP ARP.* *The construction contractor shall adhere to all conditions outlined in the permits. The project applicant shall ensure that the proposed project replaces, restores, or enhances on a "no net loss" basis (in accordance with the USACE and the Central Valley RWQCB) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded due to project implementation, either through the SSHCP In-Lieu Fee Program or by*	City of Rancho Cordova Community Development Department Central Valley RWQCB USACE	Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity	

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		other methods agreeable to the USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.			
		4.2-10(b) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that a CDFW 1602 Streambed Alteration Agreement has been obtained. The construction contractor shall adhere to all conditions outlined in the Streambed Alteration Agreement.	City of Rancho Cordova Community Development Department	Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity	
		4.2-10(c) The project applicant shall comply with SSHCP AMM STREAM-2 and a 100-foot setback from Morrison Creek shall be established. Only allowed compatible uses described in the SSHCP shall be sited within the setback. • ***STREAM-2 (UDA Stream Setbacks):*** *A 100-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all streams listed in Table 5-1 (see Table 4.2-3 below) (see also Figure 2-4 [of the SSHCP]). If a stream reach supports woody riparian vegetation, the setback will be equal to the riparian edge plus 25 feet or will be the*	City of Rancho Cordova Community Development Department	Prior to initiation of any groundbreaking activity	

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<table>
<tr><th>Impact Number</th><th>Impact</th><th>Mitigation Measure</th><th>Monitoring Agency</th><th>Implementation Schedule</th><th>Sign-off</th></tr>
<tr><td></td><td></td><td>setback defined above, whichever is greater. If trails are located within the Stream Setback, the nearest edge of the trail will be located at least 50 feet from the top of the bank.

Table 4.2-3
Stream Setback Minimum Requirements in the Urban Development Area
<table><tr><th>Stream</th><th>Minimum Setback (from the Top of Bank Measured in Aerial Perspective) on Both Sides of the Stream</th></tr><tr><td>Elder Creek</td><td>100 feet</td></tr><tr><td>Frye Creek</td><td>100 feet or as depicted as part of the NewBridge development project hardline Preserve (see SSHCP Appendix K)</td></tr><tr><td>Gerber Creek</td><td>100 feet</td></tr><tr><td>Morrison Creek</td><td>100 feet</td></tr><tr><td>Central Paseo</td><td>100 feet or as depicted as part of the Cordova Hills development project hardline Preserve (see SSHCP Appendix K)</td></tr><tr><td>Sun Creek</td><td>100 feet or as depicted as part of the Sun Creek development project hardline Preserve (see SSHCP Appendix K)</td></tr></table>
4.2-10(d) Implement Mitigation Measure 4.2-2(c).</td><td>See Mitigation Measure 4.2-2(c)</td><td>See Mitigation Measure 4.2-2(c)</td><td></td></tr>
<tr><td>4.2-12</td><td>Conflict with any local policies or ordinances protecting biological resources, such as a tree</td><td>4.2-12 Prior to removal of any protected trees (as defined by Chapter 19.12 of the City's Municipal Code) within the project site and off-site improvement areas, a tree removal permit</td><td>City of Rancho Cordova Community</td><td>Prior to removal of any protected trees within the project site</td><td></td></tr>
</table>

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	preservation policy or ordinance.	*shall be procured from the City. In addition, tree species that are native to the Central Valley and Sierra Nevada foothills such as interior live oak (Quercus wislizeni), valley oak (Quercus lobata), blue oak (Quercus douglasii), Fremont cottonwood (Populus fremontii), black walnut (Juglans hindsii), and western redbud (Cercis occidentalis) shall be incorporated into the planned landscaping design in public spaces such as open space, parks, and parkways. Enough plantings of such native trees shall be incorporated into the landscaping such that the number of surviving native trees after five years is equal to or greater than the number of non-native trees removed. Landscaping plans detailing the tree species to be planted shall be provided to the City for approval prior to tree removal.*	Development Department	and off-site improvement areas	
4.2-14	Cumulative loss of habitat for special-status species.	*4.2-14 Implement Mitigation Measures 4.2-1 through 4.2-11.*	See Mitigation Measures 4.2-1 through 4.2-11	See Mitigation Measures 4.2-1 through 4.2-11	
4.3 Cultural and Tribal Resources					
4.3-2	Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred	*4.3-2 The following requirements shall be included through a notation on all project improvement plans prior to the issuance of grading permits, to the satisfaction of the City Engineer.* *In the event subsurface deposits believed to be cultural or human in origin are discovered during construction, all work shall halt within a 50-foot radius of the discovery. A qualified*	City Engineer	Prior to the issuance of grading permits	

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	outside of dedicated cemeteries.	*professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:* • *If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and agency notifications are not required.* • *If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the City of Rancho Cordova and applicable landowner. The project applicant shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Appropriate treatment measures that preserve or restore the character and integrity of a find may be, but are not limited to, processing materials for reburial, minimizing handling of historical*			

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		objects, leaving objects in place within the landscape, construction monitoring of further construction activities, and/or returning objects to a location within the project area where they will not be subject to future impacts. Work shall not resume within the no-work radius until the applicant, through consultation, as appropriate, determines that the site either: 1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to the City's satisfaction. • *If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the City of Rancho Cordova and the Sacramento County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner shall notify the*			

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		NAHC, which then shall designate a Native American Most Likely Descendant (MLD) for the proposed project (Section 5097.98 of the PRC). The designated MLD shall have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC shall mediate (Section 5097.94 of the PRC). If an agreement is not reached, the landowner shall rebury the remains where they shall not be further disturbed (Section 5097.98 of the PRC). The burial shall also include either recording the site with the NAHC or the appropriate information center, using an open space or conservation zoning designation or easement, or recording a reinternment document with Sacramento County (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to their satisfaction.			
4.3-3	Cause a substantial adverse change in the significance of a tribal cultural resource as	*4.3-3(a) Implement Mitigation Measure 4.3-2.*	See Mitigation Measure 4.3-2	See Mitigation Measure 4.3-2	

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	defined in PRC Section 21074.	*4.3-3(b) Prior to initiation of ground-disturbing activities associated with the proposed project, a consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training shall be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program shall include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential tribal cultural resources are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values. Documentation of the brochure and training program (i.e., a sign-in sheet)*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		shall be submitted along with all applicable reports to the City's Community Development Department.			
		4.3-3(c) Prior to the start of ground-disturbing activities associated with the proposed project, the project applicant and construction contractor(s) shall implement the following measures to minimize the potential for destruction of or damage to existing or previously undiscovered burials, archaeological, and tribal cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities: • *Native American monitors from culturally affiliated Native American Tribes shall be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any ground-disturbing activities begin.* • *Native American representatives and Native American monitors have the authority to identify sites or objects of*	City of Rancho Cordova Community Development Department	Prior to the start of ground-disturbing activities	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
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		significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative shall recommend appropriate treatment of such sites or objects. *Compliance with the aforementioned measures shall be documented and submitted with applicable reports to the City's Community Development Department.*			
		4.3-3(d) Develop a standard operating procedure, points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed. *If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other project personnel during construction activities, work shall cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
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		specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes shall assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations shall be documented in the project record. *If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with Wilton Rancheria regarding mitigation contained in the Public Resources Code Sections 21084.3(a) and (b) and CEQA Guidelines Section 15370 shall occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.*			
4.4 Geology and Soils/Mineral Resources					
4.4-3	Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of	*4.4-3* *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for review and approval by the Rancho Cordova Community Development Department. The report shall address and make recommendations on the following:* *A. Road, pavement, and parking area design;*	Rancho Cordova Community Development Department	Prior to approval of improvement plans	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
	the Uniform Building Code.	*B. Structural foundations, including retaining wall design (if applicable);* *C. Grading practices;* *D. Erosion/winterization;* *E. Special problems discovered on-site, (i.e., open bodies of water, expansive/unstable soils, etc.); and* *F. Slope stability.* *Once approved by the Rancho Cordova Community Development Department, two copies of the final report shall be provided to the Rancho Cordova Community Development Department and one copy to the Rancho Cordova Building and Safety Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.*			
4.4-5	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	*4.4-5 Should construction or grading activities result in the discovery of unique paleontological resources, all work within the vicinity of the discovery shall cease. The City of Rancho Cordova Community Development Department shall be notified, and the resources shall be examined by a qualified paleontologist at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The paleontologist shall submit to the Community Development Department for review and approval a report of the findings and method of*	City of Rancho Cordova Community Development Department	If construction or grading activities result in the discovery of unique paleontological resources	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.			
4.5 Hazards and Hazardous Materials					
4.5-2	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	*4.5-2(a) Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall complete and submit, for both the underground storage units identified on APNs 073-0010-011 and 072-0300-008, a Consolidated Application For Authority to Remove Under Ground Storage Tanks to the Sacramento County Environmental Management Department (EMD) for review. Upon issuance of a permit (Authority Letter to Remove) from the EMD, removal of the UST shall proceed in accordance with all permit conditions, including, but not limited to, inspection, testing, and plan/report submittal requirements.*	Sacramento County Environmental Management Department	Prior to initiation of demolition or construction activities	
		4.5-2(b) Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall retain a licensed contractor to remove the existing 55-gallon drum located on APN 072-0300-008, to the northeast of the existing residence. The drum shall be disposed of in accordance with all applicable federal, State, and local regulations related to the handling, transport, and disposal of hazardous waste. Proof of safe disposal shall be provided to the Community Development Department.	City of Rancho Cordova Community Development Department	Prior to initiation of demolition or construction activities	

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Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		4.5-2(c) Prior to issuance of a demolition permit for any on-site structures, the project applicant shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the Community Development Department an asbestos and lead survey. If asbestos-containing materials or lead-containing materials are not discovered during the survey, further mitigation related to asbestos-containing materials or lead containing materials shall not be required. If asbestos-containing materials and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site asbestos-containing materials and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA) Administration regulations and disposed of in accordance with all CalEPA regulations, prior to the demolition and/or removal of the on-site structures. The plan shall include the requirement that work shall be conducted by a Cal-OSHA registered asbestos and lead abatement contractor in accordance with Title 8 CCR 1529 and Title 8 CCR 1532.1 regarding asbestos and lead training, engineering controls, and certifications. The applicant shall submit the work plan to the Community Development Department for review and approval. Materials containing more than one (1) percent asbestos that is friable are also	City of Rancho Cordova Community Development Department	Prior to issuance of a demolition permit for any on-site structures	

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		subject to SMAQMD regulations. Removal of materials containing more than one (1) percent friable asbestos shall be completed in accordance with SMAQMD Rule 902.			
		4.5-2(d) Prior to issuance of a demolition permit for any on-site structures, the project applicant shall retain the services of a licensed environmental professional to prepared a Phase II Environmental Assessment (ESA) for the project site. The Phase II ESA shall evaluate, at a minimum, potential lead contamination in the soils in the vicinity of the structures located on APN 072-0300-008, as well as potential termiticide contamination in the soils in the vicinity of the wooden structures located on APN 072-0300-002 and APN 072-0300-008. In the event that the lead and/or termiticide contamination is determined to occur, the project applicant shall implement all recommended measures in the Phase II ESA necessary to address such hazards. Such measures may include, but shall not be limited to, capping contaminated soil in place and deed-restricting the subject property, excavation and off-haul of contaminated soils by a licensed contractor, or other appropriate methods deemed acceptable by the Sacramento County Environmental Management Department (EMD).	Sacramento County Environmental Management Department	Prior to issuance of a demolition permit for any on-site structures	
		4.5-2(e) Prior to Improvement Plan approval, the applicant shall hire a licensed well contractor	City of Rancho Cordova	Prior to Improvement Plan approval	

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		to obtain a well abandonment permit from the Sacramento County Environmental Management Department (EMD) for all on-site wells, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III), for review and approval by the EMD. In addition, prior to Improvement Plan approval, the project applicant shall ensure that any on-site septic systems are abandoned in compliance with applicable EMD standards. Verification of abandonment shall be ensured by the City of Rancho Cordova Community Development Department.	Community Development Department		
		4.5-2(f) If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities at the project site, work shall stop in the area of potential contamination, and the type and extent of contamination shall be identified by a Registered Environmental Assessor (REA) or qualified professional. The REA or qualified professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations, relevant environmental screening levels for identified contaminants, whether the contaminants exceed ESLs, thus warranting remediation, and recommendations for appropriate	City of Rancho Cordova Community Development Department	If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities	

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		handling and disposal. Site preparation or construction activities shall not recommence within the contaminated areas until any necessary remediation identified in the report is complete. The report and verification of proper remediation and disposal shall be submitted to the City of Rancho Cordova Community Development Department for review and approval.			
4.6 Hydrology and Water Quality					
4.6-1	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.	*4.6-1 Prior to the commencement of ground-disturbing activities, the project applicant shall submit, and obtain approval of, a Spill Prevention Countermeasure and Control Plan (SPCC) to the Sacramento County Environmental Management Department. The SPCC shall specify measures and procedures to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112.*	Sacramento County Environmental Management Department	Prior to the commencement of ground-disturbing activities	
4.6-2	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations.	*4.6-2 Prior to approval of final project improvement plans, the project applicant shall submit a detailed Best Management Practice (BMP) and water quality maintenance plan to the City for review and approval. The BMP and water quality maintenance plan shall meet the standards of the City's NPDES Permit (No. CAS0085324), the California Stormwater Quality Association (CASQA) Stormwater*	City of Rancho Cordova Community Development Department	Prior to approval of final project improvement plans	

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Impact Number	Impact		Mitigation Measure	Monitoring Agency	Implementation Schedule	Sign-off
			BMP Handbook for New Development and Redevelopment, and the Stormwater Quality Design Manual for the Sacramento region. Site design measures, source control measures, hydromodification management, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the improvement plans.			
		4.6-3	*Prior to approval of final project improvement plans, the project applicant shall submit a maintenance covenant to the City for review and approval. The maintenance covenant shall be executed to ensure the long-term maintenance of stormwater quality measures.*	City of Rancho Cordova Community Development Department	Prior to approval of final project improvement plans	
4.8 Noise						
4.8-1	Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	*4.8-1*	*The following criteria shall be noted on project Improvement Plans. Improvement Plans shall be submitted to the City's Community Development Department for review and approval.* • *Consistent with Section 6.68.090 of the Rancho Cordova Municipal Code, noise-generating construction activities shall be limited to the hours of 6:00 AM to 8:00 PM on weekdays and 7:00 AM to 8:00 PM on weekends.*	City of Rancho Cordova Community Development Department	Prior to approval of Improvement Plans	
4.10 Transportation						
4.10-2	Conflict or be inconsistent with CEQA	*4.10-2(a)*	*Prior to approval of Improvement Plans, the project applicant shall include in the*	City of Rancho Cordova	Prior to approval of Improvement Plans	

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Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
	Guidelines Section 15064.3, subdivision (b) under Existing Plus Project conditions.	*Improvement Plan submittal a Trail System Plan detailing the applicant's construction of a portion of the regional trail system in the vicinity of the project site. The Trail System Plan shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*	Community Development Department		
		4.10-2(b) Prior to the recording of a Final Map, the project applicant shall pay a fair share contribution to provide monetary support for the City's transportation services, as determined by the City of Rancho Cordova Community Development Department. The charges for residential and nonresidential development will fund these transportation services as determined appropriate by the City Council. Supplemental transportation services may include, but are not limited to, the following: • *Transit Shuttle – shuttle for residents and/or employees between residential areas, employment centers, shopping and service centers and light rail stations and/or other public transit options;* • *Guaranteed Ride Home – free taxi rides and rental cars for ride sharers in case of an emergency;* • *Transit Subsidies – financial assistance to encourage residents*	City of Rancho Cordova Community Development Department	Prior to the recording of a Final Map	

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			and employees to use transit or other alternative transportation measures; • *Transportation Plans for employers and/or resident groups – plans which guide employers and resident groups on the implementation of trip reduction programs, such as ride share matching or other similar programs;* • *Education Programs – various programs such as education of transit options, home office set up, alternative commute opportunities;* • *Infrastructure Support – additional bike racks and lockers, transportation alternative and ride share informational boards/kiosks, and transit facilities;* • *Transportation Coordinator Training and Support – instruction in mobility (transportation alternatives) for residential groups and work site coordinators; and* • *Bicycle and Alternative Fuel Vehicle Incentives – incentives for purchasing new bicycles or alternative fuel vehicles.*			
Initial Study						
I-d	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	*I-1*	*Prior to the approval of Improvement Plans and issuance of Building Permits for any development on the project site, the project applicant shall submit a lighting plan for the project to the City of Rancho Cordova Planning*	City of Rancho Cordova Planning Division	Prior to the approval of Improvement Plans and issuance of Building Permits	

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		Division for review and approval. The lighting plan shall include, but not necessarily be limited to, the following provisions: • *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;* • *Place and shield or screen flood and area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas and passing motorists;* • *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash;* • *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting motorists on nearby roadways; and* • *The proposed location, mounting height, and aiming point of all outdoor lighting used during project operations and/or construction.*		for any development on the project site	

The Preserve Project

SCH# 2019100515

Draft Environmental Impact Report

Prepared for

City of Rancho Cordova

November 2021

Prepared by

RANEY PLANNING & MANAGEMENT, INC. 20 years

1501 Sports Drive, Suite A, Sacramento, CA 95834

The Preserve Project
Draft Environmental Impact Report

SCH# 2019100515

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1. Introduction

1. INTRODUCTION

1.1 TYPE AND PURPOSE OF THE EIR

The Preserve Project Environmental Impact Report (EIR) has been prepared in accordance with the California Environmental Quality Act (CEQA) of 1970, Public Resources Code (PRC) Sections 21000-21178, as amended, and the Guidelines for Implementation of the California Environmental Quality Act, California Code of Regulations (CCR) Title 14, Sections 15000-15387 (CEQA Guidelines). The City of Rancho Cordova is the lead agency for the environmental review of The Preserve Project (proposed project) evaluated herein and has the principal responsibility for approving the project. As required by Section 15121 of the CEQA Guidelines, this EIR will (a) inform public agency decision-makers, and the public generally, of the significant environmental effects of the project, (b) identify possible ways to minimize the significant adverse environmental effects, and (c) describe reasonable and feasible project alternatives which reduce environmental effects. The public agency shall consider the information in the EIR along with other information that may be presented to the agency.

As provided in the CEQA Guidelines Section 15021, public agencies are charged with the duty to avoid or minimize environmental damage where feasible. The public agency has an obligation to balance a variety of public objectives, including economic, environmental, and social issues. CEQA requires the preparation of an EIR prior to approving any project that may have a significant effect on the environment. For the purposes of CEQA, the term project refers to the whole of an action, which has the potential for resulting in a direct physical change or a reasonably foreseeable indirect physical change in the environment (CEQA Guidelines Section 15378[a]). With respect to the proposed project, the City has determined that the proposed development is a *project* within the definition of CEQA, which has the potential for resulting in significant environmental effects.

The lead agency, which is the City of Rancho Cordova for this project, is required to consider the information in the EIR along with any other available information in deciding whether to approve the application. The basic requirements for an EIR include discussions of the environmental setting, environmental impacts, mitigation measures, alternatives, growth inducing impacts, and cumulative impacts.

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a *project-level EIR* pursuant to CEQA Guidelines Section 15161, which is an analysis that examines the environmental impacts of a specific development project. A *project-level EIR* focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

1.2 KNOWN RESPONSIBLE AND TRUSTEE AGENCIES

“Responsible agency” means a public agency that proposes to carry out or approve a project for which a lead agency is preparing or has prepared an EIR or Negative Declaration. For the purpose of CEQA, the term responsible agency includes all California public agencies other than the lead agency that have discretionary approval power over the project or an aspect of the project. The

Sacramento Metropolitan Air Quality Management District (SMAQMD) and Central Valley Regional Water Quality Control Board (CVRWQCD) are identified as potential responsible agencies for the proposed project.

"Trustee agency" means a State agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. The only known possible trustee agency is the California Department of Fish and Wildlife (CDFW).

Although not subject to California law, and, thus, outside the definitions of responsible agency or trustee agency, the U.S. Army Corps of Engineers (USACE) and U.S. Fish and Wildlife Service (USFWS) would also be called upon to grant approvals — under federal law — necessary for the development of the project site. The above agencies do not have duties under CEQA, but, rather, are governed by a variety of federal statutes, such as the Clean Water Act, which governs the dredging and filling of waters of the U.S. (e.g., wetlands), and the Endangered Species Act, which requires USACE to consult with the USFWS as part of the review process for any wetland or fill permits that may be required.

1.3 PROJECT SUMMARY

The project site consists of 279.3 acres located northwest of Raymer Way and Grant Line Road, north of the Sunridge Specific Plan area and east of the Rio Del Oro Specific Plan area, within the City of Rancho Cordova. Currently, the project site contains two single-family residences and associated outbuildings on the southern portion of the site, an orchard within the northeastern portion of the site, and a third single-family residence and associated outbuildings in the northwestern portion of the site. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal drainage corridors and wetlands. Morrison Creek runs northeast to southwest through the project site. Per the City of Rancho Cordova General Plan, the project site is located within the Grant Line West Planning Area and is designated Natural Resources and Residential-Mixed Density. The site is zoned Agricultural (AG-80) and Industrial Reserve (IR).

The proposed project would include subdivision of the project site to develop 440 single-family residences and associated parks, open space areas, and infrastructure to support the community. Of the 279.3 acres within the project site, 185.3 acres of currently undeveloped land on the northern parcels would remain as open space following development of the proposed project. A total of 8.65 acres are planned for two park areas located at the northern end of the development area, and an additional 9.77 acres of land would be designated Community Space. Finally, 0.45-acre of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to the surrounding parks. Off-site improvements could be required, including utility connection or road development to the east of the site boundary and along the existing Raymer Way to the intersection with Grant Line Road, which could include expansion of the roadway or modifications to Morrison Creek.

A General Plan Amendment (GPA) is included as part of the proposed project to change the land use designation of the project site from Grant Line West Planning Area to Low-Density Residential. In addition, a GPA is included to amend the Circulation Element to alter the planned construction of Centennial Drive. If constructed as depicted in the Circulation Element, Centennial Drive would be a four-lane roadway and run through the project site in an east-west direction; however, through approval of the GPA, the portion within the project site would not be constructed.

The proposed project would require the following discretionary actions by the City of Rancho Cordova:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- General Plan Amendment from Grant Line West Planning Area to Low-Density Residential;
- General Plan Amendment to remove the portion of Centennial Drive through the project site, as depicted in the Circulation Element;
- Rezone from AG-80 (approximately 68.42 acres) and IR (approximately 30.48 acres) to Residential District (RD-5);
- Tentative Subdivision Map; and
- Development Agreement.

Please refer to Chapter 3, Project Description, of this EIR for a detailed description of the proposed project and entitlements, as well as a full list of the project objectives.

1.4 EIR PROCESS

The EIR process begins with the decision by the lead agency to prepare an EIR, either during a preliminary review of a project or at the conclusion of an Initial Study. Once the decision is made to prepare an EIR, the lead agency sends a Notice of Preparation (NOP) to appropriate government agencies and, when required, to the State Clearinghouse (SCH) in the Office of Planning and Research (OPR), which will ensure that responsible and trustee State agencies reply within the required time. The SCH assigns an identification number to the project, which then becomes the identification number for all subsequent environmental documents on the project. Commenting agencies have 30 days to respond to the NOP and provide information regarding alternatives and mitigation measures they wish to have explored in the Draft EIR and to provide notification regarding whether the agency will be a responsible agency or a trustee agency for the project.

Upon completion of the Draft EIR and prior to circulation to State and local agencies and interested members of the public, a notice of completion is filed with the SCH and a public notice of availability is published to inform interested parties that a Draft EIR is available for agency and public review. In addition, the notice provides information regarding the location where copies of the Draft EIR are available for public review and any public meetings or hearings that are scheduled. The Draft EIR is circulated for a minimum period of 45 days, during which time reviewers may submit comments on the document to the lead agency. The lead agency must respond to comments in writing. If significant new information, as defined in CEQA Guidelines Section 15088.5, is added to an EIR after public notice of availability is given, but before certification of the EIR, the revised EIR or affected chapters must be recirculated for an additional public review period with related comments and responses.

A Final EIR will be prepared, containing public comments on the Draft EIR and written responses to those comments, as well as a list of changes to the Draft EIR text necessitated by public comments, as warranted. Before approving a project, the lead agency shall certify that the EIR (consisting of the Draft EIR and Final EIR) has been completed in compliance with CEQA, and that the EIR has been presented to the decision-making body of the lead agency, which has reviewed and considered the EIR. The lead agency shall also certify that the EIR reflects the lead agency's independent judgment and analysis.

The findings prepared by the lead agency must be based on substantial evidence in the administrative record and must include an explanation that bridges the gap between evidence in the record and the conclusions required by CEQA. If the decision-making body elects to proceed with a project that would have unavoidable significant impacts, then a Statement of Overriding Considerations explaining the decision to balance the benefits of the project against unavoidable environmental impacts must be prepared.

1.5 SCOPE OF THE EIR

This EIR constitutes a project-level analysis for the proposed project and, pursuant to CEQA Guidelines Section 15161, covers "all phases of the project including planning, construction, and operation." State CEQA Guidelines § 15126.2(a) states, in pertinent part:

> An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

Pursuant to the CEQA Guidelines, the scope of this EIR addresses specific issues and concerns identified as potentially significant in the Initial Study prepared for the proposed project.

Environmental Issues Addressed in this EIR

The sections of the CEQA Guidelines Appendix G Checklist identified for study in this EIR include the following:

- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Cultural and Tribal Resources;
- Geology and Soils/Mineral Resources;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning/Population and Housing;
- Noise;
- Public Services and Utilities; and
- Transportation.

The evaluation of effects is presented on a resource-by-resource basis in Chapters 4.1 through 4.10 of the EIR. Each chapter is divided into the following four sections: Introduction, Existing Environmental Setting, Regulatory Context, and Impacts and Mitigation Measures. Impacts that are determined to be significant in Chapters 4.1 through 4.10, and for which feasible mitigation measures are not available to reduce those impacts to a less-than-significant level, are identified as significant and unavoidable. Chapter 5 presents a discussion of growth-inducing impacts, a summary of cumulative impacts, and significant irreversible as well as significant and unavoidable environmental changes associated with the project. Alternatives to the proposed project are discussed in Chapter 6 of the EIR.

1.6 DEFINITION OF BASELINE

The CEQA Guidelines identify several types of EIRs, each applicable to different project circumstances. This EIR has been prepared as a project-level EIR pursuant to CEQA Guidelines

Section 15161, which is an analysis that examines the environmental impacts of a specific development project. A project-level EIR focuses primarily on the changes in the environment that would result from the development of the project, and examines all phases of the project including planning, construction, and operation.

According to CEQA Guidelines Section 15125, an EIR must include a description of the existing physical environmental conditions in the vicinity of the project to provide the "baseline physical conditions" against which project-related changes could be compared. In addition, CEQA Guidelines Section 15126.2(a) states that an EIR shall identify and focus on the significant environmental effects of the proposed project. The CEQA Guidelines, Section 15126.2(a), states in pertinent part:

> An EIR shall identify and focus on the significant environmental effects of the proposed project. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced.

Normally, the baseline condition is the physical condition that exists when the NOP is published. The NOP for the proposed project was published on October 25, 2019. Therefore, conditions existing at that time are considered to be the baseline against which changes that would result from the proposed project are evaluated. Impacts could include both direct and indirect physical changes to the baseline condition. The baseline condition for the proposed project site is described in Chapter 3, Project Description, of this EIR. The baseline conditions pertaining to each resource area are described in the "Existing Environmental Setting" section of the respective chapters of this EIR.

1.7 NOTICE OF PREPARATION AND SCOPING

In accordance with CEQA Guidelines Section 15082, an NOP, as well as an attached Initial Study (see Appendix A), was circulated to the public, local, State and federal agencies, and other known interested parties for a 30-day public and agency review period from October 25, 2019 to November 25, 2019. The purpose of the NOP was to provide notification that an EIR for the proposed project was being prepared and to solicit public input on the scope and content of the document.

A public scoping meeting was held on for the purpose of informing the public and receiving comments on the scope of the environmental analysis to be prepared for the proposed project.

In addition, pursuant to CEQA Guidelines Section 15082, the City of Rancho Cordova held an NOP scoping meeting during the 30-day review period, on November 29, 2019, for the purpose of receiving comments on the scope of the environmental analysis to be prepared for the proposed project. Agencies and members of the public were invited to attend and provide input on the scope of the EIR. A total of eight comment letters were received during the NOP public review period and verbal comments were received at the NOP scoping meeting. The comment letters are provided as Appendix B to this EIR. All comments were taken into consideration during the preparation of this EIR. A summary of the NOP comments received is provided in Section 1.8 below.

1.8 COMMENTS RECEIVED ON THE NOTICE OF PREPARATION

During the NOP public review period from October 25, 2019 to November 25, 2019, the City of Rancho Cordova received eight comment letters. In addition, verbal comments were received at the public scoping meeting held on November 13, 2019. A copy of each letter is provided in Appendix B of this EIR. The comment letters received during the NOP public review period were authored by the following representatives of public agencies:

- County of Sacramento Department of Transportation – Matthew G. Darrow
- Cordova Recreation and Park District – Laura L. Taylor;
- County of Sacramento, Department of Waste Management and Recycling – Dave Ghirardelli;
- Sacramento Municipal Utility District – Nicole Goi;
- Department of California Highway Patrol – R.M. Johnson;
- Central Valley Regional Water Quality Control Board – Jordan Hensley;
- California Department of Transportation (Caltrans) – David Smith; and
- Sacramento Metropolitan Air Quality Management District – Molly Wright.

The following list, categorized by issue, summarizes the concerns brought forth in the comment letters and verbal comments received on the scope of the EIR:

Air Quality and Greenhouse Gas Emissions	Concerns related to: • Construction and operational emissions of criteria pollutants and GHG emissions. • Project emissions in conjunction with planned projects within the Grant Line West planning area.
Biological Resources	Concerns related to: • Loss of plant and wildlife habitat. • Impacts on Morrison Creek. • Removal of wetlands or protected plants and animals.
Cultural and Tribal Resources	Concerns related to: • Potential for encountering previously unknown cultural, historical, or tribal resources at the project site.
Geology and Soils/Mineral Resources	Concerns related to: • Increased stormwater runoff causing soil erosion. • Removal of unsuitable soils.
Hydrology and Water Quality	Concerns related to: • Degradation of water quality in area waterways.
Land Use and Planning/Population and Housing	Concerns related to: • Increase in population.
Noise	Concerns related to: • Increase in noise levels to surrounding residential areas.
Public Services and Utilities	Concerns related to: • Lack of public access to the proposed park facilities. • Location of the proposed parks. • Impacts from construction of the proposed park facilities. • Connection of proposed trail system to the City's existing trail system.

	• Cumulative impacts related to the need for increased electrical delivery. • Potential need to relocate and/or remove any electrical infrastructure.
Transportation	Concerns related to: • Traffic increases in the project vicinity. • Increased traffic delays and congestion during commute hours. • Increase in emergency response times due to increased traffic delays and congestion. • Cumulative traffic impacts on the local and regional transportation system.

All of these issues are addressed in this EIR, in the relevant sections identified in the first column.

1.9 PROJECT CHANGES SINCE PUBLICATION OF THE NOP

Since the NOP was published, relatively minor changes to the proposed project have been made, including the following:

- Changes to the Tentative Subdivision Map layout that resulted in an increase in the number of single-family lots by six from 434 to 440;
- An additional General Plan Amendment is proposed to amend the Circulation Element to alter the planned construction of Centennial Drive; and
- A slight modification to the requested Rezone of Residential District (RD-5 is proposed, rather than RD-6).

The above changes have been evaluated throughout this EIR.

1.10 DRAFT EIR AND PUBLIC REVIEW

This Draft EIR is being circulated for public review and comment for a period of 45 days. During this period, the general public, organizations, and agencies can submit comments to the Lead Agency on the Draft EIR's accuracy and completeness. Release of the Draft EIR marks the beginning of a 45-day public review period pursuant to CEQA Guidelines Section 15105. The public can review the Draft EIR at the City's website at:

https://www.cityofranchocordova.org/government/planning/environmental-review/environmental-documents

or at the following address during normal business hours:

City of Rancho Cordova
Community Development Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Comments may be submitted both in written form and/or orally at the public hearing on the Draft EIR. Notice of the time and location of the hearing will be published in local newspapers, mailed to property owners and residents surrounding the project, emailed to residents that have requested to be placed on the project's email notification list, posted on the City's website, and posted at and adjacent to the site prior to the hearing.

All comments or questions regarding the Draft EIR should be addressed to:

Darcy Goulart, Principal Planner
City of Rancho
Cordova Community Planning Department
Rancho Cordova, CA 95760
(916) 851-8784
fax (916) 851-8762
dgoulart@cityofranchocordova.org

1.11 ORGANIZATION OF THE DRAFT EIR

The EIR is organized into the following sections:

Chapter 1 – Introduction

Provides an introduction and overview describing the intended use of the EIR and the review and certification process, as well as summaries of the chapters included in the EIR and summaries of the issues and concerns received from the public and public agencies during the NOP review period.

Chapter 2 – Executive Summary

Summarizes the elements of the project and the environmental impacts that would result from implementation of the proposed project, describes proposed mitigation measures, and indicates the level of significance of impacts after mitigation.

Chapter 3 – Project Description

Provides a detailed description of the proposed project, including the project's location, background information, objectives, and technical characteristics.

Chapter 4 – Environmental Setting, Impacts, and Mitigation

Contains a project-level and cumulative analysis of environmental issue areas associated with the proposed project. The section for each environmental issue contains an introduction and description of the setting of the project site, identifies impacts, and recommends appropriate mitigation measures.

Chapter 5 – Statutorily Required Sections

Provides discussions required by CEQA regarding impacts that would result from the proposed project, including a summary of potential growth-inducing impacts, significant irreversible changes to the environment, and significant and unavoidable impacts.

Chapter 6 – Alternatives Analysis

Provides a comparative analysis of the alternatives to the proposed project, their respective comparative environmental effects, and a determination of the environmentally superior alternative.

Chapter 7 – EIR Authors and Persons Consulted

Lists EIR and technical report authors who provided technical assistance in the preparation and review of the EIR.

Chapter 8 – References
Provides bibliographic information for all references and resources cited.

Appendices
The Appendices include the NOP and Initial Study, comments received during the NOP comment period, and all technical reports prepared for the proposed project.

2. Executive Summary

2. EXECUTIVE SUMMARY

2.1 INTRODUCTION

The Executive Summary chapter of the EIR provides an overview of the proposed project (see Chapter 3, Project Description, for further details) and provides a table summary of the conclusions of the environmental analysis provided in Chapters 4.1 through 4.10. This chapter also summarizes the alternatives to the proposed project that are described in Chapter 6, Alternatives Analysis, and identifies the Environmentally Superior Alternative. Table 2-1 contains the environmental impacts associated with the proposed project, the significance of the impacts, the proposed mitigation measures for the impacts, and the significance of the impacts after implementation of the mitigation measures.

2.2 SUMMARY DESCRIPTION OF THE PROPOSED PROJECT

The project site consists of approximately 279.3 acres within the City of Rancho Cordova, located northwest of Raymer Way and Grant Line Road, north of the Sunridge Specific Plan area and east of the Rio Del Oro Specific Plan area. The site is identified by Assessor's Parcel Numbers (APNs) 072-0300-001, -002, -005, -008, and 073-0010-010, and -011.

Currently, the project site contains two single-family residences and associated outbuildings on the southern portion of the site, within parcels 072-0300-002 and -005. An orchard is located within the northeastern portion of the site within parcel 073-0010-011, and a third single-family residence and associated outbuildings are located on APN 072-0300-008. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal drainage corridors and wetlands. Additionally, Morrison Creek runs northeast to southwest through the project site.

Per the City of Rancho Cordova General Plan, the project site is located within the Grant Line West Planning Area and is designated Natural Resources and Residential-Mixed Density. The site is zoned Agricultural (AG-80) and Industrial Reserve (IR).

The proposed project would include subdivision of the project site to develop 440 single-family residences and associated parks, open space areas, and infrastructure to support the community. Of the 279.3 acres within the project site, 185.3 acres of currently undeveloped land on the northern parcels would remain as open space following development of the proposed project. A total of 8.65 acres are planned for two park areas located at the northern end of the development area, and an additional 9.77 acres of land would be designated Community Space. Finally, 0.45-acre of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to the surrounding parks.

The proposed project could include off-site improvements to the east of the site boundary. Improvements could include utility connection or road development. Additionally, off-site improvements could be required along the existing Raymer Way to the intersection with Grant Line Road, and could include expansion of the roadway or modifications to Morrison Creek.

A General Plan Amendment (GPA) is included as part of the proposed project to change the land use designation of the project site from Grant Line West Planning Area to Low-Density Residential. In addition, a GPA is included as part of the project to amend the Circulation Element to alter the planned construction of Centennial Drive. If constructed as depicted in the Circulation Element, Centennial Drive would be a four-lane roadway and run through the project site in an east-west direction; however, through approval of the GPA, the portion within the project site would not be constructed.

The proposed project would require the following discretionary actions by the City of Rancho Cordova:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- GPA from Grant Line West Planning Area to Low-Density Residential;
- GPA to remove the portion of Centennial Drive through the project site, as depicted in the Circulation Element;
- Rezone from AG-80 (approximately 68.42 acres) and IR (approximately 30.48 acres) to Residential District (RD-5);
- Tentative Subdivision Map; and
- Development Agreement.

In addition to the aforementioned entitlements from the City, the proposed project would require approvals/permits from the following State, federal, or local agencies:

- California Department of Fish and Wildlife (CDFW);
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- Sacramento Metropolitan Air Quality Management District (SMAQMD);
- U.S. Army Corps of Engineers (USACE) – Nationwide Permit (404); and, possibly,
- U.S. Fish and Wildlife Service (USFWS).

Please refer to Chapter 3, Project Description, of this EIR for a detailed description of the proposed project and entitlements, as well as a full list of the project objectives.

2.3 ENVIRONMENTAL IMPACTS AND PROPOSED AND RECOMMENDED MITIGATION

Under CEQA, a significant effect on the environment is defined as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, mineral, flora, fauna, ambient noise, and objects of historic or aesthetic significance. Mitigation measures must be implemented as part of the proposed project to reduce potential adverse impacts to a less-than-significant level. Such mitigation measures are noted in this EIR and are found in the following technical chapters: Air Quality, Greenhouse Gas Emissions, and Energy; Biological Resources; Cultural and Tribal Resources; Geology and Soils/Mineral Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise; and Transportation. Any impact that remains significant after implementation of mitigation measures is considered a significant and unavoidable impact.

A summary of the identified impacts in the technical chapters of the EIR, as well as the Initial Study prepared for the project, is presented in Table 2-1. In Table 2-1, the proposed project

impacts are identified for each technical chapter (Chapter 4.1 through 4.10) of the EIR. In addition, Table 2-1 includes the level of significance of each impact, any mitigation measures required for each impact, and the resulting level of significance after implementation of mitigation measures for each impact.

2.4 SUMMARY OF PROJECT ALTERNATIVES

The following section presents a summary of the evaluation of the alternatives considered for the proposed project, which include the following:

- No Project Alternative;
- Reduced VMT Alternative; and
- Reduced Footprint Alternative.

The following summary provides brief descriptions of the three alternatives to the proposed project that are evaluated in this EIR. For a more thorough discussion of project alternatives, please refer to Chapter 6, Alternatives Analysis.

No Project Alternative

The No Project Alternative assumes that the project site would remain in its current condition, as described above. The No Project Alternative would not meet any of the identified project objectives.

Reduced VMT Alternative

The Reduced VMT Alterative would consist of 376 single-family residential lots on the same 98.9-acre development footprint. Lot sizes would be larger in size than those of the currently proposed project, and the reduction in units would result in a density of 3.8 dwelling units per acre (du/ac). Under the Reduced VMT Alternative, the project would require a rezone of the 98.9 acres to the RD-4 zoning district.

Because the Reduced VMT Alternative would maintain a similar development footprint to the proposed project, access to the site under the alternative would continue to be provided by two entry points along Raymer Way, and Edington Drive would still be extended to provide access from the site to the existing Camden at Somerset Ranch subdivision. With the reduction in units, the site would require fewer interior streets and water and sewer line connections. The Alternative would still implement two bio-retention basins in the northwest portion of the site, and new drain inlets and underground storm drains would also be installed. The GPA would still be required to amend the General Plan's Circulation Element, which calls for extending Centennial Drive through the site.

The Reduced VMT Alternative would result in fewer impacts to Air Quality, GHG Emissions, and Energy, Noise, Public Services and Utilities, and Transportation, as compared to the proposed project. However, the Alternative would result in similar impacts related to Biological Resources, Cultural and Tribal Resources, Geology and Soils/Mineral Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, and Land Use and Planning/Population and Housing as compared to the proposed project.

The Reduced VMT Alternative would not achieve Objective #2. However, the Alternative would meet Objectives #1, #3, #4, #5, #6, and #7, as the reduction of units would not affect the ability for the alternative to consolidate the remaining parcels in the Grant Line West Planning Area in a

manner that concentrates development south of Morrison Creek; develop a residential community that is contiguous to and compatible with adjacent existing development; utilize existing utility capacity for maximum efficiency; develop a residential community that can provide timely housing; contribute to the overall bicycle and pedestrian connectivity of the City; or enhance the City's network of parks, trails, and open spaces.

Reduced Footprint Alternative

Under this alternative, the project site would be reduced to avoid wetland areas in the northwest section of the development area. The reduction in footprint would reduce the project's development area from 98.9 acres to 92.57 acres, which would preserve 6.33 acres of wetlands. The alternative would still implement the 9.77 acres designated for Community Space to allow for the inclusion of the bio-retention and hydromodification areas in the northwest portion of the site. Retaining the Community Space would necessitate a reduction in the number of units from 440 units to 315 units. The reduction in units and footprint would result in a density of 3.4 du/ac. As such, the Alternative would require a Rezone to the RD-4 Zoning District in order to accommodate the proposed density.

Access to the site under the alternative would continue to be provided by two entry points along Raymer Way, and Edington Drive would still be extended to provide access from the site to the existing Camden at Somerset Ranch subdivision. With the reduction in units, fewer water and sewer line connections would be required. The amount of stormwater infrastructure within the site would also be reduced due to the reduced area of ground disturbance. New drain inlets and underground storm drains would be installed. The GPA would still be required to amend the General Plan's Circulation Element, which calls for extending Centennial Drive through the site.

The Reduced Footprint Alternative would result in fewer impacts related to all issue areas, except for Land Use and Planning/Population and Housing, which would be similar as compared to the proposed project.

The Reduced Footprint Alternative would not achieve Objective #2. However, the Alternative would meet Objectives #1, #3, #4, #5, #6, and #7, as the reduction of units would not affect the ability for the alternative to consolidate the remaining parcels in the Grant Line West Planning Area in a manner that concentrates development south of Morrison Creek; develop a residential community that is contiguous to and compatible with adjacent existing development; utilize existing utility capacity for maximum efficiency; develop a residential community that can provide timely housing; contribute to the overall bicycle and pedestrian connectivity of the City; or enhance the City's network of parks, trails, and open spaces.

Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126(e)(2) of the CEQA Guidelines requires that an environmentally superior alternative be designated and states, "If the environmentally superior alternative is the 'no project' alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives." The No Project Alternative would be considered the environmentally superior alternative, because the project site is assumed to remain in its current condition under the alternative. Consequently, the impacts resulting from the proposed project would not occur under the Alternative.

Based on the analysis presented in Chapter 6, Alternatives Analysis, of this EIR, the Reduced Footprint Alternative would meet would meet Objectives #1, #3, #4, #5, and #7. and would result in similar or fewer impacts as compared to the proposed project. In addition, the Reduced Footprint Alternative would result in fewer impacts to Biological Resources, Cultural and Tribal Resources, Geology and Soils/Mineral Resources, and Hazards and Hazardous Materials as compared to the Reduced VMT Alternative. Therefore, the Reduced Footprint Alternative would be the Environmentally Superior Alternative.

2.5 AREAS OF CONTROVERSY

Areas of controversy that were identified in NOP comment letters, and are otherwise known for the region, include the following:

- Construction and operational emissions of criteria pollutants and/or GHG emissions.
- Adverse effects from project emissions in conjunction with planned projects within the Grant Line West planning area.
- Loss of plant and wildlife habitat.
- Impacts on Morrison Creek.
- Removal of wetlands or protected plant and animals.
- Potential impacts related to the inadvertent discovery of cultural, historical, or tribal resources at the project site.
- Increased stormwater runoff causing soil erosion.
- Removal of unsuitable soils.
- Degradation of water quality in area waterways.
- Increase in population.
- Increase in ambient noise levels on surrounding residential areas.
- Concerns related to a lack of public access to the proposed park facilities.
- Concerns related to the interconnectivity of the proposed trail system to the City’s existing trail system.
- Potential increase in emergency response times.
- Potential need to relocate and/or remove any electrical infrastructure.
- Increased traffic in the project vicinity.
- Cumulative traffic impacts on the local and regional transportation system.

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.1 Air Quality, Greenhouse Gas Emissions, and Energy			
4-1-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction.	LS	*None required.*	N/A
4-1-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation.	LS	*None required.*	N/A
4-1-3 Expose sensitive receptors to substantial pollutant concentrations.	S	*4.1-3* *Prior to the initiation of any ground-disturbing activities, the project applicant shall ensure that all heavy-duty off-road diesel-powered equipment to be used during the grading phase of construction of the proposed project (including owned, leased, and subcontractor equipment) shall be CARB Tier 4 or cleaner.* *In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid SMAQMD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.* *The aforementioned requirements shall be noted on improvement plans and submitted for review and*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
			approval by the City of Rancho Cordova Community Development Department.	
4-1-4	**Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.**	LS	*None required.*	N/A
4-1-5	**Result in the inefficient or wasteful use of energy, or conflict with a State or local plan for renewable energy or energy efficiency.**	LS	*None required.*	N/A
4-1-6	**Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).**	LS	*None required.*	N/A
4-1-7	**Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.**	S	*4.1-7* *Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 MTCO2e per year. Credit purchases shall adhere to all of the following:* *1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following: *(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;* *(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or* *(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);* *(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		(c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*	
4.2 Biological Resources			
4.2-1 Have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species.	S	*4.2-1(a)* *Prior to initiation of ground-disturbing activities within the Raymer Way Offsite, the project applicant shall comply with SSHCP AMM Plant-1 (Rare Plant Surveys). Though stinkbells is not considered an SSHCP Covered Species, the special-status plant surveys conducted per PLANT-1 shall identify whether the species is present in the survey area. If any special-status plant species are found to be present during the focused survey(s), Mitigation Measure 4.2-1(b) shall be implemented. If special-status plant species are not found to be present during the focused survey(s), then no further action is required. A written summary of the survey results shall*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		be submitted to the City of Rancho Cordova Community Development Department. • ***PLANT-1 (Rare Plant Surveys):*** *If a Covered Activity project site contains modeled habitat for Ahart's dwarf rush (Juncus leiospermus var. ahartii), Bogg's Lake hedge-hyssop (Gratiola heterosepala), dwarf downingia (Downingia pusilla), Legenere (Legenere limosa), pincushion navarretia (Navarretia myersii), or Sanford's arrowhead (Sagittaria sanfordii), the Covered Activity project site will be surveyed for the rare plant by an approved biologist and following the California Department of Fish and Wildlife (CDFW) rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See Chapter 10 (of the SSHCP) for the process to submit survey information to the Plan Permittee and the Permitting Agencies.* *4.2-1(b)* *If any SSHCP-covered plants are determined to be present within the Raymer Way Offsite, SSHCP PLANT-2 (Rare Plant Protection) shall be implemented. If any special-status plant species are determined to be present, a mitigation plan shall be prepared for review and approval by the City of*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Rancho Cordova; mitigation may include harvesting and transplanting of impacted bulbs into a preserved area with suitable habitat. Avoided areas containing species shall be fenced with orange construction fencing. • ***PLANT-2 (Rare Plant Protection):*** *If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs at the project site.*	
4.2-2 Have a substantial adverse effect, either directly or through habitat modifications, on special-status invertebrates	S	*4.2-2(a)* *Prior to initiation of ground-disturbing activities, the project applicant shall submit a South Sacramento Habitat Conservation Plan (SSHCP) permit application package to the City of Rancho Cordova to request that the incidental take coverage provided by City's SSHCP Incidental Take Permit (ITP) be extended to the proposed activities. The City of Rancho Cordova shall review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency with a copy of the SSHCP requirements for tracking purposes. The project applicant shall be responsible for paying all SSHCP development fees associated with obtaining*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		coverage from the City of Rancho Cordova. Any proposal to provide land in fee title, or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy. *4.2-2(b)* *The project applicant shall comply with SSHCP requirements and all relevant AMMs set forth in the SSHCP Permit obtained for the proposed project.* *4.2-2(c)* *Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, or timed as required by the applicable permits if the proposed project is constructed in phases, the project applicant shall ensure that mitigation for impacts to aquatic features and other habitat for special-status species has been implemented through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, RWQCB, USFWS, CDFW, City, and South Sacramento Conservation Agency as appropriate, depending on agency jurisdiction*	
4.2-3 Have a substantial adverse effect, either directly or through habitat modifications, on special-status amphibian species.	S	*Western Spadefoot* *4.2-3(a)* *The project applicant shall comply with SSHCP AMMs WS-1 through WS-6.* • ***WS-1 (Western Spadefoot Work Window):*** *Ground-disturbing Covered Activities within*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable. • ***WS-2 (Western Spadefoot Exclusion Fencing):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high- visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below.* • ***WS-3 (Western Spadefoot Monitoring):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17 [of the SSHCP])*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction- related activities are taking place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below. • ***WS-4 (Avoid Western Spadefoot Entrapment):*** *If a Covered Activity occurs in western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6 below. • ***WS-5 (Erosion Control Materials in Western Spadefoot Habitat):*** *If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.* *Western Pond Turtle* *4.2-3(b) Prior to initiation of ground-disturbing activities, pre-construction surveys shall be conducted per SSHCP AMM WPT-1. If western pond turtles are detected, WPT-2 through WPT-9 shall be implemented.*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• ***WPT-1 (Western Pond Turtle Surveys):*** *If the SSHCP western pond turtle modeled habitat maps (Figure 3-19 [of the SSHCP]) show that modeled habitat for western pond turtle is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate western pond turtle aquatic habitat within the project footprint and within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-19 (of the SSHCP), western pond turtle aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water, freshwater marsh, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide those maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated western pond turtle habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as western pond turtle habitat is identified and fully avoided. Otherwise,*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Covered Activities must comply with WPT-2 through WPT-9. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information. • ***WPT-2 (Western Pond Turtle Work Window):*** *Maintenance and improvements to existing structures may occur throughout the year as long as western pond turtle habitat is identified and avoided, and movement of equipment is confined to existing roads. Otherwise, construction and ground-disturbing Covered Activities must be conducted outside of western pond turtle's active season. Construction and ground-disturbing activities will be initiated after May 1 and will commence prior to September 15. If it appears that construction activities may go beyond September 15, the appropriate Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1, to determine if additional measures are necessary to minimize take.* • ***WPT-3 (Western Pond Turtle Monitoring):*** *If a Covered Activity is occurring in western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), an approved biologist experienced with western pond turtle*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for western pond turtle prior to construction activities. The approved biologist will also training construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western pond turtle enters an active construction zone (i.e., outside the buffer zone). • ***WPT-4 (Western Pond Turtle Habitat Dewatering and Exclusion):*** *If construction activities will occur in western pond turtle aquatic habitat, aquatic habitat for the turtle will be dewatered and then remain dry and absent of aquatic prey (e.g., crustaceans and other aquatic invertebrates) for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to western pond turtle. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent turtles from attempting to burrow or move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Western pond turtle habitat outside construction fencing will be avoided by all construction personnel. The fencing and work area will be inspected by the approved biologist to ensure that the fencing is intact and that no turtles have entered the work area before the start of each work day. Fencing will be maintained by the contractor until completion of the project. If, after exclusion fencing and dewatering, western pond turtles are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will discuss the next best steps with the Implementing Entity and Wildlife Agencies. • ***WPT-5 (Avoid Western Pond Turtle Entrapment):*** *If a Covered Activity occurs within western pond turtle modeled habitat*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		(Figure 3-19 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western pond turtle modeled habitat will be inspected for western pond turtle by the approved biologist prior to being moved. • ***WPT-6 (Erosion Control Materials in Western Pond Turtle Habitat):*** *If erosion control (BMP-2) is implemented within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that turtles are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• ***WPT-7 (Western Pond Turtle Modeled Habitat Speed Limit):*** *Covered Activity construction and maintenance vehicles will observe a 20-mile-per-hour speed limit within western pond turtle modeled upland habitat (Figure 3-19 [of the SSHCP]).* • ***WPT-8 (Western Pond Turtle Encounter Protocol):*** *If a western pond turtle is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the turtle, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a western pond turtle or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist.*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• ***WPT-9 (Western Pond Turtle Post-Construction Restoration):*** *After completion of ground- disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation and placing appropriate artificial or natural basking areas in waterways and wetlands. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.*	
4.2-4 Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl.	S	*4.2-4 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs WBO-2 through WBO-7. If western burrowing owl is found within the survey area, WBO-3 through 7 shall be implemented as required based on the results of surveys conducted per WBO-2.* • ***WBO-1 (Western Burrowing Owl Surveys):*** *Surveys within modeled habitat*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		are required for both the breeding and non-breeding season. If the project site falls within modeled habitat, an approved biologist will survey the project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping will be conducted by the approved biologist while walking transects throughout the entire project site plus all accessible areas within a 250-foot radius from the project site. The centerline of these transects will be no more than 50 feet apart and will vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects will be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the project does not fully avoid the habitat, pre-construction surveys will be	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		required. Burrowing owl habitat is fully avoided if project-related activities do not impinge on a 250- foot buffer established by the approved biologist around suitable burrows. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information. • ***WBO-2 (Western Burrowing Owl Pre-Construction Surveys):*** *Prior to any Covered Activity ground disturbance, an approved biologist will conduct pre-construction surveys in all areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey will last a minimum of 3 hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		observed will be counted and their location will be mapped. Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction. • ***WBO-3 (Burrowing Owl Avoidance):*** *If western burrowing owl or evidence of western burrowing owl is observed on the project site or within 250 feet of the project site during pre-construction surveys, then the following will occur:* ***During Breeding Season:*** *If the approved biologist finds evidence of western burrowing owls within a project site during the breeding season (February 1 through August 31), all project-related activities will avoid nest sites*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 250-foot buffer zone. Construction and other project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity and Wildlife Agencies prior to project construction based on the following criteria: o *The Implementing Entity and Wildlife Agencies approve of the avoidance and minimization plan provided by the project applicant.* o *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).* o *The same approved biologist monitors the owls during*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		construction and finds no change in owl nesting and foraging behavior in response to construction activities. *If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies.* *If monitoring by the approved biologist indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The approved biologist will excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies.* *The Implementing Entity and Wildlife Agencies will respond to a request from the Third-Party Project Proponent to review the*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		proposed construction monitoring plan within 21 days. ***During Non-Breeding Season:*** *During the non-breeding season (September 1 through January 31), the approved biologist will establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer will be allowed. Construction activities within the non-disturbance buffer will be allowed if the following criteria are met to prevent owls from abandoning over- wintering sites:* o *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).* o *The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.* o *If there is any change in owl foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer.*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		o *If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity and Wildlife Agencies that an approved biologist excavate usable burrows and install one-way exclusionary devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue.* *Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.* • ***WBO-4 (Burrowing Owl Construction Monitoring):*** *During construction of Covered Activities, 250-foot construction buffer zones will be established and maintained around any occupied burrow. An approved biologist will monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist will also train construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• ***WBO-5 (Burrowing Owl Passive Relocation):*** *Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures described in this condition preclude work from continuing. Passive relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation will only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors will be in place for 48 hours to ensure that owls have left the burrow, and then the biologist will excavate the burrow to prevent reoccupation. Burrows will be excavated using hand tools only. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term. • ***WBO-6 (Burrowing Owl Timing of Maintenance Activities):*** *All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas will be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.* • ***WBO-7 (Rodent Control):*** *Rodent control will be allowed only in developed portions of a Covered Activity project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.*	
4.2-5 Have a substantial adverse effect, either directly or through habitat modifications, on raptors and nesting birds.	S	*4.2-5(a)* *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs RAPTOR-2 through RAPTOR-4. Raptor surveys conducted per RAPTOR-2 shall include surveying for golden eagle although it is not a SSHCP Covered Species. If raptor species (including golden eagles) are found nesting within the survey area, RAPTOR-3 and RAPTOR-4 shall be implemented as required*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		based on the results of surveys conducted per RAPTOR-2. The following AMMs do not apply to Swainson's hawk or burrowing owl, as specific AMMs have been developed for such covered raptor species and are included in separate mitigation measures. • ***RAPTOR-2 (Raptor Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground- disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre- construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.* • ***RAPTOR-3 (Raptor Nest/Roost Buffer):*** *If active nests are found within the project*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged. • ***RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring):*** *If project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone). *4.2-5(b)* *A qualified biologist shall conduct a preconstruction nesting bird survey of all areas associated with construction activities, and a 100-foot buffer around such areas, within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31). If active nests are found for any SSHCP Covered Species, the applicable SSHCP AMM(s) TCB-3 through -5, SWHA-3 through -4, WBO-3 through-6, and RAPTOR-3 through-4 shall be implemented. If active nests are found for any other species, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with the CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest, to be determined by a qualified biologist. Once the young are independent of the nest, further measures are not necessary.*	
4.2-6 Have a substantial adverse effect, either directly or	S	*4.2-6* *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
through habitat modifications, on Swainson's hawk.		*SWHA-2 through SWHA-4. If Swainson's hawk nesting is found within the survey area during the pre-construction survey conducted per SWHA-2, then SWHA-3 and SWHA-4 shall be implemented as required based on the results of surveys conducted per SWHA-2.* • ***SWHA-2 (Swainson's Hawk Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• ***SWHA-3 (Swainson's Hawk Nest Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25-mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.* • ***SWHA-4 (Swainson's Hawk Nest Buffer Monitoring):*** *If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down construction activities. If agitated*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).	
4.2-7 Have a substantial adverse effect, either directly or through habitat modifications, on tricolored blackbird.	S	*4.2-7 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs TCB-2 through TCB-5. If tricolored blackbirds are found within the survey area during the pre-construction survey conducted per TCB-2, then TCB-3 through TCB-5 shall be implemented as required based on the results of surveys conducted per TCB-2.* • ***TCB-2 (Tricolored Blackbird Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and within 3 days of*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys will be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies. • ***TCB-3 (Tricolored Blackbird Nest Buffer):*** *If active nests are found within the project footprint or within 500 feet of any project-related Covered Activity, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.* • ***TCB-4 (Tricolored Blackbird Nest Buffer Monitoring):*** *If nesting tricolored blackbirds are present within the project footprint or within 500 feet of any project-related Covered*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Activity, then an approved biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• ***TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves):*** *On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.*	
4.2-8 Have a substantial adverse effect, either directly or through habitat modifications, on special-status bats.	S	*4.2-8* *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs BAT-2 through BAT-4. Winter hibernaculum surveys conducted per BAT-2 shall also include surveying for pallid bat although it is not an SSHCP Covered Species. If winter hibernacula of western red bat or pallid bat are found within the survey area, then BAT-3 through BAT-4 shall be implemented as required based on the results of surveys conducted per BAT-2.* • ***BAT-2 (Winter Hibernaculum Pre-Construction Surveys):*** *If the Third-Party Project Proponent elects not to avoid potential winter hibernaculum sites within the project footprint plus a 300-foot buffer, additional surveys are required. Prior to any ground disturbance related to Covered Activities, an approved biologist will conduct a pre- construction survey within 3 days of ground-disturbing activities within the project footprint and 300 feet of the project footprint to determine the presence of winter hibernaculum sites. Pre-construction surveys*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		will be conducted during the winter hibernaculum season (November 1 through March 31). If a winter hibernaculum is present, then BAT-3 and BAT-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies. • ***BAT-3 (Winter Hibernaculum Buffer):*** *If active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will establish a 300-foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Implementing Entity and Wildlife Agencies concur.* • ***BAT-4 (Bat Eviction Methods):*** *An approved biologist will determine if non-maternity and non-hibernaculum day and night roosts are present on the project site. If necessary, an approved biologist will use safe eviction methods to remove bats if direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided. If a winter hibernaculum site is present, Covered Activities will not occur until*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		the hibernaculum is vacated, or, if necessary, safely evicted using methods acceptable to the Wildlife Agencies.	
4.2-9 Have a substantial adverse effect, either directly or through habitat modifications, on American badger.	S	*4.2-9 A qualified biologist shall conduct a preconstruction survey for American badger within 14 days prior to commencement of construction, and results of the survey shall be provided to the City's Community Development Department. If badgers or dens with signs of recent badger use are detected (i.e., fresh scat, claw marks), CDFW shall be consulted and a non-disturbance buffer shall be established around any active dens. The den(s) shall be monitored daily by the qualified biologist during construction. Work shall not occur within the non-disturbance buffer until the qualified biologist determines that the badger(s) have left the work area, or as determined in consultation with CDFW.*	LS
4.2-10 Have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	S	*4.2-10(a) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that authorization pursuant to Clean Water Act (CWA) Section 404 from the U.S. Army Corps of Engineers (USACE) and CWA Section 401 from the Central Valley Regional Water Quality Control Board (RWQCB) is obtained. CWA Section 404 authorization is anticipated to be obtained through a Letter of Permission issued by USACE under the SSHCP ARP, and CWA Section 401 authorization is anticipated to be obtained through an individual Water*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Quality Certification issued by the RWQCB under the SSHCP ARP. *The construction contractor shall adhere to all conditions outlined in the permits. The project applicant shall ensure that the proposed project replaces, restores, or enhances on a "no net loss" basis (in accordance with the USACE and the Central Valley RWQCB) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded due to project implementation, either through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.* *4.2-10(b) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that a CDFW 1602 Streambed Alteration Agreement has been obtained. The construction contractor shall adhere to all conditions outlined in the Streambed Alteration Agreement.* *4.2-10(c) The project applicant shall comply with SSHCP AMM STREAM-2 and a 100-foot setback from Morrison Creek shall be established. Only allowed compatible*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		uses described in the SSHCP shall be sited within the setback. • ***STREAM-2 (UDA Stream Setbacks):*** *A 100-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all streams listed in Table 5-1 (see Table 4.2-3 below) (see also Figure 2-4 [of the SSHCP]). If a stream reach supports woody riparian vegetation, the setback will be equal to the riparian edge plus 25 feet or will be the setback defined above, whichever is greater. If trails are located within the Stream Setback, the nearest edge of the trail will be located at least 50 feet from the top of the bank.*	

Table 4.2-3
Stream Setback Minimum Requirements in the Urban Development Area

Stream	Minimum Setback (from the Top of Bank Measured in Aerial Perspective) on Both Sides of the Stream
Elder Creek	100 feet
Frye Creek	100 feet or as depicted as part of the NewBridge development project hardline Preserve (see SSHCP Appendix K)
Gerber Creek	100 feet
Morrison Creek	100 feet

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Central Paseo: 100 feet or as depicted as part of the Cordova Hills development project hardline Preserve (see SSHCP Appendix K) Sun Creek: 100 feet or as depicted as part of the Sun Creek development project hardline Preserve (see SSHCP Appendix K) *4.2-10(d) Implement Mitigation Measure 4.2-2(c).*	
4.2-11 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	LS	*None required.*	N/A
4.2-12 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	S	*4.2-12 Prior to removal of any protected trees (as defined by Chapter 19.12 of the City's Municipal Code) within the project site and off-site improvement areas, a tree removal permit shall be procured from the City. In addition, tree species that are native to the Central Valley and Sierra Nevada foothills such as interior live oak (Quercus wislizeni), valley oak (Quercus lobata), blue oak (Quercus douglasii), Fremont cottonwood (Populus fremontii), black walnut (Juglans hindsii), and western redbud (Cercis occidentalis) shall be incorporated into the planned landscaping design in public spaces such as open space, parks, and parkways. Enough plantings of such native trees shall be incorporated into the landscaping such that the*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		number of surviving native trees after five years is equal to or greater than the number of non-native trees removed. Landscaping plans detailing the tree species to be planted shall be provided to the City for approval prior to tree removal.	
4.2-13 Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan.	LS	*None required.*	N/A
4.2-14 Cumulative loss of habitat for special-status species.	CC & S	*4.2-14 Implement Mitigation Measures 4.2-1 through 4.2-11.*	LCC
4.3 Cultural and Tribal Resources			
4.3-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5.	LS	*None required.*	N/A
4.3-2 Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries.	S	*4.3-2 The following requirements shall be included through a notation on all project improvement plans prior to the issuance of grading permits, to the satisfaction of the City Engineer.* *In the event subsurface deposits believed to be cultural or human in origin are discovered during construction, all work shall halt within a 50-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find: • *If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and agency notifications are not required.* • *If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the City of Rancho Cordova and applicable landowner. The project applicant shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Appropriate treatment measures that preserve or restore the character and integrity of a find may be, but are not limited to, processing materials for reburial, minimizing handling of historical objects, leaving objects in place within the landscape, construction monitoring of further construction activities, and/or returning objects to a location within the project area*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		where they will not be subject to future impacts. Work shall not resume within the no-work radius until the applicant, through consultation, as appropriate, determines that the site either: 1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to the City's satisfaction. • *If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the City of Rancho Cordova and the Sacramento County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner shall notify the NAHC, which then shall designate a Native American Most Likely Descendant (MLD) for the proposed project (Section 5097.98 of the PRC). The designated MLD shall have 48 hours from the time access to the property is granted to make recommendations concerning*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC shall mediate (Section 5097.94 of the PRC). If an agreement is not reached, the landowner shall rebury the remains where they shall not be further disturbed (Section 5097.98 of the PRC). The burial shall also include either recording the site with the NAHC or the appropriate information center, using an open space or conservation zoning designation or easement, or recording a reinternment document with Sacramento County (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to their satisfaction.	
4.3-3 Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074.	S	*4.3-3(a)* *Implement Mitigation Measures 4.3-2.* *4.3-3(b)* *Prior to initiation of ground-disturbing activities associated with the proposed project, a consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training shall be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program shall include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential tribal cultural resources are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values. Documentation of the brochure and training program (i.e., a sign-in sheet) shall be submitted along with all applicable reports to the City's Community Development Department. *4.3-3(c) Prior to the start of ground-disturbing activities associated with the proposed project, the project applicant and construction contractor(s) shall implement the following measures to minimize the potential for destruction of or damage to existing or previously undiscovered burials, archaeological, and tribal cultural resources and to identify any such*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		resources at the earliest possible time during project-related earthmoving activities: • *Native American monitors from culturally affiliated Native American Tribes shall be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any ground-disturbing activities begin.* • *Native American representatives and Native American monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative shall recommend appropriate treatment of such sites or objects.* *Compliance with the aforementioned measures shall be documented and submitted with applicable reports to the City's Community Development Department.* *4.3-3(d) Develop a standard operating procedure, points of contact, timeline and schedule for the project so all*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		possible damages can be avoided or alternatives and cumulative impacts properly accessed. *If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other project personnel during construction activities, work shall cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes shall assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations shall be documented in the project record.* *If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with Wilton Rancheria regarding mitigation contained in the Public Resources Code Sections 21084.3(a) and (b) and CEQA Guidelines Section 15370 shall occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.3-4 Cause a cumulative loss of cultural resources.	LS	*None required.*	N/A
4.4 Geology and Soils / Mineral Resources			
4.4-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides.	LS	*None required.*	N/A
4.4-2 Result in substantial soil erosion or the loss of topsoil.	LS	*None required.*	N/A
4.4-3 Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code.	PS	*4.4-3 The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for review and approval by the Rancho Cordova Community Development Department. The report shall address and make recommendations on the following:* *A. Road, pavement, and parking area design;* *B. Structural foundations, including retaining wall design (if applicable);* *C. Grading practices;* *D. Erosion/winterization;* *E. Special problems discovered on-site, (i.e., open bodies of water, expansive/unstable soils, etc.); and*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		F. Slope stability. *Once approved by the Rancho Cordova Community Development Department, two copies of the final report shall be provided to the Rancho Cordova Community Development Department and one copy to the Rancho Cordova Building and Safety Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.*	
4.4-4 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.	LS	*None required.*	N/A
4.4-5 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	S	*4.4-5 Should construction or grading activities result in the discovery of unique paleontological resources, all work within the vicinity of the discovery shall cease. The City of Rancho Cordova Community Development Department shall be notified, and the resources shall be examined by a qualified paleontologist at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The paleontologist shall submit to the Community*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation		Mitigation Measures	Level of Significance After Mitigation
				Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.	
4.4-6	**Cumulative impacts to geology and soils, mineral resources, and paleontological resources.**	LS	*None required.*		N/A
	4.5 Hazards and Hazardous Materials				
4.5-1	**Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**	LS	*None required.*		N/A
4.5-2	**Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.**	S	*4.5-2(a)*	*Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall complete and submit, for both the underground storage units identified on APNs 073-0010-011 and 072-0300-008, a Consolidated Application For Authority to Remove Under Ground Storage Tanks to the Sacramento County Environmental Management Department (EMD) for review. Upon issuance of a permit (Authority Letter to Remove) from the EMD, removal of the UST shall proceed in accordance with all permit conditions, including, but not limited to, inspection, testing, and plan/report submittal requirements.*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		4.5-2(b) *Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall retain a licensed contractor to remove the existing 55-gallon drum located on APN 072-0300-008, to the northeast of the existing residence. The drum shall be disposed of in accordance with all applicable federal, State, and local regulations related to the handling, transport, and disposal of hazardous waste. Proof of safe disposal shall be provided to the Community Development Department.* *4.5-2(c)* *Prior to issuance of a demolition permit for any on-site structures, the project applicant shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the Community Development Department an asbestos and lead survey. If asbestos-containing materials or lead-containing materials are not discovered during the survey, further mitigation related to asbestos-containing materials or lead containing materials shall not be required. If asbestos-containing materials and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site asbestos-containing materials and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA) Administration regulations and disposed of in accordance with all CalEPA regulations, prior to the demolition and/or removal of the on-site structures. The*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		plan shall include the requirement that work shall be conducted by a Cal-OSHA registered asbestos and lead abatement contractor in accordance with Title 8 CCR 1529 and Title 8 CCR 1532.1 regarding asbestos and lead training, engineering controls, and certifications. The applicant shall submit the work plan to the Community Development Department for review and approval. Materials containing more than one (1) percent asbestos that is friable are also subject to SMAQMD regulations. Removal of materials containing more than one (1) percent friable asbestos shall be completed in accordance with SMAQMD Rule 902. *4.5-2(d) Prior to issuance of a demolition permit for any on-site structures, the project applicant shall retain the services of a licensed environmental professional to prepared a Phase II Environmental Assessment (ESA) for the project site. The Phase II ESA shall evaluate, at a minimum, potential lead contamination in the soils in the vicinity of the structures located on APN 072-0300-008, as well as potential termiticide contamination in the soils in the vicinity of the wooden structures located on APN 072-0300-002 and APN 072-0300-008. In the event that the lead and/or termiticide contamination is determined to occur, the project applicant shall implement all recommended measures in the Phase II ESA necessary to address such hazards. Such measures may include, but shall not be limited to, capping contaminated soil in place and deed-restricting the subject property, excavation and off-haul of*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		contaminated soils by a licensed contractor, or other appropriate methods deemed acceptable by the Sacramento County Environmental Management Department (EMD).	
		4.5-2(e) Prior to Improvement Plan approval, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Sacramento County Environmental Management Department (EMD) for all on-site wells, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III), for review and approval by the EMD. In addition, prior to Improvement Plan approval, the project applicant shall ensure that any on-site septic systems are abandoned in compliance with applicable EMD standards. Verification of abandonment shall be ensured by the City of Rancho Cordova Community Development Department.	
		4.5-2(f) If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities at the project site, work shall stop in the area of potential contamination, and the type and extent of contamination shall be identified by a Registered Environmental Assessor (REA) or qualified professional. The REA or qualified professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		anticipated contaminants and contaminant concentrations, relevant environmental screening levels for identified contaminants, whether the contaminants exceed ESLs, thus warranting remediation, and recommendations for appropriate handling and disposal. Site preparation or construction activities shall not recommence within the contaminated areas until any necessary remediation identified in the report is complete. The report and verification of proper remediation and disposal shall be submitted to the City of Rancho Cordova Community Development Department for review and approval.	
4.5-3 Cumulative exposure to potential hazards and increases in the transport, storage, and use of hazardous materials.	LS	*None required.*	N/A
4.6 Hydrology and Water Quality			
4.6-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.	S	*4.6-1(a)* *Implement Mitigation Measure 4.4-2.* *4.6-1(b)* *Prior to the commencement of ground-disturbing activities, the project applicant shall submit, and obtain approval of, a Spill Prevention Countermeasure and Control Plan (SPCC) to the Sacramento County Environmental Management Department. The SPCC shall specify measures and procedures to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112.*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.6-2 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations.	S	*4.6-2* *Prior to approval of final project improvement plans, the project applicant shall submit a detailed Best Management Practice (BMP) and water quality maintenance plan to the City for review and approval. The BMP and water quality maintenance plan shall meet the standards of the City's NPDES Permit (No. CAS0085324), the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, and the Stormwater Quality Design Manual for the Sacramento region. Site design measures, source control measures, hydromodification management, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the improvement plans.* *4.6-3* *Prior to approval of final project improvement plans, the project applicant shall submit a maintenance covenant to the City for review and approval. The maintenance covenant shall be executed to ensure the long-term maintenance of stormwater quality measures.*	LS
4.6-3 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a water	LS	*None required.*	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	quality control plan or sustainable groundwater management plan.			
4.6-4	**Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.**	LS	*None required.*	N/A
4.6-5	**Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which**	LS	*None required.*	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	would impede or redirect flood flows.			
4.6-6	**Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns.**	LS	*None required.*	N/A
4.7 Land Use and Planning / Population and Housing				
4.7-1	**Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.**	LS	*None required.*	N/A
4.7-2	**Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure).**	LS	*None required.*	N/A
4.7-4	**Cause a significant cumulative environmental impact due to a conflict with any land use**	LS	*None required.*	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect.			
4.7-5	**Cumulative unplanned population growth.**	LS	*None required.*	N/A
	4.8 Noise			
4.8-1	**Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**	S	*4.8-1 The following criteria shall be noted on project Improvement Plans. Improvement Plans shall be submitted to the City's Community Development Department for review and approval.* • *Consistent with Section 6.68.090 of the Rancho Cordova Municipal Code, noise-generating construction activities shall be limited to the hours of 6:00 AM to 8:00 PM on weekdays and 7:00 AM to 8:00 PM on weekends.*	LS
4.8-2	**Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.**	LS	*None required.*	N/A
4.8-3	**Exposure of persons to or generation of excessive**	LS	*None required.*	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	groundborne vibration or groundborne noise levels.			
4.8-4	**Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the General Plan.**	LS	*None required.*	N/A
	4.9 Public Services and Utilities			
4.9-1	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services.**	LS	*None required.*	N/A
4.9-2	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of**	LS	*None required.*	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

	Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
	which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services.			
4.9-3	**Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools.**	LS	*None required.*	N/A
4.9-4	**Require or result in the relocation or construction of new or expanded water, wastewater treatment, or electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.**	LS	*None required.*	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact		Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.9-5	**Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.**	LS	*None required.*	N/A
4.9-6	**Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**	LS	*None required.*	N/A
4.9-7	**Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, state, and local management and reduction statutes and regulations related to solid waste.**	LS	*None required.*	N/A
4.9-8	**Cumulative impacts to fire and police protection services.**	LCC	*None required.*	N/A

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.9-9 Cumulative impacts to public schools.	LCC	*None required.*	N/A
4.9-10 Cumulative impacts to utilities and service systems.	LCC	*None required.*	N/A
4.10 Transportation			
4.10-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.	LS	*None required.*	N/A
4.10-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Existing Plus Project conditions.	S	*4.10-2(a) Prior to approval of Improvement Plans, the project applicant shall include in the Improvement Plan submittal a Trail System Plan detailing the applicant's construction of a portion of the regional trail system in the vicinity of the project site. The Trail System Plan shall be subject to review and approval by the City of Rancho Cordova Community Development Department.* *4.10-2(b) Prior to the recording of a Final Map, the project applicant shall pay a fair share contribution to provide monetary support for the City's transportation services, as determined by the City of Rancho Cordova Community Development Department. The charges for residential and nonresidential development will fund these transportation services as determined appropriate by the City Council. Supplemental*	SU

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		transportation services may include, but are not limited to, the following: • *Transit Shuttle – shuttle for residents and/or employees between residential areas, employment centers, shopping and service centers and light rail stations and/or other public transit options;* • *Guaranteed Ride Home – free taxi rides and rental cars for ride sharers in case of an emergency;* • *Transit Subsidies – financial assistance to encourage residents and employees to use transit or other alternative transportation measures;* • *Transportation Plans for employers and/or resident groups – plans which guide employers and resident groups on the implementation of trip reduction programs, such as ride share matching or other similar programs;* • *Education Programs – various programs such as education of transit options, home office set up, alternative commute opportunities;* • *Infrastructure Support – additional bike racks and lockers, transportation alternative and ride share informational boards/kiosks, and transit facilities;*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• *Transportation Coordinator Training and Support – instruction in mobility (transportation alternatives) for residential groups and work site coordinators; and* • *Bicycle and Alternative Fuel Vehicle Incentives – incentives for purchasing new bicycles or alternative fuel vehicles.*	
4.10-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).	LS	*None required.*	N/A
4.10-4 Result in inadequate emergency access.	LS	*None required.*	N/A
4.10-5 Conflict with a program, plan, ordinance, or policy addressing the circulation system under Cumulative Plus Project conditions.	LS	*None required.*	N/A
4.10-6 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Cumulative Plus Project conditions.	LS	*None required.*	N/A

3. Project Description

3. PROJECT DESCRIPTION

3.1 INTRODUCTION

The Project Description chapter of the EIR provides a comprehensive description of The Preserve Project (proposed project) in accordance with CEQA Guidelines. Please note that this chapter provides an overall general description of the existing environmental conditions; however, detailed discussions of the existing setting in compliance with CEQA Guidelines Section 15125, as it relates to each given potential impact area, is included in each technical chapter of this EIR.

3.2 PROJECT LOCATION

The project site consists of approximately 279.3 acres located within the City of Rancho Cordova. (see Figure 3-1). The site is located northwest of Raymer Way and Grant Line Road, north of the Sunridge Specific Plan area and east of the Rio Del Oro Specific Plan area (see Figure 3-2). The site is identified by Assessor's Parcel Numbers (APNs) 072-0300-001, -002, -005, -008, and 073-0010-010, and -011.

3.3 PROJECT SETTING AND SURROUNDING LAND USES

Section 15125 of CEQA Guidelines requires an EIR to include a description of the physical environmental conditions of the project site and the site vicinity, as they exist at the time the Notice of Preparation is published, from a local and regional perspective. Per CEQA Guidelines Section 15125, the description of the environmental setting shall not be longer than necessary to understand the potential significant effects of the project.

The following sections describe the existing setting of the project site and the surrounding land uses in the project vicinity. Please note that detailed discussions of the existing setting in compliance with CEQA Guidelines Section 15125, specific to each environmental resource area, are included in each corresponding technical chapter of this EIR.

Site Characteristics

Currently, the 279.3-acre project site contains two single-family residences and associated outbuildings on the southern portion of the site, within parcels 072-0300-002 and -005. An orchard is located within the northeastern portion of the site within parcel 073-0010-011, and a third single-family residence and associated outbuildings are located on APN 072-0300-008. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal drainage corridors and wetlands. Additionally, Morrison Creek runs northeast to southwest through the project site. The elevation of the site ranges from 210 to 250 feet above mean sea level.

Per the City of Rancho Cordova General Plan, the project site is located within the Grant Line West Planning Area and is designated Natural Resources and Residential-Mixed Density. The site is zoned Agricultural (AG-80) and Industrial Reserve (IR)

Figure 3-1
Project Location

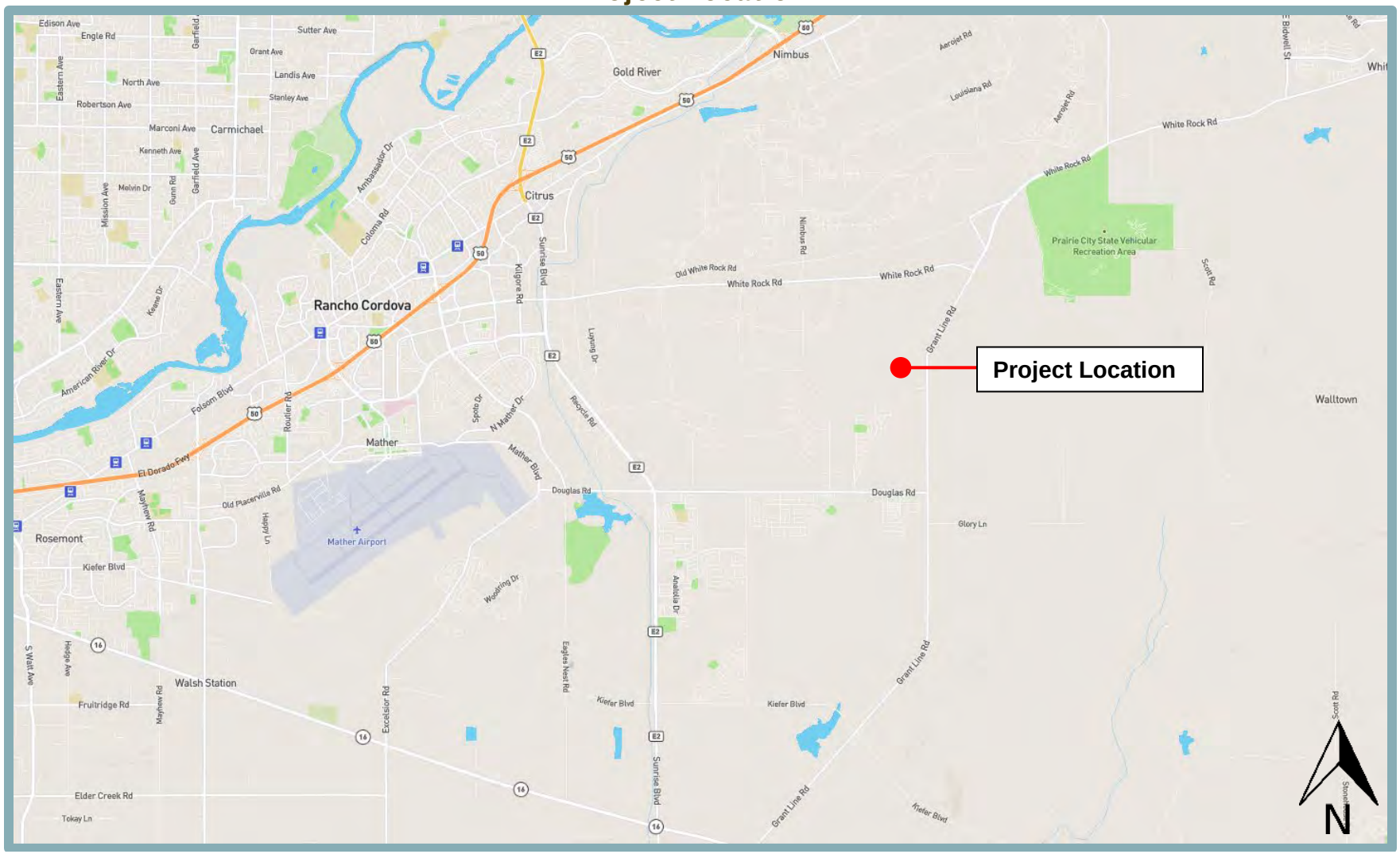
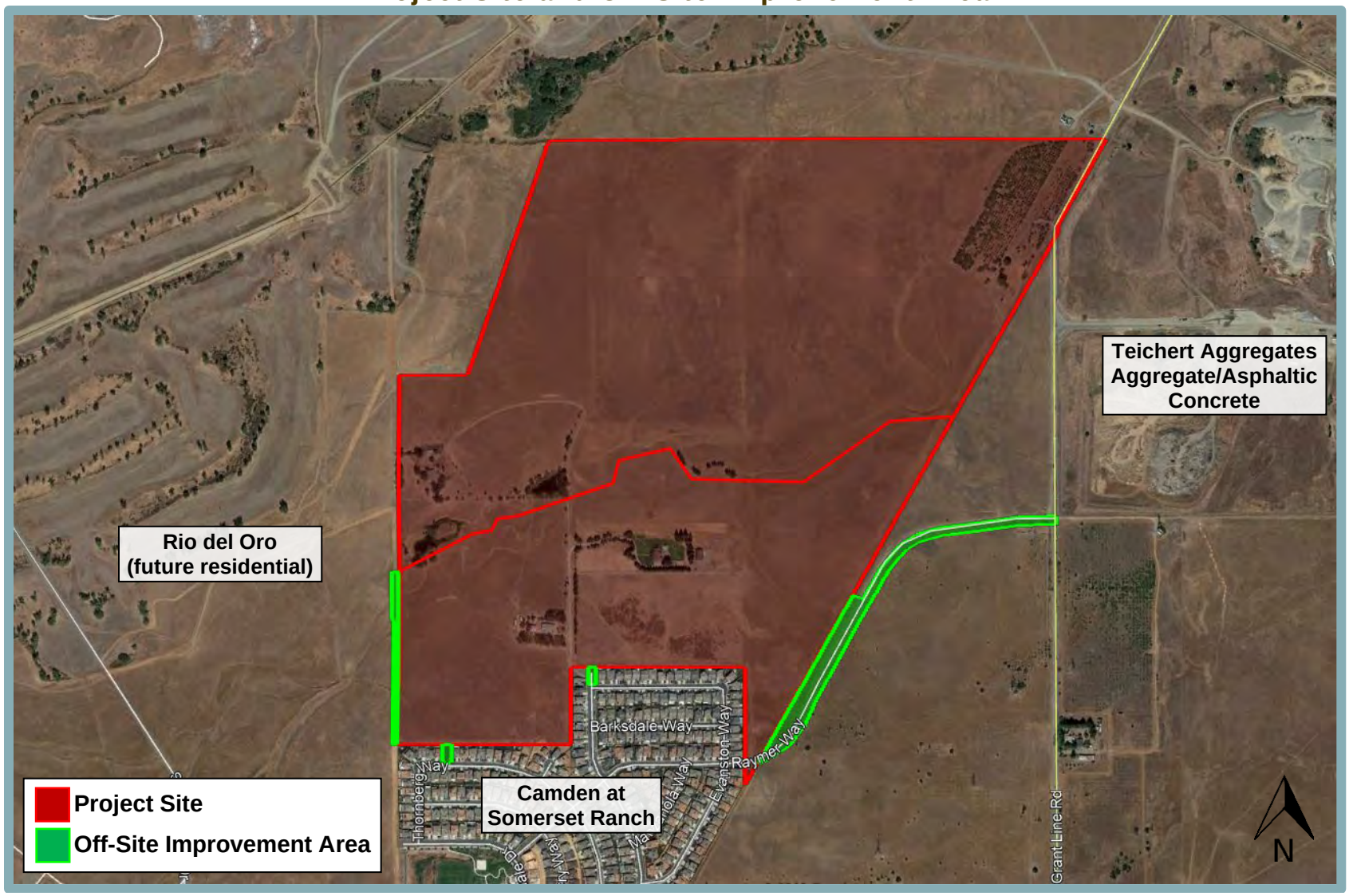


Figure 3-2
Project Site and Off-Site Improvement Area



Surrounding Land Uses

Surrounding land uses include the Camden at Somerset Ranch residential subdivision directly to the south, vacant agricultural lands under a Williamson Act contract and a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, industrial/open space to the north, and vacant land approved for the development of the Rio Del Oro residential community immediately adjacent to the west.

Vegetation and Wetlands

The following description focuses on the proposed area of disturbance, south of Morrison Creek. The area is covered in vernal pool grassland primarily composed of non-native annual grasses and forbs, with limited patchy riparian vegetation along Morrison Creek. An arborist report documented 247 trees within the area of disturbance, including coast redwood, eucalyptus, and other trees not native to the region. The area of disturbance contains approximately 7.9 acres of jurisdictional wetland, including seasonal wetlands and vernal pools.

3.4 PROJECT OBJECTIVES

The following project objectives have been developed by the project applicant for the proposed project:

1. Consolidate the remaining parcels in the Grant Line West Planning Area of the City of Rancho Cordova General Plan in a manner that concentrates development south of Morrison Creek to avoid and minimize potential conflicts with the South Sacramento Habitat Conservation Plan.
2. Develop a residential mixed-density community that is consistent with the General Plan conceptual land use designation for the Grant Line West Planning Area.
3. Develop a residential community that is contiguous to and compatible with adjacent existing development and that provides a range of housing choices.
4. Utilize existing utility capacity for maximum efficiency.
5. Develop a residential community that can provide timely housing to help meet current demand during a period of housing shortages in the region and throughout the State.
6. Contribute to the overall bicycle and pedestrian connectivity of the City by building key components of the regional trail system and providing strong connections for both existing and future residents.
7. Enhance the City's network of parks, trails and open spaces for the enjoyment of all residents.

3.5 PROJECT COMPONENTS

The proposed project would include subdivision of the project site to develop a total of 440 single-family lots and various associated improvements including, but not limited to, parks, landscaping, circulation improvements, and utility installation. The project would require City approval of the following: General Plan Amendments; Rezone; Development Agreement; and Tentative Subdivision Map. The details of the proposed project, including required approvals, are described in further detail below.

General Plan Amendments/Rezone

As noted previously, the project site is currently designated Residential-Mixed Density and Natural Resources in the Grant Line West Planning Area by the City of Rancho Cordova General Plan. The proposed project would require a General Plan Amendment to change the site's land use

designation from Natural Resources and Residential-Mixed Density within the Grant Line West Planning Area to Low-Density Residential. The General Plan Amendment would also amend the Circulation Element to alter the planned construction of Centennial Drive. Centennial Drive is a future roadway depicted in the Circulation Element's Circulation Plan with Roadway System and Sizing map (Figure C-1 in the Circulation Element). If constructed as depicted in the Circulation Element, Centennial Drive would be a four-lane roadway and run through the project site in an east-west direction; however, through approval of the General Plan Amendment, the portion within the project site would not be constructed. In addition, the project would require a rezone to change approximately 68.42 acres of the AG-80 and approximately 30.48 acres of the IR zoning designations to Residential District (RD-5), five dwelling units per acre maximum (see Figure 3-3).

Tentative Subdivision Map

The proposed project would include a Tentative Subdivision Map to subdivide the project site into 440 single-family residential lots (see Figure 3-4 through Figure 3-9). Lots on the western portion of the project site would generally be a minimum of 4,050 square feet (sf) (45 feet x 90 feet), with larger lots at the corners of each block. Lots in the central portion of the site would generally be a minimum of 5,775 sf (55 feet x 105 feet) with corner lots and others being larger, and lots in the eastern portion of the site would generally be a minimum of 4,725 sf (45 feet x 105 feet). Overall, the proposed lots would range from a minimum of 4,050 sf to a maximum of 9,416 sf. The units would include either an 18- or 20-foot setback from the front of the residence to the street. In addition, the proposed project would establish a 100-foot setback from Morrison Creek and would include park areas, community spaces, green infrastructure, and open space areas.

Development Agreement

The proposed project would include a Development Agreement to assure the City that the proposed project would be constructed and developed in compliance with the plans submitted by the applicant. Development Agreements increase the certainty in the approval of development projects, thereby preventing the waste of resources, reducing the cost of development, and encouraging investment in comprehensive planning.

Access and Circulation

The proposed project would include two entry points from Raymer Way, as well as connection to the existing Camden at Somerset Ranch subdivision by way of an extension of Edington Drive and a new connection to Thornburg Way. The streets would be between 32 and 50-feet wide (curb to curb), which would allow for emergency vehicle access within the minimum 20-foot street width requirement. The internal circulation system would consist of several drive aisles with circulation to all residences within the subdivision. The proposed project would include construction of five-foot attached sidewalks and three-foot gutters along the majority of internal streets. Six-foot margins along the sides of each street would allow for street parking.

Parks, Open Space, and Landscaping

A total of 8.65 acres are planned for two park areas located at the northern end of the development area (see Figure 3-10). The parks would be managed by the Cordova Recreation and Park District. An additional 9.77 acres of land would be designated Community Space. The Community Space area would include bioretention and hydromodification areas. Finally, 0.45-acre of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to the surrounding parks.

Figure 3-3
Existing and Proposed Zoning

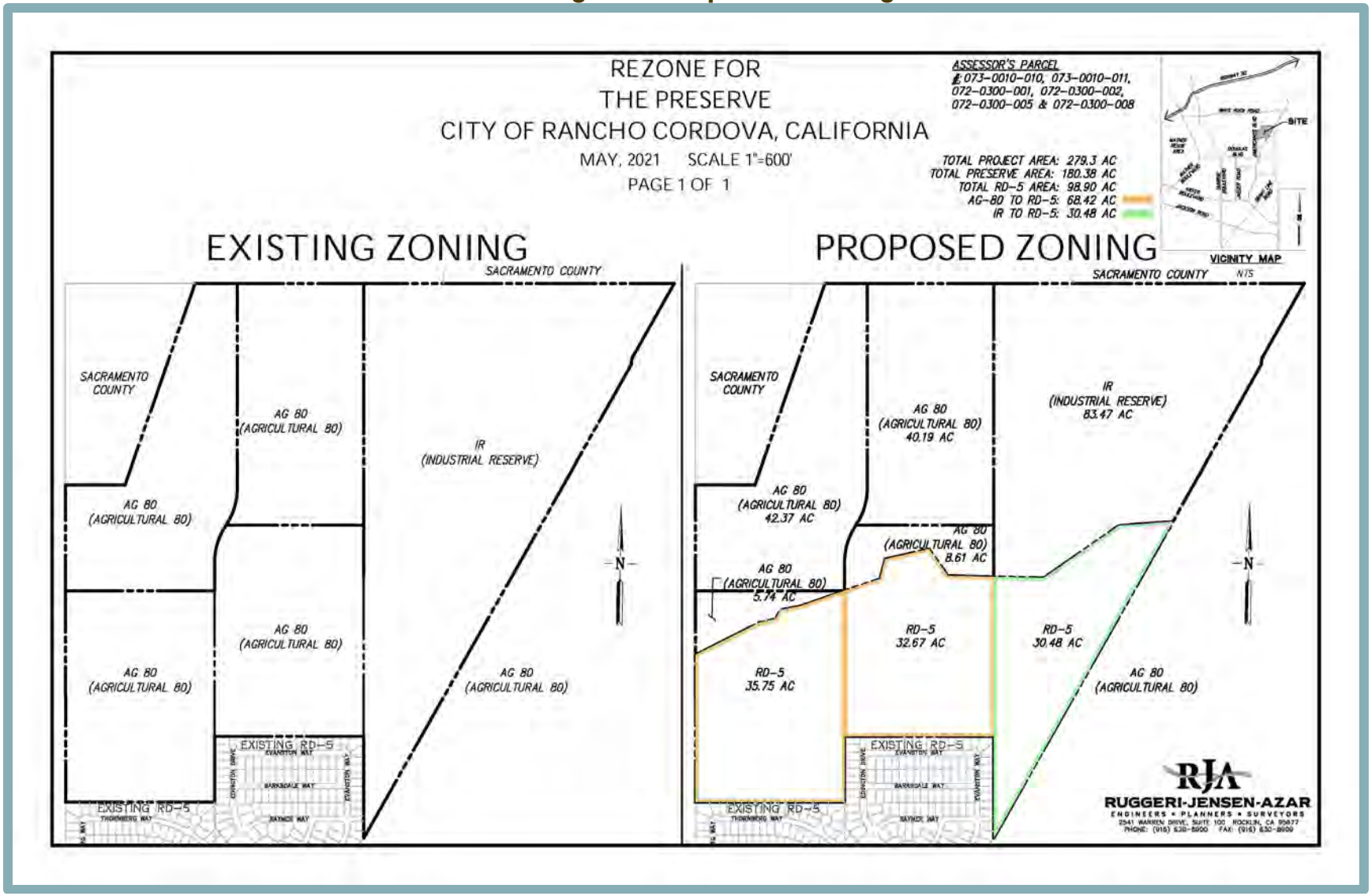


Figure 3-4
Tentative Subdivision Map Overview

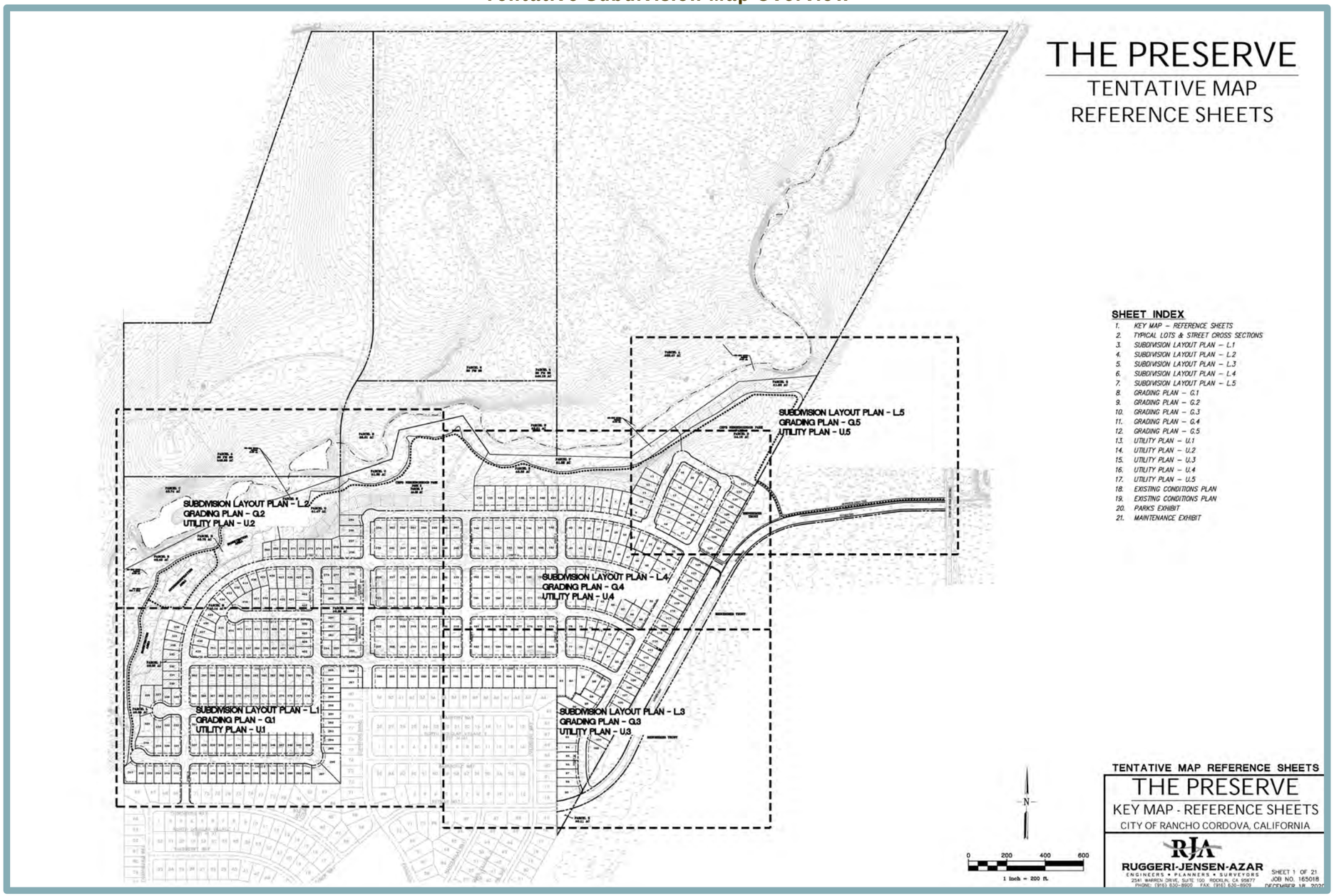


Figure 3-5
Tentative Subdivision Map – Section 1

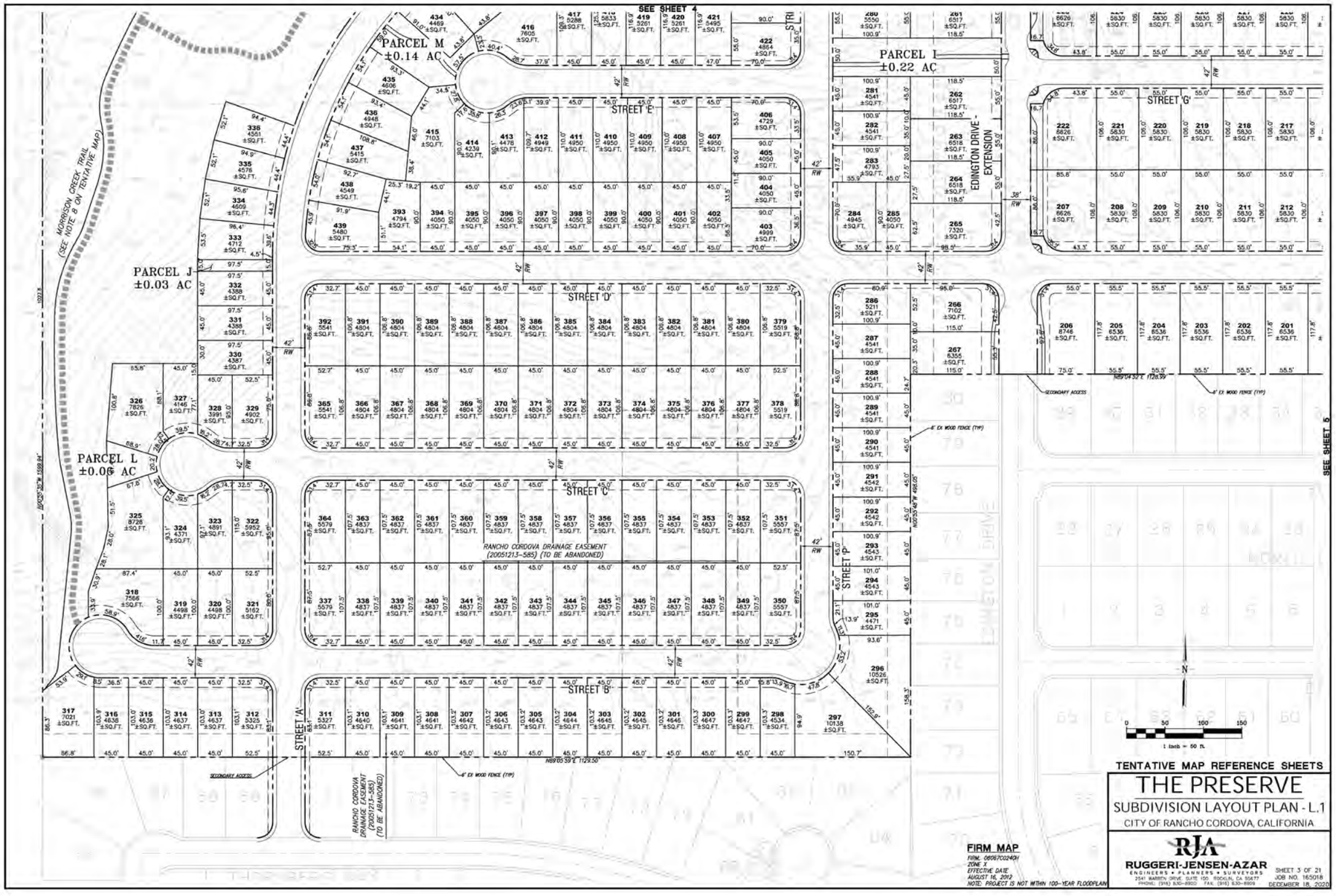


Figure 3-6
Tentative Subdivision Map – Section 2

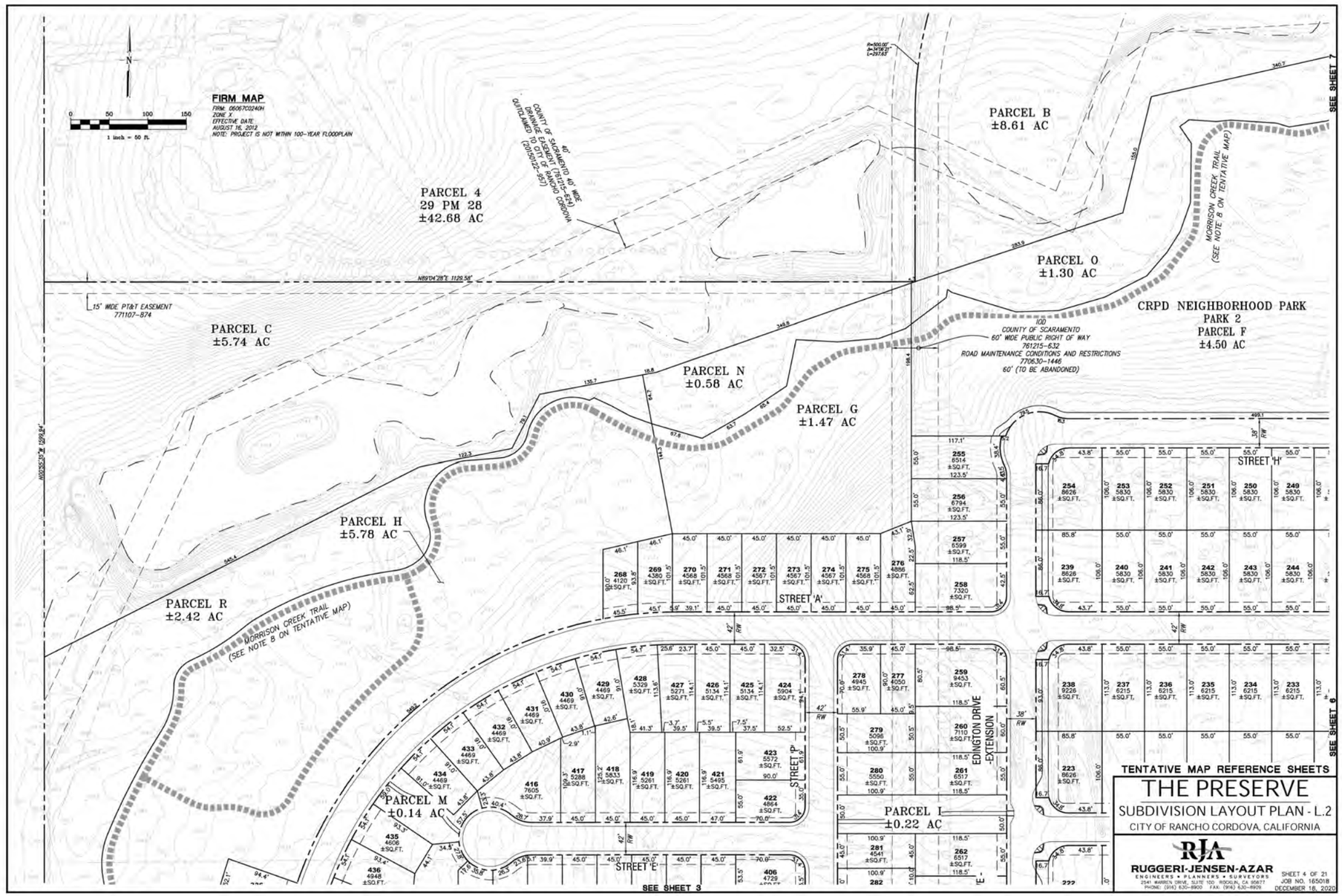


Figure 3-7
Tentative Subdivision Map – Section 3



Figure 3-8
Tentative Subdivision Map – Section 4



Figure 3-9
Tentative Subdivision Map – Section 5

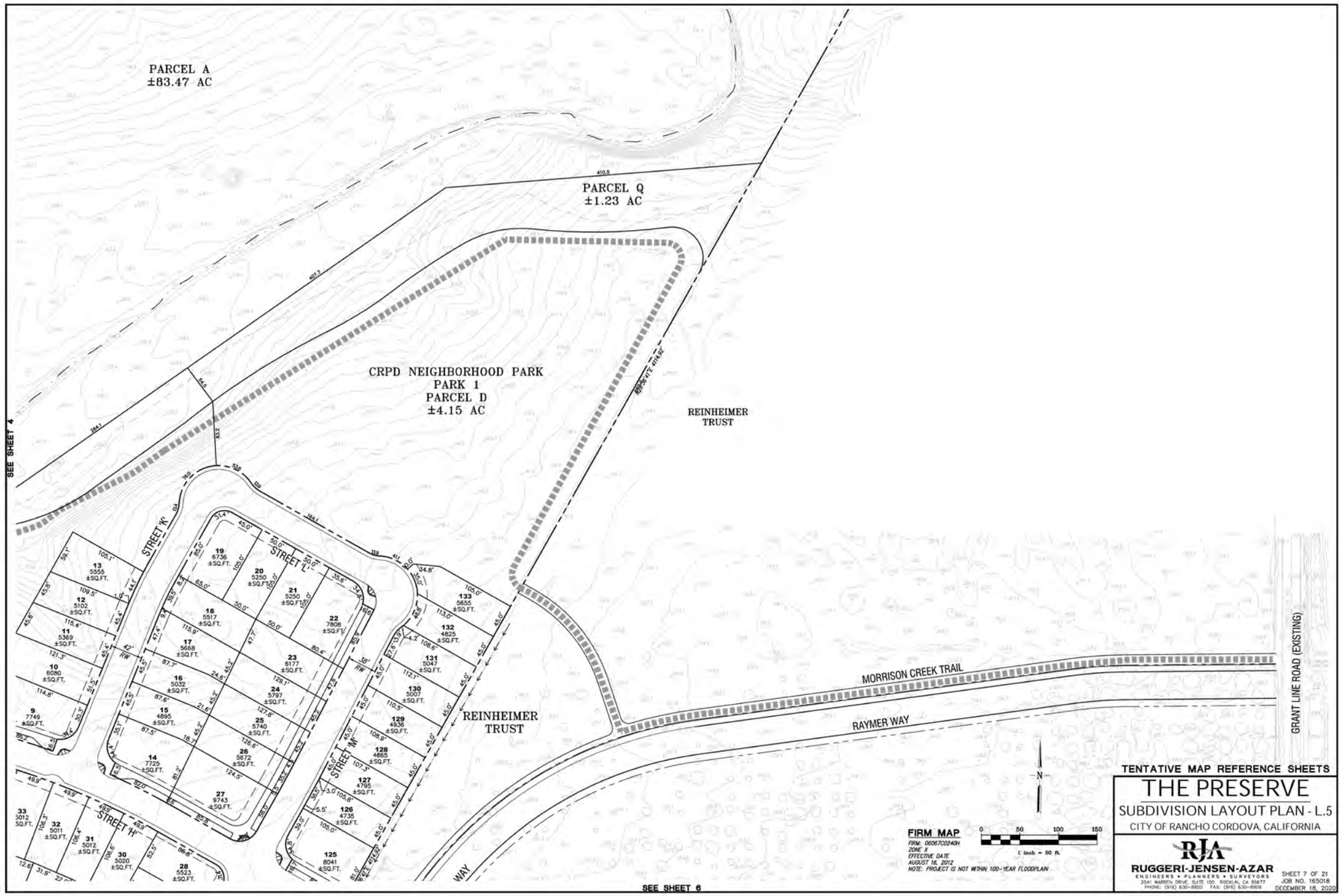


Figure 3-10
Parks and Open Space Plan



It should be noted that through current project entitlements, the 185.3 acres of undeveloped land on the northern parcels of the project site would remain as open space following development of the proposed project. Morrison Creek would be undisturbed within the open space area.

The proposed project would include measures to protect the vegetation and habitats within the 185.3 acres of open space area, including but not limited to, fencing and long-term funding for management of the area. The area would also include an easement for the future extension of Centennial Drive. The areas designated for open space would maintain the IR or AG-80 zoning designation and would not require an amendment.

Utilities

Figure 3-11 through Figure 3-15 provide an overview of the proposed water, sewer, and stormwater utility improvements.

Treated water service for the project would be provided by the Sacramento County Water Agency. The proposed project would include connection of new eight-inch water mains to an existing 10-inch water main located within Edington Drive. The new water lines would run throughout the drive aisles of the project site and would service all units.

Sanitary sewer service is provided to the City by the County Sanitation District 1. The County Sanitation District 1 operates and maintains the sewer system, which collects wastewater flows from individual developments within the City and conveys them to the Sacramento Regional County Sanitation District Inceptor system. Wastewater is ultimately delivered to the Sacramento Regional Wastewater Treatment Plant north of Elk Grove. The proposed project would include installation of eight-inch sanitary sewer pipelines throughout the project site which would divert wastewater to the County Sanitation District. The project would include connection of the eight-inch sanitary sewer lines to existing eight-inch sewer lines within Edington Drive and Thornberg Way.

Stormwater generated by impervious areas within the project site would be captured by a series of drain inlets located within the internal roadways and routed, through new underground 12- to 24-inch storm drains, to two bio-retention basins located within the northwest portion of the development area. The bio-retention basins would provide for treatment runoff by allowing stormwater to infiltrate through underlying soils, prior to capture with a perforated underdrain located underneath the bio-retention soil media. In addition, each basin would include an overflow structure connected to the underdrain. Treated stormwater captured by the perforated underdrain would flow, through new 15-inch storm drains, to a hydromodification basin located in between the two bio-retention basins. During large storm events, excess stormwater in the bio-retention basins would flow directly through the overflow structures. The hydromodification basin would allow for detention of captured runoff prior to discharging, through a new 36-inch storm drain and outlet structure, to Morrison Creek.

Off-Site Improvements

As shown in Figure 3-2, the project could include off-site improvements to the east of the site boundary. The improvements could occur adjacent to the proposed structures along the easternmost border. Improvements could include utility connection or road development. Additionally, off-site improvements could be required along the existing Raymer Way to the intersection with Grant Line Road. Improvements within the area would include expansion of the roadway or modifications to Morrison Creek.

Figure 3-11
Preliminary Utilities Plan – Section 1

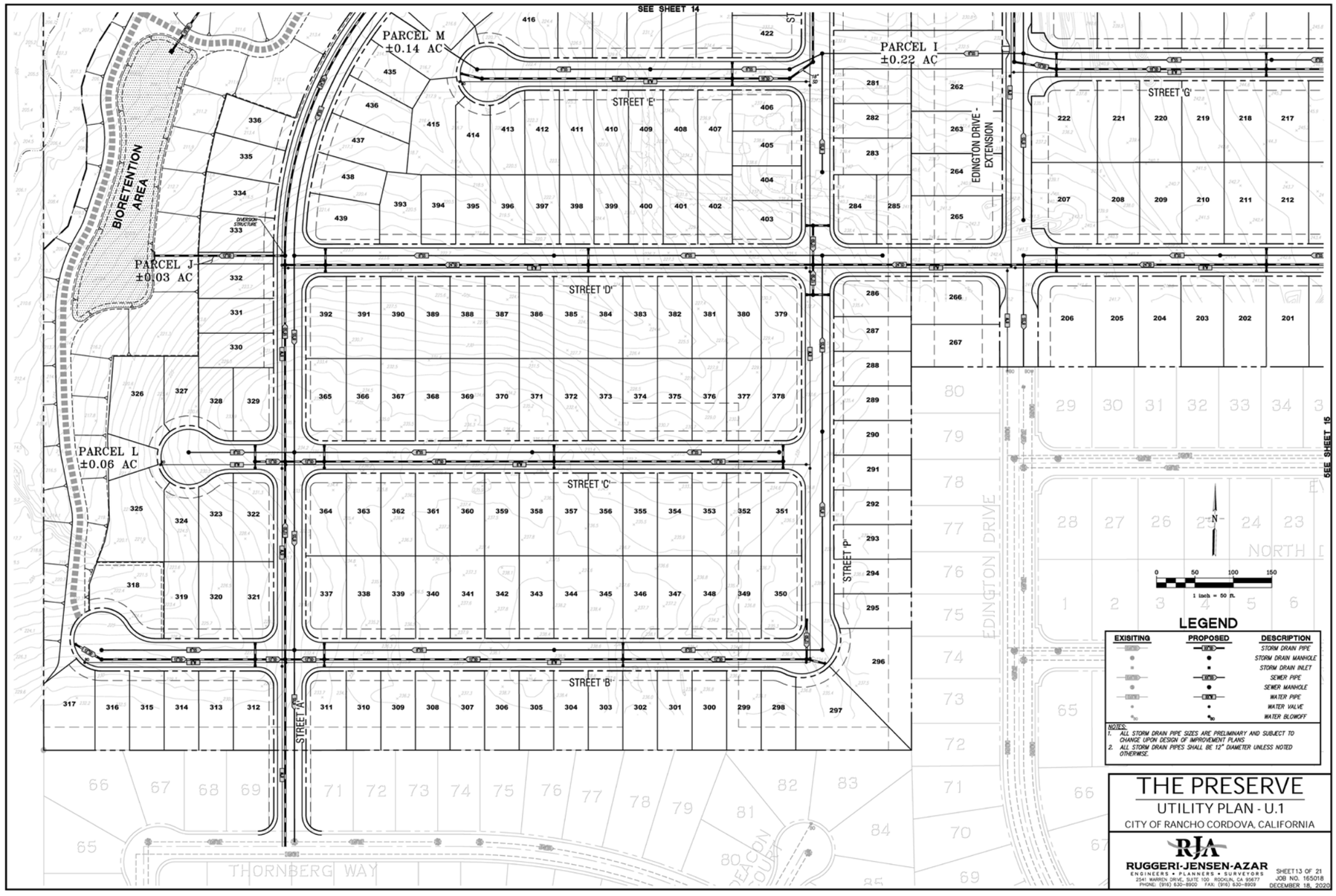


Figure 3-12
Preliminary Utilities Plan – Section 2

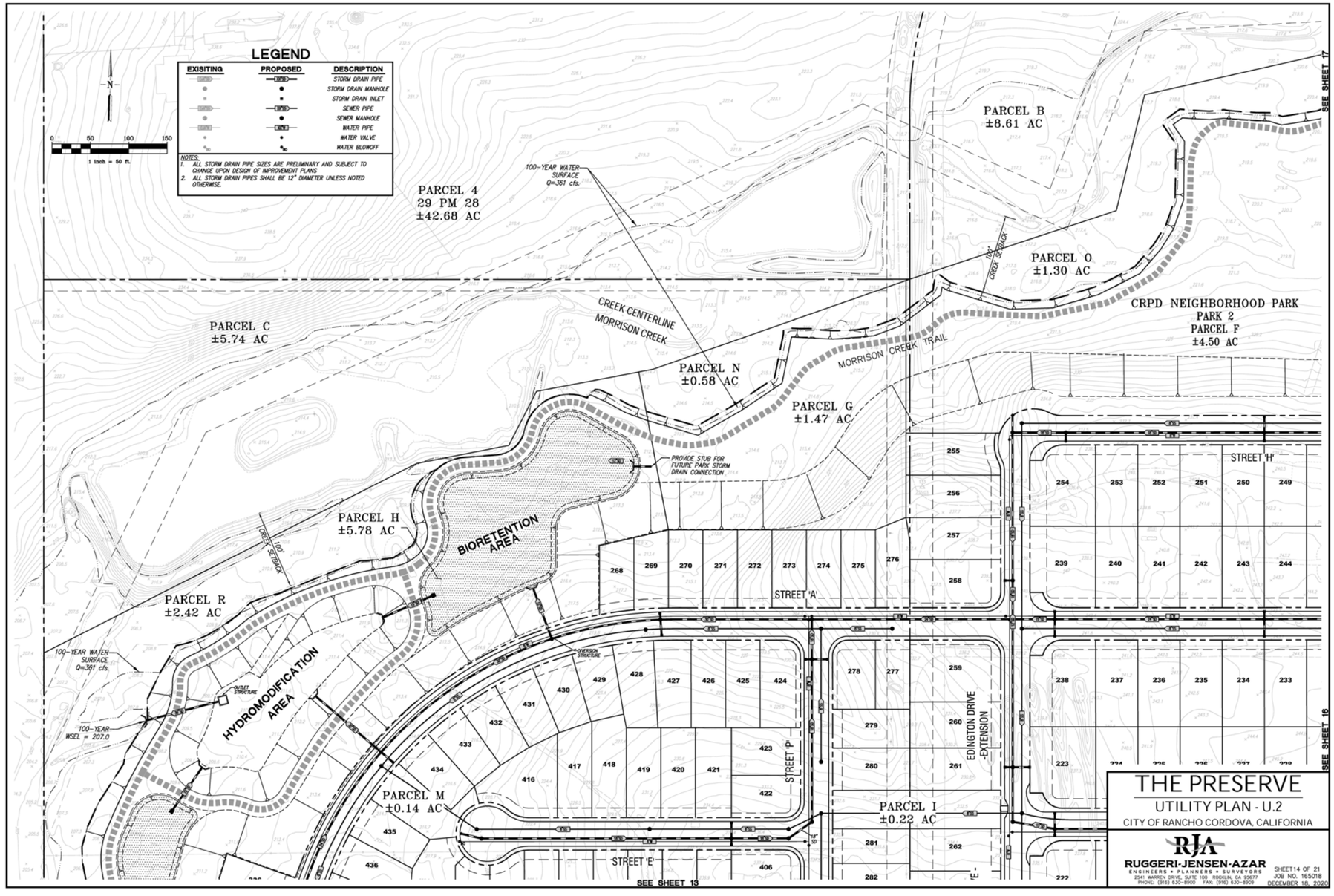


Figure 3-13
Preliminary Utilities Plan – Section 3

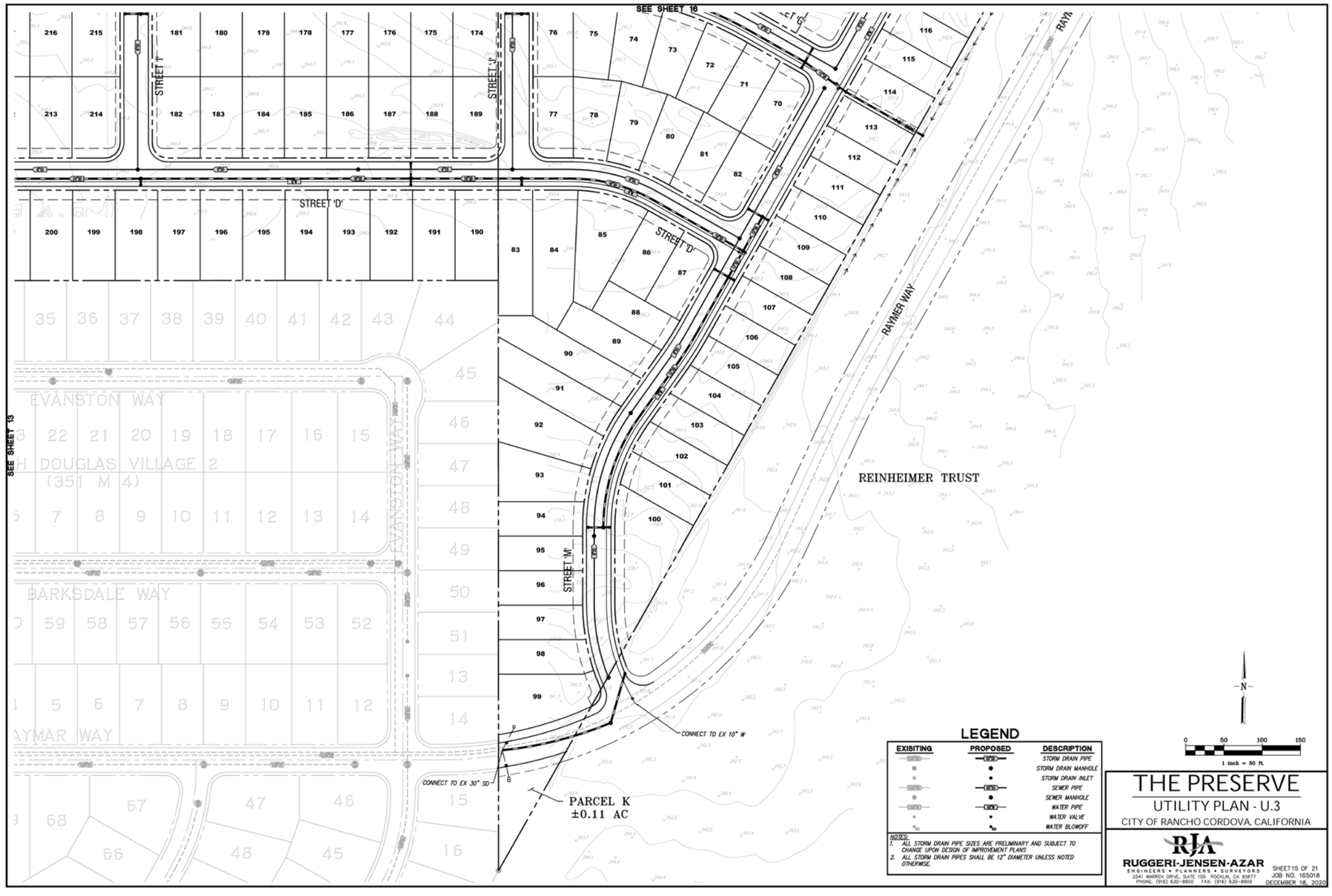


Figure 3-14
Preliminary Utilities Plan – Section 4

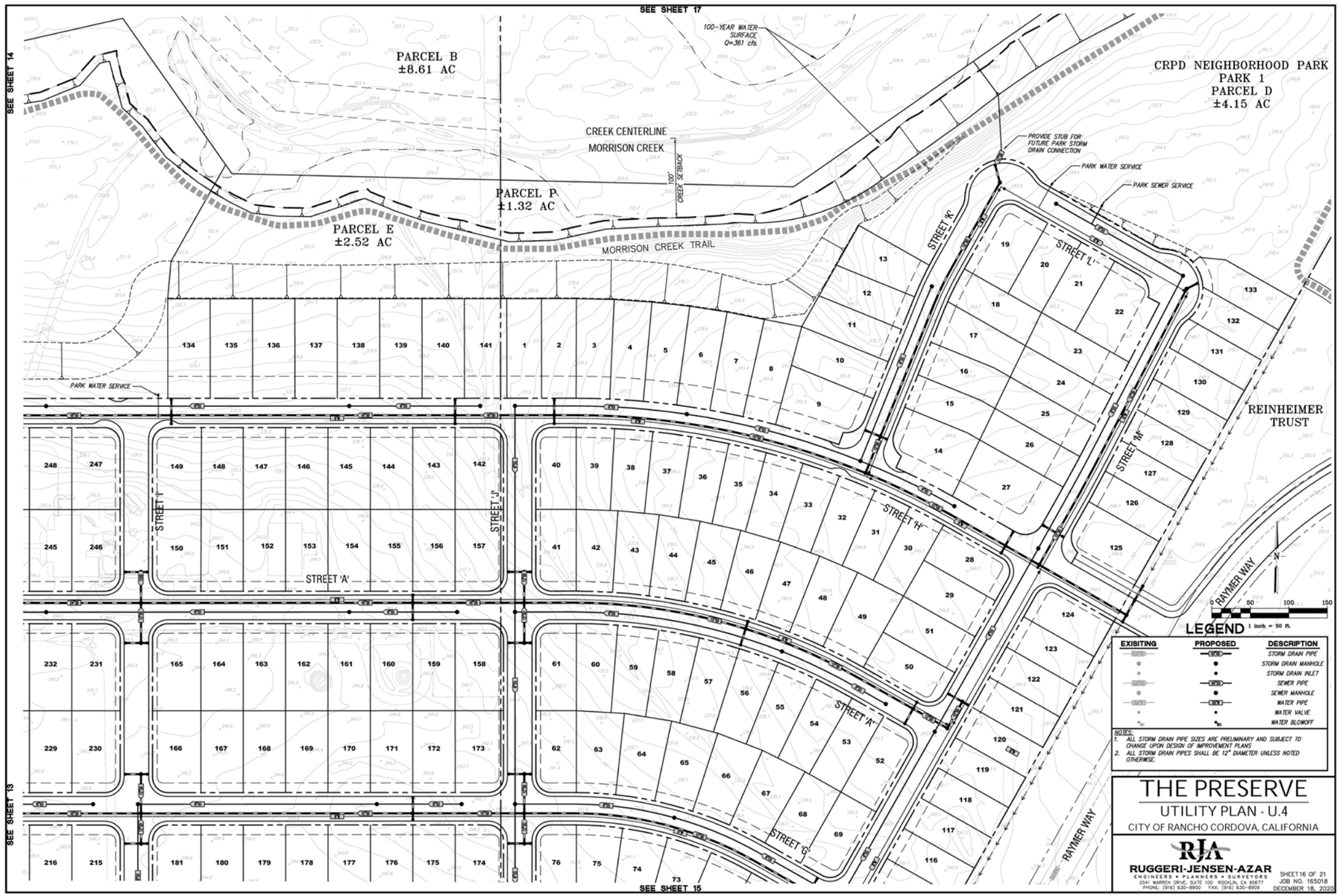
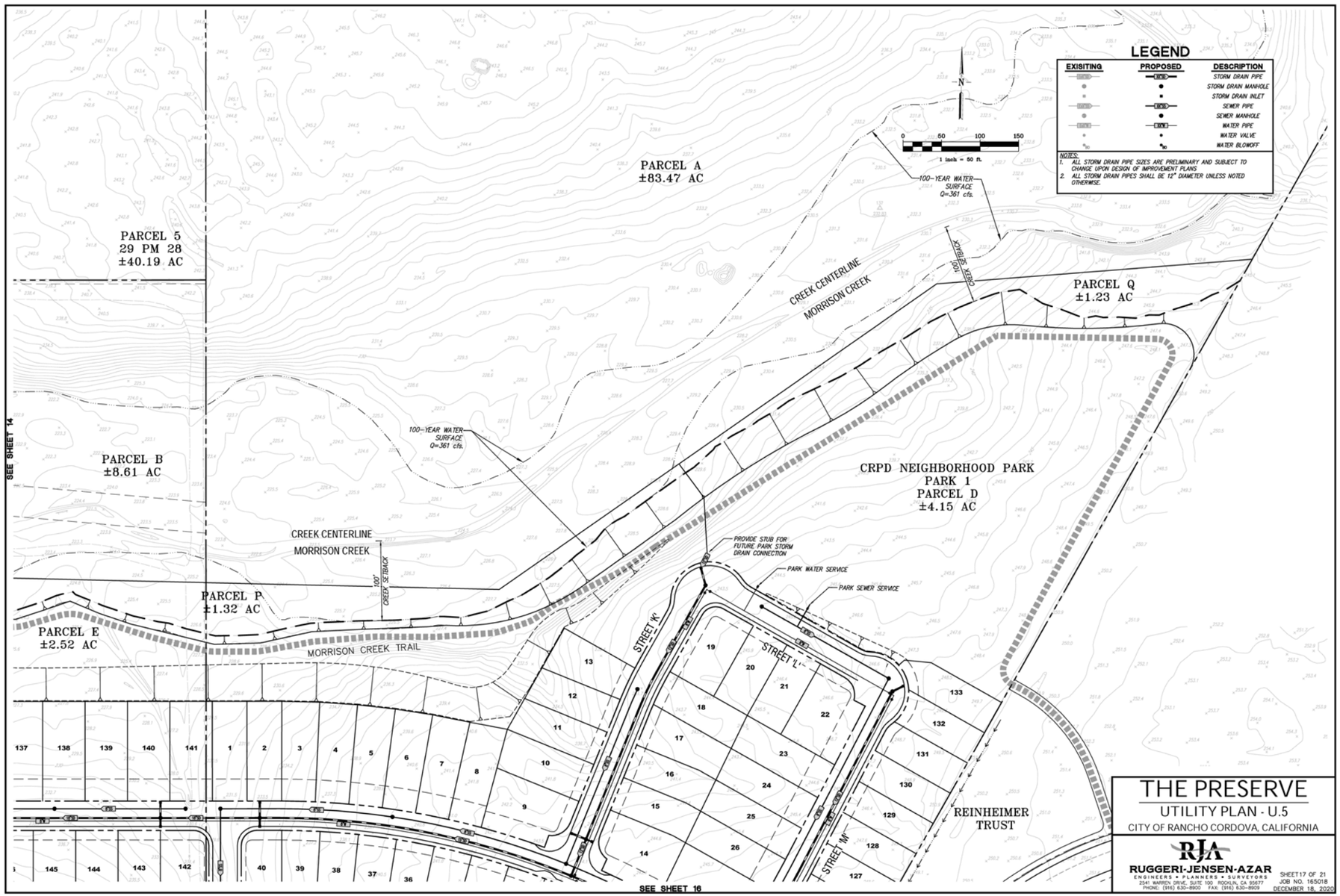


Figure 3-15
Preliminary Utilities Plan – Section 5



3.6 REQUIRED DISCRETIONARY APPROVALS

The proposed project would require City approval of the following:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- General Plan Amendment from Grant Line West Planning Area to Low-Density Residential;
- General Plan Amendment to remove the portion of Centennial Drive through the project site, as depicted in the Circulation Element;
- Rezone from AG-80 (approximately 68.42 acres) and IR (approximately 30.48 acres) to Residential District (RD-5);
- Tentative Subdivision Map; and
- Development Agreement.

3.7 OTHER AGENCY AND PERMIT APPROVALS

In addition to the aforementioned entitlements from the City of Rancho Cordova, the proposed project would require approvals/permits from the following State, federal, or local agencies:

- California Department of Fish and Wildlife (CDFW);
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- Sacramento Metropolitan Air Quality Management District (SMAQMD);
- U.S. Army Corps of Engineers (USACE) – Nationwide Permit (404); and, possibly,
- U.S. Fish and Wildlife Service (USFWS).

4.0 Introduction to the Analysis

4.0 INTRODUCTION TO THE ANALYSIS

4.0.1 INTRODUCTION

The technical chapters of the EIR analyze the potential impacts of buildout of the proposed project on a range of environmental issue areas. Chapters 4.1 through 4.10 of the EIR include the following: the environmental setting as the setting relates to the specific issue; standards of significance; method of analysis; and project-specific impacts and mitigation measures. Additionally, Chapters 4.1 through 4.10 describe the cumulative impacts of the project combined with past, present and reasonably probable future projects for each issue area. The format of each of the technical chapters is described at the end of this chapter. It should be noted that all technical reports are either attached to this EIR, available by request from the City, or available on the City's website at:

www.cityofranchocordova.org/government/planning/environmental-review/environmental-documents.

4.0.2 DETERMINATION OF SIGNIFICANCE

Under CEQA, a significant effect is defined as a substantial or potentially substantial adverse change in the environment (Public Resources Code Section 21068). The CEQA Guidelines require that the determination of significance be based on scientific and factual data. The specific criteria for determining the significance of a particular impact are identified within in each technical chapter, and are consistent with significance criteria set forth in the CEQA Guidelines or as based on the professional judgment of the EIR preparers.

4.0.3 ENVIRONMENTAL ISSUES DISMISSED IN THE INITIAL STUDY

The Initial Study prepared for the proposed project (see Appendix A to this EIR) includes a detailed environmental checklist addressing a range of technical environmental issues. For each technical environmental issue, the Initial Study identifies the level of impact for the proposed project. The Initial Study identifies the environmental effects as "no impact," "less than significant," "less than significant with mitigation incorporated," and "potentially significant."

Impacts identified in the Initial Study as no impact, less than significant, or less than significant with the implementation of mitigation are presented below. All remaining issues identified in the Initial Study as potentially significant are discussed in the subsequent technical chapters of this EIR.

Aesthetics (All Sections): The City of Rancho Cordova General Plan EIR designates the American River and the Sierra Nevada Mountain range as scenic resources and notes that scenic views of Mount Diablo are available from Grant Line Road. However, considering the lack of designated public views of the American River or the Sierra Nevada foothills across the project site, the setback of proposed structures from Grant Line Road, and the existing maximum height requirements, the proposed project would not result in a substantial adverse effect on a scenic vista. The project site is not visible from the nearest designated State scenic highway to the project site, State Route (SR) 50. As a result, the project would not substantially damage scenic resources, including, but not

limited to, trees, rock outcroppings, and historic buildings within a State scenic highway. In addition, the Initial Study determined that compliance with the City's Municipal Code and *Design Guidelines* would ensure that the proposed project would not result in a degradation of the existing visual character of the site or quality of the public views of the site and its surroundings. The proposed project could introduce new sources of substantial light and glare to the site in the form of street lights, homes, windows, and increased vehicle traffic. The proposed project would comply with Section 23.725.060 of the Rancho Cordova Municipal Code which requires shielding of fixtures to limit light pollution and the restriction of direct lighting from crossing property lines. In addition, Mitigation Measure I-1 set forth in the Initial Study (see Appendix A to this EIR) requires the City's approval of a lighting plan for the proposed project, which would ensure the impact on the surrounding area due to lighting on the project site would be reduced to a less-than-significant level. Based on the above, impacts related to Aesthetics from the proposed project would be *less than significant* and *less than significant with mitigation incorporated*.

- *Agriculture and Forest Resources (All Sections):* Per the Department of Conservation Farmland Mapping and Monitoring Program (FMMP), the project site is currently classified as Grazing Land, Farmland of Local Importance, and Unique Farmland. However, the portion of the site designated Unique Farmland is located within the 185.3-acre open space area, which would not be developed as part of the proposed project. The project site is currently zoned Agricultural (AG-80) and Industrial Reserve (IR), and the proposed project includes a request for a rezone of a portion of the site to RD-5. However, the project site is not currently being used for agricultural purposes, and, thus, the project would not result in development of land being used for agriculture. The project site is not under a Williamson Act Contract, is not considered forest land or timberland, and is not zoned for Timberland Production. Therefore, the proposed project would result in *no impacts* and *less-than-significant* impacts related to Agriculture and Forest Resources.

- *Air Quality (d):* Typical sources of objectionable odor include wastewater treatment plants, landfills, and composting facilities, which are not proposed as part of the project. Diesel fumes from construction equipment can be considered objectionable; however, construction activities would be temporary in nature. During operations, residential land uses, such as the proposed project, are not typically associated with creation of substantial objectionable odors. Therefore, the proposed project would not create objectionable odors affecting a substantial number of people, and a *less-than-significant* impact would occur.

- *Geology and Soils (ai and e):* According to the City's General Plan EIR, the closest fault zone to the project site is the Bear Mountain fault zone, located approximately 24 miles northeast of Rancho Cordova's Planning Area. In addition, the proposed residences would connect to the County Sanitation District 1 system. Therefore, the project would not result in substantial adverse effects, including risk, injury, or death, associated with the rupture of a known fault zone and would not include the use of septic tanks or alternative wastewater disposal systems, and *no impact* would occur related to such.

- *Hazards and Hazardous Materials (c-g):* The project site is not located within one-quarter mile of an existing or proposed school nor is it located within an airport land use plan and/or within two miles of a public airport. Thus, *no impact* would occur related to emitting hazardous emissions or handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school or result in a safety

hazard or excessive noise for a project located within an airport land use plan or within two miles of a public airport.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and the project site is not located within a High or Very High Fire Hazard Severity Zone. Furthermore, the proposed would not impair or physically interfere with an adopted emergency response plan due to substantial street width and number of access points. Therefore, the proposed project would result in *less-than-significant* impacts related to being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, exposing people or structures to the risk of loss, injury or death involving wildland fires, or impairing implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

- *Hydrology and Water Quality (d):* Based on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), the project site is not located within a Special Flood Hazard Area. In addition, the project site is not located near the ocean or a large closed body of water which would be subject to tsunamis or seiches. Therefore, the proposed project would result in *no impact* related to the risk release of pollutants due to project inundation.

- *Land Use and Planning (a):* The two on-site residences would be demolished as part of the proposed project, but do not belong to an established community. Therefore, the project would not have the potential to physically divide an established community, and a *less-than-significant* impact would occur.

- *Noise (c):* The nearest airport to the project site, Mather Airport, is located approximately five miles away. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels related to air traffic, and *no impact* would occur.

- *Population and Housing (b):* The proposed project would require demolition of the two existing single-family residences. While the project would displace inhabitants of the two residences, replacement housing would be available from the existing housing stock in Rancho Cordova. Furthermore, the project would add 440 residential units to the site, resulting in a net increase of 437 units to the City's housing stock. Therefore, *a less-than-significant* impact would occur related to the displacement of existing people or housing.

- *Public Services (d and e):* The proposed project would introduce new residents to the project area and thereby increase the demand for parks and other public facilities. However, the proposed project would include dedication of parkland, satisfying the City's Municipal Code requirements. In addition, the future residents of the proposed project would have access to the City's existing public facilities. Thus, implementation of the project would not result in substantial adverse physical impacts associated with the provision of new or altered parks or other public facilities, and a *less-than-significant* impact would occur.

- *Recreation (All Sections):* Given that the proposed project would induce population growth through the development of new residences, the project would result in increased demand

for recreational facilities. As mentioned above, the project would include the dedication of land for parks, Community Space, and green infrastructure. Furthermore, the project applicant would be required to pay development impact fees. Therefore, a *less-than-significant* impact would occur related to recreation.

- *Wildfire (All Sections):* According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program the project site is not located within or adjacent to a High or Very High Fire Hazard Severity Zone. Furthermore, the project is not located on a slope or near a downstream flooding area that would increase hazards related to wildfire. Therefore, a *less-than-significant* impact would occur related to wildfire.

4.0.4 ENVIRONMENTAL ISSUES ADDRESSED IN THIS EIR

The EIR provides the analysis necessary to address the technical environmental impacts of the proposed project. The following environmental issues are addressed in this EIR:

- Air Quality, Greenhouse Gas Emissions, and Energy;
- Biological Resources;
- Cultural and Tribal Resources;
- Geology and Soils/Mineral Resources;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning/Population and Housing;
- Noise;
- Public Services and Utilities; and
- Transportation.

See Section 5.3, Cumulative Impacts, of Chapter 5, Statutorily Required Sections, for additional information on the scope of the cumulative impact analysis for each environmental issue addressed in the EIR.

4.0.5 CHAPTER FORMAT

Each technical chapter addressing a specific environmental issue begins with an **introduction** describing the purpose of the section. The introduction is followed by a description of the project's **existing environmental setting** as the setting pertains to that particular issue. The setting description is followed by the **regulatory context** and the **impacts and mitigation measures** discussion, which contains the **standards of significance**, followed by the **method of analysis**. The **impact and mitigation measures** discussion includes impact statements prefaced by a number in bold-faced type (for both project-specific and cumulative analyses). An explanation of each impact and an analysis of the impact's significance follow each impact statement. All mitigation measures pertinent to each individual impact follow directly after the impact statement (see below). The degree of relief provided by identified mitigation measures is also evaluated. An example of the format is shown below.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance.

4.x-1 Statement of Project-Specific Impact

Discussion of impact for the proposed project in paragraph format.

Statement of ***level of significance*** of impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR: less than significant, significant, or significant and unavoidable. If an impact is determined to be significant, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less-than-significant level with implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-1(a) *Required mitigation measure(s) presented in italics and listed in consecutive order.*

4.x-1(b) *Required additional mitigation measure, if necessary.*

Cumulative Impacts and Mitigation Measures

The following discussion of cumulative impacts is based on implementation of the proposed project in combination with cumulative development within the applicable area or region.

4.x-2 Statement of Cumulative Impact

Discussion of cumulative impacts for the proposed project in paragraph format.

As discussed in detail in Chapter 5, Statutorily Required Sections, of the EIR, the cumulative setting for the proposed project is generally considered to be development anticipated to occur upon buildout of the Rancho Cordova General Plan (i.e., Rancho Cordova city limits), as well as buildout of a number of approved or reasonably foreseeable projects within the project region.

Statement of ***level of significance*** of cumulative impact prior to mitigation is included at the end of each impact discussion. The following levels of significance are used in the EIR for cumulative impacts: less than significant, less than cumulatively considerable, cumulatively considerable, or significant and unavoidable. If an impact is determined to be cumulatively considerable, mitigation will be included in order to reduce the specific impact to the maximum extent feasible. Impacts that cannot be reduced to a less-than-significant or less than cumulatively considerable levels with the implementation of all feasible mitigation would be considered to remain significant and unavoidable.

Mitigation Measure(s)

Statement of *level of significance* after the mitigation is included immediately preceding mitigation measures.

4.x-2(a) *Required mitigation measure(s) presented in italics and listed in consecutive order.*

4.x-2(b) *Required additional mitigation measure, if necessary.*

4.1 Air Quality, Greenhouse Gas Emissions, and Energy

4.1 AIR QUALITY, GREENHOUSE GAS EMISSIONS, AND ENERGY

4.1.1 INTRODUCTION

The Air Quality, Greenhouse Gas Emissions, and Energy chapter of the EIR describes the potential impacts of the proposed project on local and regional air quality emissions, potential impacts related to greenhouse gas (GHG) emissions and climate change, and potential impacts related to energy. The chapter includes a discussion of the existing air quality, GHG, and energy setting, the existing regulatory setting, as well as potential air quality, GHG, and energy impacts resulting from implementation of the project. In addition, the chapter includes mitigation measures warranted to reduce or eliminate any identified significant impacts. This chapter is based on the Rancho Cordova General Plan[1] and associated EIR,[2] the Sacramento Metropolitan Air Quality Management District (SMAQMD) CEQA Guide,[3] and technical analysis performed by Raney Planning and Management, Inc.

4.1.2 EXISTING ENVIRONMENTAL SETTING

The following information provides an overview of the existing environmental setting in relation to air quality within the proposed project area. Air basin characteristics, ambient air quality standards (AAQS), attainment status and regional air quality plans, local air quality monitoring, odors, sensitive receptors, greenhouse gases, and energy are discussed.

Air Basin Characteristics

The proposed project site is located in the City of Rancho Cordova, which falls within the Sacramento Valley Air Basin (SVAB) and is within the jurisdictional boundaries of the SMAQMD. The SVAB is in the northern half of California's Great Valley and is bordered on three sides by mountain ranges. Air flows into the SVAB through the Carquinez Strait, moves across the Delta and carries pollutants from the heavily populated San Francisco Bay Area into the SVAB. The prevailing winds are moderate in strength and vary from moist clean breezes from the south to dry land flows from the north.

Most precipitation in the SVAB results from air masses moving in from the Pacific Ocean during the winter months. Storms usually move through the area from the west or northwest. During the winter rainy season (November through February) over half the total annual precipitation falls while the average winter temperature is a moderate 49 degrees Fahrenheit. During the summer, daytime temperatures can exceed 100 degrees Fahrenheit. Dense fog occurs mostly in mid-winter and rarely in the summer. Daytime temperatures from April through October average between 60 and 80 degrees Fahrenheit with low humidity. The inland location and surrounding mountains shelter the valley from much of the ocean breeze that keeps the coastal regions moderate in temperature. The only breech in the mountain barrier is the Carquinez Strait, which exposes the midsection of the valley to the coastal air mass.

1 City of Rancho Cordova. *Rancho Cordova General Plan*. June 26, 2006.
2 City of Rancho Cordova. *Rancho Cordova General Plan Draft Environmental Impact Report.* March 2006.
3 Sacramento Metropolitan Air Quality Management District. *CEQA Guide*. April 2020.

Air quality in the City of Rancho Cordova is also affected by inversion layers, which occur when a layer of warm air traps a layer of cold air, preventing vertical dispersion of air contaminants. The presence of an inversion layer results in higher concentrations of pollutants near ground level. Summer inversions are strong and frequent, but are less troublesome than those that occur in the fall. Autumn inversions, formed by warm air subsiding in a region of high pressure, have accompanying light winds that do not provide adequate dispersion of air pollutants.

Air quality in the project vicinity is influenced by both local and distant emission sources. Air pollutant sources in the immediate project vicinity include emissions from vehicle traffic on United States Route 50 (US 50) and other nearby roadways. Other sources of air pollutants in the area include activities associated with commercial, residential, and industrial land uses.

Ambient Air Quality Standards

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established AAQS for common pollutants. The federal standards are divided into primary standards, which are designed to protect the public health, and secondary standards, which are designed to protect the public welfare. The AAQS for each contaminant represent safe levels that avoid specific adverse health effects. Pollutants for which AAQS have been established are called “criteria” pollutants. Table 4.1-1 identifies the major pollutants, characteristics, health effects and typical sources. The national and California AAQS (NAAQS and CAAQS, respectively) are summarized in Table 4.1-2. The NAAQS and CAAQS were developed independently with differing purposes and methods. As a result, the federal and State standards differ in some cases. In general, the State of California standards are more stringent than the federal standards, particularly for ozone and particulate matter (PM).

A description of each criteria pollutant and its potential health effects is provided below.

Ozone

Ozone is a reactive gas consisting of three oxygen atoms. In the troposphere, ozone is a product of the photochemical process involving the sun's energy, and is a secondary pollutant formed as a result of a complex chemical reaction between reactive organic gases (ROG) and oxides of nitrogen (NO_X) emissions in the presence of sunlight. As such, unlike other pollutants, ozone is not released directly into the atmosphere from any sources. In the stratosphere, ozone exists naturally and shields Earth from harmful incoming ultraviolet radiation. The primary source of ozone precursors is mobile sources, including cars, trucks, buses, construction equipment, and agricultural equipment. Ground-level ozone reaches the highest level during the afternoon and early evening hours. High levels occur most often during the summer months. Ground-level ozone is a strong irritant that could cause constriction of the airways, forcing the respiratory system to work harder in order to provide oxygen. Ozone at the Earth's surface causes numerous adverse health effects and is a major component of smog. High concentrations of ground level ozone can adversely affect the human respiratory system and aggravate cardiovascular disease and many respiratory ailments.

Reactive Organic Gas

ROG is a reactive chemical gas composed of hydrocarbon compounds typically found in paints and solvents that contributes to the formation of smog and ozone by involvement in atmospheric chemical reactions. A separate health standard does not exist for ROG. However, some compounds that make up ROG are toxic, such as the carcinogen benzene.

Table 4.1-1
Summary of Criteria Pollutants

Pollutant	Characteristics	Health Effects	Major Sources
Ozone	A highly reactive gas produced by the photochemical process involving a chemical reaction between the sun's energy and other pollutant emissions. Often called photochemical smog.	• Eye irritation • Wheezing, chest pain, dry throat, headache, or nausea • Aggravated respiratory disease such as emphysema, bronchitis, and asthma	Combustion sources such as factories, automobiles, and evaporation of solvents and fuels.
Carbon Monoxide	An odorless, colorless, highly toxic gas that is formed by the incomplete combustion of fuels.	• Impairment of oxygen transport in the bloodstream • Impaired vision, reduced alertness, chest pain, and headaches • Can be fatal in the case of very high concentrations	Automobile exhaust, combustion of fuels, and combustion of wood in woodstoves and fireplaces.
Nitrogen Dioxide	A reddish-brown gas that discolors the air and is formed during combustion of fossil fuels under high temperature and pressure.	• Lung irrigation and damage • Increased risk of acute and chronic respiratory disease	Automobile and diesel truck exhaust, industrial processes, and fossil-fueled power plants.
Sulfur Dioxide	A colorless, irritating gas with a rotten egg odor formed by combustion of sulfur-containing fossil fuels.	• Aggravation of chronic obstruction lung disease • Increased risk of acute and chronic respiratory disease	Diesel vehicle exhaust, oil-powered power plants, and industrial processes.
Particulate Matter (PM_{10} and $PM_{2.5}$)	A complex mixture of extremely small particles and liquid droplets that can easily pass through the throat and nose and enter the lungs.	• Aggravation of chronic respiratory disease • Heart and lung disease • Coughing • Bronchitis • Chronic respiratory disease in children • Irregular heartbeat • Nonfatal heart attacks	Combustion sources such as automobiles, power generation, industrial processes, and wood burning. Also from unpaved roads, farming activities, and fugitive windblown dust.
Lead	A metal found naturally in the environment as well as in manufactured products.	• Loss of appetite, weakness, apathy, and miscarriage • Lesions of the neuromuscular system, circulatory system, brain, and gastrointestinal tract	Industrial sources and combustion of leaded aviation gasoline.

Sources:

- ***California Air Resources Board. California Ambient Air Quality Standards (CAAQS). Available at: http://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm. Accessed May 2021.***
- ***Sacramento Metropolitan, El Dorado, Feather River, Placer, and Yolo-Solano Air Districts: Sacramento Region Spare the Air. Air Quality Information for the Sacramento Region. Available at: http://www.sparetheair.com/health.cfm?page=healthoverall. Accessed May 2021.***
- ***California Air Resources Board. Glossary of Air Pollution Terms. Available at: http://www.arb.ca.gov/html/gloss.htm. Accessed May 2021.***

Table 4.1-2
Ambient Air Quality Standards

Pollutant	Averaging Time	CAAQS	NAAQS	
			Primary	Secondary
Ozone	1 Hour	0.09 ppm	-	Same as primary
	8 Hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	8 Hour	9 ppm	9 ppm	-
	1 Hour	20 ppm	35 ppm	
Nitrogen Dioxide	Annual Mean	0.030 ppm	53 ppb	Same as primary
	1 Hour	0.18 ppm	100 ppb	-
Sulfur Dioxide	24 Hour	0.04 ppm	-	-
	3 Hour	-	-	0.5 ppm
	1 Hour	0.25 ppm	75 ppb	-
Respirable Particulate Matter (PM_{10})	Annual Mean	20 ug/m^3	-	Same as primary
	24 Hour	50 ug/m^3	150 ug/m^3	
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	12 ug/m^3	12 ug/m^3	15 ug/m^3
	24 Hour	-	35 ug/m^3	Same as primary
Lead	30 Day Average	1.5 ug/m^3	-	-
	Calendar Quarter	-	1.5 ug/m^3	Same as primary
Sulfates	24 Hour	25 ug/m^3	-	-
Hydrogen Sulfide	1 Hour	0.03 ppm	-	-
Vinyl Chloride	24 Hour	0.010 ppm	-	-
Visibility Reducing Particles	8 Hour	see note below	-	-

ppm = parts per million
ppb = parts per billion
µg/m^3 = micrograms per cubic meter

Note: Statewide Visibility Reducing Particle Standard (except Lake Tahoe Air Basin): Particles in sufficient amount to produce an extinction coefficient of 0.23 per kilometer when the relative humidity is less than 70 percent. This standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Source: California Air Resources Board. Ambient Air Quality Standards. May 4, 2016. Available at: http://www.arb.ca.gov/research/aaqs/aaqs2.pdf. Accessed May 2021.

Oxides of Nitrogen

NO_X are a family of gaseous nitrogen compounds and are precursors to the formation of ozone and particulate matter. The major component of NO_X, nitrogen dioxide (NO_2), is a reddish-brown gas that discolors the air and is toxic at high concentrations. NO_X results primarily from the combustion of fossil fuels under high temperature and pressure. On-road and off-road motor vehicles and fuel combustion are the major sources of NO_X. NO_X reacts with ROG to form smog, which could result in adverse impacts to human health, damage the environment, and cause poor visibility. Additionally, NO_X emissions are a major component of acid rain. Health effects related to NO_X include lung irritation and lung damage and can cause increased risk of acute and chronic respiratory disease.

Carbon Monoxide

Carbon monoxide (CO) is a colorless, odorless, poisonous gas produced by incomplete burning of carbon-based fuels such as gasoline, oil, and wood. When CO enters the body, the CO

combines with chemicals in the body, which prevents blood from carrying oxygen to cells, tissues, and organs. Symptoms of exposure to CO can include problems with vision, reduced alertness, and general reduction in mental and physical functions. Exposure to CO can result in chest pain, headaches, reduced mental alertness, and death at high concentrations.

Sulfur Dioxide

Sulfur Dioxide (SO_2) is a colorless, irritating gas with a rotten egg odor formed primarily by the combustion of sulfur-containing fossil fuels from mobile sources, such as locomotives, ships, and off-road diesel equipment. SO_2 is also emitted from several industrial processes, such as petroleum refining and metal processing. Similar to airborne NO_X, suspended sulfur oxide particles contribute to poor visibility. The sulfur oxide particles are also a component of particulate matter that is 10 micrometers in diameter and smaller (PM_{10}).

Particulate Matter

Particulate matter, also known as particle pollution or PM, is a complex mixture of extremely small particles and liquid droplets. Particle pollution is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, and soil or dust particles. The size of particles is directly linked to their potential for causing health impacts. The USEPA is concerned about PM_{10} because those are the particles that generally pass through the throat and nose and enter the lungs. Once inhaled, the particles could affect the heart and lungs and cause serious health effects. USEPA groups particle pollution into three categories based on their size and where they are deposited:

- "Inhalable coarse particles ($PM_{2.5-10}$)," which are found near roadways and dusty industries, are between 2.5 and 10 micrometers in diameter. $PM_{2.5-10}$ is deposited in the thoracic region of the lungs.
- "Fine particles ($PM_{2.5}$)," which are found in smoke and haze, are 2.5 micrometers in diameter and smaller. $PM_{2.5}$ particles could be directly emitted from sources such as forest fires, or could form when gases emitted from power plants, industries, and automobiles react in the air. They penetrate deeply into the thoracic and alveolar regions of the lungs.
- “Ultrafine particles (UFP),” are very, very small particles (less than 0.1 micrometers in diameter) largely resulting from the combustion of fossil fuels, meat, wood, and other hydrocarbons. While UFP mass is a small portion of $PM_{2.5}$, their high surface area, deep lung penetration, and transfer into the bloodstream could result in disproportionate health impacts relative to their mass. UFP is not currently regulated separately, but is analyzed as part of $PM_{2.5}$.

PM_{10}, $PM_{2.5}$, and UFP include primary pollutants, which are emitted directly to the atmosphere and secondary pollutants, which are formed in the atmosphere by chemical reactions among precursors. Generally speaking, $PM_{2.5}$ and UFP are emitted by combustion sources like vehicles, power generation, industrial processes, and wood burning, while PM_{10} sources include the same sources plus roads and farming activities. Fugitive windblown dust and other area sources also represent a source of airborne dust. Long-term PM pollution, especially fine particles, could result in significant health problems including, but not limited to, the following: increased respiratory symptoms, such as irritation of the airways, coughing or difficulty breathing; decreased lung function; aggravated asthma; development of chronic respiratory disease in children; development of chronic bronchitis or obstructive lung disease; irregular heartbeat; heart attacks; and increased blood pressure.

Lead

Lead is a relatively soft and chemically resistant metal that is a natural constituent of air, water, and the biosphere. Lead is neither created nor destroyed in the environment, and, thus, essentially persists forever. Lead forms compounds with both organic and inorganic substances. As an air pollutant, lead is present in small particles. Sources of lead emissions in California include a variety of industrial activities. Gasoline-powered automobile engines were a major source of airborne lead through the use of leaded fuels. The use of leaded fuel has been mostly phased out, with the result that ambient concentrations of lead have dropped dramatically. However, because lead was emitted in large amounts from vehicles when leaded gasoline was used, lead is present in many soils (especially urban soils) as a result of airborne dispersion and could become re-suspended into the air.

Because lead is only slowly excreted by the human body, exposures to small amounts of lead from a variety of sources could accumulate to harmful levels. Effects from inhalation of lead above the level of the ambient air quality standard may include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms could include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children. Lead also causes cancer.

Sulfates

Sulfates are the fully oxidized ionic form of sulfur and are colorless gases. Sulfates occur in combination with metal and/or hydrogen ions. In California, emissions of sulfur compounds occur primarily from the combustion of petroleum-derived fuels (e.g., gasoline and diesel fuel) that contain sulfur. The sulfur is oxidized to SO_2 during the combustion process and subsequently converted to sulfate compounds in the atmosphere. The conversion of SO_2 to sulfates takes place comparatively rapidly and completely in urban areas of California due to regional meteorological features.

The sulfates standard established by CARB is designed to prevent aggravation of respiratory symptoms. Effects of sulfate exposure at levels above the standard include a decrease in ventilatory function, aggravation of asthmatic symptoms, and an increased risk of cardio-pulmonary disease. Sulfates are particularly effective in degrading visibility, and, because they are usually acidic, can harm ecosystems and damage materials and property.

Hydrogen Sulfide

Hydrogen Sulfide (H_2S) is associated with geothermal activity, oil and gas production, refining, sewage treatment plants, and confined animal feeding operations. Hydrogen sulfide is extremely hazardous in high concentrations, especially in enclosed spaces (800 parts per million [ppm] can cause death).

Vinyl Chloride

Vinyl Chloride (C_2H_3Cl, also known as VCM) is a colorless gas that does not occur naturally, but is formed when other substances such as trichloroethane, trichloroethylene, and tetrachloro-ethylene are broken down. Vinyl chloride is used to make polyvinyl chloride (PVC) which is used to make a variety of plastic products, including pipes, wire and cable coatings, and packaging materials.

Visibility Reducing Particles

Visibility Reducing Particles are a mixture of suspended particulate matter consisting of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. The standard is intended to limit the frequency and severity of visibility impairment due to regional haze and is equivalent to a 10-mile nominal visual range.

Toxic Air Contaminants

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are also a category of environmental concern. TACs are present in many types of emissions with varying degrees of toxicity. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases. Common stationary sources of TACs include gasoline stations, dry cleaners, and diesel backup generators, which are subject to SMAQMD stationary source permit requirements. The other, often more significant, common source type is on-road motor vehicles, such as cars and trucks, on freeways and roads, and off-road sources such as construction equipment, ships, and trains.

Fossil fueled combustion engines, including those used in cars, trucks, and some pieces of construction equipment, release at least 40 different TACs. In terms of health risks, the most volatile contaminants are diesel particulate matter (DPM), benzene, formaldehyde, 1,3-butadiene, toluene, xylenes, and acetaldehyde. Gasoline vapors contain several TACs, including benzene, toluene, and xylenes. Diesel engines emit a complex mixture of air pollutants, including both gaseous and solid material. The solid material in diesel exhaust, DPM, is composed of carbon particles and numerous organic compounds, including over 40 known cancer-causing organic substances. Examples of such chemicals include polycyclic aromatic hydrocarbons, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene. Diesel exhaust also contains gaseous pollutants, including volatile organic compounds and NO_X. Due to the published evidence of a relationship between diesel exhaust exposure and lung cancer and other adverse health effects, the CARB has identified DPM from diesel-fueled engines as a TAC. Although a variety of TACs are emitted by fossil fueled combustion engines, the cancer risk due to DPM exposure represents a more significant risk than the other TACs discussed above.[4]

More than 90 percent of DPM is less than one micrometer in diameter, and, thus, DPM is a subset of $PM_{2.5}$. As a California statewide average, DPM comprises about eight percent of $PM_{2.5}$ in outdoor air, although DPM levels vary regionally due to the non-uniform distribution of sources throughout the State. Most major sources of diesel emissions, such as ships, trains, and trucks, operate in and around ports, rail yards, and heavily-traveled roadways. Such areas are often located near highly populated areas. Thus, elevated DPM levels are mainly an urban problem, with large numbers of people exposed to higher DPM concentrations, resulting in greater health consequences compared to rural areas.

Due to the high levels of diesel activity, high volume freeways, stationary diesel engines, rail yards and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Construction-related activities also have the potential to generate concentrations of DPM from on-road haul trucks and off-road equipment exhaust emissions.

[4] California Air Resources Board. *Reducing Toxic Air Pollutants in California's Communities*. February 6, 2002.

The size of diesel particulates that are of the greatest health concern are fine particles (i.e., $PM_{2.5}$) and UFPs. UFPs have a small diameter (on the order of 0.1 micrometers).[5] The small diameter of UFPs imparts the particulates with unique attributes, such as high surface areas and the ability to penetrate deeply into lungs. Once UFPs have been deposited in lungs, the small diameter allows the UFPs to be transferred to the bloodstream. The high surface area of the UFPs also allows for a greater adsorption of other chemicals, which are transported along with the UFPs into the bloodstream of the inhaler, where the chemicals can eventually reach critical organs.[6] The penetration capability of UFPs may contribute to adverse health effects related to heart, lung, and other organ health.[7] UFPs are a subset of DPM and activities that create large amounts of DPM, such as the operations involving heavy diesel-powered engines, also release UFPs.

Health risks from TACs are a function of both the concentration of emissions and the duration of exposure, which typically are associated with long-term exposure and the associated risk of contracting cancer. Health effects of exposure to TACs other than cancer include birth defects, neurological damage, and death. Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, State, and federal level. The identification, regulation, and monitoring of TACs is relatively new compared to criteria air pollutants that have established AAQS. TACs are regulated or evaluated on the basis of risk to human health rather than comparison to an AAQS or emission-based threshold.

Attainment Status and Regional Air Quality Plans

The Federal Clean Air Act (FCAA) and the California Clean Air Act (CCAA) require all areas of California to be classified as attainment, nonattainment, or unclassified as to their status with regard to the NAAQS and/or CAAQS. The FCAA and CCAA require that the CARB, based on air quality monitoring data, designate portions of the State where the federal or State AAQS are not met as “nonattainment areas.” Because of the differences between the national and State standards, the designation of nonattainment areas is different under the federal and State legislation. The FCAA requires areas violating the NAAQS to prepare an air quality control plan referred to as the State Implementation Plan (SIP). The CCAA requires local air pollution control districts to prepare air quality attainment plans. These plans must provide for district-wide emission reductions of five percent per year averaged over consecutive three-year periods or, provide for adoption of “all feasible measures on an expeditious schedule.”

As presented in Table 4.1-3, under the CCAA, Sacramento County has been designated nonattainment for the State one-hour ozone, State and federal eight-hour ozone, State PM_{10}, and Federal $PM_{2.5}$ standards. The County is designated attainment or unclassified for all other AAQS. Due to the nonattainment designations, the SMAQMD, along with the other air districts in the SVAB region, is required to develop plans to attain the federal and State standards for ozone and particulate matter. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals. Each of the attainment plans currently in effect are discussed in further detail in the Regulatory Context section of this chapter.

5 South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.
6 Health Effects Institute. *Understanding the Health Effects of Ambient Ultrafine Particles*. January 2013.
7 South Coast Air Quality Management District. *Final 2012 Air Quality Management Plan*. December 2012.

Table 4.1-3
Sacramento County Attainment Status Designations

Pollutant	Averaging Time	California Standards	Federal Standards
Ozone	1 Hour	**Nonattainment**	Attainment
	8 Hour	**Nonattainment**	**Nonattainment**
Carbon Monoxide	8 Hour	Attainment	Attainment
	1 Hour	Attainment	Attainment
Nitrogen Dioxide	Annual Mean	Attainment	Unclassifiable/ Attainment
	1 Hour	Attainment	Unclassifiable/ Attainment
Sulfur Dioxide	24 Hour	Attainment	-
	1 Hour	Attainment	Attainment
Respirable Particulate Matter (PM_{10})	Annual Mean	**Nonattainment**	-
	24 Hour	**Nonattainment**	Attainment
Fine Particulate Matter ($PM_{2.5}$)	Annual Mean	Attainment	Attainment
	24 Hour	-	**Nonattainment**
Lead	Rolling 3-Month Average	Attainment	Attainment
Sulfates	24 Hour	Attainment	-

Source: Sacramento Metropolitan Air Quality Management District. Air Quality Pollutants and Standards. Available at: http://www.airquality.org/air-quality-health/air-quality-pollutants-and-standards. Accessed May 2021.

Local Air Quality Monitoring

Air quality is monitored by CARB at various locations to determine which air quality standards are being violated, and to direct emission reduction efforts, such as developing attainment plans and rules, incentive programs, etc. The nearest local air quality monitoring station to the project site is the Sloughhouse station, located at 7520 Sloughhouse Road in Elk Grove, CA, approximately seven miles south of the project site. Data for $PM_{2.5}$ and PM_{10} was not available for the Sloughhouse monitoring site; thus, such data was obtained from the next nearest site, the Sacramento-Del Paso Manor monitoring site, located approximately 9.8 miles northwest of the project site at 2701 Avalon Drive, in the City of Sacramento. Table 4.1-4 shows historical occurrences of pollutant levels exceeding the State and federal AAQS for the three-year period from 2017 to 2019.

Odors

While offensive odors rarely cause physical harm, they can be unpleasant, leading to considerable annoyance and distress among the public and can generate citizen complaints to local governments and air districts. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative or formulaic methodologies to determine the presence of a significant odor impact do not exist. Adverse effects of odors on residential areas and other sensitive receptors warrant the closest scrutiny; but consideration should also be given to other land use types where people congregate, such as recreational facilities, worksites, and commercial areas. The potential for an odor impact is dependent on a number of variables including the nature of the odor source, distance between a receptor and an odor source, and local meteorological conditions.

Table 4.1-4
Air Quality Data Summary (2017-2019)

Pollutant	Standard	Days Standard Was Exceeded		
		2017	2018	2019
1-Hour Ozone	State	0	2	0
	Federal	0	0	0
8-Hour Ozone	State	7	4	2
	Federal	6	4	0
24-Hour $PM_{2.5}$	Federal	6.2	10.6	0
24-Hour PM_{10}	State	18.6	12.2	*
	Federal	0	12.3	*
1-Hour Nitrogen Dioxide	State	0	0	0
	Federal	0	0	0

Note: * indicates that sufficient data was not available to determine the value.

Source: California Air Resources Board. Aerometric Data Analysis and Management (iADAM) System. Available at http://www.arb.ca.gov/adam/welcome.html. Accessed May 2021.

One of the most important factors influencing the potential for an odor impact to occur is the distance between the odor source and receptors, also referred to as a buffer zone or setback. The greater the distance between an odor source and receptor, the less concentrated the odor emission would be when reaching the receptor.

Meteorological conditions also affect the dispersion of odor emissions, which determines the exposure concentration of odiferous compounds at receptors. The predominant wind direction in an area influences which receptors are exposed to the odiferous compounds generated by a nearby source. Receptors located upwind from a large odor source may not be affected due to the produced odiferous compounds being dispersed away from the receptors. Wind speed also influences the degree to which odor emissions are dispersed away from any area.

Odiferous compounds could be generated from a variety of source types including both construction and operational activities. Examples of common land use types that typically generate significant odor impacts include, but are not limited to wastewater treatment plants; sanitary landfills; composting/green waste facilities; recycling facilities; petroleum refineries; chemical manufacturing plants; painting/coating operations; rendering plants; and food packaging plants.

While the project site is located across from the Teichert Aggregate Grantline Plant, the materials mined at the Teichert site include aggregates such as sand and gravel. Aggregate material is not associated with any odors. Although some heavy-duty equipment could be used at the plant, the distance of the project site from the Teichert plant would not likely result in diesel odors reaching the proposed residences.

Sensitive Receptors

Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, day care centers, playgrounds, and medical facilities. A residential subdivision exists directly to the south

of the project site. The closest residences are approximately 50 feet away from the project site. The remaining surrounding areas are primarily vacant.

Greenhouse Gas Emissions

GHGs are gases that absorb and emit radiation within the thermal infrared range, trapping heat in the earth's atmosphere. Some GHGs occur naturally and are emitted into the atmosphere through both natural processes and human activities. Other GHGs are created and emitted solely through human activities. The principal GHGs that enter the atmosphere due to human activities are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated carbons. Other common GHGs include water vapor, ozone, and aerosols. The increase in atmospheric concentrations of GHG due to human activities has resulted in more heat being held within the atmosphere, which is the accepted explanation for global climate change.

The primary GHG emitted by human activities is CO_2, with the next largest components being CH_4 and N_2O. A wide variety of human activities result in the emission of CO_2. Some of the largest sources of CO_2 include the burning of fossil fuels for transportation, electricity production, and industrial processes, including plastic and cement production. The primary sources of CH_4 emissions include domestic livestock sources, decomposition of wastes in landfills, releases from natural gas systems, coal mine seepage, and manure management. The main human activities producing N_2O are agricultural soil management, fuel combustion in motor vehicles, nitric acid production, manure management, and stationary fuel combustion. Emissions of GHG by economic sector indicate that energy-related activities account for the majority of U.S. emissions. The transportation sector is the largest single-source of GHG emissions, and electricity production is the second largest source, followed by industrial activities. The agricultural, commercial, and residential sectors account for the remainder of GHG emission sources.[8]

Emissions of GHG are partially offset by uptake of carbon and sequestration in trees, agricultural soils, landfilled yard trimmings and food scraps, and absorption of CO_2 by the earth's oceans. Additional emission reduction measures for GHG could include, but are not limited to, compliance with local, State, or federal plans or strategies for GHG reductions, on-site and off-site mitigation, and project design features. Attainment concentration standards for GHGs have not been established by the federal or State government.

Global Warming Potential

Global Warming Potential (GWP) is one type of simplified index (based upon radiative properties) that can be used to estimate the potential future impacts of emissions of various gases. According to the USEPA, the GWP of a gas, or aerosol, to trap heat in the atmosphere is the "cumulative radiative forcing effects of a gas over a specified time horizon resulting from the emission of a unit mass of gas relative to a reference gas." The reference gas for comparison is CO_2. GWP is based on a number of factors, including the heat-absorbing ability of each gas relative to that of CO_2, as well as the decay rate of each gas relative to that of CO_2. Each gas's GWP is determined by comparing the radiative forcing associated with emissions of that gas versus the radiative forcing associated with emissions of the same mass of CO_2, for which the GWP is set at one. Methane gas, for example, is estimated by the USEPA to have a comparative global warming potential 25 times greater than that of CO_2, as shown in Table 4.1-5.

[8] U.S. Environmental Protection Agency. *Sources of Greenhouse Gas Emissions*. Available at: https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions. Accessed May 2021.

Table 4.1-5
Global Warming Potentials and Atmospheric Lifetimes of Select GHGs

Gas	Atmospheric Lifetime (years)	Global Warming Potential (100-year time horizon)
Carbon Dioxide (CO_2)	See footnote[1]	1
Methane (CH_4)	12	25
Nitrous Oxide (N_2O)	114	298
Hydrofluorocarbon (HFC)-23	270	14,800
HFC-134a	14	1,430
HFC-152a	1.4	124
PFC: Tetrafluoromethane (CF_4)	50,000	7,390
PFC: Hexafluoroethane (C_2F_6)	10,000	12,200
Sulfur Hexafluoride (SF_6)	3,200	22,800

[1] For a given amount of carbon dioxide emitted, some fraction of the atmospheric increase in concentration is quickly absorbed by the oceans and terrestrial vegetation, some fraction of the atmospheric increase will only slowly decrease over a number of years, and a small portion of the increase will remain for many centuries or more.

Source: USEPA. Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019 [Table 1-2]. April 14, 2021.

As shown in the table above, at the extreme end of the scale, sulfur hexafluoride is estimated to have a comparative GWP 22,800 times that of CO_2. The "specified time horizon" is related to the atmospheric lifetimes of such GHGs, which are estimated by the USEPA to vary from 50 to 200 years for CO_2, to 50,000 years for tetrafluoromethane. Longer atmospheric lifetimes allow GHG to buildup in the atmosphere; therefore, longer lifetimes correlate with the GWP of a gas. The common indicator for GHG is expressed in terms of metric tons of CO_2 equivalents ($MTCO_2e$), which is calculated based on the GWP for each pollutant.

Effects of Global Climate Change

Uncertainties exist as to exactly what the climate changes will be in various areas of the Earth. According to the Intergovernmental Panel on Climate Change's Working Group II Report, *Climate Change 2007: Impacts, Adaptation and Vulnerability*,[9] climate change impacts to North America may include:

- Diminishing snowpack;
- Increasing evaporation;
- Exacerbated shoreline erosion;
- Exacerbated inundation from sea level rising;
- Increased risk and frequency of wildfire;
- Increased risk of insect outbreaks;
- Increased experiences of heat waves; and

[9] Intergovernmental Panel on Climate Change. *Summary for Policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Field, C.B., V.R. Barros, D.J. Dokken, K.J. Mach, M.D. Mastrandrea, T.E. Bilir, M. Chatterjee, K.L. Ebi, Y.O. Estrada, R.C. Genova, B. Girma, E.S. Kissel, A.N. Levy, S. MacCracken, P.R. Mastrandrea, and L.L. White (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA* [pg. 1-32]. 2014.

- Rearrangement of ecosystems as species and ecosystems shift northward and to higher elevations.

For California, climate change has the potential to cause/exacerbate the following environmental impacts:

- Increased frequency, duration, and intensity of conditions conducive to air pollution formation (particularly ozone);
- Reduced precipitation, changes to precipitation and runoff patterns, reduced snowfall (precipitation occurring as rain instead of snow), earlier snowmelt, decreased snowpack, and increased agricultural demand for water;
- Increased growing season and increased growth rates of weeds, insect pests and pathogens;
- Inundation by sea level rise;
- Increased incidents and severity of wildfire events; and
- Expansion of the range and increased frequency of pest outbreaks.

Energy

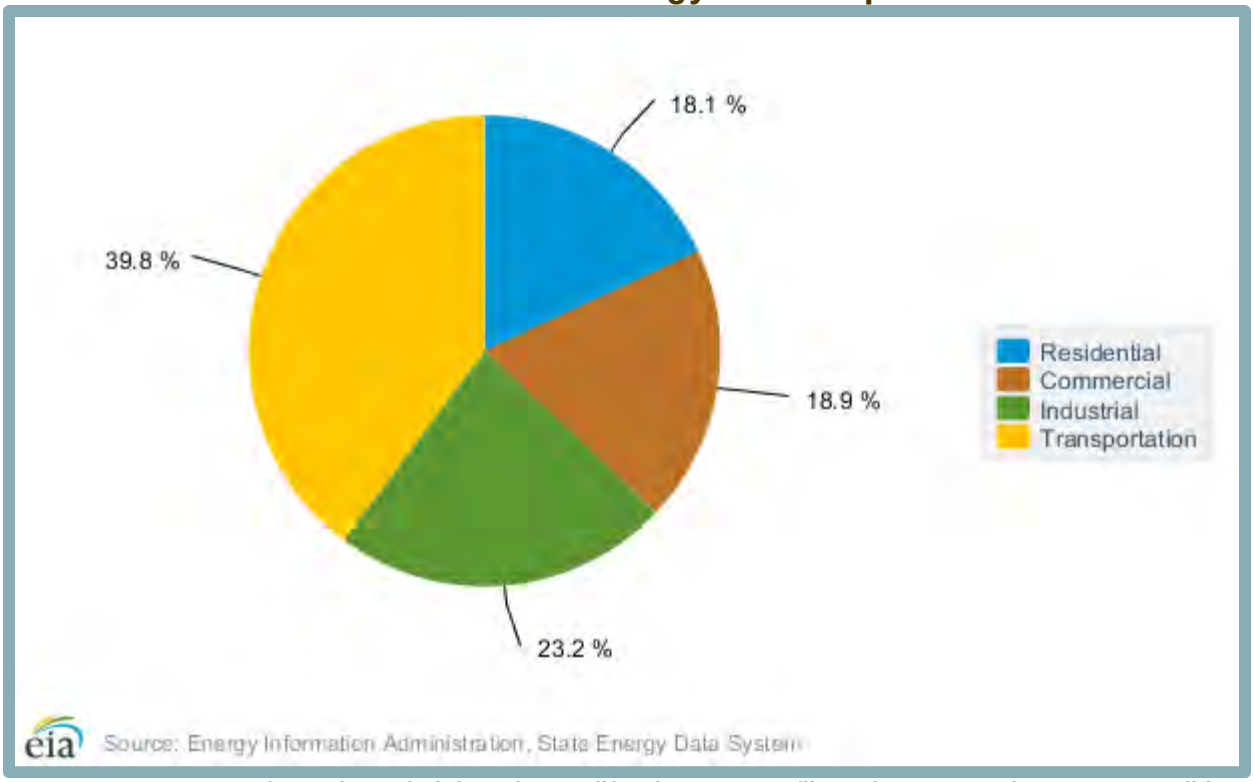
California is one of the highest energy demanding states within the nation. Activities such as heating and cooling structures, lighting, the movement of goods, agricultural production, and countless other facets of daily life consume a variety of energy sources. Energy within the state is provided primarily by the combustion of fossil fuels such as natural gas, motor gasoline, diesel, jet fuel, and, to a lesser extent, coal. In addition to the fossil fuel-based energy sources, the state is ranked second in the nation in renewable energy generation, which includes solar, geothermal, wind, and biomass resources. In fact, California leads the nation in solar thermal electricity capacity, with 73 percent of the nation's total solar thermal capacity installed within the State.[10]

Figure 4.1-1 presents energy consumption within California for the most recent year for which data is available, 2018. As shown in Figure 4.1-1, transportation-related activity consumes the largest single share of energy within the State. Within the transportation sector, motor gasoline is the dominate form of energy, with jet fuel, diesel, natural gas, and electricity supplying the remaining portions of California's transportation sector energy demand. However, when considered together, energy demand from the built-environment including the residential, commercial, and industrial sectors, represents the greatest share of total State-wide energy demand.

Electricity is provided to California consumers through a mix of sources including natural gas, hydroelectric, non-hydroelectric renewable sources, nuclear, coal, and petroleum. Of the foregoing sources of electricity, natural gas provided the greatest amount of electricity at approximately 45 percent of California's statewide supply in 2018. Meanwhile, non-hydroelectric based sources of renewable energy provided an additional 35 percent of the state's energy, with hydroelectric and nuclear providing nine and 11 percent, respectively. Coal contributed less than 0.2 percent of the State's total electricity supply.

[10] U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: https://www.eia.gov/state/index.php?sid=CA. Accessed December 2020.

Figure 4.1-1
2018 California Energy Consumption



Source: U.S. Energy Information Administration. California: State Profile and Energy Estimates. Accessible at: https://www.eia.gov/state/index.php?sid=CA. Accessed May 2021.

California residents and businesses consume petroleum products for various purposes including on-road vehicles, off-road equipment, and air travel. In 2018, 49 percent of all petroleum products consumed within California consisted of motor gasoline. The second largest demand on petroleum products is jet fuel, which represents 19 percent of the petroleum products consumed, while distillate fuel oils, which includes diesel fuel, represents 16 percent of the total petroleum products demanded within the State.[11]

In the year 2019, the entire State consumed approximately 279.401.90 gigawatt hours (GWh) of electricity. Of the total electricity consumed by the State, Sacramento County consumed approximately 10,852.26 GWh, which constitutes approximately 3.9 percent of the total energy consumed within the State.[12]

Energy Consumption at the Project Site

Currently, the project site contains three single-family residences and associated outbuildings and an orchard on the northeastern portion of the site. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. Existing energy use associated with the project site would be typical of

[11] U.S. Energy Information Administration. *California: State Profile and Energy Estimates*. Available at: https://www.eia.gov/state/index.php?sid=CA. Accessed May 2021.

[12] California Energy Commission. *Electricity Consumption by County*. Available at: http://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed April 2021.

residential uses, requiring electricity for interior and exterior building lighting, heating, ventilation, and air conditioning (HVAC), electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape and orchard maintenance and harvesting, would involve the use of electric or gas-powered equipment.

4.1.3 REGULATORY CONTEXT

Air quality, GHG emissions, and energy are monitored and regulated through the efforts of various international, federal, State, and local government agencies. Agencies work jointly and individually to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for regulating and improving the air quality within the project area, monitoring or reducing GHG emissions, and monitoring or reducing energy consumption are discussed below. Although significant overlap exists within the regulatory environment for air quality, GHG emissions, and energy, the following discussion presents regulations primarily focused on air quality, GHG, and energy separately to the extent feasible.

Federal Regulations Related to Air Quality

The following discussion provides a summary of the federal regulations relevant to air quality, organized by pollutant type.

Criteria Pollutants

The FCAA, passed in 1970 and last amended in 1990, forms the basis for the national air pollution control effort. The USEPA is responsible for implementing most aspects of the FCAA, including setting NAAQS for major air pollutants; setting hazardous air pollutant standards; approving state attainment plans; setting motor vehicle emission standards; issuing stationary source emission standards and permits; and establishing acid rain control measures, stratospheric ozone protection measures, and enforcement provisions. Under the FCAA, NAAQS are established for the following criteria pollutants: ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead.

The NAAQS describe acceptable air quality conditions designed to protect the health and welfare of the citizens of the nation. The NAAQS (other than for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. NAAQS for ozone, NO_2, SO_2, PM_{10}, $PM_{2.5}$ are based on statistical calculations over one- to three-year periods, depending on the pollutant. The FCAA requires the USEPA to reassess the NAAQS at least every five years to determine whether adopted standards are adequate to protect public health based on current scientific evidence. States with areas that exceed the NAAQS must prepare a SIP that demonstrates how those areas will attain the standards within mandated time frames.

Hazardous Air Pollutants/TACs

The 1977 FCAA amendments required the USEPA to identify national emission standards for hazardous air pollutants to protect public health and welfare. Hazardous air pollutants include certain volatile organic chemicals, pesticides, herbicides, and radionuclides that present a tangible hazard, based on scientific studies of exposure to humans and other mammals. Under the 1990 FCAA Amendments, which expanded the control program for hazardous air pollutants, 189 substances and chemical families were identified as hazardous air pollutants.

Federal Regulations Related to GHG Emissions

The following are the federal regulations relevant to GHG emissions.

Federal Vehicle Standards

In 2007, in response to the *Massachusetts v. EPA* U.S. Supreme Court ruling, the Bush Administration issued Executive Order (EO) 13432 directing the USEPA, the Department of Transportation (DOT), and the Department of Energy to establish regulations that reduce GHG emissions from motor vehicles, non-road vehicles, and non-road engines by 2008. In 2009, the National Highway Transportation Safety Administration (NHTSA) issued a final rule regulating fuel efficiency and GHG emissions from cars and light-duty trucks for model year 2011; and, in 2010, the USEPA and NHTSA issued a final rule regulating cars and light-duty trucks for model years 2012 through 2016 (75 FR 25324–25728).

In 2010, President Obama issued a memorandum directing the DOT, Department of Energy, USEPA, and NHTSA to establish additional standards regarding fuel efficiency and GHG reduction, clean fuels, and advanced vehicle infrastructure. In response to this directive, the USEPA and NHTSA proposed stringent, coordinated federal GHG and fuel economy standards for model years 2017 through 2025 light-duty vehicles. The proposed standards were projected to achieve emission rates as low as 163 grams per mile of CO_2 by model year 2025 on an average industry fleet-wide basis, which is equivalent to 54.5 miles per gallon if the foregoing emissions level was achieved solely through fuel efficiency. The final rule was adopted in 2012 for model years 2017 through 2021 (77 FR 62624–63200), and NHTSA intended to set standards for model years 2022 through 2025 in future rulemaking.

In addition to the regulations applicable to cars and light-duty trucks described above, in 2011, the USEPA and NHTSA announced fuel economy and GHG standards for medium- and heavy-duty trucks for model years 2014–2018. The standards for CO_2 emissions and fuel consumption are tailored to three main vehicle categories: combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles. According to the USEPA, this regulatory program will reduce GHG emissions and fuel consumption for the affected vehicles by six to 23 percent over the 2010 baselines (76 FR 57106–57513).

In August 2016, the USEPA and NHTSA announced the adoption of the phase two program related to the fuel economy and GHG standards for medium- and heavy-duty trucks. The phase two program would have applied to vehicles with model years 2018 through 2027 for certain trailers, and model years 2021 through 2027 for semi-trucks, large pickup trucks, vans, and all types of sizes of buses and work trucks. The final standards were expected to lower CO_2 emissions by approximately 1.1 billion MT, and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

In August 2018, the USEPA and NHTSA proposed to amend certain fuel economy and GHG standards for passenger cars and light trucks and establish new, less-stringent standards for model years 2021 through 2026. Compared to maintaining the post-2020 standards that were previously in place, the 2018 proposal would increase U.S. fuel consumption by approximately 0.5 million barrels per day, and would impact the global climate by 3/1000th of 1°C by 2100. California and other states stated their intent to challenge federal actions that would delay or eliminate GHG reduction measures, and committed to cooperating with other countries to implement global climate change initiatives.

On September 27, 2019, the USEPA and NHTSA published the *Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program* (84 FR 51,310), which became effective November 26, 2019. The Part One Rule revokes California's authority to set its own GHG

emissions standards and set zero-emission-vehicle mandates in California. On March 31, 2020, the USEPA and NHTSA issued the Part Two Rule, which sets CO_2 emissions standards and corporate average fuel economy standards for passenger vehicles and light-duty trucks for model years 2021 through 2026. On January 20, 2021, President Joe Biden issued an Executive Order on Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis, which includes review of the Part One Rule by April 2021 and review of the Part Two Rule by July 2021. Implementation of both rules will be determined by the results of these reviews.

Federal Regulations Related to Energy

The following are the federal regulations relevant to energy.

Energy Policy and Conservation Act

The Energy Policy and Conservation Act was originally enacted in 1975 with the intention of ensuring that all vehicles sold in the U.S. meet established fuel economy standards. Following congressional establishment of the original set of fuel economy standards the U.S. DOT was tasked with establishing additional on-road vehicle standards and making revisions to standards as necessary. Compliance with established standards is based on manufacturer fleet average fuel economy, which originally applied to both passenger cars and light trucks but did not apply to heavy-duty vehicles exceeding 8,500 pounds in gross vehicle weight. The fuel economy program implemented under the Energy Policy and Conservation Act is known as the Corporate Average Fuel Economy (CAFE) Standards. Updates to the CAFE standards since original implementation have increased fuel economy requirements and begun regulation of medium- and heavy-duty vehicles.

Energy Policy Act of 2005

The Energy Policy Act of 2005 addressed energy production in the U.S. from various sources. In particular, the Energy Policy Act of 2005 included tax credits, loans, and grants for the implementation of energy systems that would reduce GHG emissions related to energy production.

State Regulations Related to Air Quality

The following discussion summarized applicable State regulations related to air quality, organized by pollutant type. Only the most prominent and applicable California air quality-related legislation is included below; however, an exhaustive list and extensive details of California air quality legislation can be found at the CARB website (http://www.arb.ca.gov/html/lawsregs.htm).

Criteria Air Pollutants

The FCAA delegates the regulation of air pollution control and the enforcement of the NAAQS to the states. In California, the task of air quality management and regulation has been legislatively granted to CARB, with subsidiary responsibilities assigned to air quality management districts and air pollution control districts at the regional and county levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for ensuring implementation of the CCAA of 1988, responding to the FCAA, and regulating emissions from motor vehicles and consumer products.

CARB has established CAAQS, which are generally more restrictive than the NAAQS. The CAAQS describe adverse conditions; that is, pollution levels must be below these standards before a basin can attain the standard. Air quality is considered “in attainment” if pollutant levels are continuously below the CAAQS and do not violate the standards more than once each year.

The CAAQS for ozone, CO, SO_2 (one-hour and 24-hour), NO_2, PM_{10}, $PM_{2.5}$, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded.

Hazardous Air Pollutants/TACs

The State Air Toxics Program was established in 1983 under Assembly Bill (AB) 1807 (Tanner), and involved definition of a list of TACs. The California TAC list identifies more than 700 pollutants, of which carcinogenic and noncarcinogenic toxicity criteria have been established for a subset of these pollutants pursuant to the California Health and Safety Code. The State list of TACs includes the federally-designated hazardous air pollutants. In 1987, the Legislature enacted the Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) to address public concern over the release of TACs into the atmosphere. AB 2588 law requires facilities emitting toxic substances to provide local air pollution control districts with information that will allow an assessment of the air toxics problem, identification of air toxics emissions sources, location of resulting hotspots, notification of the public exposed to significant risk, and development of effective strategies to reduce potential risks to the public over five years. TAC emissions from individual facilities are quantified and prioritized. "High-priority" facilities are required to perform a health risk assessment, and if specific thresholds are exceeded, the facility operator is required to communicate the results to the public in the form of notices and public meetings.

CARB Air Quality and Land Use Handbook

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (CARB Handbook) addresses the importance of considering health risk issues when siting sensitive land uses, including residential development, in the vicinity of intensive air pollutant emission sources including freeways or high-traffic roads, distribution centers, ports, petroleum refineries, chrome plating operations, dry cleaners, and gasoline dispensing facilities.[13] The CARB Handbook draws upon studies evaluating the health effects of traffic traveling on major interstate highways in metropolitan California centers within Los Angeles (Interstate-405 and Interstate-710), the San Francisco Bay, and San Diego areas. The recommendations identified by CARB, including siting residential uses a minimum distance of 500 feet from freeways or other high-traffic roadways, are consistent with those adopted by the State of California for location of new schools. Specifically, the CARB Handbook recommends, "Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day".[14]

Importantly, the Introduction chapter of the CARB Handbook clarifies that the guidelines are strictly advisory, recognizing that: "[l]and use decisions are a local government responsibility. The Air Resources Board Handbook is advisory and these recommendations do not establish regulatory standards of any kind." CARB recognizes that there may be land use objectives as well as meteorological and other site-specific conditions that need to be considered by a governmental jurisdiction relative to the general recommended setbacks, specifically stating, "[t]hese recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues".[15]

[13] California Air Resources Board. *Air Quality and Land Use Handbook: A Community Health Perspective*. April 2005.
[14] *Ibid.*
[15] *Ibid.*

Diesel Particulate Matter

In 2000, CARB approved a comprehensive diesel risk reduction plan to reduce diesel emissions, including DPM, from new and existing diesel-fueled vehicles and engines. The regulation is anticipated to result in an 80 percent decrease in statewide diesel health risk by 2020 compared with the diesel health risk in 2000. Additional regulations apply to new trucks and diesel fuel, including the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Off-Road Diesel Vehicle Regulation, and the New Off-Road Compression-Ignition (Diesel) Engines and Equipment program. The aforementioned regulations and programs have timetables by which manufacturers must comply and existing operators must upgrade their diesel-powered equipment. Several Airborne Toxic Control Measures (ATCMs) exist that reduce diesel emissions, including In-Use Off-Road Diesel-Fueled Fleets (13 California Code of Regulations [CCR] 2449 et seq.) and In-Use On-Road Diesel-Fueled Vehicles (13 CCR 2025).

Heavy-Duty Diesel Truck and Bus Regulation

CARB adopted the final Heavy-Duty Truck and Bus Regulation, Title 13, Division 3, Chapter 1, Section 2025, on December 31, 2014, to reduce DPM (black carbon) and NO_X emissions from heavy-duty diesel vehicles. The rule requires DPM filters be applied to newer heavier trucks and buses by January 1, 2012, with older vehicles required to comply by January 1, 2015. The rule requires nearly all diesel trucks and buses to be compliant with the 2010 model year engine requirement by January 1, 2023. CARB also adopted an ATCM to limit idling of diesel-fueled commercial vehicles on December 12, 2013. The rule requires diesel-fueled vehicles with gross vehicle weights greater than 10,000 pounds to idle no more than five minutes at any location (13 CCR 2485).

Asbestos

Asbestos is strictly regulated due to the serious adverse health effects resulting from exposure, including asbestosis and lung cancer, and based on the natural widespread occurrence of asbestos and the use of asbestos as a building material. CARB has established two ATCMs for naturally occurring asbestos. The first asbestos ATCM applies to Surfacing Applications (i.e., restricts the content of asbestos material used in surfacing applications, such as unpaved roads and parking lots), and the second asbestos ATCM is for Construction, Grading, Quarrying and Surface Mining Operations (i.e., requires implementation of mitigation measures to minimize asbestos-laden dust during the namesake activities).

California Health and Safety Code Section 41700

Section 41700 of the Health and Safety Code states that a person must not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public; or that endanger the comfort, repose, health, or safety of any of those persons or the public; or that cause, or have a natural tendency to cause, injury or damage to business or property. Section 41700 also applies to sources of objectionable odors.

Heavy-Duty Vehicle Idling Emission Reduction Program

On October 20, 2005, CARB approved a regulatory measure to reduce emissions of toxics and criteria pollutants by limiting idling of new and in-use sleeper berth equipped diesel trucks.[16] The regulation established new engine and in-use truck requirements and emission performance requirements for technologies used as alternatives to idling the truck's main engine. For example, the regulation requires 2008 and newer model year heavy-duty diesel engines to be equipped with a non-programmable engine shutdown system that automatically shuts down the engine after five minutes of idling, or optionally meet a stringent NO_X emission standard. The regulation also requires operators of both in-state and out-of-state registered sleeper berth equipped trucks to manually shut down their engine when idling more than five minutes at any location within California. Emission producing alternative technologies such as diesel-fueled auxiliary power systems and fuel-fired heaters are also required to meet emission performance requirements that ensure emissions are not exceeding the emissions of a truck engine operating at idle.

In-Use Off-Road Diesel Vehicle Regulation

On July 26, 2007, CARB adopted a regulation to reduce DPM and NO_X emissions from in-use (existing), off-road, heavy-duty diesel vehicles in California.[17] Such vehicles are used in construction, mining, and industrial operations. The regulation is designed to reduce harmful emissions from vehicles by subjecting fleet owners to retrofit or accelerated replacement/repower requirements, imposing idling limitations on owners, operators, renters, or lessees of off-road diesel vehicles. The idling limits require operators of applicable off-road vehicles (self-propelled diesel-fueled vehicles 25 horsepower and up that were not designed to be driven on-road) to limit idling to less than five minutes. The idling requirements are specified in Title 13 of the CCR.

State Regulations Related to GHG Emissions

The statewide GHG emissions regulatory framework is summarized below. The following text describes EOs, legislation, regulations, and other plans and policies that would directly or indirectly reduce GHG emissions and/or address climate change issues. The following discussion does not include an exhaustive list of applicable regulations; rather, only the most prominent and applicable California legislation related to GHG emissions and climate change is included below.

State Climate Change Targets

California has taken a number of actions to address climate change, including EOs, legislation, and CARB plans and requirements, which are summarized below.

EO S-3-05

EO S-3-05 (June 2005) established California's GHG emissions reduction targets and laid out responsibilities among the State agencies for implementing the EO and for reporting on progress toward the targets. The EO established the following targets:

- By 2010, reduce GHG emissions to 2000 levels;
- By 2020, reduce GHG emissions to 1990 levels; and
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

[16] California Air Resources Board. *Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling*. October 24, 2013. Available at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.htm. Accessed December 2020.

[17] California Air Resources Board. *In-Use Off-Road Diesel Vehicle Regulation*. December 10, 2014. Available at: http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm. Accessed December 2020.

EO S-3-05 also directed the California EPA to report biannually on progress made toward meeting the GHG targets and the impacts to California due to global warming, including impacts to water supply, public health, agriculture, the coastline, and forestry. The Climate Action Team was formed, which subsequently issued reports from 2006 to 2010.

AB 32

In furtherance of the goals established in EO S-3-05, the Legislature enacted AB 32 (Núñez and Pavley). The bill is referred to as the California Global Warming Solutions Act of 2006 (September 27, 2006). AB 32 provided initial direction on creating a comprehensive, multiyear program to limit California's GHG emissions at 1990 levels by 2020, and initiate the transformations required to achieve the State's long-range climate objectives. AB 32 also required that the CARB prepare a "scoping plan" for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020. The CARB's Scoping Plan is described in further detail below.

CARB's 2007 Statewide Limit on GHG Emissions

In 2007, in accordance with California Health and Safety Code Section 38550, CARB approved a statewide limit on GHG emissions by 2020, consistent with the determined 1990 baseline (427 million metric tons [MMT] CO_2e).

EO B-18-12

EO B-18-12 (April 2012) directed State agencies, departments, and other entities under the governor's executive authority to take action to reduce entity-wide GHG emissions by at least 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline. EO B-18-12 also established goals for existing State buildings for reducing grid-based energy purchases and water use.

EO B-30-15

EO B-30-15 (April 2015) identified an interim GHG reduction target in support of targets previously identified under EO S-3-05 and AB 32. EO B-30-15 set an interim target goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 to keep California on its trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050 as set forth in EO S-3-05. To facilitate achieving this goal, EO B-30-15 called for an update to the CARB's Climate Change Scoping Plan: A Framework for Change (Scoping Plan) to express the 2030 target in terms of $MMTCO_2e$. The CARB's Scoping Plan is discussed in further detail below. The EO also called for State agencies to continue to develop and implement GHG emission reduction programs in support of the reduction targets.

Senate Bill (SB) 32 and AB 197

SB 32 and AB 197 (enacted in 2016) are companion bills. SB 32 codified the 2030 emissions reduction goal of EO B-30-15 by requiring CARB to ensure that statewide GHG emissions are reduced to 40 percent below 1990 levels by 2030. AB 197 established the Joint Legislative Committee on Climate Change Policies, consisting of at least three members of the Senate and three members of the Assembly, to provide ongoing oversight over implementation of the state's climate policies. AB 197 also added two members of the Legislature to the Board as nonvoting members; requires CARB to make available and update (at least annually via the CARB's website) emissions data for GHGs, criteria air pollutants, and TACs from reporting facilities; and requires CARB to identify specific information for GHG emissions reduction measures when updating the Scoping Plan.

CARB's Climate Change Scoping Plan

One specific requirement of AB 32 is for CARB to prepare a scoping plan for achieving the maximum technologically feasible and cost-effective GHG emission reductions by 2020 (Health and Safety Code Section 38561[a]), and to update the Scoping Plan at least once every five years. In 2008, CARB approved the first Scoping Plan. The Scoping Plan included a mix of recommended strategies that combined direct regulations, market-based approaches, voluntary measures, policies, and other emission reduction programs calculated to meet the 2020 statewide GHG emission limit and initiate the transformations needed to achieve the State's long-range climate objectives. The key elements of the Scoping Plan include the following:

1. Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
2. Achieving a statewide renewable energy mix of 33 percent;
3. Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system and caps sources contributing 85 percent of California's GHG emissions;
4. Establishing targets for transportation-related GHG emissions for regions throughout California, and pursuing policies and incentives to achieve those targets;
5. Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard (LCFS) (17 CCR, Section 95480 et seq.); and
6. Creating targeted fees, including a public goods charge on water use, fees on high GWP gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

The Scoping Plan also identified local governments as essential partners in achieving California's goals to reduce GHG emissions because they have broad influence and, in some cases, exclusive authority over activities that contribute to significant direct and indirect GHG emissions through their planning and permitting processes, local ordinances, outreach and education efforts, and municipal operations. Specifically, the Scoping Plan encouraged local governments to adopt a reduction goal for municipal operations and for community emissions to reduce GHGs by approximately 15 percent from then levels (2008) by 2020. Many local governments developed community-scale local GHG reduction plans based on this Scoping Plan recommendation.

In 2014, CARB approved the first update to the Scoping Plan. The *First Update to the Climate Change Scoping Plan: Building on the Framework* (First Update) defined the State's GHG emission reduction priorities for the next five years and laid the groundwork to start the transition to the post-2020 goals set forth in EO S-3-05 and EO B-16-2012. The First Update concluded that California is on track to meet the 2020 target but recommended a 2030 mid-term GHG reduction target be established to ensure a continuation of action to reduce emissions. The First Update recommended a mix of technologies in key economic sectors to reduce emissions through 2050, including energy demand reduction through efficiency and activity changes; large-scale electrification of on-road vehicles, buildings, and industrial machinery; decarbonizing electricity and fuel supplies; and the rapid market penetration of efficient and clean energy technologies. As part of the First Update, CARB recalculated the State's 1990 emissions level using more recent GWPs identified by the Intergovernmental Panel on Climate Change, from 427 $MMTCO_2e$ to 431 $MMTCO_2e$.

In 2015, as directed by EO B-30-15, CARB began working on an update to the Scoping Plan to incorporate the 2030 target of 40 percent below 1990 levels by 2030 to keep California on a trajectory toward meeting or exceeding the long-term goal of reducing GHG emissions to 80 percent below 1990 levels by 2050, as set forth in EO S-3-05. Governor Jerry Brown called on California to pursue a new and ambitious set of strategies, in line with the five climate change pillars from his inaugural address, to reduce GHG emissions and prepare for the unavoidable impacts of climate change. In summer 2016, the Legislature affirmed the importance of addressing climate change through passage of SB 32 (Pavley, Chapter 249, Statutes of 2016).

In December 2017, CARB adopted California's *2017 Climate Change Scoping Plan* (2017 Scoping Plan) for public review and comment. The 2017 Scoping Plan builds on the successful framework established in the initial Scoping Plan and First Update while identifying new, technologically feasible and cost-effective strategies that will serve as the framework to achieve the 2030 GHG target as established by SB 32 and define the State's climate change priorities to 2030 and beyond. Strategies within the 2017 Scoping Plan include implementing renewable energy and energy efficiency measures, increased stringency of the LCFS, measures identified in the Mobile Source and Freight Strategies, measures identified in the proposed Short-Lived Climate Pollutant (SLCP) Plan, and increased stringency of SB 375 targets (discussed in further detail below). To fill the gap in additional reductions needed to achieve the 2030 target, the 2017 Scoping Plan recommends continuing the Cap-and-Trade Program and a measure to reduce GHGs from refineries by 20 percent.

For local governments, the 2017 Scoping Plan replaced the initial Scoping Plan's 15 percent reduction goal with a recommendation to aim for a community-wide goal of no more than six $MTCO_2e$ per capita by 2030, and no more than two $MTCO_2e$ per capita by 2050, which are consistent with the State's long-term goals. Such goals are also consistent with the Under 2 Memorandum of Understanding (Under 2 Coalition 2019) and the Paris Agreement, which were developed around the scientifically based levels necessary to limit global warming to below an increase of 2°C. The 2017 Scoping Plan recognized the benefits of local government GHG planning (e.g., through Climate Action Plans [CAPs]) and provide more information regarding tools CARB is working on to support those efforts. The 2017 Scoping Plan also recognizes the CEQA streamlining provisions for project-level review where a legally adequate CAP exists.[18]

When discussing project-level GHG emissions reduction actions and thresholds in the context of CEQA, the 2017 Scoping Plan states that "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts, is an appropriate overall objective for new development" for project-level CEQA analysis, but also recognizes that such a standard may not be appropriate or feasible for every development project. The 2017 Scoping Plan further provides that "the inability of a project to mitigate its GHG emissions to net zero does not imply the project results in a substantial contribution to the cumulatively significant environmental impact of climate change under CEQA."

CARB's Regulations for the Mandatory Reporting of GHG Emissions

CARB's Regulation for the Mandatory Reporting of GHG Emissions (17 CCR 95100–95157) incorporated by reference certain requirements that the USEPA promulgated in its Final Rule on

[18] *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490; *San Francisco Tomorrow et al. v. City and County of San Francisco* (2015) 229 Cal.App.4th 498; *San Franciscans Upholding the Downtown Specific Plan v. City & County of San Francisco* (2002) 102 Cal.App.4th 656; *Sequoyah Hills Homeowners Assn. V. City of Oakland* (1993) 23 Cal.App.4th 704, 719.

Mandatory Reporting of GHGs (40 Code of Federal Regulations Part 98). Specifically, Section 95100(c) of the Mandatory Reporting Regulation incorporated those requirements that the USEPA promulgated in the Federal Register on October 30, 2009; July 12, 2010; September 22, 2010; October 28, 2010; November 30, 2010; December 17, 2010; and April 25, 2011. In general, entities subject to the Mandatory Reporting Regulation that emit more than 10,000 $MTCO_2e$ per year are required to report annual GHGs through the California Electronic GHG Reporting Tool. Certain sectors, such as refineries and cement plants, are required to report regardless of emission levels. Entities that emit more than the 25,000 $MTCO_2e$ per year threshold are required to have their GHG emission report verified by a CARB-accredited third party.

SB 605 and SB 1383

SB 605 (2014) required CARB to complete a comprehensive strategy to reduce emissions of SLCPs in the State, and SB 1383 (2016) required CARB to approve and implement that strategy by January 1, 2018. SB 1383 also establishes specific targets for the reduction of SLCPs (40 percent below 2013 levels by 2030 for CH_4 and HFCs, and 50 percent below 2013 levels by 2030 for anthropogenic black carbon), and provides direction for reductions from dairy and livestock operations and landfills. Accordingly, CARB adopted its SLCP Reduction Strategy in March 2017. The SLCP Reduction Strategy establishes a framework for the statewide reduction of emissions of black carbon, CH_4, and fluorinated gases.

EO B-55-18

EO B-55-18 (September 2018) establishes a statewide policy for California to achieve carbon neutrality as soon as possible, and no later than 2045, and achieve and maintain net-negative emissions thereafter. The goal is an addition to the existing statewide targets of reducing the State's GHG emissions. CARB intends to work with relevant State agencies to ensure that future scoping plan updates identify and recommend measures to achieve the carbon neutrality goal.

Mobile Sources

The following regulations relate to the control of GHG emissions from mobile sources. Mobile sources include both on-road vehicles and off-road equipment.

AB 1493

AB 1493 (Pavley) (July 2002) was enacted in response to the transportation sector accounting for more than half of California's CO_2 emissions. AB 1493 required CARB to set GHG emission standards for passenger vehicles, light-duty trucks, and other vehicles determined by the State board to be vehicles that are primarily used for noncommercial personal transportation in the State. The bill required that CARB set GHG emission standards for motor vehicles manufactured in 2009 and all subsequent model years. CARB adopted the standards in September 2004. When fully phased in, the near-term (2009–2012) standards would result in a reduction of approximately 22 percent of GHG emissions compared to the emissions from the 2002 fleet, and the mid-term (2013–2016) standards would result in a reduction of approximately 30 percent. However, as previously described within the Federal Vehicle Standards section, the USEPA's SAFE Vehicles Rule Part One, adopted in November 2019, revokes California's authority to set GHG emissions standards. As the USEPA rule is the subject of pending legal challenges and President Biden issued an EO to review Part One and Part Two, the analysis within this EIR uses the best available information at this time, as set forth in CARB's EMFAC.

EO S-1-07

EO S-1-07 (January 2007, implementing regulation adopted in April 2009) set a declining LCFS for GHG emissions measured in CO_2e grams per unit of fuel energy sold in California. The target of the LCFS is to reduce the carbon intensity of California passenger vehicle fuels by at least 10 percent by 2020 (17 CCR 95480 et seq.). Carbon intensity measures the amount of GHG emissions in the lifecycle of a fuel, including extraction/feedstock production, processing, transportation, and final consumption, per unit of energy delivered.

SB 375

SB 375 (Steinberg) (September 2008) addresses GHG emissions associated with the transportation sector through regional transportation and sustainability plans. SB 375 requires CARB to adopt regional GHG reduction targets for the automobile and light-truck sector for 2020 and 2035, and to update those targets every eight years. SB 375 requires the State's 18 regional metropolitan planning organizations to prepare a sustainable communities strategy as part of their Regional Transportation Plans that will achieve the GHG reduction targets set by CARB. If a metropolitan planning organization is unable to devise a sustainable communities strategy to achieve the GHG reduction target, the metropolitan planning organization must prepare an alternative planning strategy demonstrating how the GHG reduction target would be achieved through alternative development patterns, infrastructure, or additional transportation measures or policies.

Pursuant to California Government Code Section 65080(b)(2)(K), a sustainable communities strategy does not (1) regulate the use of land, (2) supersede the land use authority of cities and counties, or (3) require that a city's or county's land use policies and regulations, including those in a general plan, be consistent with the sustainable community strategy. Nonetheless, SB 375 makes regional and local planning agencies responsible for developing those strategies as part of the federally required metropolitan transportation planning process and the State-mandated housing element process.

Advanced Clean Cars Program and Zero-Emissions Vehicle Program

The Advanced Clean Cars program (January 2012) is an emissions-control program for model years 2015 through 2025. The program combines the control of smog- and soot-causing pollutants and GHG emissions into a single coordinated package. The package includes elements to reduce smog-forming pollution, reduce GHG emissions, promote clean cars, and provide the fuels for clean cars. To improve air quality, CARB has implemented new emission standards to reduce smog-forming emissions beginning with 2015 model year vehicles. By 2025, implementation of the rule is anticipated to reduce emissions of smog-forming pollution from cars by 75 percent compared to the average new car sold in 2015. To reduce GHG emissions, CARB, in conjunction with the USEPA and NHTSA, adopted GHG standards for model year 2017 to 2025 vehicles; the standards were estimated to reduce GHG emissions by 34 percent by 2025. The zero-emissions vehicle program acts as the focused technology of the Advanced Clean Cars program by requiring manufacturers to produce increasing numbers of zero-emissions vehicles and plug-in hybrid electric vehicles in the 2018 to 2025 model years. However, implementation of the Advanced Clean Cars program is contingent upon the outcome of the on-going SAFE Vehicles Rule litigation.

EO B-16-12

EO B-16-12 (March 2012) required that State entities under the governor's direction and control support and facilitate the rapid commercialization of zero-emissions vehicles. The order directed

CARB, California Energy Commission (CEC), California Public Utilities Commission (CPUC), and other relevant agencies to work with the Plug-In Electric Vehicle Collaborative and the California Fuel Cell Partnership to establish benchmarks to help achieve goals by 2015, 2020, and 2025. On a statewide basis, EO B-16-12 established a target reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels by 2050. EO B-16-12 did not apply to vehicles that have special performance requirements necessary for the protection of the public safety and welfare.

AB 1236

AB 1236 (October 2015) (Chiu) required a city, county, or city and county to approve an application for the installation of electric-vehicle charging stations, as defined, through the issuance of specified permits unless the city or county makes specified written findings based on substantial evidence in the record that the proposed installation would have a specific, adverse impact upon the public health or safety, and a feasible method to satisfactorily mitigate or avoid the specific, adverse impact does not exist. The bill provided for appeal of that decision to the planning commission, as specified. AB 1236 required electric-vehicle charging stations to meet specified standards. The bill required a city, county, or city and county with a population of 200,000 or more residents to adopt an ordinance, by September 30, 2016, that created an expedited and streamlined permitting process for electric-vehicle charging stations. The bill also required a city, county, or city and county with a population of less than 200,000 residents to adopt the ordinance by September 30, 2017.

EO N-79-20

EO N-79-20 (September 2020) establishes a Statewide goal that 100 percent of in-state vehicle sales of new passenger cars and trucks shall be zero-emission by the year 2035. The order directed the CARB to develop and propose passenger vehicle and truck regulations requiring increasing volumes of new zero-emission vehicles sold in the State in order to achieve the goal by 2035. In addition, the order required that a Zero-Emissions Vehicle Market Development Strategy be created and updated to ensure coordinated and expeditious implementation of the EO.

Water

The following regulations relate to the conservation of water, which reduces GHG emissions related to electricity demands from the treatment and transportation of water.

EO B-29-15

In response to a drought in California, EO B-29-15 (April 2015) set a goal of achieving a statewide reduction in potable urban water usage of 25 percent relative to water use in 2013. The term of the EO extended through February 28, 2016, although many of the directives subsequently became permanent water-efficiency standards and requirements. The EO includes specific directives that set strict limits on water usage in the State. In response to EO B-29-15, the California Department of Water Resources modified and adopted a revised version of the Model Water Efficient Landscape Ordinance that, among other changes, significantly increases the requirements for landscape water use efficiency, and broadens the applicability of the ordinance to include new development projects with smaller landscape areas.

EO B-37-16

Issued in May 2016, EO B-37-16 directed the State Water Resources Control Board (SWRCB) to adjust emergency water conservation regulations through the end of January 2017 to reflect

differing water supply conditions across the State. The SWRCB also developed a proposal to achieve a mandatory reduction of potable urban water usage that builds off the mandatory 25 percent reduction called for in EO B-29-15. The SWRCB and Department of Water Resources were directed to develop new, permanent water use targets that build upon the existing State law requirements that the State achieve 20 percent reduction in urban water usage by 2020. EO B-37-16 also specifies that the SWRCB permanently prohibit water-wasting practices such as hosing off sidewalks, driveways, and other hardscapes; washing automobiles with hoses not equipped with a shut-off nozzle; using non-recirculated water in a fountain or other decorative water feature; watering lawns in a manner that causes runoff, or within 48 hours after measurable precipitation; and irrigating ornamental turf on public street medians.

EO B-40-17

EO B-40-17 (April 2017) lifted the drought emergency in all California counties except Fresno, Kings, Tulare, and Tuolumne. It also rescinded EO B-29-15, but expressly stated that EO B-37-16 remains in effect and directed the SWRCB to continue development of permanent prohibitions on wasteful water use.

Solid Waste

The following regulations relate to the generation of solid waste and means to reduce GHG emissions from solid waste produced within the State.

AB 939 and AB 341

In 1989, AB 939, known as the Integrated Waste Management Act (California Public Resources Code [PRC] Sections 40000 et seq.), was passed because of the observed increase in waste stream and the decrease in landfill capacity. The statute established the California Integrated Waste Management Board, which oversees a disposal reporting system. AB 939 mandated a reduction of waste being disposed where jurisdictions were required to meet diversion goals of all solid waste through source reduction, recycling, and composting activities of 25 percent by 1995 and 50 percent by 2000.

AB 341 (Chapter 476, Statutes of 2011 [Chesbro]) amended the California Integrated Waste Management Act of 1989 to include a provision declaring that the policy goal of the State is that not less than 75 percent of solid waste generated be source-reduced, recycled, or composted by 2020, and annually thereafter. In addition, AB 341 required the California Department of Resources Recycling and Recovery to develop strategies to achieve the State's policy goal.

Other State Actions

The following State regulations are broadly related to GHG emissions.

SB 97

SB 97 (Dutton) (August 2007) directed the Governor's Office of Planning and Research to develop guidelines under CEQA for the mitigation of GHG emissions. In 2008, the Governor's Office of Planning and Research issued a technical advisory as interim guidance regarding the analysis of GHG emissions in CEQA documents. The advisory indicated that the lead agency should identify and estimate a project's GHG emissions, including those associated with vehicular traffic, energy consumption, water usage, and construction activities. The advisory further recommended that the lead agency determine the significance of the impacts and impose all mitigation measures necessary to reduce GHG emissions to a level that is less than significant. The California Natural

Resource Agency (CNRA) adopted the CEQA Guidelines amendments in December 2009, and the amended CEQA Guidelines became effective in March 2010.

Under the amended CEQA Guidelines, a lead agency has the discretion to determine whether to use a quantitative or qualitative analysis, or apply performance standards to determine the significance of GHG emissions resulting from a particular project (14 CCR 15064.4[a]). The CEQA Guidelines require a lead agency to consider the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]). The CEQA Guidelines also allow a lead agency to consider feasible means of mitigating the significant effects of GHG emissions, including reductions in emissions through the implementation of project features or off-site measures. The adopted amendments do not establish a GHG emission threshold, instead allowing a lead agency to develop, adopt, and apply the lead agency's own thresholds of significance or those developed by other agencies or experts. CNRA acknowledges that a lead agency may consider compliance with regulations or requirements implementing AB 32 in determining the significance of a project's GHG emissions.

With respect to GHG emissions, the CEQA Guidelines state that lead agencies should "make a good faith effort, to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions (14 CCR 15064.4[a]). The CEQA Guidelines note that an agency may identify emissions by either selecting a "model or methodology" to quantify the emissions or by relying on "qualitative analysis or other performance based standards" (14 CCR 15064.4[a]). Section 15064.4(b) states that the lead agency should consider the following when assessing the significance of impacts from GHG emissions on the environment: (1) the extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting; (2) whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and (3) the extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4[b]).

EO S-13-08

EO S-13-08 (November 2008) is intended to hasten California's response to the impacts of global climate change, particularly sea-level rise. Therefore, the EO directs State agencies to take specified actions to assess and plan for such impacts. The final 2009 California Climate Adaptation Strategy report was issued in December 2009, and an update, *Safeguarding California: Reducing Climate Risk*, followed in July 2014. To assess the State's vulnerability, the report summarizes key climate change impacts to the State for the following areas: agriculture, biodiversity and habitat, emergency management, energy, forestry, ocean and coastal ecosystems and resources, public health, transportation, and water. Issuance of the *Safeguarding California: Implementation Action Plans* followed in March 2016. In January 2018, the CNRA released the *Safeguarding California Plan: 2018 Update,* which communicates current and needed actions that State government should take to build climate change resiliency.

State Regulations Related to Energy

The State has adopted various regulations aimed at reducing energy consumption, increasing energy efficiency, and mandating sourcing requirements for electricity production.

Building Energy

The following regulations relate to energy efficiency and energy use reductions in the built environment.

Title 24, Part 6

Title 24 of the CCR was established in 1978 and serves to enhance and regulate California's building standards. While not initially promulgated to reduce GHG emissions, Part 6 of Title 24 specifically established Building Energy Efficiency Standards that are designed to ensure new and existing buildings in California achieve energy efficiency and preserve outdoor and indoor environmental quality. These energy efficiency standards are reviewed periodically, and revised if necessary, by the Building Standards Commission and CEC (PRC Section 25402[b][1]). The regulations receive input from members of industry, as well as the public, with the goal of "reducing of wasteful, uneconomic, inefficient, or unnecessary consumption of energy" (PRC Section 25402). The regulations are scrutinized and analyzed for technological and economic feasibility (PRC Section 25402[d]) and cost effectiveness (PRC Sections 25402[b][2] and [b][3]). As a result, the standards save energy, increase electricity supply reliability, increase indoor comfort, avoid the need to construct new power plants, and help preserve the environment.

The 2019 Title 24 standards are the currently applicable building energy efficiency standards and became effective on January 1, 2020. The 2019 Title 24 Building Energy Efficiency Standards reduced energy used and associated GHG emissions compared to the previous 2016 Title 24 standards. In general, single-family residences built to the 2019 standards are anticipated to use approximately seven percent less energy due to energy efficiency measures than those built to the 2016 standards; once rooftop solar electricity generation is factored in, single-family residences built under the 2019 standards use approximately 53 percent less energy than those under the 2016 standards. Nonresidential buildings built to the 2019 standards use an estimated 30 percent less energy than those built to the 2016 standards.

Title 24, Part 11

In addition to the CEC's efforts, in 2008, the California Building Standards Commission adopted the nation's first green building standards. The California Green Building Standards Code (Part 11 of Title 24) is commonly referred to as CALGreen, and establishes minimum mandatory standards and voluntary standards pertaining to the planning and design of sustainable site development, energy efficiency (in excess of the California Energy Code requirements), water conservation, material conservation, and interior air quality. The CALGreen standards took effect in January 2011 and instituted mandatory minimum environmental performance standards for all ground-up, new construction of commercial, low-rise residential and state-owned buildings and schools and hospitals. The original CALGreen standards have been updated several times. The CALGreen 2019 standards, which are the current standards, improved upon the 2016 CALGreen standards, and went into effect on January 1, 2020. The mandatory standards require the following:

- Mandatory reduction in indoor water use through compliance with specified flow rates for plumbing fixtures and fittings;
- Mandatory reduction in outdoor water use through compliance with a local water efficient landscaping ordinance or the California Department of Water Resources' Model Water Efficient Landscape Ordinance;
- 65 percent of construction and demolition waste must be diverted from landfills;
- Mandatory inspections of energy systems to ensure optimal working efficiency;

- Inclusion of electric vehicle charging stations or designated spaces capable of supporting future charging stations; and
- Low-pollutant-emitting exterior and interior finish materials, such as paints, carpets, vinyl flooring, and particle boards.

The CALGreen standards also include voluntary efficiency measures that are provided at two tiers and implemented at the discretion of local agencies and applicants. CALGreen's Tier 1 standards call for a 15 percent improvement in energy requirements, stricter water conservation, 65 percent diversion of construction and demolition waste, 10 percent recycled content in building materials, 20 percent permeable paving, 20 percent cement reduction, and cool/solar-reflective roofs. CALGreen's more rigorous Tier 2 standards call for a 30 percent improvement in energy requirements, stricter water conservation, 80 percent diversion of construction and demolition waste, 15 percent recycled content in building materials, 30 percent permeable paving, 25 percent cement reduction, and cool/solar-reflective roofs.

Title 20

Title 20 of the CCR requires manufacturers of appliances to meet state and federal standards for energy and water efficiency. The CEC certifies an appliance based on a manufacturer's demonstration that the appliance meets the standards. New appliances regulated under Title 20 include refrigerators, refrigerator-freezers, and freezers; room air conditioners and room air-conditioning heat pumps; central air conditioners; spot air conditioners; vented gas space heaters; gas pool heaters; plumbing fittings and plumbing fixtures; fluorescent lamp ballasts; lamps; emergency lighting; traffic signal modules; dishwaters; clothes washers and dryers; cooking products; electric motors; low-voltage dry-type distribution transformers; power supplies; televisions and consumer audio and video equipment; and battery charger systems. Title 20 presents protocols for testing each type of appliance covered under the regulations, and appliances must meet the standards for energy performance, energy design, water performance, and water design. Title 20 contains three types of standards for appliances: federal and state standards for federally regulated appliances, state standards for federally regulated appliances, and state standards for non-federally regulated appliances.

SB 1

SB 1 (Murray) (August 2006) established a $3 billion rebate program to support the goal of the state to install rooftop solar energy systems with a generation capacity of 3,000 megawatts through 2016. SB 1 added sections to the California PRC, including Chapter 8.8 (California Solar Initiative), that require building projects applying for ratepayer-funded incentives for photovoltaic systems to meet minimum energy efficiency levels and performance requirements. Section 25780 established that it is a goal of the state to establish a self-sufficient solar industry. The goals included establishing solar energy systems as a viable mainstream option for homes and businesses within 10 years of adoption, and placing solar energy systems on 50 percent of new homes within 13 years of adoption. SB 1, also termed "Go Solar California," was previously titled "Million Solar Roofs."

AB 1470

AB 1470 established the Solar Water Heating and Efficiency Act of 2007. The bill made findings and declarations of the Legislature relating to the promotion of solar water heating systems and other technologies that reduce natural gas demand. AB 1470 required the CEC to evaluate the data available from a specified pilot program, and, if the CEC made a specified determination, to

design and implement a program of incentives for the installation of 200,000 solar water heating systems in homes and businesses throughout the state by 2017.

AB 1109

Enacted in 2007, AB 1109 required the CEC to adopt minimum energy efficiency standards for general-purpose lighting to reduce electricity consumption by 50 percent for indoor residential lighting and by 25 percent for indoor commercial lighting.

Renewable Energy and Energy Procurement

The following regulations relate to the source of electricity provided to consumers within the State, as well as standards related to the generation of electricity within the State.

Renewable Portfolio Standard (RPS) and SB 100

Established in 2002 under SB 1078 (which added Section 387, 390.1, and 399.25 to the Public Utilities Code and added Article 16 to Chapter 2.3 of Part 1 Division 1 of the Public Utilities Code), accelerated in 2006 under SB 107 (which amended Sections 25620.1, 25740, 25741, 25742, 25743, 25746, and 25751 of, added Sections 25470.5 and 25744.5, and repealed Sections 25745 and 25749 of, the PRC, as well as amending Sections 87, 399.11, 399.12, 399.13, 399.14, and 399.15 of the Public Utilities Code, adding Article 9 to Chapter 3 of Part 1 of Division 1 of the Public Utilities Code, and to repeal and add Section 399.16 of the Public Utilities Code), and expanded in 2011 under SB 2 (which amended Sections 5740, 25740.5, 25741, 25742, 25746, 25747, and 25751 of the PRC, added Section 25519.5 to the PRC, to add and repeal Section 25741.5 of, the PRC, and to amend Sections 399.11, 399.12, 399.20, and 454.5 of, to amend, renumber, and add Sections 399.13 and 399.16 of, to add Sections 399.18, 399.19, 399.26, 399.30, 399.31, and 1005.1, to add Article 11 (commencing with Section 910) to Chapter 4 of Part 1 of Division 1 of, to repeal Section 387 of, and to repeal and add Sections 399.14, 399.15, and 399.17 of, the Public Utilities Code), California's RPS is one of the most ambitious renewable energy standards in the country. The RPS program requires investor-owned utilities, electric service providers, and community choice aggregators to increase procurement from eligible renewable energy resources to 33 percent of total procurement by 2020.

Since the inception of the RPS program, the program has been extended and enhanced multiple times. In 2015, SB 350 (An act to add Section 44258.5 to the Health and Safety Code, to amend Section 1720 of the Labor Code, to amend Sections 25310 and 25943 of, and to add Sections 25302.2 and 25327 to, the PRC, and to amend Sections 359, 399.4, 399.11, 399.12, 399.13, 399.15, 399.16, 399.18, 399.21, 399.30, 454.55, 454.56, 701.1, 740.8, 9505, and 9620 of, to amend and repeal Sections 337 and 352 of, to add Sections 237.5, 365.2, 366.3, 454.51, 454.52, 740.12, 9621, and 9622 to, to add Article 17 (commencing with Section 400) to Chapter 2.3 of Part 1 of Division 1 of, to add and repeal Article 5.5 (commencing with Section 359.5) of Chapter 2.3 of Part 1 of Division 1 of, and to repeal Article 5 (commencing with Section 359) of Chapter 2.3 of Part 1 of Division 1 of, the Public Utilities Code) extended the State's RPS program by requiring that publicly owned utilities procure 50 percent of their electricity from renewable energy sources by 2030. The requirements of SB 350 were expanded and intensified in 2018 through the adoption of SB 100 (An act to amend Sections 399.11, 399.15, and 399.30 of, and to add Section 454.53 to, the Public Utilities Code), which mandated that all electricity generated within the State by publicly owned utilities be generated through carbon-free sources by 2045. In addition, SB 100 increased the previous renewable energy requirement for the year 2030 by 10 percent; thus, requiring that 60 percent of electricity generated by publicly owned utilities originate from renewable sources by the year 2030.

Local Regulations

The most prominent local regulations related to air quality, GHG emissions, and energy are established by the SMAQMD and the Rancho Cordova General Plan and are discussed in further detail below.

Sacramento Metropolitan Air Quality Management District

The SMAQMD regulates many sources of pollutants in the ambient air as well as GHG emissions, and is responsible for implementing certain programs and regulations for controlling air pollutant and GHG emissions to improve air quality in order to attain federal and State AAQS and reduce GHG emissions in compliance with State goals.

Air Quality Attainment Plan

As a part of the SVAB federal ozone nonattainment area, the SMQAMD works with the other local air districts within the Sacramento area to develop a regional air quality management plan under the FCAA requirement. The regional air quality management plan is called the SIP which describes and demonstrates how Sacramento County, as well as the Sacramento nonattainment area, would attain the required federal ozone standard by the proposed attainment deadline. In accordance with the requirements of the FCAA, the SMQAMD, along with the other air districts in the region, prepared the *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan) in December 2008. The CARB determined that the Ozone Attainment Plan met federal Clean Air Act requirements and approved the Plan on March 26, 2009 as a revision to the SIP. An update to the plan, *2017 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2017 Ozone Attainment Plan), was prepared and adopted by CARB on November 16, 2017. An additional update to the plan was prepared and adopted by CARB on October 15, 2018, and known as the *2018 Updates to the California State Implementation Plan.*

The 2013 Ozone Attainment Plan, and subsequent updates, demonstrate how existing and new control strategies would provide the necessary future emission reductions to meet the FCAA requirements, including the NAAQS. It should be noted that in addition to strengthening the 8-hour ozone NAAQS, the USEPA also strengthened the secondary 8-hour ozone NAAQS, making the secondary standard identical to the primary standard. The SVAB remains classified as a severe nonattainment area for ozone with an attainment deadline of 2027. On October 26, 2015, the USEPA released a final implementation rule for the revised NAAQS for ozone to address the requirements for reasonable further progress, modeling and attainment demonstrations, and reasonably available control measures (RACM) and reasonably available control technology (RACT). The USEPA published designations for areas in attainment/unclassifiable for the 2015 ozone standards. The USEPA identified the entire Sacramento County as nonattainment for the 2015 ozone standards.[19]

Rancho Cordova General Plan

The following goals and policies related to air quality are from the Rancho Cordova General Plan:

Air Quality Element

Goal AQ.1 Ensure a healthy community by participating in local and regional efforts to meet or exceed all state and federal air quality standards.

[19] U.S. Environmental Protection Agency. *Nonattainment and Unclassifiable Area Designations for the 2015 Ozone Standards*. April 30, 2018.

Policy AQ.1.1 Coordinate with responsible agencies and other jurisdictions to improve air quality within Rancho Cordova and the greater Sacramento region.

Policy AQ.1.2 Evaluate projects for compliance with State and federal ambient air quality standards and the Sacramento Metropolitan Air Quality Management District's (SMAQMD) thresholds of significance.

Policy AQ.1.3 The City shall prohibit wood-burning open masonry fireplaces in all new development. Fireplaces with EPA-approved inserts, EPA-approved stoves, and fireplaces burning natural gas will be allowed.

Policy AQ.1.4 The City shall develop an incentive program to encourage homeowners to replace high-pollution emitting non-EPA-certified wood stoves that were installed before the effective date of the applicable EPA regulation with newer cleaner-burning EPA-certified wood stoves.

Policy AQ.1.5 Require odor impact analyses be conducted for evaluating new development requests that either could generate objectionable odors that may violate SMAQMD Rule 402 or any subsequent rules and regulations regarding objectionable odors near sensitive receptors or locate new sensitive receptors near existing sources of objectionable odors. Should objectionable odor impacts be identified, odor mitigation shall be required in the form of setbacks, facility improvements or other appropriate measures.

Goal AQ.2 Support land use patterns and densities that lessen air quality impacts.

Policy AQ.2.1 Promote strategic land use patterns for businesses that reduce the number and length of motor vehicle trips and that encourage multiple forms of transportation for employees and patrons.

Policy AQ.2.2 Encourage mixed-use developments that put residences in close proximity to services, employment, transit, schools, and civic facilities/services.

Policy AQ.2.3 Encourage infill development as a way to reduce vehicle trips and improve air quality.

Policy AQ.2.4 Maximize air quality benefits through selective use of landscaping vegetation that is low in emission of volatile organic compounds, and through revegetation of appropriate areas.

Goal AQ.3 Support multiple forms of transportation and a circulation system design that reduces vehicle trips and emissions.

Policy AQ.3.1 Promote walking and bicycling as viable forms of transportation to services, shopping, and employment.

Policy AQ.3.2 Promote mass transit as an alternative to single-occupant motor vehicle travel.

Policy AQ.3.3 Involve local businesses in creating, maintaining, or promoting mass transit opportunities and reducing vehicle emissions.

Policy AQ.3.4 Emphasize "demand management" strategies that seek to reduce single occupant vehicle use in order to achieve state and federal air quality plan objectives.

Goal AQ.4 Support energy conservation, the use of alternative fuels, clean vehicles and industries to reduce air quality impacts.

Policy AQ.4.1 Promote improved air quality benefits through energy conservation measures for new and existing development.

Policy AQ.4.2 Support vehicle improvements and the use of clean vehicles that reduce emissions and improve air quality.

Policy AQ.4.4 Support SMAQMD's program of retrofitting construction equipment.

Natural Resources Element

Goal NR.7 Reduce per capita energy consumption.

Policy NR.7.1 Increase energy conservation Citywide.

Policy NR.7.2 Promote the development and use of advanced energy technology and building materials in Rancho Cordova.

Policy NR.7.3 Encourage the development of energy efficient buildings and subdivisions.

Policy NR.7.4 Promote energy rebate programs offered by local energy providers (e.g., SMUD, PG&E) as a way to bring energy efficiency into older neighborhoods and developments.

4.1.4 IMPACTS AND MITIGATION MEASURES

The standards of significance and methodology used to analyze and determine the proposed project's potential project-specific impacts related to air quality and GHG emissions are described below. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Based on the recommendations of SMAQMD, and consistent with Appendix G of the CEQA Guidelines, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations (including localized CO concentrations and TAC emissions);
- Result in other emissions (such as those leading to odors) affecting a substantial number of people;
- Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources;
- Conflict with or obstruct a state or local plan for renewable energy or energy efficiency;
- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.

Criteria Pollutant Emissions and TAC Emissions

In order to evaluate criteria air pollutant emissions from development projects, SMAQMD has established significance thresholds for emissions of NO_X, ROG, PM_{10}, and $PM_{2.5}$. The significance thresholds serve as air quality standards in the evaluation of air quality impacts associated with proposed development projects. Thus, if the proposed project's emissions exceed the SMAQMD thresholds, the project could have a significant effect on regional air quality and attainment of federal and State AAQS. The SMAQMD's recommended thresholds of significance are listed in Table 4.1-6. Therefore, if the proposed project's emissions exceed the pollutant thresholds presented in Table 4.1-6, the project could have a significant effect on air quality, the attainment of federal and State AAQS, and could conflict with or obstruct implementation of the applicable air quality plan.

Table 4.1-6
SMAQMD Thresholds of Significance

Pollutant	Construction Threshold	Operational Threshold
NO_X	85 lbs/day	65 lbs/day
ROG	-	65 lbs/day
PM_{10}	80 lbs/day and 14.6 tons/yr	80 lbs/day and 14.6 tons/yr
$PM_{2.5}$	82 lbs/day and 15 tons/yr	82 lbs/day and 15 tons/yr

Source: SMAQMD Thresholds of Significance Table, April 2020.

For TAC emissions, if a project would introduce a new source of TAC or a new sensitive receptor near an existing source of TAC that would not meet the CARB's minimum recommended setback, a detailed health risk assessment may be required. Neither SMAQMD nor the City has established quantitative thresholds of significance for construction-related TAC emissions.

GHG Emissions and Other Cumulative Emissions

Nearly all development projects in the region have the potential to generate air pollutants that may increase global climate change. SMAQMD has adopted thresholds of significance for GHG emissions during construction and operations of projects.

This GHG analysis has been prepared to show compliance with SMAQMD's GHG thresholds of significance.

Where a residential or mixed-use residential project is consistent with an applicable Sustainable Communities Strategy (SCS) that the State Air Resources Board (CARB) has determined, if implemented, will achieve the greenhouse gas emission reduction targets for the region, and the residential or mixed-use residential project incorporates mitigation measures from a prior applicable environmental document, then, pursuant to PRC Section 21159.28, the environmental review completed for the residential or mixed-use residential project is not "required to reference, describe, or discuss … any project specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network." (PRC, Section 21159.28[a])

The Sacramento Area Council of Governments (SACOG) approved its current 2020 SCS on November 18, 2019. On October 26, 2020, CARB accepted that "SACOG's determination that the SCS adopted by the SACOG Board of Directors on November 18, 2019, would, when implemented, achieve the applicable GHG emissions reduction target for automobiles and light trucks of 19 percent per capita reduction by 2035, relative to 2005 levels, as established by CARB for the region."

As explained in SACOG's 2020 SCS, Rancho Cordova has emerged as a regional job center over the past twenty years. However, housing development has not kept up with employment growth in the City. To help improve the City's job/housing balance, the 2020 SCS forecasts construction of an additional 1,070 new housing units in the Established Communities community type within the City. As SACOG's 2020 SCS was approved in late 2019, few housing units have been developed in the City's Established Communities community type since SACOG adopted the plan. By proposing the creation of 440 residential lots within the City's Established Communities community type, the proposed project is consistent with the 2020 SCS's use designation and build-out forecast for the site and will help to address the City's existing job/housing imbalance. Furthermore, the proposed project is consistent with, and will implement, all applicable General Plan Policies. As a result, pursuant to PRC Section 21159.28, this EIR is not required to reference, describe, or discuss any project specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming or the regional transportation network. For this reason, in evaluating the proposed project's consistency with SMAQMD's GHG thresholds of significance (discussed further below), the City could evaluate consistency excluding project specific or cumulative impacts from cars and light-duty truck trips generated by the project on global warming. However, notwithstanding PRC Section 21159.28, to be conservative, in applying SMAQMD's GHG thresholds of significance to the proposed project, this EIR does not exclude emissions from cars and light-duty truck trips.

As such, if the proposed project would result in GHG emissions in excess of the thresholds of significance shown in Table 4.1-7, including emissions associated with cars and light-duty truck trips, the project could be considered to result in a potentially significant impact related to global climate change and mitigation measures would be required to reduce the impact.

Table 4.1-7 SMAQMD GHG Thresholds of Significance ($MTCO_2e$/year)	
Construction	**Operations**
1,100	1,100
Source: SMAQMD Thresholds of Significance Table, April 2020.	

To accomplish consistency with statewide and regional GHG reduction goals, SMAQMD has prepared a two-tiered framework of analysis for new projects.

Tier 1

All projects within SMAQMD's jurisdiction would be required to comply with the Best Management Practices (BMPs) included in Tier 1. The proposed Tier 1 BMPs are as follows:

- ***BMP 1:*** No natural gas: Projects shall be designed and constructed without natural gas infrastructure.
- ***BMP 2:*** Electric vehicle (EV) ready: Projects shall meet the current CALGreen Tier 2 standards, except all EV Capable spaces shall instead be EV Ready.

If a project would not comply with both of the foregoing BMPs, the project would be required to include features that would achieve an equivalent level of GHG emissions reductions. For instance, a project that includes natural gas infrastructure may include pre-wiring to allow for the future retrofit of all natural gas appliances with all-electric appliances. Furthermore, projects that are below the Governor's Office of Planning and Research's (OPR's) *de minimis* vehicle miles travelled (VMT) criteria, and/or projects that emit less than 1,100 $MTCO_2e$/yr prior to implementation of BMP 1 and BMP 2 would be considered sufficiently small to screen out of further requirements, and would be assumed to result in a less-than-significant impact related to GHG emissions and climate change.

The following types of projects would be considered to be below the OPR's *de minimis* VMT criteria:

- Small projects that generate or attract fewer than 110 trips per day;
- Residential and office projects in areas with low VMT (currently below threshold VMT) that incorporate similar features (i.e., density, mix of uses, transit accessibility), including affordable housing infill development; or
- Residential, retail, office, or mixed-use projects within 0.5-mile walking distance of an existing major transit stop or existing stop along a high-quality transit corridor, unless the primary use of the site is auto-oriented (e.g., car dealership, car wash, gas station).

Projects that are not small enough to screen out of further review are subject to review under Tier 2 of SMAQMD's updated thresholds.

Tier 2

The second tier of SMAQMD's updated thresholds includes the following BMP:

- ***BMP 3***: Residential projects shall achieve a 15 percent reduction in VMT per resident, and office projects should achieve a 15 percent reduction in VMT per worker compared to existing average VMT per capita for the county, or for the city if a more local SB 743 target has been established. It is noted that the City of Rancho Cordova establishes the same

VMT threshold of 15 percent reduction in VMT per resident.[20] VMT reductions can be achieved by many strategies, such as:

- Locate in an area that already has low VMT due to location, transit service, etc.;
- Adopt CAPCOA measures;
- Adopt measures noted in Sacramento's CAP checklist;
- Join a Transportation Management Association;
- Incorporate traffic calming measures;
- Incorporate pedestrian facilities and connections to public transportation; and/or
- Promote electric bicycle or other micro-mobility options.

If a project cannot incorporate the foregoing BMPs, other reductions or purchasing and retiring of GHG/carbon offsets can be used as an alternative method of compliance.

In accordance with CARB and SMAQMD recommendations, the City of Rancho Cordova, as lead agency, uses the currently adopted SMAQMD GHG thresholds of significance as presented above. Therefore, if the proposed project would result in construction GHG emissions in excess of 1,100 $MTCO_2e$/yr or if the project would not achieve the SMAQMD's operational GHG requirements, the project would be considered to result in a cumulatively considerable contribution to global climate change.

With regard to other cumulative emissions, such as the cumulative emissions of criteria air pollutants, the SMAQMD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. If a project would interfere with an adopted attainment plan, the project would inhibit the future attainment of AAQS, and thus result in a significant incremental contribution to cumulative emissions. As discussed throughout this Chapter, the SMAQMD's recommended thresholds of significance for ozone precursors and PM_{10} are based on attainment plans for the region. Thus, SMAQMD concluded that if a project's ozone precursor and PM_{10} emissions would be less than the associated thresholds, the project would not be expected to conflict with any relevant attainment plans, and would not result in a cumulatively considerable contribution to a significant cumulative impact. As a result, the operational phase cumulative-level emissions thresholds established by SMAQMD are identical to the project-level operational emissions thresholds; the operational/cumulative thresholds for criteria pollutants are presented in Table 4.1-6.

Energy

Quantitative thresholds for the analysis of potential impacts related to energy consumption have not been adopted by any local, regional, or statewide entities. Consequently, potential impacts of the project related to energy will be determined based on whether the project would result in wasteful, inefficient, or unnecessary use of energy. In addition, the potential for the project to conflict with or obstruct a state or local plan for renewable energy generation or energy efficiency will be considered. The analysis of energy consumption will include consideration of energy demand during both project construction and operations.

[20] City of Rancho Cordova. *City of Rancho Cordova Transportation Impact Guidelines*. June 2, 2020.

Method of Analysis

The analysis protocol and guidance provided by the SMAQMD's *CEQA Guide*, including screening criteria and pollutant thresholds of significance, was used to analyze the proposed project's air quality impacts.

Construction Emissions

The proposed project's short-term construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2 software, which is a statewide model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify air quality emissions from land use projects. The model applies inherent default values for various land uses, including trip generation rates based on the ITE Manual, vehicle mix, trip length, average speed, etc. Where project-specific information is available, such information should be applied in the model. Accordingly, the proposed project's construction modeling assumes the following based on applicant-provided project-specific data:

- Construction would begin in the year 2021;
- Construction would occur over an approximately two-year period;
- 12,000 square feet of existing buildings would be demolished;
- Approximately 10,000 cubic yards of soil would be imported during grading;
- The proposed project would improve the pedestrian network connectivity; and
- The project would comply with all applicable provisions of the 2019 California Building Standard Code (CBSC), 2019 CALGreen Code, and Model Water Efficiency Landscape Ordinance (MWELO).

The results of construction emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included in Appendix C to this EIR.

Operational Emissions and Operational Energy Use

The proposed project's operational emissions were estimated using CalEEMod. Based on project-specific construction information provided by the project applicant, the proposed project is anticipated to be fully operational by 2023. The modeling performed for the proposed project included compliance with SMAQMD rules and regulations as well as with the 2019 California Building Energy Efficiency Standards Code, which is part of the CBSC. The proposed project's compliance with such would be verified as part of the City's building approval review process. Kimley-Horn & Associates, Inc. provided project-specific trip generation rates[21] and VMT data,[22] which were applied to the project modeling. In compliance with the 2019 CBSC, the modeling for project operations included the assumption that 100 percent of the electricity required for project operations would be provided by on-site renewable energy systems.

The results of operational emissions estimations were compared to the standards of significance discussed above in order to determine the associated level of impact. All CalEEMod modeling results are included in Appendix C to this EIR.

[21] Kimley-Horn. *Traffic Impact Analysis for The Preserve, City of Rancho Cordova, California.* November 4, 2020.
[22] Kimley-Horn. *The Preserve,Vehicle Miles Traveled (VMT) Evaluation.* March 5, 2021.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

4.1-1 Conflict with or obstruct implementation of the applicable air quality plan during project construction. Based on the analysis below, the impact is *less than significant*.

During construction of the project, various types of equipment and vehicles would temporarily operate on the project site and in off-site improvement areas. Construction-related emissions would be generated from construction equipment, vegetation clearing and earth movement activities, construction workers' commute, and construction material hauling for the entire construction period. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants. Project construction activities also represent sources of fugitive dust, which includes PM emissions. As construction of the proposed project would generate emissions of criteria air pollutants, including ROG, NO_X, and PM_{10}, intermittently within the site and in the vicinity of the site, until all construction has been completed, construction is a potential concern, as the proposed project is located in a nonattainment area for ozone and PM.

Table 4.1-8 below presents the estimated construction-related emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed project in comparison with the SMAQMD thresholds of significance as described above. The construction modeling assumptions are described in the Method of Analysis section above.

As shown in Table 4.1-8, construction activities would result in emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ below the applicable SMAQMD thresholds of significance. Therefore, construction activities associated with development of the proposed project would not substantially contribute to the SVAB's non-attainment status for ozone or PM. Accordingly, construction of the proposed project would not violate an air quality standard or contribute to an existing or projected air quality violation, and a less-than-significant impact would occur associated with construction.

Table 4.1-8
Maximum Unmitigated Construction-Related Emissions

Pollutant	Project Emissions	Construction Threshold	Exceeds Threshold?
NO_X	54.00 lbs/day	85 lbs/day	**NO**
ROG	28.63 lbs/day	-	**NO**
PM_{10}	20.32 lbs/day and 0.53 tons/yr	80 lbs/day and 14.6 tons/yr	**NO**
$PM_{2.5}$	11.87 lbs/day and 0.28 tons/yr	82 lbs/day and 15 tons/yr	**NO**

Source: CalEEMod, May 2021.

It should be noted that construction activity related to implementation of the proposed project is required to comply with all SMAQMD rules and regulations. The applicable rules and regulations would include, but would not be limited to, the following:

- Rule 403 related to Fugitive Dust;
- Rule 404 Related to Particulate Matter;
- Rule 407 related to open burning;
- Rule 442 related to Architectural Coatings;
- Rule 453 related to Cutback and Emulsified Asphalt Paving Materials; and
- Rule 460 related to Adhesives and Sealants.

In addition, the control of fugitive dust during construction is required by SMAQMD Rule 403, and enforced by SMAQMD staff. The BMPs for dust control include the following:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads;
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph);
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used;
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [CCR Title 13, Sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site;
- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [CCR Title 13, Sections 2449 and 2449.1]. For more information contact CARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.; and
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Compliance with the foregoing measures is required per Rule 403, and the City would enforce compliance with Rule 403 as a condition of approval of the proposed project. Thus, project construction is assumed to include compliance with the foregoing BMPs.

Conclusion

Construction activities associated with the proposed project would be required to comply with all SMAQMD BMPs, and would therefore adhere to local air quality plans. Nonetheless, the emissions resulting from construction activity are anticipated to fall below SMAQMD's applicable thresholds of significance. Thus, implementation of the proposed project would not conflict with or obstruct implementation of the applicable air quality plan related to the region's nonattainment status for ozone, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.1-2 Conflict with or obstruct implementation of the applicable air quality plan during project operation. Based on the analysis below, the impact is *less than significant*.

Operational emissions of ROG, NO_X, and PM would be generated by the proposed project from both mobile and stationary sources. Day-to-day activities such as the future residents' vehicle trips to and from the project site would make up the majority of the mobile emissions. Emissions would occur from area sources such as natural gas combustion from heating mechanisms, landscape maintenance equipment exhaust, fireplaces, and consumer products (e.g., deodorants, cleaning products, spray paint, etc.).

As discussed above, due to the nonattainment designations of the area, the SMAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The current applicable air quality plan for the proposed project area is the *Sacramento Regional 2009 NAAQS 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (Ozone Attainment Plan), updated July 24, 2017. The Ozone Attainment Plan demonstrates how existing and new control strategies would provide the necessary future emission reductions to meet the CAA requirements, including the federal AAQS. Adopted SMAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with the applicable air quality plan. Thus, if a project's operational emissions exceed the SMAQMD's mass emission thresholds, a project would be considered to conflict with or obstruct implementation of the SMAQMD's air quality planning efforts.

Emissions of ROG, NO_X, and PM_{10} would be generated during operations of the proposed project from both mobile and stationary sources. Emissions related to operation of the proposed project would include sources such as architectural coatings, landscape maintenance equipment exhaust, and consumer products (e.g., deodorants, detergents, hair spray, cleaning products, spray paint, insecticides, floor finishes, polishes, etc.). However, the most significant source of emissions related to the proposed project would be from mobile sources. As discussed in the Method of Analysis section above, to capture the potential emissions related to mobile sources from the proposed project, Kimley-Horn & Associates, Inc. prepared project-specific trip generation rates and VMT estimates.

The project is required to comply with all SMAQMD rules and regulations related to operations, such as the following:

- Rule 414 related to water heaters; and
- Rule 417 related to wood-burning appliances.

The modeling was adjusted to reflect the project's inherent site or design features (i.e., proximity to nearest planned bus stop), and compliance with applicable regulations

(i.e., 2019 California Building Energy Efficiency Standards). Based on project-specific information, the project was assumed to include natural gas hearths in each of the proposed residential units. It should be noted that the project would not involve installation or operation of any pieces of equipment that would require implementation of SMAQMD's Best Available Control Technology (BACT) measures; therefore, the project would be subject to SMAQMD's mass emissions thresholds for PM_{10} and $PM_{2.5}$.

The maximum unmitigated operational emissions for the proposed project are presented in Table 4.1-9 below.

Table 4.1-9
Maximum Unmitigated Project Operational Emissions

Pollutant	Project Emissions	Operational Threshold	Exceeds Threshold?
NO_X	29.54 lbs/day	65 lbs/day	**NO**
ROG	28.81 lbs/day	65 lbs/day	**NO**
PM_{10}	24.66 lbs/day and 4.33 tons/yr	80 lbs/day and 14.6 tons/yr	**NO**
$PM_{2.5}$	7.03 lbs/day and 1.23 tons/yr	82 lbs/day and 15 tons/yr	**NO**

Source: CalEEMod, May 2021.

As shown in Table 4.1-9, the emissions resulting from operation of the proposed project would be below all applicable SMAQMD thresholds. Based on the emissions presented in Table 4.1-9, operation of the proposed project would not create a conflict with nor obstruction of implementation of the applicable air quality plan, and a ***less-than-significant*** impact would result.

Mitigation Measure(s)
None required.

4.1-3 Expose sensitive receptors to substantial pollutant concentrations. Based on the analysis below, and with the implementation of mitigation, the impact is *less than significant*.

As noted previously, the nearest sensitive receptors to the project site are the residential subdivision directly to the south of the project site. The closest residences are approximately 50 feet away from the project site.

The major pollutant concentrations of concern are localized CO emissions, TAC emissions, and criteria pollutant emissions, which are addressed in further detail below.

Localized CO Emissions
Localized concentrations of CO are related to the levels of traffic and congestion along streets and at intersections. Per the SMAQMD Guide, emissions of CO are generally of less concern than other criteria pollutants, as operational activities are not likely to generate substantial quantities of CO, and the SVAB has been in attainment for CO

for multiple years.[23] Consequently, the proposed project is not anticipated to result in significant impacts to air quality related to localized CO emissions.

TAC Emissions

Another category of environmental concern are TACs. The CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (Handbook) provides recommended setback distances for sensitive land uses from major sources of TACs, including, but not limited to, freeways and high traffic roads, distribution centers, and rail yards. The CARB has identified DPM from diesel-fueled engines as a TAC; thus, high volume freeways, stationary diesel engines, and facilities attracting heavy and constant diesel vehicle traffic are identified as having the highest associated health risks from DPM. Health risks associated with TACs are a function of both the concentration of emissions and the duration of exposure, where the higher the concentration and/or the longer the period of time that a sensitive receptor is exposed to pollutant concentrations would correlate to a higher health risk.

The proposed project would not involve any land uses or operations that would be considered major sources of TACs, including DPM. The CARB's Handbook includes facilities (distribution centers) associated with 100 or more heavy-duty diesel trucks per day as a source of substantial DPM emissions. The proposed project is not a distribution center, and is not located near any existing distribution centers. Residential developments do not involve frequent heavy-duty diesel truck trips. Some future residents may own diesel-fueled vehicles; however, emissions from passenger vehicles are typically less intense than from heavy-duty trucks, and the likelihood that the equivalent of 100 heavy-duty diesel trucks per day would occur from diesel-fueled passenger vehicles to and from the site is very low. Accordingly, the proposed project would not involve diesel trucks at the site in excess of 100 per day and would not be expected to expose any existing sensitive receptors to substantial DPM emissions associated with truck trips. As such, the proposed project would not generate any substantial pollutant concentrations during operations.

Construction-related activities have the potential to generate concentrations of TACs, specifically DPM, from on-road haul trucks and off-road equipment exhaust emissions. However, construction would be temporary and would occur over a relatively short duration in comparison to the operational lifetime of the proposed project. While methodologies for conducting health risk assessments are associated with long-term exposure periods (e.g., over a 30-year period or longer), construction activities associated with the proposed project were estimated to occur over an approximately two-year period. Only portions of the site would be disturbed at a time throughout the construction period, with operation of construction equipment occurring intermittently throughout the course of a day rather than continuously at any one location on the project site. In addition, all construction equipment and operation thereof would be regulated per the In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation includes emissions reducing requirements such as limitations on vehicle idling, disclosure, reporting, and labeling requirements for existing vehicles, as well as standards relating to fleet average emissions and the use of BACTs. Thus, off-road diesel vehicles used during construction of the proposed

[23] Sacramento Metropolitan Air Quality Management District. *Guide to Air Quality Assessment, Chapter 4: Operational Criteria Air Pollutant and Precursor Emissions*. June 2020.

project would be required to comply with statewide emissions reductions targets. Project construction would also be required to comply with all applicable SMAQMD rules and regulations, particularly associated with permitting of air pollutant sources. In addition, construction equipment would operate intermittently throughout the course of a day, would be restricted to daytime hours per Section 6.68.090 of the Rancho Cordova Municipal Code, and would likely only occur over portions of the project site at a time. Considering the intermittent nature of construction equipment operating within an influential distance to the nearest sensitive receptors, the duration of construction activities in comparison to the operational lifetime of the project, the typical long-term exposure periods associated with conducting health risk assessments, and compliance with regulations, the likelihood that any one nearby sensitive receptor would be exposed to high concentrations of DPM for any extended period of time would be low. Nonetheless, because heavy equipment would operate in close proximity to the sensitive receptors to the south of the project site, such receptors could be exposed to increased pollutant concentrations. Without the implementation of mitigation, construction activities associated with the project could result in a potentially significant impact related to the exposure of sensitive receptors to substantial concentrations of DPM.

Naturally-Occurring Asbestos

According to the *Special Report 192: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Eastern Sacramento County, California,* prepared by the Department of Conservation, the project site is located within an area categorized as least likely to contain naturally-occurring asbestos (NOA). The geology in the project site is known to consist of sedimentary rocks, whose deposits are generally less likely to contain NOA due to the composition and lack of metamorphism. Faults and serpentinite outcroppings are not known to be in the project area.[24] Consequently, NOA is not anticipated to be present on the project site.

Criteria Pollutants

Recent rulings from the California Supreme Court (including the *Sierra Club v. County of Fresno* (2018) 6 Cal. 5th 502 case regarding the proposed Friant Ranch Project) have underscored the need for analysis of potential health impacts resulting from the emission of criteria pollutants during operations of proposed projects. Although analysis of project-level health risks related to the emission of CO and TACs has long been practiced under CEQA, the analysis of health impacts due to individual projects resulting from emissions of criteria pollutants is a relatively new field. SMAQMD released the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District* (Guidance) for the analysis of criteria emissions in areas within the District's jurisdiction.[25] The Guidance represents SMAQMD's effort to develop a methodology that provides a consistent, reliable, and meaningful analysis in response to the Supreme Court's direction on correlating health impacts to a project's emissions.

The Guidance was prepared by conducting regional photochemical modeling, and relies on the USEPA's Benefits Mapping and Analysis Program (BenMAP) to assess

[24] Department of Conservation, California Geological Survey. *Special Report 192: Relative Likelihood for the Presence of Naturally Occurring Asbestos in Eastern Sacramento County, California*. Published 2006.

[25] Sacramento Metropolitan Air Quality Management District. *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District*. October 2020.

health impacts from ozone and $PM_{2.5}$. SMAQMD has prepared two tools that are intended for use in analyzing health risks from criteria pollutants. Small projects with criteria pollutant emissions close to or below SMAQMD's adopted thresholds of significance may use the Minor Project Health Effect Screening Tool, while larger projects with emissions between two and six times greater than SMAQMD's adopted thresholds may use the Strategic Area Project Health Screening Tool. Considering the proposed project would result in emissions lower than the SMAQMD's thresholds of significance, the project would qualify for use of the Minor Project Health Effects Screening Tool. It is important to note, however, that the Minor Project Health Effects Screening Tool applies the assumption that all small projects result in emissions of criteria pollutants equal to the SMAQMD thresholds of significance. As shown in Table 4.1-9, the project would result in operational emissions below the SMAQMD thresholds of significance and, thus, the health impacts calculated for the project using in the Minor Project Health Effects Screening Tool are highly conservative. The project's actual health impacts associated with criteria pollutant emissions would be expected to be much less than what is presented herein based on the aforementioned SMAQMD tool. Results from the Minor Project Health Effects Screening Tool are shown in Table 4.1-10 below.

As shown in the table, according to the Minor Project Health Effects Screening Tool, which is based on the highly conservative assumption that the project would emit criteria pollutants at levels equal to the SMAQMD thresholds of significance, the proposed project could result in 1.7 premature deaths per year due to the project's $PM_{2.5}$ emissions and 0.04 premature deaths per year due to the project's ozone emissions. Such numbers represent a very small increase over the background incidence of premature deaths due to $PM_{2.5}$ and ozone concentrations (0.0039 percent and 0.0001 percent, respectively). In addition, according to the Minor Project Health Effects Screening Tool, $PM_{2.5}$ emissions from the proposed project could result in 0.67 asthma-related emergency room visits, and ozone emissions from the proposed project could result in 0.56 asthma-related emergency room visits.

Such numbers represent a minute increase over the background level of asthma-related emergency room visits (0.0037 percent and 0.0062 percent, respectively). As noted above, because the proposed project's emissions would be substantially below the SMAQMD thresholds of significance, the proposed project's actual health impacts associated with criteria pollutant emissions would be much lower than what is presented in Table 4.1-10.

Furthermore, the SMAQMD criteria pollutant thresholds of significance were established with consideration given to the health-based air quality standards established by the NAAQS and CAAQS, and are designed to aid the district in achieving attainment of the NAAQS and CAAQS. The thresholds of significance represent emissions levels that would ensure that project-specific emissions would not inhibit attainment of regional NAAQS and CAAQS and, therefore, would not adversely affect public health.

Table 4.1-10
Health Effects from Proposed Project

Health Endpoint	Age Range[1]	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2] (Mean)	Percent of Background Health Incidences Across the 5-Air-District Region[3] (%)	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
Respiratory $PM_{2.5}$				
Emergency Room Visits, Asthma	0-99	0.67	0.0037	18,419
Hospital Admissions, Asthma	0-64	0.04	0.0024	1,846
Hospital Admissions, All Respiratory	65-99	0.26	0.0013	19,644
Cardiovascular $PM_{2.5}$				
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65-99	0.14	0.0006	24,037
Acute Myocardial Infarction, Nonfatal	18-24	0.00	0.0014	4
Acute Myocardial Infarction, Nonfatal	25-44	0.01	0.0016	308
Acute Myocardial Infarction, Nonfatal	45-54	0.01	0.0018	741
Acute Myocardial Infarction, Nonfatal	55-64	0.02	0.0018	1,239
Acute Myocardial Infarction, Nonfatal	65-99	0.09	0.0018	5,052
Mortality $PM_{2.5}$				
Mortality, All Cause	30-99	1.7	0.0039	44,766
Respiratory Ozone				
Hospital Admissions, All Respiratory	65-99	0.06	0.0003	19,644
Emergency Room Visits, Asthma	0-17	0.20	0.0034	5,859
Emergency Room Visits, Asthma	18-99	0.36	0.0028	12,560
Mortality Ozone				
Mortality, Non-Accidental	0-99	0.04	0.0001	30,386

[1] Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

[2] Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the 5-Air-District Region.

[3] The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

[4] The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.

Source: SMAQMD, Minor Project Health Effects Screening Tool. June 2020 (see Appendix C).

Considering that implementation of the proposed project would not result in emissions of criteria pollutants that would exceed the SMAQMD standards, the proposed project would not inhibit attainment of regional NAAQS and CAAQS and would not result in adverse health impacts related to the emission of criteria pollutants.

The results of the Minor Project Health Effects Screening Tool have been presented for informational purposes only. Overall, because the project would be relatively small compared to the regional growth and development that drives health impacts from criteria pollutants, and the anticipated air quality emissions would fall below all applicable thresholds of significance, potential health impacts related to criteria air pollutants would be less than significant.

Conclusion

Based on the above analysis, the operations of the proposed residential land uses would not be anticipated to result in the production of substantial concentrations of TACs, including DPM, localized CO, or criteria pollutants. In addition, the likelihood of NOA being present on the project site is low. However, construction activities have the potential to expose nearby sensitive receptors to increased concentration of DPM. Therefore, the proposed project could result in the exposure of sensitive receptors to substantial pollutant concentrations, and a ***potentially significant*** impact could result.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.1-3 *Prior to the initiation of any ground-disturbing activities, the project applicant shall ensure that all heavy-duty off-road diesel-powered equipment to be used during the grading phase of construction of the proposed project (including owned, leased, and subcontractor equipment) shall be CARB Tier 4 or cleaner.*

In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid SMAQMD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.

The aforementioned requirements shall be noted on improvement plans and submitted for review and approval by the City of Rancho Cordova Community Development Department.

4.1-4 Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people. Based on the analysis below, the impact is *less than significant*.

Emissions of pollutants have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emissions that have the potential to cause dust, or emissions considered to constitute air pollutants. Air pollutants have been discussed in Impacts 4.1-1 through 4.1-3 above. Therefore, the following discussion focuses on emissions of odors and dust.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. Due to the subjective nature of odor impacts, the number of variables that can influence the potential for an odor impact, and the variety of odor sources, quantitative methodologies to determine the presence of a significant odor impact are difficult. Certain land uses such as wastewater treatment and conveyance facilities, landfills, confined animal facilities, composting operations, food manufacturing plants, refineries, and chemical plants have the potential to generate considerable odors. Operations of the proposed project would involve activities typical to residential developments, and, consequently, would not be anticipated to result in the creation of substantial odors.

Diesel fumes from construction equipment could be found to be objectionable; however, as addressed above, operation of construction equipment would be regulated by SMAQMD rules and regulations, restricted to daytime hours per Section 6.68.090 of the Rancho Cordova Municipal Code, and would occur intermittently throughout the course of a day. For the aforementioned reasons, the project would not result in any noticeable objectionable odors associated with construction.

In addition, SMAQMD Rule 402, Nuisance, prohibits the emission of nuisance air contaminant discharges, including odors, and provides enforcement of odor control. Rule 402 is complaint-based, where if public complaints are sufficient to cause the odor source to be considered a public nuisance, then SMAQMD is required to investigate the identified source, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications to correct the nuisance condition. Thus, although not anticipated, if odor or air quality complaints are made upon development of the proposed project, SMAQMD would be required (per SMAQMD Rule 402) to ensure that such complaints are addressed and mitigated, as necessary.

Dust

With regard to dust, the proposed project is required to comply with all applicable SMAQMD rules and regulations for construction, including, but not limited to, Rule 403 (Fugitive Dust) and Rule 404 (Particulate Matter). Furthermore, all projects are required to implement the SMAQMD's Basic Construction Emission Control Practices (BCECP). Compliance with SMAQMD rules and regulations and BCECP would help to ensure that dust is minimized during project construction. Following project construction, vehicles operating within the project site would be limited to paved areas of the site, which would not have the potential to create substantial dust emissions.

Thus, project operations would not include sources of dust that could adversely affect a substantial number of people.

Conclusion

For the aforementioned reasons, project construction and operations would not result in substantial emissions, such as those leading to odors or dust, which could adversely affect a substantial number of people, and a ***less-than-significant*** impact would result.

Mitigation Measure(s)

None required.

4.1-5 Result in the inefficient or wasteful use of energy, or conflict with a State or local plan for renewable energy or energy efficiency. Based on the analysis below, the impact is *less than significant*.

The following discussion addresses the proposed project's potential effects related to energy demand during construction and operations.

Construction Energy Use

Construction of the proposed project would involve on-site energy demand and consumption related to use of oil in the form of gasoline and diesel fuel for construction worker vehicle trips, hauling and materials delivery truck trips, and operation of off-road construction equipment. In addition, diesel-fueled portable generators may be necessary to provide additional electricity demands for temporary on-site lighting, welding, and for supplying energy to areas of the site where energy supply cannot be met via a hookup to the existing electricity grid.

Even during the most intense period of construction, due to the different types of construction activities (e.g., site preparation, grading, building construction), only portions of the project site would be disturbed at a time, with operation of construction equipment occurring at different locations on the project site, rather than a single location. In addition, the entire construction phase is anticipated to occur over approximately two years. As a result, the increased energy demand associated with construction would take place for a minimal amount of time compared to the operational lifetime of the project.

All construction equipment and operation thereof would be regulated pursuant to the CARB In-Use Off-Road Diesel Vehicle Regulation. The In-Use Off-Road Diesel Vehicle Regulation is intended to reduce emissions from in-use, off-road, heavy-duty diesel vehicles in California by imposing limits on idling, requiring all vehicles to be reported to CARB, restricting the addition of older vehicles into fleets, and requiring fleets to reduce emissions by retiring, replacing, or repowering older engines, or installing exhaust retrofits. In addition, as a means of reducing emissions, construction vehicles are required to become cleaner through the use of renewable energy resources. The In-Use Off-Road Diesel Vehicle Regulation would therefore help to improve fuel efficiency for equipment used in construction of the proposed project.

Technological innovations and more stringent standards are being researched, such as multi-function equipment, hybrid equipment, or other design changes, which could help to further reduce demand on oil and limit emissions associated with construction.

The CARB prepared the 2017 Climate Change Scoping Plan Update (2017 Scoping Plan),[26] which builds upon previous efforts to reduce GHG emissions and is designed to continue to shift the California economy away from dependence on fossil fuels. Appendix B of the 2017 Scoping Plan includes examples of local actions (municipal code changes, zoning changes, policy directions, and mitigation measures) that would support the State's climate goals. The examples provided include, but are not limited to, enforcing idling time restrictions for construction vehicles, utilizing existing grid power for electric energy rather than operating temporary gasoline/diesel-powered generators, and increasing use of electric and renewable fuel-powered construction equipment. The In-Use Off-Road Diesel Vehicle Regulation and idling restriction regulations described above, with which the proposed project must comply, would be consistent with the intention of the 2017 Scoping Plan and the recommended actions included in Appendix B of the 2017 Scoping Plan.

Based on the above, the temporary increase in energy use occurring during construction of the proposed project would not result in a significant increase in peak or base demands or require additional capacity from local or regional energy supplies. In addition, the proposed project would be required to comply with all applicable regulations related to energy conservation and fuel efficiency, which would help to reduce the temporary increase in demand.

Operational Energy Use

Energy use associated with operation of the proposed project would be typical of residential uses, requiring electricity for interior and exterior building lighting, HVAC, electronic equipment, machinery, refrigeration, appliances, security systems, and more. Maintenance activities during operations, such as landscape maintenance, would involve the use of electric or gas-powered equipment. As noted above, the project would be required to include a solar photovoltaic system in accordance with the Building Energy Efficiency Standards.

In addition to on-site energy use, the proposed project would result in transportation energy use associated with vehicle trips generated by the proposed single-family residences. With regard to transportation energy use, the proposed project would comply with all applicable regulations associated with vehicle efficiency and fuel economy.

The proposed project would be subject to all relevant provisions of the most recent update of the CBSC, including the CALGreen Code and the Building Energy Efficiency Standards. Adherence to the most recent CALGreen Code and the Building Energy Efficiency Standards would ensure that the proposed structure would consume energy efficiently through the incorporation of such features as efficient water heating systems, high performance attics and walls, and high efficacy lighting. In addition, California has set energy-use reduction goals targeting zero-net-energy use in all new

26 California Air Resources Board. *The 2017 Climate Change Scoping Plan Update.* January 20, 2017.

homes.[27] The CALGreen Code requires that new residential buildings use a combination of energy efficiency and distributed renewable energy generation to meet all annual energy needs. Required compliance with the CBSC would ensure that the building energy use associated with the proposed project would not be wasteful, inefficient, or unnecessary.

Conclusion

Based on the context above, construction and operation of the proposed project would not result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

A project's emissions may be individually limited, but cumulatively considerable when taken in combination with past, present, and future development projects. The geographic context for the cumulative air quality and GHG analysis includes Sacramento County and surrounding areas within the portion of the SVAB that is designated nonattainment for ozone and PM_{10}. Refer to Section 5.3 of Chapter 5, Statutorily Required Sections, for additional detail regarding the cumulative setting evaluated in this EIR.

4.1-6 Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors). Based on the analysis below, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

The proposed project is within a nonattainment area for ozone and PM_{10}. By nature, air pollution is largely a cumulative impact. The population growth and vehicle usage within the nonattainment area from the proposed project, in combination with other past, present, and reasonably foreseeable projects within Rancho Cordova and surrounding areas, contributes to the region's adverse air quality impacts on a cumulative basis, and could either delay attainment of AAQS or require the adoption of additional controls on existing and future air pollution sources to offset emission

[27] California Energy Commission. *Title 24 2019 Building Energy Efficiency Standards FAQ*. November 2018.

increases. Thus, the project's emissions of criteria air pollutants would contribute to cumulative regional air quality effects.

As noted in the Standards of Significance section above, SMAQMD directs lead agencies to use the region's existing attainment plans as a basis for analysis of cumulative emissions. A project's interference with such plans may be determined through the use of the SMAQMD's recommended thresholds of significance for ozone precursors, $PM_{2.5}$, and PM_{10}. The SMAQMD's recommended cumulative thresholds are identical to the operational thresholds, both of which are presented in Table 4.1-6.

Accordingly, if the proposed project would result in an increase of ROG, NO_X, PM_{10}, or $PM_{2.5}$ in excess of SMAQMD's operational phase cumulative-level emissions threshold, which are equivalent to SMAQMD's project-level operational emissions thresholds, the project could potentially result in a significant incremental contribution towards cumulative air quality impacts. The proposed project's unmitigated cumulative contribution to regional emissions are equivalent to the project's unmitigated operational emissions, as presented in Table 4.1-9.

As shown in Table 4.1-9, the proposed project's unmitigated operational emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ would all be below the SMAQMD's applicable thresholds of significance. Therefore, implementation of the proposed project would not result in a significant incremental contribution to a cumulative violation of any air quality standards, contribute substantially to an existing or projected air quality violation, or conflict with and/or obstruct implementation of the SMAQMD's air quality planning efforts. As such, the proposed project's incremental contribution to regional air quality impacts would be ***less-than-cumulatively considerable***.

Mitigation Measure(s)

None required.

4.1-7 Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. Based on the analysis below, and with the implementation of mitigation, the project's incremental contribution to this significant cumulative impact is *less than cumulatively considerable*.

Buildout of the proposed project would contribute to increases of GHG emissions that are associated with global climate change during construction and operation. As discussed in the Method of Analysis section, the modeling assumed that both on- and off-site construction would occur during implementation of the proposed project.

Construction GHG Emissions

The estimated unmitigated maximum construction-related emissions from the proposed project are presented in Table 4.1-11. As shown in the table, the short-term emissions related to on-site construction would be below the applicable threshold of significance.

As shown in the table, the maximum annual emissions related to implementation of the proposed project are anticipated to occur in 2022. However, even in 2022, the construction-related GHG emissions would be below the threshold of 1,100 $MTCO_2e$/yr, and project construction would not be considered to result in a cumulatively considerable contribution to global climate change.

Table 4.1-11
Unmitigated On-site Construction GHG Emissions

Year	GHG Emissions ($MTCO_2e$/yr)	Threshold of Significance ($MTCO_2e$/yr)	Exceeds Threshold?
2021	468.99	1,100	**NO**
2022	735.89	1,100	**NO**
2023	164.25	1,100	**NO**

Source: CalEEMod, May 2021 (see Appendix C).

Operational GHG Emissions

As noted previously, projects that are below the OPR's *de minimis* VMT criteria would be considered sufficiently small to screen out of further requirements, and would be assumed to result in a less-than-significant impact related to GHG emissions and climate change. The following types of projects would be considered to be below the OPR's *de minimis* VMT criteria:

- Small projects that generate or attract fewer than 110 trips per day;
- Residential and office projects in areas with low VMT (currently below threshold VMT) that incorporate similar features (i.e., density, mix of uses, transit accessibility), including affordable housing infill development; or
- Residential, retail, office, or mixed-use projects within 0.5-mile walking distance of an existing major transit stop or existing stop along a high-quality transit corridor, unless the primary use of the site is auto-oriented (e.g., car dealership, car wash, gas station).

The proposed project would generate greater than 110 daily trips, would not be considered infill development, and is not located within 0.5-mile of a high-quality transit station. As a result, the project would not qualify for screening pursuant to the OPR's *de minimis* VMT criteria, and further analysis of operational GHG emissions is warranted.

The modeling assumptions for the GHG emissions related to operations of the proposed project are discussed in the Method of Analysis section above. The estimated operational GHG emissions at full buildout (2023) are presented in Table 4.1-12.

As noted above, because the project is located within the jurisdiction of SMAQMD, the project is required to implement BMPs 1 and 2. Even with implementation of BMPs 1 and 2, the project would still result in annual emissions over the SMAQMD's threshold of significance, and the proposed project would not meet the OPR's *de minimis* criteria for VMT. Therefore, the project would be subject to BMP 3, which requires that project-related VMT be reduced by 15 percent relative to Sacramento County targets.

Table 4.1-12
Project Operational GHG Emissions ($MTCO_2e$/yr)

Emission Source	GHG Emissions
Area	7.59
Energy[1]	0.00
Mobile	4,298.89
Waste	212.73
Water	43.21
TOTAL ANNUAL GHG EMISSIONS[2]	**4,562.42**

[1] Pursuant to SMAQMD BMP 1, the proposed project would not include any natural gas infrastructure. As such, GHG emissions resulting from the combustion of natural gas have been omitted from this table. Any resulting increase in electricity required to compensate for the lack of ntaural gas would be achieved through renewable resources, and an increase in GHG emissions would not occur.
[2] Rounding may result in small differences in summation.

Source: CalEEMod, May 2021 (see Appendix C).

The Sacramento VMT target is 19.7 VMT per capita, which is 15 percent below the regional average.[28] According to the VMT Evaluation prepared for the proposed project by Kimley-Horn, the project is anticipated to generate 23.3 VMT per capita. As such, the project would not achieve a 15 percent VMT reduction and would not comply with BMP 3.

Conclusion

During construction, the propose project would result in GHG emissions below the applicable threshold of significant. However, during operations, the project would not comply with BMP 3 of the SMAQMD's Guidance. As such, the proposed project would be considered to generate GHG emissions, either directly or indirectly, that would have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Consequently, the project would result in a cumulatively considerable incremental contribution to impacts related to GHG emissions or climate change and the project's impact would be ***significant***.

Mitigation Measure(s)

Per the SMAQMD's Guidance, when a project does not achieve BMP 3, the applicant may estimate excess GHG emissions from VMT and purchase offsite carbon offsets to indirectly achieve the BMP 3 target. The VMT significance threshold for residential land use types as determined by the City is 19.7 VMT per capita. For the proposed project, the allowable annual VMT would be approximately 9,585,000 (19.7 VMT per resident per day * 1,333 residents * 365 days per year = 9,584,937 VMT per year). As proposed, the project is anticipated to generate approximately 11,336,500 annual VMT. If BMP 3 is to be achieved, the project-related VMT must be reduced by 15.45 percent.

CalEEMod was used to calculate the difference in GHGs that would occur when VMT is reduced by 15.45 percent. As demonstrated in Table 4.1-13, if annual VMT is

[28] Kimley-Horn. *The Preserve,Vehicle Miles Traveled (VMT) Evaluation.* March 5, 2021.

reduced by 15.45 percent, as required in order to achieve BMP 3, then annual mobile GHG emissions would be reduced by 617.30 $MTCO_2e$.

Table 4.1-13
Annual VMT Compared to Mobile-Sourced GHG Emissions

Scenario	Annual VMT	Mobile-Sourced GHGs ($MTCO_2e$/yr)
Unmitigated Project	11,336,500	4,298.89
15.45 Percent Reduction in Annual VMT	9,585,000	3,681.59
CO_2e Offset Purchase Required	**--**	***617.30***
Source: CalEEMod, May 2021.		

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.1-7 *Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:*

1. *Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:*

   (i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;
   (ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or
   (iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);
   (iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.

2. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*

4.2 Biological Resources

4.2. BIOLOGICAL RESOURCES

4.2.1 INTRODUCTION

The Biological Resources chapter of the EIR evaluates the biological resources known to occur or potentially occur within the project site. The Biological Resources chapter describes potential impacts to those resources and identifies measures to eliminate or substantially reduce those impacts to a less-than-significant level. Existing plant communities, wetlands, wildlife habitats, and potential for special-status species and communities are discussed for the 98.9-acre development area within the southern portion of the project site and the proposed off-site improvement areas, referred to hereinafter as the "study area" for the purpose of this analysis. The study area does not include the 185.3 acres of open space area within the northern portion of the site which would not be developed as part of the proposed project.

The information contained in the analysis is primarily based on the Biological Resources Assessment prepared for the proposed project by ECORP Consulting, Inc. (ECORP) (see Appendix D).[1] Appendices to the Biological Resources Assessment include, but are not limited to, Bird and Bat Potential Habitat Assessment Surveys,[2] a Special-Status Plant Survey Report,[3] an Aquatic Resources Delineation,[4] and an Arborist Survey Report[5], along with addenda thereto. Further information was sourced from the City of Rancho Cordova General Plan[6] and associated EIR.[7]

4.2.2 EXISTING ENVIRONMENTAL SETTING

The following sections describe the existing environmental setting and biological resources occurring in the proposed project area.

Regional Setting

The study area is located in the Great Valley region, Sacramento Valley subregion of the California Floristic Province. The project region is characterized by agricultural areas, grasslands, wetlands, and valley oaks. The average annual precipitation for the region is 36.9 inches, with the wettest period during November through March, and average daily temperatures range from 47.7 degrees Fahrenheit (˚F) in winter to 73.8˚F in summer.

1 ECORP Consulting, Inc. *Biological Resources Assessment, The Preserve Development, Rancho Cordova, California.* June 28, 2019.
ECORP Consulting, Inc. *Addendum to Biological Resources Assessment for The Preserve Development.* July 25, 2019.

2 ECORP Consulting, Inc. *Bird and Bat Potential Habitat Assessment Surveys – The Preserve Development Project, Rancho Cordova, California.* June 21, 2019.

3 ECORP Consulting, Inc. *Special-Status Plant Survey Report, The Preserve Development, Rancho Cordova, California.* June 27, 2019.

4 ECORP Consulting, Inc. *Aquatic Resources Delineation, The Preserve Development, Rancho Cordova, California.* November 26, 2018.
ECORP Consulting, Inc. *Addendum to Aquatic Resources Delineation for The Preserve Development.* June 27, 2019.

5 ECORP Consulting, Inc. *Arborist Survey Report, The Preserve, Rancho Cordova, California.* June 21, 2019.

6 City of Rancho Cordova. *General Plan*. Adopted June 26, 2006.

7 City of Rancho Cordova. *General Plan Environmental Impact Report.* 2006.

As noted in the General Plan EIR, the topography within the City's Planning Area includes gently rolling terrain, such as that found in the eastern Great Central Valley, interrupted by numerous seasonal creeks and streams. Such creeks and streams are largely ephemeral and intermittent, which is typical of areas that experience extremely dry summers and cool, wet winters, as is the case for the project region. The most notable creeks in the City's Planning Area are Morrison Creek, Laguna Creek, Deer Creek, Buffalo Creek, and Carson Creek.

Project Setting

The 108.25-acre study area for the proposed project is depicted in Figure 4.2-1, and includes the 98.9-acre proposed development area, as well as a total of 7.85 acres in which potential off-site improvements are proposed. For the purpose of this chapter, the off-site improvement areas are referred to as follows: the Rio del Oro Offsite, located to the west of the project site; the Raymer Way Offsite, located to the east of the project site; the Morrison Creek Offsite, located to the north of the study area around an existing crossing of Morrison Creek; and the North Douglas Offsites, consisting of road stubs located to the south of the project site. The Raymer Way Offsite has been included in this analysis in anticipation that future improvements to the roadway may be required to support the proposed project. Within the Morrison Creek Offsite, an existing berm to the east of a gravel road crossing Morrison Creek is proposed to be removed to minimize flooding of the adjacent areas during 100-year storms. The North Douglas Offsites are the locations of future roadway connections to the existing North Douglas Project. The Rio del Oro Offsite is located entirely within a disced firebreak on the Rio del Oro property. It should be noted that the Morrison Creek Offsite is located within the boundaries of the 279.3-acre project site, but outside of the 98.9-acre development area.

The study area is situated at an elevation range between approximately 200 and 250 feet above mean sea level (MSL). The study area is characterized by flat to gently rolling terrain and consists primarily of grazed annual grasslands with two single-family residences and other outbuildings. It should be noted that although the structure is not included within the study area, a third single-family residence and associated outbuildings is located within the northwest portion of the project site, in a portion of the project site which would not be developed as part of the proposed project. A private road, sometimes identified as Douglas Road, leads from south of the study area into the two residences. The study area is located within the U.S. Fish and Wildlife Service (USFWS) Mather Core Area. Core Areas are areas prioritized for the conservation and recovery of threatened and endangered vernal pool species.

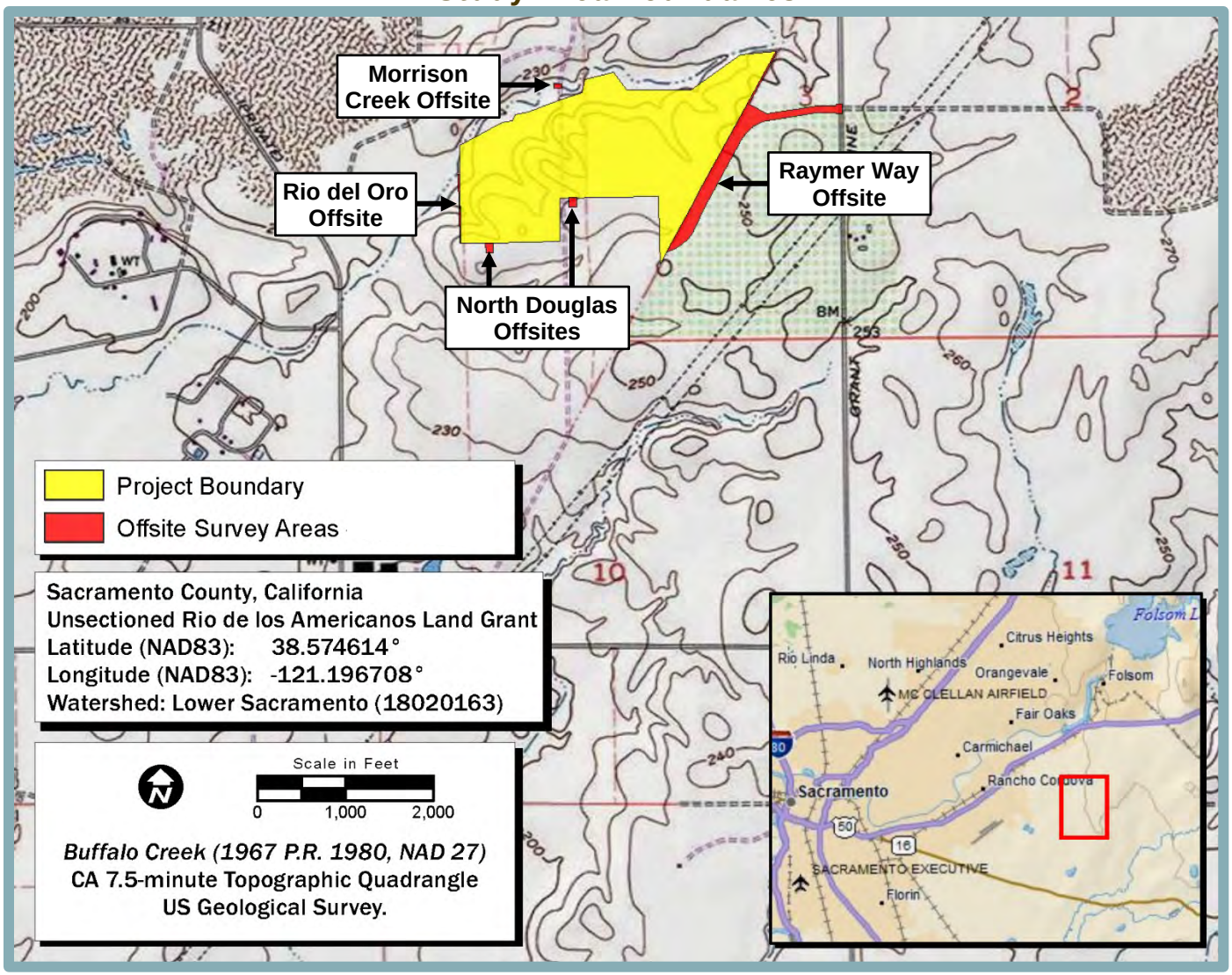
Soils

Per the Biological Resources Assessment, two soil units, or types, have been mapped within the study area: (159) Hicksville gravelly loam, 0 to 2 percent slopes, occasionally flooded; and (193) Red Bluff-Redding complex, 0 to 5 percent slopes. Hicksville and Red Bluff soils are formed in alluvium derived from mixed rock sources. Redding soils are formed in gravelly and cobbly alluvium derived from mixed rock sources.

Land Cover Types

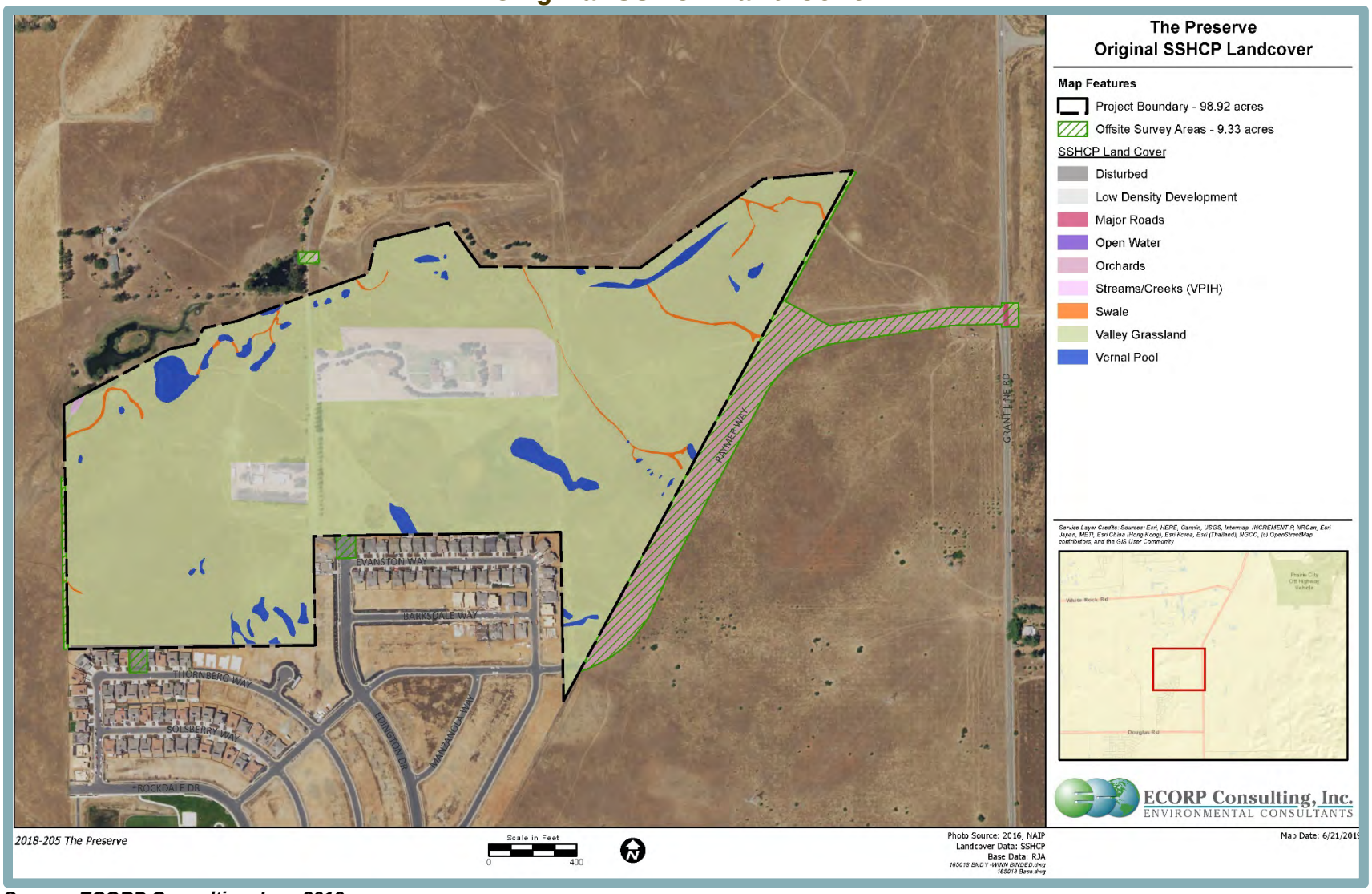
The study area is covered by the South Sacramento Habitat Conservation Plan (SSHCP), discussed in greater detail under the Regulatory Context section below. As part of the Biological Resources Assessment, SSHCP Land Cover data within the study area were reviewed; however, the type and extent of SSHCP Land Cover types was revised to reflect field conditions based on an on-site assessment conducted by ECORP. Baseline SSHCP Land Cover data is presented in Figure 4.2-2, and a revised Land Cover map is provided as Figure 4.2-3.

Figure 4.2-1
Study Area Boundaries



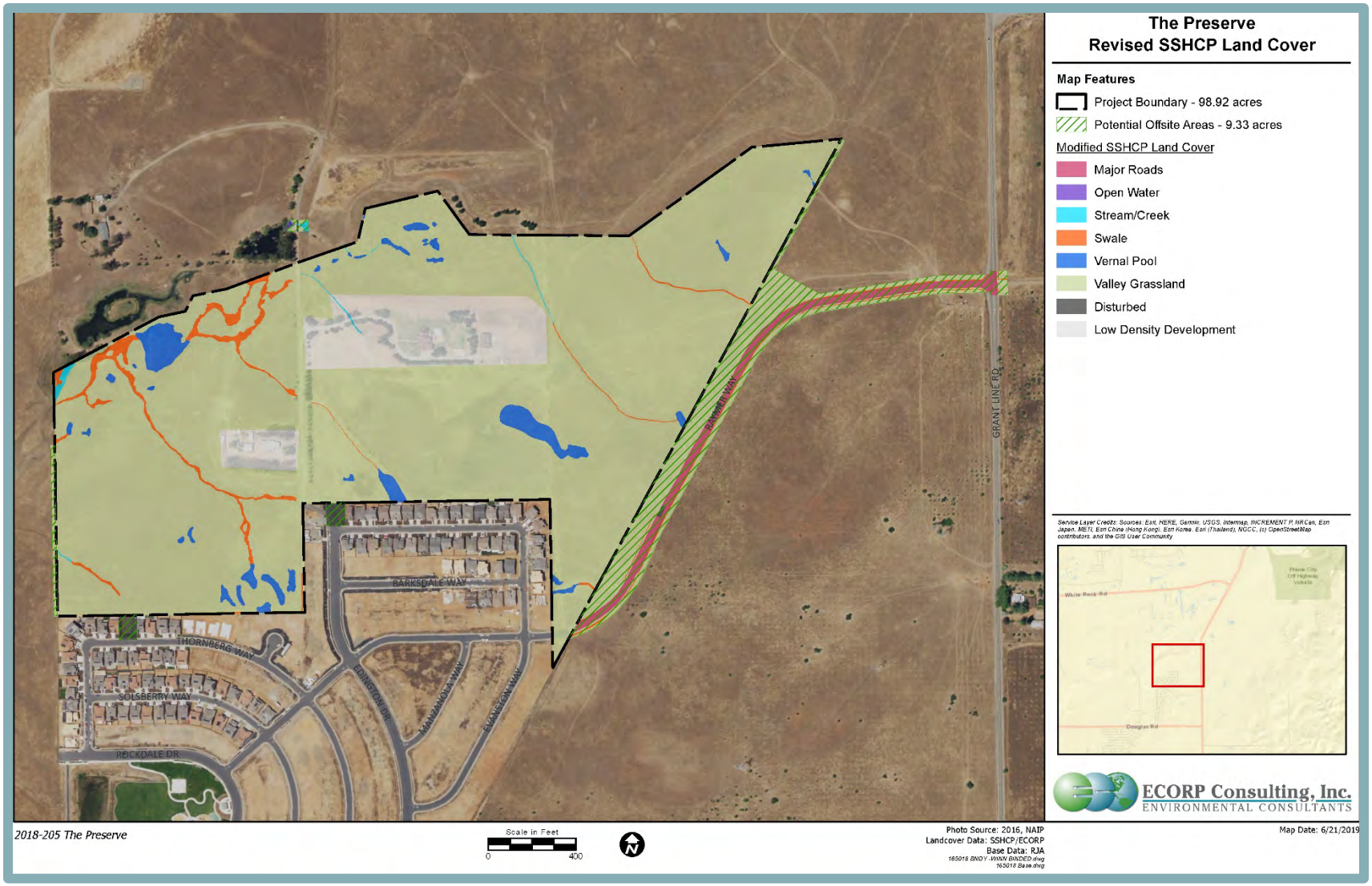
Source: ECORP Consulting, Inc., 2019.

Figure 4.2-2
Original SSHCP Land Cover



Source: ECORP Consulting, Inc., 2019.

Figure 4.2-3
Revised SSHCP Land Cover



Source: ECORP Consulting, Inc., 2019.

The SSHCP Land Cover data indicated that the study area primarily contains the Valley Grassland land cover type, and the reconnaissance visit revised the extent of this land cover type on Figure 4.2-3. In addition, the study area contains Low Density Development and a small amount of Disturbed land cover.

The Valley Grassland land cover type is predominantly characterized by non-native (naturalized) annual grasses. Within the study area, the common plant species found in Valley Grassland are a mixture of nonnative annual grasses, including medusahead grass (*Elymus caput-medusae*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), and brome fescue (*Festuca bromoides*). Narrow tarplant (*Holocarpha virgata*), a native perennial forb, is also common in this land cover type within the study area.

The Low Density Development land cover type consists of existing homesteads including buildings/structures and horticultural trees. The Disturbed and Major Roads land cover types consists of disturbed areas, and sections of paved and gravel road within the study area. Major Roads land cover type consists of Grant Line Road and Raymer Way within the Raymer Way Offsite.

Aquatic Resources

An Aquatic Resources Delineation was prepared for the study area, the Morrison Offsite, the North Douglas Offsites, and the Rio del Oro Offsite in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. The U.S. Army Corps of Engineers (USACE) verified the delineation on May 9, 2019. It should be noted that a 72.6-acre area that includes the western portion of the project site was previously delineated and verified by the USACE in 2012 as part of the Rio del Oro Project (SPK-1999-00590). As part of the Aquatic Resources Delineation prepared for the proposed project, the portion of the 72.6-acre area that falls within the study area was reverified.

An addendum to the delineation has been prepared for the Raymer Way Offsite, but has not yet been verified by the USACE.

Per the Aquatic Resources Delineation and associated addendum, a total of 4.687 acres of aquatic resources have been mapped on the study area, including 0.215-acre within the Raymer Way Offsite, which has not been verified (see Table 4.2-1). The Rio Del Oro Offsite and North Douglas Offsites do not contain any mapped aquatic resources. The identified features include vernal pool, swale, and stream/creek land cover types.

Table 4.2-1
Aquatic Resources Mapped within the Study Area

Resource Type	Acreage
Vernal Pool	2.613
Swale	1.866
Stream/Creek (Non VPIH)	0.192
Open Water	0.016
Total	**4.687**

Source: ECORP Consulting, Inc., 2019.

A discussion of the aquatic resources found within the study area is presented below, and an aquatic resources delineation map is presented in Figure 4.2-4.

Vernal Pool

Vernal pools are seasonal ephemeral wetlands that fill and dry each year, forming in shallow depressions within Valley Grassland that are underlaid by an impermeable layer (e.g., a hardpan). Water collects in the depressions during the winter rainy season and recedes during the spring.

Soils typically remain moist until late spring before becoming desiccated, and then remain dry throughout the summer. Vernal pools provide habitat for several special-status species, including invertebrates, plants, and amphibians. Vernal pools occur throughout the study area. The features are variously dominated by Great Valley button-celery (*Eryngium castrense*), stalked popcorn flower (*Plagiobothrys stipitatus*), woolly marbles (*Psilocarphus brevissimus*), Mediterranean barley (*Hordeum marinum*), waxy mannagrass (*Glyceria declinata*), hairy hawkbit (*Leontodon saxatilis*), and toad rush (*Juncus bufonius*).

Swale

Swales are shallow ephemeral drainages found in flat to gently rolling Valley Grassland in association with vernal pool complexes, on soils with an impermeable layer. Swales convey runoff as shallow, gently sloping ephemeral wetlands during and shortly after winter rainstorms, but usually maintain soil saturation for longer periods during the growing season. Swales typically have hydric soils and support hydrophytic vegetation, but lack an ordinary high-water mark (OHWM). Roadside ditches that may represent habitat for vernal pool invertebrates may also be classified as swales. Swales serve as habitat for many vernal pool species and provide hydrological connections between vernal pools that allows movement/dispersal of amphibian species, plant seeds, and vernal pool invertebrates (both adults and cysts). Swales occur throughout the study area, and are dominated by Italian ryegrass (*Festuca perennis*), Fitch's spikeweed (*Centromadia fitchii*), and Mediterranean barley. Swale land cover within the Raymer Way Offsite represents roadside ditches.

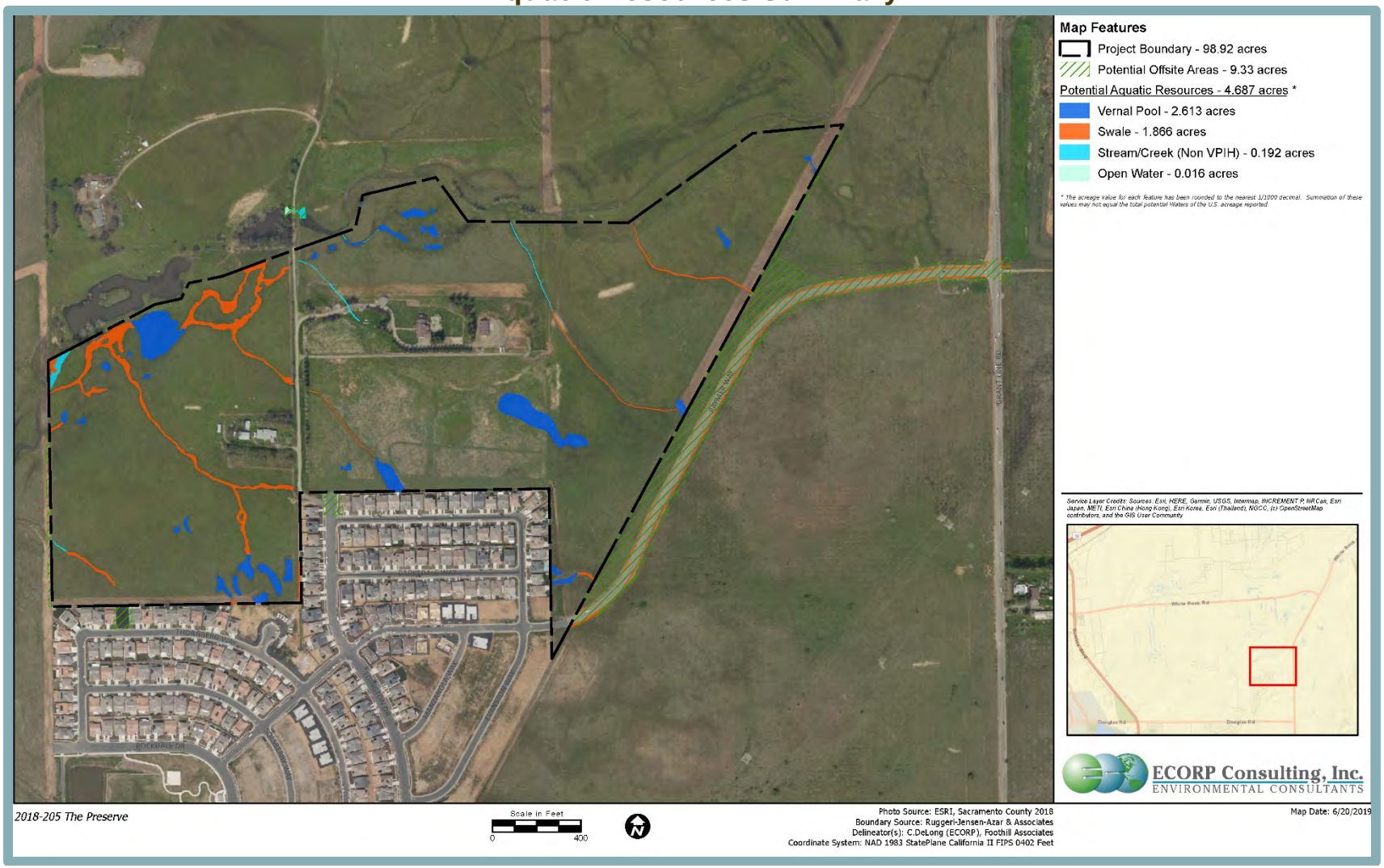
Stream/Creek

The stream/creek land cover type includes intermittent and perennial linear water features such as rivers, streams, creeks, drainages, and roadside and irrigation ditches. These features typically exhibit a bed and bank and an OHWM. Morrison Creek is primarily located outside and to the north of the study area, with the exception of one Offsite located around a crossing of Morrison Creek. Several small headwater tributaries to the creek flow through the study area into Morrison Creek. The stream/creek features do not represent habitat for vernal pool invertebrates, due to the fast-moving flow and ephemeral nature of the features. Stream/creek features occur throughout the study area, flowing northwest to Morrison Creek, and vary from steep, unvegetated features, to gently sloping features that are sparsely vegetated with creeping spikerush (*Eleocharis macrostachya*).

Special-Status Species

Special-status species are species that have been listed as "threatened" or "endangered" under the Federal Endangered Species Act (FESA), California Endangered Species Act (CESA), or are of special concern to federal resource agencies, the State, or private conservation organizations. A species may be considered special-status due to declining populations, vulnerability to habitat change, or restricted distributions. A description of the criteria and laws pertaining to special-status classifications is described below.

Figure 4.2-4
Aquatic Resources Summary



Source: ECORP Consulting, Inc., 2019.

Special-status plant species may meet one or more of the following criteria:

- Plants listed or proposed for listing as threatened or endangered under the FESA (50 CFR 17.12 for listed plants and various notices in the Federal Register [FR] for proposed species);
- Plants that are candidates for possible future listing as threatened or endangered under the FESA (64 FR 205, October 25, 1999; 57533-57547);
- Plants listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5);
- Plants that meet the definitions of rare or endangered species under the California Environmental Quality Act (CEQA) (CEQA Guidelines, Section 15380); or
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered" in California (Lists 1A, 1B, 2A, 2B, and 3 species in CNPS [2001]).

Special-status wildlife species may meet one or more of the following criteria:

- Wildlife listed as threatened or endangered, or proposed or candidates for listing by the USFWS or National Marine Fisheries Service (NMFS) under the FESA (50 CFR 17.11 for listed wildlife and various notices in the Federal Register for proposed species);
- Wildlife listed or proposed for listing by the State of California as threatened and endangered under the CESA (14 CCR 670.5);
- Wildlife that meet the definitions of rare or endangered species under CEQA (CEQA Guidelines, Section 15380);
- Wildlife identified as Medium or High priority species by the Western Bat Working Group (WBWG);
- Wildlife species of special concern to the California Department of Fish and Wildlife (CDFW) (Remsen [1978] for birds; Williams [1986] for mammals); and/or
- Wildlife species that are fully protected in California (California Fish and Game Code [FGC], Section 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]).

Several species of plants and animals within the State of California have low populations, limited distributions, or both. Such species may be considered "rare" and are vulnerable to extirpation as the State's human population grows and the habitats these species occupy are converted to agricultural and urban uses. As described below, State and federal laws have provided the CDFW and the USFWS with a mechanism for conserving and protecting the diversity of plant and animal species native to the State. A number of native plants and animals have been formally designated as threatened or endangered under State and federal endangered species legislation. Others have been designated as "candidates" for such listing. Still others have been designated as "species of special concern" by the CDFW. In addition, the CNPS has developed a set of lists of native plants considered rare, threatened, or endangered. Collectively, these plants and animals are referred to as "special-status species."

As part of the Biological Resources Assessment, SSHCP Modeled Species Habitat data were used to determine which SSHCP Covered Species are considered to have the potential to occur within the study area. Surveys for potential Covered Species habitat were conducted by ECORP consistent with SSHCP standards, discussed in greater detail under the Method of Analysis section below. In addition, surveys for special-status plants were conducted in spring of 2019. In order to determine whether any special-status species other than SSHCP Covered Species have the potential to occur within the study area, the following resources were queried:

- CDFW California Natural Diversity Database (CNDDB) record search for the "Buffalo Creek, California" 7.5-minute quadrangle and the eight surrounding USGS quadrangles;
- USFWS Information, Planning, and Consultation System Resource Report List for the study area;
- CNPS' electronic *Inventory of Rare and Endangered Plants of California* was queried for the "Buffalo Creek, California" 7.5-minute quadrangle and the eight surrounding USGS quadrangles.

Based on SSHCP modeled species habitat, species occurrence information from the literature review, and field assessments, a list of special-status plant and animal species that have been documented within the project region was generated. The full list of special-status species is included in Appendix E to the Biological Resources Assessment (Appendix D to this EIR). Each of the species was evaluated based on the following criteria:

- **Present** - Species was observed during field surveys or is known to occur within the study area based on documented occurrences within the CNDDB, SSHCP, or other literature.
- **Potential to Occur** - Habitat (including soil and elevation requirements) for the species occurs within the study area based on site assessment, literature research, or SSHCP Modeled Species Habitat data.
- **Low Potential to Occur** - Marginal or limited amounts of habitat occur, and/or the species is not known to occur within the vicinity of the study area based on CNDDB records and other available documentation. This designation is only used for species that are not SSHCP Covered Species.
- **Absent** - Suitable habitat (including soil and elevation requirements) and/or the species is not known to occur within the vicinity of the study area based on CNDDB records and other documentation, or SSHCP Modeled Species Habitat data does not indicate that habitat for the species occurs within the study area.

Based on SSHCP Modeled Species Habitat data, the study area contains habitat for 21 of the 28 SSHCP Covered Species. Of the 21 Covered Species, one species was considered to be present based on field observations made during habitat surveys required by the SSHCP, and one species was considered present based on CNDDB data. Seven of the 28 SSHCP Covered Species were determined to be absent from the study area because SSHCP Modeled Species Habitat does not exist within the study area.

In addition, based on the literature sources listed previously, seven additional special-status species, that are not SSHCP Covered Species, were considered to have potential to occur within the study area. Each of the 28 species that were considered to be present or have the potential to occur, according to the definitions listed above, are listed in Table 4.2-2, and descriptions are provided in the following sections. Species that were considered to be absent from the study area due to the lack of suitable habitat, or because the known distribution of the species does not include the study area vicinity, are not discussed further in this chapter.

Table 4.2-2
Special-Status Species with Potential to Occur within the Study Area

Common Name (*Scientific Name*)	Status			Habitat Requirements	Survey Period	Potential for Occurrence
	ESA	CESA	Other			
Plants						
Stinkbells *(Fritillaria agrestis)*	-	-	4.2	Clay and sometimes serpentinite soils in chaparral, cismontane woodland, Pinyon and juniper woodland, and Valley and foothill grassland (33' to 5,102').	March to June	**Absent within Project**. Special-status plant surveys did not detect the species. **Potential to Occur** within off-site along Raymer Way; Valley grassland represents suitable habitat.
Boggs Lake hedge–hyssop *(Gratiola heterosepala)*	–	–	1B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland. Species has an affinity for slight disturbance such as farmed fields (USFWS 2005a) (98’ to 751’).	April to August	**Absent**. Special-status plant surveys did not detect the species. Field surveys have determined that habitat is not present for the species within the unsurveyed Raymer Way Offsite.
Ahart’s dwarf rush (*Juncus leiospermus var. ahartii*)	–	–	1B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland. Species has an affinity for slight disturbance such as farmed fields (USFWS 2005a) (98’ to 751’).	March to May	**Absent within Project**. Special-status plant surveys did not detect the species. **Potential to Occur** within off-site along Raymer Way; small amounts of SSHCP

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Table 4.2-2
Special-Status Species with Potential to Occur within the Study Area

Common Name *(Scientific Name)*	Status			Habitat Requirements	Survey Period	Potential for Occurrence
	ESA	CESA	Other			
						Modeled Species Habitat present within unsurveyed Raymer Way Offsite.
Legenere *(Legenere limosa)*	–	–	1B.1, SSHCP Covered Species	Various seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005b) (3’ to 2,887').	April to June	**Absent**. Special-status plant surveys did not detect the species. Field surveys have determined that habitat for the species is not present within the unsurveyed Raymer Way Offsite.
Slender Orcutt grass *(Orcuttia tenuis)*	FT	CE	1B.1, SSHCP Covered Species	Vernal pools, often gravelly (115’ to5,774’).	May to September	**Absent**. Special-status plant surveys did not detect the species. Field surveys have determined that habitat for the species is not present within the unsurveyed Raymer Way Offsite.
Sacramento Orcutt grass *(Orcuttia viscida)*	FE	CE	1B.1, SSHCP Covered Species	Vernal pools (98' to 328').	April to July	**Absent**. Special-status plant surveys did not detect the species. Field surveys have determined that habitat for the species is not present within

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Table 4.2-2
Special-Status Species with Potential to Occur within the Study Area

Common Name *(Scientific Name)*	Status			Habitat Requirements	Survey Period	Potential for Occurrence
	ESA	CESA	Other			
						the unsurveyed Raymer Way Offsite.
Sanford's arrowhead *(Sagittaria sanfordii)*	–	–	1B.2, SSHCP Covered Species	Shallow marshes and freshwater swamps (0' to 2,133').	May to October	**Absent**. Special-status plant surveys did not detect the species. Field surveys have determined that habitat for the species is not present within the unsurveyed Raymer Way Offsite.
Invertebrates						
Conservancy fairy shrimp (*Branchinecta conservatio)*	FE	-	-	Vernal pools/wetlands.	November to April	**Potential to Occur** within vernal pool habitat.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	-	SSHCP Covered Species	Vernal pools/wetlands.	November to April	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Midvalley fairy shrimp *(Branchinecta mesovallensis)*	-	-	CNDDB, SSHCP Covered Species	Vernal pools/wetlands.	November to April	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Ricksecker's water scavenger beetle (*Hydochara rickseckeri)*	-	-	SSHCP Covered Species	Vernal pools/wetlands.	November to April	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	-	SSHCP Covered Species	Vernal pools/wetlands.	November to April	**Present**. SSHCP Modeled Species Habitat present and

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Table 4.2-2
Special-Status Species with Potential to Occur within the Study Area

Common Name (*Scientific Name*)	Status			Habitat Requirements	Survey Period	Potential for Occurrence
	ESA	CESA	Other			
						CNDDB occurrence overlaps the site.
Amphibians						
Western spadefoot (*Spea hammondii*)	-	-	SSC, SSHCP Covered Species	California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March to May	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Reptiles						
Western pond turtle (*Actinemys marmorata*)	-	-	SSC, SSHCP Covered Species	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April to September	**Potential to Occur**. No SSHCP Modeled Species Habitat present; however, ponded areas in Morrison Creek represent potential habitat.
Birds						
Burrowing owl *(Athene cunicularia)*	-	-	BCC, SSC, SSHCP Covered Species	Nests in burrows or burrow surrogates in open, treeless, areas within grassland, steppe, and desert biomes. Often with other burrowing mammals (e.g. prairie dogs, California ground squirrels). May also use human-made habitat such as agricultural fields, golf courses, cemeteries, roadside, airports, vacant urban lots, and fairgrounds.	February to August	**Present**. SSHCP Modeled Species Habitat present, and burrowing owls were observed during survey conducted per SSHCP AMM WBO-1.
Ferruginous hawk (*Buteo regalis*)	-	-	BCC, CDFW WL, SSHCP Covered Species	Rarely breeds in California (Lassen County); winter range includes grassland and shrubsteppe habitats from Northern California (except northeast and northwest corners) south to Mexico and east to Oklahoma, Nebraska, and Texas.	September to March (wintering)	**Potential to Occur**. SSHCP Modeled Species Habitat present.

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Table 4.2-2
Special-Status Species with Potential to Occur within the Study Area

Common Name (*Scientific Name*)	Status			Habitat Requirements	Survey Period	Potential for Occurrence
	ESA	CESA	Other			
Golden eagle (*Aquila chrysaetos*)	-	-	BCC, CFP	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/savannah and chaparral. Nesting occurs on cliff ledges, river banks, trees, and human-made structures (e.g. windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter.	Nest (February to August); winter CV (October to February)	**Potential to Occur**. Winter foraging habitat present.
Grasshopper sparrow (*Ammodramus savannarum*)	-	-	SSC	In California, breeding range includes most coastal counties south to Baja California; western Sacramento Valley and western edge of Sierra Nevada region. Nests in moderately open grasslands and prairies with patchy bare ground. Avoids grasslands with extensive shrub cover; more likely to occupy large tracts of habitat than small fragments; removal of grass cover by grazing often detrimental.	May to August	**Potential to Occur**. Nesting habitat present.
Loggerhead shrike (*Lanius ludovicianus*)	-	-	BCC, SSC, SSHCP Covered Species	Found throughout California in open country with short vegetation, pastures, old orchards, grasslands, agricultural areas, open woodlands. Not found in heavily forested habitats.	March to July	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Merlin *(Falco columbarius)*	-	-	CDFW WL	Breeds in Oregon, Washington north into Canada. Winters in southern Canada to South America, including California. Breeds near forest openings, fragmented woodlots, and riparian areas. Wintering habitat includes	September to April (wintering in the Central Valley); does not breed in California	**Potential to Occur**. Winter foraging habitat present.

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Table 4.2-2
Special-Status Species with Potential to Occur within the Study Area

Common Name (*Scientific Name*)	Status			Habitat Requirements	Survey Period	Potential for Occurrence
	ESA	CESA	Other			
				wide variety, open forests, grasslands, tidal flats, plains, and urban settings.		
Northern harrier (*Circus hudsonius*)	-	-	SSC, SSHCP Covered Species	Nests on the ground in open wetlands, marshy meadows, wet/lightly grazed pastures, (rarely) freshwater/brackish marshes, tundra, grasslands, prairies, croplands, desert, shrub-steppe, and (rarely) riparian woodland communities.	April to September	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Swainson's hawk (*Buteo swainsoni*)	-	CT	BCC, SSHCP Covered Species	Nesting occurs in trees in agricultural, riparian, oak woodland, scrub, and urban landscapes. Forages over grassland, agricultural lands, particularly during disking/harvesting, irrigated pastures.	March to August	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Tricolored blackbird (*Agelaius tricolor*)	-	CT	BCC, SSC, SSHCP Covered Species	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta counties south to San Bernardino, Riverside and San Diego Counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen Counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	March to August	**Present**. SSHCP Modeled Species Habitat present, evidence of past nesting observed during survey per SSHCP AMM TCB- 1; however, the species is nomadic and may not be present every year.
White-tailed kite (*Elanus leucurus*)	-	-	CFP, SSHCP Covered Species	Nesting occurs within trees in low elevation grassland, agricultural, wetland, oak woodland, riparian, savannah, and urban habitats.	March to August	**Potential to Occur**. SSHCP Modeled Species Habitat present.
Yellow-billed magpie (*Pica nuttallii*)	-	-	BCC	Endemic to California; found in the Central Valley and coast range south of San Francisco Bay and north of Los Angeles	April to June	**Potential to Occur**. Nesting habitat present.

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Table 4.2-2
Special-Status Species with Potential to Occur within the Study Area

Common Name (*Scientific Name*)	Status			Habitat Requirements	Survey Period	Potential for Occurrence
	ESA	CESA	Other			
				County; nesting habitat includes oak savannah with large in large expanses of open ground; also found in urban parklike settings.		
Mammals						
Pallid bat *(Antrozous pallidus)*	-	-	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of redwoods cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings (Western Bat Working Group [WBWG] 2018).	April to September	**Potential to Occur**. Structures onsite represent potential hibernacula.
Western red bat (*Lasiurus blossevillii*)	-	-	SSC, SSHCP Covered Species	Roosts in foliage of trees or shrubs; day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores) (WBWG 2017)	April to September	**Potential to Occur**. SSHCP Modeled Species Habitat present; potential hibernacula habitat identified during survey per SSHCP AMM BAT-1.
American badger *(Taxidea taxus)*	-	-	SSC, SSHCP Covered Species	Drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	Any season	**Potential to Occur**. SSHCP Modeled Species Habitat present.

Notes: **ESA** – Endangered Species Act; **CESA** California Endangered Species Act; **FE** – Federally Endangered; **FT** – Federally Threatened; **BCC** – USFWS Bird of Conservation Concern; **CFP** – CDFW Fully Protected Species; **CE** – CDFW Endangered; **CT** – CDFW Threatened; **SSC** – CDFW Species of Special Concern; **SSHCP** – South Sacramento Habitat Conservation Plan-covered species; **1B –** California Rare Plant Ranks (CRPR)/Rare or Endangered in California or elsewhere; **4** – CRPR/Plants of Limited Distribution – A Watch List; **0.1** – Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat); and **0.2** – Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

Source: ECORP Consulting, Inc., 2019.

Special-Status Plants

The following sections provide a discussion of special-status plant species with potential to occur within the study area.

Stinkbells

Stinkbells (*Fritillaria agrestis*) is not listed pursuant to either the FESA or CESA, but is designated as a CRPR 4.2 species. The species is a perennial bulbiferous herb that occurs in clay, sometimes serpentine areas in chaparral, cismontane woodland, pinyon, and juniper woodland, and Valley and foothill grassland. Stinkbells bloom from March to June and the species is known to occur at elevations ranging from 33 to 5,102 feet above MSL. The current range of the species in California includes Alameda, Contra Costa, Fresno, Kern, Mendocino, Merced, Monterey, Mariposa, Placer, Sacramento, Santa Barbara, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo, Stanislaus, Tuolumne, Ventura, and Yuba counties, and is considered to be extirpated from Santa Cruz and San Mateo counties.

Documented CNDDB occurrences of the species within five miles of the study area do not exist. Stinkbells was not detected during the special-status plant surveys conducted in spring and summer 2019. However, the grassland within the unsurveyed Raymer Way Offsite provides suitable habitat for this species. Thus, stinkbells has potential to occur within the Raymer Way Offsite.

Ahart's Dwarf Rush

Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) is not listed pursuant to either the FESA or CESA, but is designated as a CRPR 1B.2 species. The species is an herbaceous annual that occurs in mesic areas in Valley and foothill grasslands. The species also appears to have an affinity for slight disturbance, given that the species has been found on farmed fields and gopher turnings. Ahart's dwarf rush blooms from March through May and is known to occur at elevations ranging from 98 to 751 feet above MSL. Ahart's dwarf rush is endemic to California; the current range of this species includes Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties.

Two documented CNDDB occurrences of the species exist within five miles of the study area. Ahart's dwarf rush is a SSHCP Covered Species, and the aquatic features and grassland within the study area provide suitable habitat for the species according to SSHCP Modeled Species Habitat. While Ahart's dwarf rush was not detected during the special-status plant surveys conducted in spring and summer 2019, the species has a potential to occur within the unsurveyed Raymer Way Offsite.

Special-Status Wildlife

The following sections provide a discussion of special-status wildlife species with potential to occur within the study area.

Conservancy Fairy Shrimp

The conservancy fairy shrimp (*Branchinecta conservatio*) is listed as endangered pursuant to the FESA. Critical Habitat units were designated for the species in the following counties: Butte, Colusa, Mariposa, Merced, Solano, Stanislaus, Tehama, and Ventura. The species is usually associated with cool-water pools, which are low to moderate in dissolved solids. The species appears to be most commonly associated with relatively large, turbid vernal pools. Conservancy fairy shrimp have been netted from November to late April, at water temperatures ranging from

as low as 41°F early in the ponding cycle, to as high as 75°F near the end of the season. Hatching generally occurs in the week following inundation of the pool at temperatures around 50°F.

Maturation takes at least 19 days, if pool temperatures slowly increase to at least 68°F; however, the average time to maturity is 49 days. The distribution of conservancy fairy shrimp is limited to the northern two-thirds of the Central Valley at an elevation range of approximately 16 to 475 feet above MSL. Populations of the species have been documented at eight widely separated locations, which include Vina Plains, Butte and Tehama counties; Sacramento National Wildlife Refuge, Glenn County; Yolo Bypass Wildlife Area, Yolo County; Jepson Prairie, Solano County; Mapes Ranch, Stanislaus County; University of California Merced area, Merced County; Grasslands Ecological Area, Merced County; and Los Padres National Forest, Ventura County.

Documented CNDDB occurrences of conservancy fairy shrimp within five miles of the study area do not exist. However, the vernal pools within the study area provide suitable habitat for the species. Thus, conservancy fairy shrimp has potential to occur within the study area.

Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*) is listed as threatened in accordance with the FESA. Vernal pool fairy shrimp may occur in seasonal ponds, vernal pools, and swales during the wet season, which generally occurs from December through May. The species can be found in a variety of pool sizes, ranging from less than 0.001-acre to over 24.5 acres. The shrimp hatch from cysts when colder water (50°F or less) fills the pool and mature in as few as 18 days, under optimal conditions. At maturity, mating takes place and cysts are dropped. Vernal pool fairy shrimp occur in disjunct patches dispersed across California's Central Valley from Shasta County to Tulare County, the central and southern Coast Ranges from northern Solano County to Ventura County, and three areas in Riverside County.

A total of 16 documented CNDDB occurrences of the species exist within five miles of the study area. Vernal pool fairy shrimp is a SSHCP Covered Species, and the vernal pools within the study area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Thus, vernal pool fairy shrimp has potential to occur within the study area.

Midvalley Fairy Shrimp

The midvalley fairy shrimp (*Branchinecta mesovallensis*) is not listed pursuant to either the CESA or FESA, but occurrences of the species are tracked by the CNDDB. The midvalley fairy shrimp was formally described as a species in 2000. The species typically occurs in small, shallow vernal pools, swales, and various artificial ephemeral wetland types (e.g., roadside puddles, scrapes and ditches, and railroad toe-drain pools). Midvalley fairy shrimp have been collected from late January to early April. The cysts typically hatch in the first week of pool filling if water temperatures are near 50°F. The species has been documented in several California counties including: Sacramento, Solano, Contra Costa, San Joaquin, Madera, Merced, Fresno, and Yolo.

Two documented CNDDB occurrences of the species exist within five miles of the study area. Midvalley fairy shrimp is a SSHCP Covered Species, and the vernal pools and grassland within the study area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Midvalley fairy shrimp has potential to occur within the study area.

Ricksecker's Water Scavenger Beetle

Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*) is not listed and protected under either CESA or FESA but is currently tracked by CDFW in the CNDDB. Ricksecker's water scavenger beetles inhabit ponds in the Coast Range and Central Valley. One documented CNDDB occurrence of the species exists within five miles of the study area. Ricksecker's water scavenger beetle is a SSHCP Covered Species, and the vernal pools within the study area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Thus, Ricksecker's water scavenger beetle has potential to occur within the study area.

Vernal Pool Tadpole Shrimp

The vernal pool tadpole shrimp (*Lepidurus packardi*) is listed as endangered pursuant to the FESA. The species inhabits vernal pools containing clear to highly turbid water, ranging in size from 0.001 to 89.0 acres (USFWS 1994). Vernal pool tadpole shrimp are distinguished from other vernal pool branchiopods by a large, shield like carapace that covers the anterior half of their body (USFWS 2003). Cysts hatch during the wet season and the shrimp reach maturity in a few weeks. The species matures slowly and is long lived, relative to other species. Vernal pool tadpole shrimp will continue to grow as long as the pools the individuals occur in remain inundated, and in some instances the species can survive for six months or longer (USFWS 2003). The geographic range of vernal pool tadpole shrimp extends from Shasta County to northern Tulare County in California's Central Valley, and in the central coast range from Solano County to Alameda County (USFWS 2003). One documented CNDDB occurrence polygon exists for this species which overlaps the study area, and 32 other documented occurrences of the species are located within five miles of the study area (CDFW 2018a). Vernal pool tadpole shrimp is a SSHCP Covered Species, and the vernal pools and grassland within the study area provide suitable habitat for the species according to SSHCP Modeled Species Habitat. Vernal pool tadpole shrimp is considered present within the study area.

Western Spadefoot

The western spadefoot (*Spea hammondii*) is not listed pursuant to either the CESA or FESA; however, the species is designated as a CDFW species of special concern. Necessary habitat components of the western spadefoot include loose, friable soils in which to burrow in upland habitats and breeding ponds. Breeding sites include temporary rain pools, such as vernal pools and seasonal wetlands, or pools within portions of intermittent drainages. The western spadefoot spends most of the species' adult life within underground burrows or other suitable refugia, such as rodent burrows. In California, western spadefoot is known to occur from the Redding area, Shasta County southward to northwestern Baja California, at elevations below 4,475 feet.

Three documented CNDDB occurrences of the species exist within five miles of the study area. Western spadefoot is a SSHCP Covered Species, and the grassland and aquatic areas within the study area provide suitable foraging habitat for the species according to SSHCP Modeled Species Habitat. Thus, western spadefoot has potential to occur within the study area.

Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is not listed pursuant to either the CESA or FESA; however, the species is designated as a CDFW species of special concern. Western pond turtles occur in a variety of fresh and brackish water habitats including marshes, lakes, ponds, and slow-moving streams. The species is primarily aquatic; however, individuals typically leave aquatic habitats in the fall to reproduce and to overwinter. Deep, still water with abundant emergent woody debris, overhanging vegetation, and rock outcrops is optimal for basking and thermoregulation.

Although adults are habitat generalists, hatchlings and juveniles and hatchlings require shallow edgewater with relatively dense submergent or short emergent vegetation in which to forage.

Western pond turtles are typically active between March and November. Mating generally occurs during late April and early May and eggs are deposited between late April and early August. Eggs are deposited within excavated nests in upland areas, with substrates that typically have high clay or silt fractions. The majority of nesting sites are located within 650 feet of the aquatic sites; however, nests have been documented as far as 1,310 feet from the aquatic habitat.

Four documented CNDDB occurrences of western pond turtle exist within five miles of the study area. Western pond turtle is a SSHCP Covered Species. While SSHCP Modeled Species Habitat is not present within the study area, the ponded areas along Morrison Creek may provide suitable aquatic habitat and the adjacent grasslands provide suitable upland habitat for the species. Western pond turtle is considered to have potential to occur within the study area.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is not listed pursuant to either the CESA or FESA; however, the species is designated as a bird of conservation concern by the USFWS and a species of special concern by the CDFW. Burrowing owls inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. The species can also inhabit developed areas such as golf courses, cemeteries, roadsides within cities, airports, vacant lots in residential areas, school campuses, and fairgrounds. Burrowing owl typically uses burrows created by fossorial mammals, most notably the California ground squirrel (*Spermophilus beecheyi*), but may also use man-made structures such as cement culverts or pipes; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement. The breeding season typically occurs between February 1 and August 31.

Seven documented CNDDB occurrences of burrowing owl exist within five miles of the study area. Western burrowing owl is a SSHCP Covered Species. The grassland within the study area provides suitable nesting and foraging habitat for this species and the aquatic features provide suitable foraging habitat, according to SSHCP Modeled Species Habitat. Burrowing owls and occupied burrows were observed along the southeastern boundary of the site during a preliminary survey of potential habitat. Burrowing owl is considered present within the study area.

Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species pursuant to the CESA. The species nests in North America (Canada, western U.S., and Mexico) and typically winters from South America north to Mexico. However, a small population has been observed wintering in the Sacramento-San Joaquin River Delta. In California, the nesting season for Swainson's hawk ranges from mid-March to late August. Swainson's hawks nest within tall trees in a variety of wooded communities including riparian, oak woodland, roadside landscape corridors, urban areas, and agricultural areas, among others. Foraging habitat includes open grassland, savannah, low-cover row crop fields, and livestock pastures. In the Central Valley, Swainson's hawks typically feed on a combination of California vole (*Microtus californicus*), California ground squirrel (*Spermophilus beecheyi*), ring-necked pheasant (*Phasianus colchicus*), many passerine birds, and grasshoppers (*Melanopulus* species).

Swainson's hawks are opportunistic foragers and will readily forage in association with agricultural mowing, harvesting, disking, and irrigating. The removal of vegetative cover by such farming activities results in more readily available prey items for the species.

Seven documented CNDDB occurrences of the species occur within five miles of the study area. Swainson's hawk is a SSHCP Covered Species, and the grassland and aquatic areas within the study area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. In addition, a preliminary survey of potential habitat found several trees within the Survey Area and survey buffers that represent potential nesting habitat. Thus, Swainson's hawk has potential to occur within the study area.

Tricolored Blackbird

Tricolored blackbird (*Agelaius tricolor*) is listed as threatened pursuant to the CESA. In addition, the species is currently considered a USFWS bird of conservation concern and a CDFW species of special concern. Tricolored blackbird is a colonial nesting species distributed widely throughout the Central Valley, Coast Range, and into Oregon, Washington, Nevada, and Baja California. Tricolored blackbird nest in colonies that can range from several pairs to several thousand pairs, depending on prey availability, the presence of predators, or level of human disturbance. Tricolored blackbird nesting habitat includes emergent marsh, riparian woodland/scrub, blackberry thickets, densely vegetated agricultural and idle fields (e.g., wheat, triticale, safflower, fava bean fields, thistle, mustard, cane, and fiddleneck), usually with some nearby standing water or ground saturation. The species feeds mainly on grasshoppers during the breeding season, but may also forage upon a variety of other insects, grains, and seeds in open grasslands, wetlands, feedlots, dairies, and agricultural fields. The nesting season is generally from March through August.

A total of 10 documented CNDDB occurrences of the species exist within five miles of the study area. Tricolored blackbird is a SSHCP Covered Species. According to SSHCP Modeled Species Habitat, the grassland within the study area provides suitable nesting and foraging habitat for the species, and the aquatic features provide suitable foraging habitat. In addition, a preliminary survey of potential habitat documented evidence of previous tricolored blackbird nesting within patches of bull thistle (*Cirsium vulgare*) in the central portion of the project site, and a small area of riparian habitat along Morrison Creek was also determined to represent potential nesting habitat. However, tricolored blackbirds were not observed nesting during a site visit on June 13, 2019. The species is nomadic and may or may not return to the study area. Thus, tricolored blackbirds are considered to be present within the study area.

Other Raptors and Nesting Birds

Various other raptors and nesting birds that are protected by the federal Migratory Bird Treaty Act (MBTA) are described below.

Ferruginous Hawk

Ferruginous hawk (*Buteo regalis*) is not listed pursuant to either the CESA or FESA. However, ferruginous hawk is a CDFW "watch list" species and USFWS bird of conservation concern. The species typically occurs in open environments and nests from Oregon to Canada, though nesting has been documented in Lassen County, California. For the remainder of the state, including the Central Valley, ferruginous hawk occurrences are restricted to the non-breeding season (approximately September through March). Winter foraging habitat includes a variety of open communities including annual

grasslands, agricultural areas, deserts, and savannahs. Ferruginous hawks do not nest in the project region but may occasionally forage within grassland and other open vegetation communities within the study area during winter or migration.

Documented CNDDB occurrences of the species within five miles of the study area do not exist. However, ferruginous hawk is a SSHCP Covered Species, and the grassland and aquatic areas within the study area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. Thus, ferruginous hawk has potential to occur within the study area.

Golden Eagle

Golden eagle (*Aquila chrysaetos*) is not listed pursuant to either the CESA or FESA, but is a USFWS Bird of Conservation Concern and is Fully Protected per CDFW. Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/savannah, and chaparral. Nesting occurs on cliff ledges, river banks, trees, and human-made structures (e.g., windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where the species can be found during winter. The study area provides potential winter foraging habitat for the species; thus, golden eagle has potential to occur within the study area.

Grasshopper Sparrow

The grasshopper sparrow (*Ammodramus savannarum*) is not listed pursuant to either the CESA or FESA, but is designated as a species of special concern by CDFW. The grasshopper sparrow is an uncommon and local, summer resident and breeder along the western edge of the Sierra Nevada and most coastal counties south to Baja California. The species generally inhabits moderately open grasslands and prairies with patchy bare ground and scattered shrubs. Grasshopper sparrows are more likely to occupy large tracts of habitat than small fragments. Breeding generally occurs from early May through August.

Documented CNDDB occurrences of grasshopper sparrow within five miles of the study area do not exist. However, the grassland within the study area provides suitable nesting habitat for the species. Thus, grasshopper sparrow has potential to occur within the study area.

Loggerhead Shrike

The loggerhead shrike (*Lanius ludovicianus*) is not listed pursuant to either the CESA or FESA, but is considered a bird of conservation concern by the USFWS and a species of special concern by the CDFW. Loggerhead shrikes nest throughout California except the northwestern corner, montane forests, and high deserts. Loggerhead shrikes nest in small trees and shrubs in open country with short vegetation such as pastures, old orchards, mowed roadsides, cemeteries, golf courses, agricultural fields, riparian areas, and open woodlands. The nesting season extends from March through July.

Documented CNDDB occurrences of the species within five miles of the study area do not exist. However, loggerhead shrike is a SSHCP Covered Species. The grassland within the study area provides suitable nesting and foraging habitat for this species and the aquatic features provide suitable foraging habitat according to SSHCP Modeled Species Habitat. Thus, loggerhead shrike has potential to occur within the study area.

Merlin

The merlin (*Falco columbarius*) is not listed pursuant to either the CESA or FESA, but is a CDFW "watch list" species and currently tracked in the CNDDB. While not considered a special-status species, the merlin is protected under the MBTA. The merlin breeds in Canada and Alaska and occurs in California as a migrant and during the non-breeding season (September through April). Foraging habitat in winter includes open forests, grasslands, and tidal flats. Merlin do not nest in the region but may occasionally forage within grassland and woodland communities on-site during winter or migration.

One documented CNDDB occurrence of the species exists within five miles of the study area. In addition, the grassland within the study area provides suitable wintering habitat for the species. Thus, merlin has potential to occur within the study area.

Northern Harrier

The northern harrier (*Circus cyaneus*) is not listed pursuant to either the CESA or FESA; however, the species is considered to be a species of special concern by the CDFW. Northern harrier is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California. The northern harrier is a ground nesting species, and typically nests in emergent wetland/marsh, open grasslands, or savannah communities usually in areas with dense vegetation. Foraging occurs within a variety of open environments such as marshes, agricultural fields, and grasslands. Nesting occurs during April through September.

Documented CNDDB occurrences of the species within five miles of the study area do not exist. However, northern harrier is a SSHCP Covered Species. The grassland within the study area provides suitable nesting and foraging habitat for the species and the aquatic features provide suitable foraging habitat according to SSHCP Modeled Species Habitat. Thus, northern harrier has potential to occur within the study area.

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not listed pursuant to either the CESA or FESA; however, the species is fully protected pursuant to Section 3511 of the California FGC. White-tailed kite species is a common resident in the Central Valley and the entire length of the California coast, and all areas up to the Sierra Nevada foothills and southeastern deserts. In northern California, white-tailed kite nesting occurs from March through early August, with nesting activity peaking from March through June. Nesting occurs in trees within riparian, oak woodland, savannah, and agricultural communities that are near foraging areas such as low elevation grasslands, agricultural fields, meadows, farmlands, savannahs, and emergent wetlands.

Five documented CNDDB occurrences of the species exist within five miles of the study area. White-tailed kite is a SSHCP Covered Species, and the grassland and aquatic areas within the study area provide suitable foraging habitat for the species according to SSHCP Modeled Species Habitat. Thus, white-tailed kite has potential to occur within the study area.

Yellow-Billed Magpie

The yellow-billed magpie (*Pica nuttalli*) is not listed pursuant to either the CESA or FESA but is considered a USFWS bird of conservation concern. Yellow-billed magpie is an

endemic species that is a yearlong resident of the Central Valley and Coast Ranges from San Francisco Bay to Santa Barbara County. Yellow-billed magpies build large, bulky nests in trees in a variety of open woodland habitats, typically near grassland, pastures or cropland. Nest building begins in late-January to mid-February, which may take up to six to eight weeks to complete, with eggs laid during April through May, and fledging during May through June. The young leave the nest at about 30 days after hatching. Yellow-billed magpies are highly susceptible to West Nile Virus, which may have been the cause of death to thousands of magpies during 2004 through 2006.

Documented CNDDB occurrences of yellow-billed magpie within five miles of the study area do not exist. However, the grassland and trees within the study area provide suitable nesting habitat for the species. Thus, yellow-billed magpie has potential to occur within the study area.

Pallid Bat

The pallid bat (*Antrozous pallidus*) is not listed pursuant to either the CESA or FESA; however, the species is considered a species of special concern by CDFW. The pallid bat is a large, light-colored bat with long, prominent ears and pink, brown, or grey wing and tail membranes. The species ranges throughout North America from the interior of British Columbia, south to Mexico, and east to Texas. The pallid bat inhabits low elevation (below 6,000 feet) rocky arid deserts and canyonlands, shrub-steppe grasslands, karst formations, and higher elevation coniferous forest (above 7,000 feet). The species roosts alone or in groups in the crevices of rocky outcrops and cliffs, caves, mines, trees, and in various human structures such as bridges, and barns. Pallid bats are feeding generalists that glean a variety of arthropod prey from surfaces as well as capturing insects on the wing. Foraging occurs over grasslands, oak savannahs, ponderosa pine forests, talus slopes, gravel roads, lava flows, fruit orchards, and vineyards. Although the species uses echolocation to locate prey, often the species relies only on passive acoustic cues. The species is not thought to migrate long distances between summer and winter sites.

Documented CNDDB occurrences of pallid bat within five miles of the study area do not exist. However, some of the structures within the study area represent potential hibernacula. Thus, pallid bat has potential to occur within the study area.

Western Red Bat

The western red bat (*Lasiurus blossevillii*) is not listed pursuant to either the CESA or FESA; however, the species is considered a species of special concern by CDFW. The western red bat is easily distinguished from other western bat species by its distinctive red coloration. The species is broadly distributed, with a range extending from southern British Columbia in Canada through Argentina and Chile in South America, and including much of the western U.S. The species day roosts primarily in the foliage of trees or shrubs in edge habitats bordering streams or open fields, in orchards, and occasionally urban areas. They western red bat may be associated with intact riparian habitat, especially with willows, cottonwoods, and sycamores. The species may occasionally utilize caves for roosting as well. Western red bat feeds on a variety of insects, and generally begin to forage one to two hours after sunset. The species is considered highly migratory; however, the timing of migration and the summer ranges of males and females may be different. Winter behavior of the species is poorly understood.

Documented CNDDB occurrences of the species within five miles of the study area do not exist. However, western red bat is a SSHCP Covered Species. The grassland and wetland areas within

the study area provide suitable foraging habitat, and the Raymer Way Offsite contains roosting-foraging habitat for this species according to SSHCP Modeled Species Habitat. A preliminary survey of potential habitat identified some of the trees with cavities along Morrison Creek as potential hibernacula. Thus, western red bat has potential to occur within the study area.

American Badger

American badger (*Taxidea taxus*) is not listed pursuant to either the CESA or FESA; however, the species is considered a species of special concern by CDFW. American badger historically ranged throughout much of the state, except in humid coastal forests. American badgers were once numerous in the Central Valley; however, populations now occur in low numbers in the surrounding peripheral parts of the Central Valley and in the adjacent lowlands of eastern Monterey, San Benito, and San Luis Obispo counties. American badgers occupy a variety of habitats, including grasslands and savannas. The principal requirements are significant food supply, friable soils, and relatively open, uncultivated ground.

One documented CNDDB occurrence of the species exists within five miles of the study area. American badger is a SSHCP Covered Species, and the grassland and wetland areas within the study area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. Thus, American badger has potential to occur within the study area.

Sensitive Natural Communities

Per the Biological Resources Assessment, five sensitive natural communities were initially identified as having the potential to occur within the study area based on a literature review: Great Valley Oak Riparian Forest, Ione Chaparral, Northern Hardpan Vernal Pool, Northern Volcanic Mudflow Vernal Pool, and Valley Needlegrass Grassland. Valley oaks are not present within the study area; therefore, Great Valley Oak Riparian Forest does not occur onsite. Vernal pool communities are present on-site, and are discussed separately under the Aquatic Resources section above. Chaparral vegetation is not present within the study area and the study area does not include any Ione formation soils; therefore, Ione chaparral is not present. The “Valley Needlegrass Grassland” vegetation alliance name used by the CNDDB has been phased out of use, and instead, “Needlegrass-Melic Grass Grassland” as well as other associations containing needlegrass (*Stipa* spp.) are now used by the California Vegetation Manual and the CDFW-maintained list of sensitive natural communities. Needlegrass species were not found during special-status plant surveys.

Based on the above, vernal pool communities are the only sensitive natural community known to occur within the study area.

Wildlife Movement Corridors

The study area does not fall within an Essential Habitat Connectivity area mapped by the CDFW. However, per the Biological Resources Assessment, the permanently ponded open waters and the small patches of riparian habitat along the upper reach of Morrison Creek within the Morrison Creek Offsite may represent a marginal wildlife movement corridor.

Trees

An arborist survey was conducted for the study area in October 2018 and June 2019 as part of the Arborist Survey Report prepared for the proposed project by ECORP Consulting, Inc. A total of 247 trees greater than six inches diameter at standard height (dsh) were mapped within the study area; all tree species inventoried are nonnative to the project region.

A total of 149 trees have a dsh equal to or greater than 12 inches and therefore meet the definition of a Protected Tree as defined in the City of Rancho Cordova's Tree Preservation Ordinance. The 149 Protected Trees include redwood (*Sequoia sempervirens*), eucalyptus (*Eucalyptus* spp.), callery pear (*Pyrus calleryana*), American sweetgum (*Liquidambar styraciflua*), Brazilian pepper-tree (*Schinus terabinthifolia*), deodar cedar (*Cedrus deodara*), white mulberry (*Morus alba*). Tree condition and structure for each of the protected trees was rated on a five-point scale (poor, fair to poor, fair, fair to good, and good) for each of the 247 trees surveyed. The locations of the protected trees are shown in Figure 4.2-5.

4.2.3 REGULATORY CONTEXT

A number of Federal, State, and local policies provide the regulatory framework that guides the protection of biological resources. The following discussion summarizes those laws that are most relevant to biological resources in the vicinity of the project site.

Federal Regulations

The following are the federal environmental laws and policies relevant to biological resources.

Federal Endangered Species Act

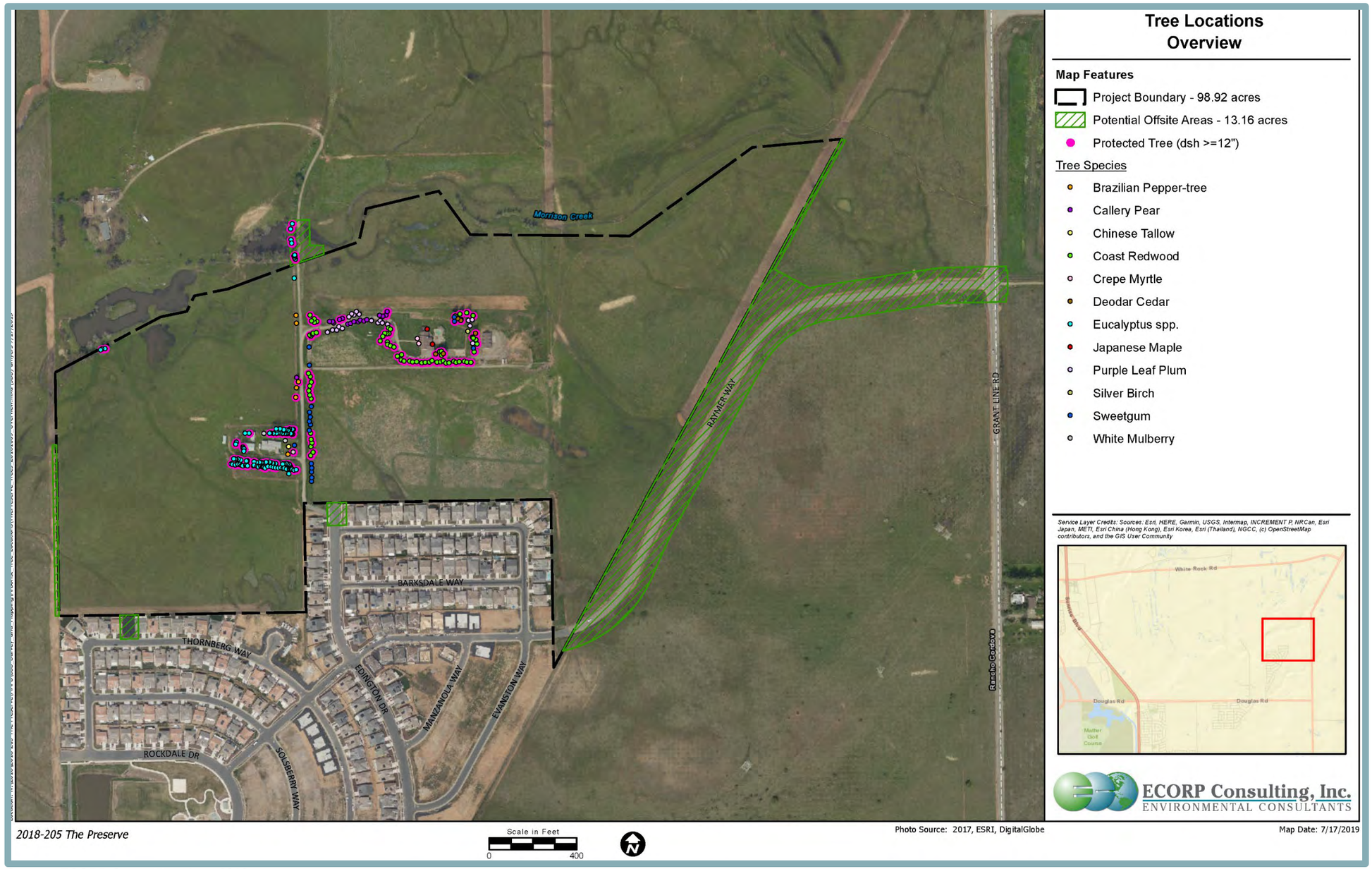
Under the FESA, the Secretary of the Interior and the Secretary of Commerce have joint authority to list a species as threatened or endangered (16 U.S. Code [USC] Section 1533(c)). Two federal agencies oversee the FESA: the USFWS has jurisdiction over plants, wildlife, and resident fish, while the NMFS has jurisdiction over anadromous fish and marine fish and mammals. Section 7 of the FESA mandates that federal agencies consult with the USFWS and NMFS to ensure that federal agency actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species.

The FESA prohibits the 'take' of any fish or wildlife species listed as threatened or endangered, including the destruction of habitat that could hinder species recovery. Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

Section 10 requires the issuance of an "incidental take" permit before any public or private action may be taken that could take an endangered or threatened species. The permit requires preparation and implementation of a habitat conservation plan (HCP) that would offset the take of individuals that may occur, incidental to implementation of a proposed project, by providing for the protection of the affected species.

Pursuant to the requirements of the FESA, a federal agency reviewing a project within the jurisdiction of the agency must determine whether any federally listed threatened or endangered species may be present in the project area and whether the proposed project will have a potentially significant impact on such species. In addition, the agency is required to determine whether the proposed action is likely to jeopardize the continued existence of any species proposed to be listed under FESA or result in the destruction or adverse modification of critical habitat proposed to be designated for such species (16 USC Section 1536(3), (4)).

Figure 4.2-5
Tree Locations



Source: ECORP Consulting, Inc., 2019.

Migratory Bird Treaty Act

Raptors (birds of prey), migratory birds, and other avian species are protected by a number of state and federal laws. The federal MBTA prohibits the killing, possessing, or trading of migratory birds except in accordance with regulations prescribed by the Secretary of Interior. Section 3503.5 of the California FGC states, "It is unlawful to take, possess, or destroy any birds in the order *Falconiformes* or *Strigiformes* (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by the code or any regulation adopted pursuant thereto."

Clean Water Act

The USACE regulates discharge of dredged or fill material into waters of the U.S. under Section 404 of the Clean Water Act (CWA). "Discharge of fill material" is defined as the addition of fill material into waters of the U.S., including but not limited to the following: placement of fill that is necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for the construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes and sub-aqueous utility lines (33 CFR Section 328.2[f]). In addition, Section 401 of the CWA (33 USC 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Waters of the U.S. include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, and wet meadows. Wetlands are defined as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR Section 328.3[b]).

Furthermore, jurisdictional waters of the U.S. can be defined by exhibiting a defined bed and bank and OHWM. The OHWM is defined by the USACE as "that line on shore established by the fluctuations of water and indicated by physical character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" (33 CFR Section 328.3[e]).

U.S Fish and Wildlife Service Draft Vernal Pool Recovery Plan

The USFWS designated critical habitat for certain vernal pool crustaceans and plants in 34 counties in California, including Sacramento County, and identified such habitat in its final rule of the vernal pool recovery plan on February 10, 2006, entitled, "Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for Four Vernal Pool Crustaceans and Eleven Vernal Pool Plants in California and Southern Oregon; Evaluation of Economic Exclusions From August 2003 Final Designation." 71 Fed. Reg. 28 (2006) (to be codified at 50 CFR Part 17). The Recovery Plan identifies a five-part strategy to ameliorate or eliminate threats to affected species and to preserve intact vernal pools. The five key elements of the Recovery Plan are: habitat protection; adaptive habitat management, restoration, and monitoring; status surveys; research; and participation and outreach. The Recovery Plan identifies habitat loss, fragmentation, and isolation of functional vernal pool ecosystems as the greatest threat to the survival and recovery of listed species and species of concern that are found in vernal pools. According to the Recovery Plan, habitat loss is generally the result of urbanization, agricultural conversion, and mining. Habitat loss may also occur from habitat alteration and degradation as a result of changes to natural hydrology; invasive species; incompatible grazing regimes, including

insufficient grazing for prolonged periods; and infrastructure projects such as roads, water storage and conveyance, and utilities. In addition, recreational activities such as off-highway vehicles and hiking, erosion, contamination, and inadequate management and monitoring may result in habitat loss. Habitat fragmentation is generally the result of activities associated with habitat loss due to road and other infrastructure projects that contribute to the isolation and fragmentation of vernal pool habitats.

State Regulations

The following are the State environmental laws and policies relevant to biological resources.

California Department of Fish and Wildlife

CDFW administers a number of laws and programs designed to protect fish and wildlife resources under the California FGC, such as CESA (FGC Section 2050, et seq.), Fully Protected Species (FGC Section 3511) and the Lake or Streambed Alteration Agreement Program (FGC Sections 1600 to 1616). Such regulations are summarized in the following sections.

California Endangered Species Act

The State of California enacted CESA in 1984. CESA is similar to the FESA but pertains to State-listed endangered and threatened species. CESA requires State agencies to consult with CDFW when preparing CEQA documents to ensure that the State lead agency actions do not jeopardize the existence of listed species. CESA directs agencies to consult with CDFW on projects or actions that could affect listed species, directs CDFW to determine whether jeopardy would occur, and allows CDFW to identify “reasonable and prudent alternatives” to the project consistent with conserving the species. Agencies can approve a project that affects a listed species if they determine that “overriding considerations” exist; however, the agencies are prohibited from approving projects that would result in the extinction of a listed species.

CESA prohibits the taking of State-listed endangered or threatened plant and wildlife species. CDFW exercises authority over mitigation projects involving State-listed species, including those resulting from CEQA mitigation requirements. CDFW may authorize taking if an approved habitat management plan or management agreement that avoids or compensates for possible jeopardy is implemented. CDFW requires preparation of mitigation plans in accordance with published guidelines.

Fish and Game Code Section 3505

Birds of prey are protected in California under provisions of the California FGC, Section 3503.5, (1992), which states, “it is unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.” Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “taking” by CDFW.

Lake or Streambed Alteration Program

The CDFW is responsible for conserving, protecting, and managing California’s fish, wildlife, and native plant resources. To meet this responsibility, the California FGC, Section 1602, requires notification to CDFW of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- substantially divert or obstruct the natural flow of any river, stream or lake;
- substantially change or use any material from the bed, channel, or bank of any river, stream, or lake; or
- deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

For the purposes of Section 1602, rivers, streams and lakes must flow at least intermittently through a bed or channel. If notification is required and CDFW believes the proposed activity is likely to result in adverse harm to the natural environment, the CDFW will require that the parties enter into a Lake or Streambed Alteration Agreement.

CDFW Species of Special Concern

In addition to formal listings under FESA and CESA, plant and wildlife species receive additional consideration during the CEQA process. Species that may by considered for review are included on a list of “Species of Special Concern” developed by CDFW. Species whose numbers, reproductive success, or habitat may be threatened are tracked by CDFW in California.

Native Plant Protection Act

The Native Plant Protection Act (NPPA) was enacted in 1977 and allows the Fish and Game Commission to designate plants as rare or endangered. Currently 64 species, subspecies, and varieties of plants that are protected as rare under the NPPA. The NPPA prohibits take of endangered or rare native plants, but includes some exceptions for agricultural and nursery operations, emergencies, and after properly notifying CDFW for vegetation removal from canals, roads, and other sites, changes in land use, and in certain other situations.

Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit, or a Rivers and Harbors Act Section 10 permit, must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the federal CWA. Although the CWA is a federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Quality Control Boards (RWQCBs) are the authorities that certify that issuance of a federal license or permit does not violate California’s water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within waters of the U.S., and also implements the State's wetland protection and hydromodification regulation program under the Porter-Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California Plan. The Procedures consist of four major elements: (1) a wetland definition; (2) a framework for determining if a feature that meets the wetland definition is a water of the State; (3) wetland delineation procedures; and (4) procedures for the submittal, review, and approval of applications for WQCs and Waste Discharge Requirements (WDRs) for dredge or fill activities. The State Office of Administrative Law approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code Section 13050[e]), "waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to waters of the State, which includes waters of the U.S. and non-federal waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce WDRs, National Pollution Discharge Elimination System (NPDES) permits, Section 401 WQC, or other approvals.

Local Regulations

The following are the local environmental laws and policies relevant to biological resources.

City of Rancho Cordova General Plan

Goals and policies from the City's General Plan related to biological resources that are applicable to the proposed project are presented below:

Goal NR1: Protect and preserve diverse wildlife and plant habitats, including habitat for special status species.

- Policy NR.1.1 Protect rare, threatened, and endangered species and their habitats in accordance with State and federal law.
- Policy NR.1.4 Discourage the planting of invasive species.
- Policy NR.1.7 Prior to project approval, the City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain listed plant and/or wildlife species based upon the City's biological resource mapping provided in the General Plan EIR or other technical materials.
- Policy NR.1.8 The City shall encourage creation of habitat preserves that are immediately adjacent to each other in order to provide interconnected open space areas for animal movement.
- Policy NR.1.9 The City shall require that impacts to riparian habitats be mitigated at a no net loss of existing function and value based on field survey and analysis of the riparian habitat to be impacted. No net loss may be accomplished by avoidance of the habitat, restoration of existing habitat, or creation of new habitat, or through some combination of the above.

Policy NR.1.10 The placement of new roadways within habitat preserves shall be discouraged, but is not prohibited. This Policy shall not apply to roadways shown in the Circulation Element or needed to meet goals or policies of the Circulation Element.

Policy NR.1.11 In such cases where a new roadway crosses a habitat preserve or separates two adjacent preserves, the roadway shall include design features, where feasible and appropriate, to allow for the movement of wildlife across or beneath the road without causing a hazard for vehicles, bicycles and pedestrians on the roadway.

Goal NR.2: Preserve the City's rich and diverse natural wetlands.

Policy NR.2.1 Require mitigation that provides for "no net loss" of wetlands consistent with current State and federal policies.

Policy NR.2.2 Ensure that direct and indirect effects to wetland habitats are mitigated to the extent feasible by environmentally sensitive project siting and design or other measures.

Policy NR.2.5 The City shall require that drainage improvements that discharge into areas of wetlands to be preserved are, to the maximum extent feasible, designed to mimic the undeveloped surface water flow conditions of the area in terms of seasonality, volume, and flow velocity.

Goal NR.3: Preserve and maintain creek corridors and wetland preserves with useable buffer zones throughout the new development areas as feasible.

Policy NR.3.2 In general, the City will encourage the preservation of existing location, topography, and meandering alignment of natural creeks. The modification, re-creation and realignment of creek corridors shall recreate the character of the natural creek corridor to the extent feasible, appropriate and consistent with other City policies. Channelization and the use of concrete within creek corridors shall be discouraged, but is not prohibited.

Policy NR.3.3 Encourage the creation of secondary flood control channels where the existing channel supports extensive riparian vegetation.

Policy NR.3.4 Encourage projects that contain wetland preserves or creeks, or are located adjacent to wetland preserves or creeks, to be designed for visibility and, as appropriate, access.

Goal NR.4: Encourage the planting and preservation of high-quality trees throughout the City.

Policy NR.4.1 Conserve native oak and landmark tree resources for their historic, economic, aesthetic, educational, and environmental value.

Policy NR.4.2 Improve overall landscaping quality and sustainability in all areas visible to the public.

Policy NR.4.4 Prior to the approval of any public or private development project in areas identified or assumed to contain trees, the City shall require that a determinate survey of trees species and size be performed. If any native oaks or other native trees six inches or more in diameter at breast height (dbh), multitrunk native oaks or native trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a certified arborist to be in good health are found to occur, such trees shall be avoided if feasible. If such trees cannot be avoided, the project applicant shall do one of the following:

- All such trees shall be replaced at an inch-for-inch ratio. A replacement tree planting plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the City of Rancho Cordova for approval prior to removal of trees; or,
- The project applicant shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City of Rancho Cordova. The mitigation plan shall be subject to the approval of the City.
- If the City of Ranch Cordova adopts a tree preservation ordinance at any time in the future, any future development activities shall be subject to that ordinance instead.

City of Rancho Cordova Tree Protection Ordinance

Chapter 19.12, Preservation and Protection of Private Trees, of the City's Municipal Code establishes regulations for the protection, removal, and preservation of landmark trees and protected trees within the City. "Landmark trees" are defined as any trees designated by council through resolution as a vital and historical part of the City's landscape, such that the trees need to be designated as landmarks for protection and preservation. "Protected tree" is defined to include the following:

1. Native oak – Quercus lobata, valley oak; Quercus wislizenii, interior live oak; Quercus douglasii, blue oak; or Quercus morehus, oracle oak – having a trunk diameter of at least six inches or greater; or
2. Any tree species other than a native oak having a trunk diameter of at least 12 inches or greater on nonresidential property; or
3. Any tree species other than a native oak having a trunk diameter of at least 24 inches or greater on residential property; or
4. Any tree planted as a requirement tree for site development, tree permit condition, landscape plan removal replacement, or other designated condition by the Public Works Director or Planning Director.
5. "Protected tree" does not include any trees for sale within the City sold by a nursery.

Per Section 19.12.090, no person shall, without an approved permit from the Public Works Director, do, or cause to be done by others, any of the following acts:

A. Secure, fasten, or run any rope, wire, sign, unprotected electrical installation or other device or material to, around, or through a protected tree;
B. Break, injure, deface, kill, or destroy a protected tree or allow any fire to burn where it will injure any protected tree;
C. Allow any chemical, gas, smoke, salt brine, oil, pesticide, or other injurious substance to seep, drain, or be emptied upon, above, or below any protected tree;
D. Excavate any ditch, tunnel, or trench, or fill within the dripline of any protected tree;
E. Erect, alter, repair or raze any building or structure without placing suitable guards around all nearby protected trees which may be injured by such operations;
F. Remove any guard or other device or materials intended for the protection of a protected tree or take away or obstruct any open space around the base of a protected tree designed to prevent soil compaction or physical damage; or
G. Allow the topping of any protected tree. [Ord. 12-2017 Section 2].

South Sacramento Habitat Conservation Plan

The SSHCP is intended to streamline federal and State permitting processes for SSHCP-covered development and infrastructure projects while protecting habitat, open space and agricultural lands.[8] The SSHCP plan area encompasses 317,656 acres that are bordered by U.S. Route 50 (US 50) on the north, San Joaquin County on the south, El Dorado County and Amador County to the east, and the Sacramento River to the west, including Galt and most of Rancho Cordova. Within the SSHCP plan area, 36,282 acres are to become part of an interconnected preserve system, including approximately 1,000 acres of vernal pool habitat. A total of 28 plant and wildlife species, and their natural habitats, are conserved under the plan.

The SSHCP is led by a multi-jurisdiction collaborative that includes Sacramento County; the cities of Rancho Cordova and Galt; the Sacramento County Water Agency; the Sacramento Regional County Sanitation District; and the Capital SouthEast Connector Joint Powers Authority. The Rancho Cordova City Council adopted the SSHCP on October 15, 2018.

4.2.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to biological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the County's General Plan, and professional judgment, a significant impact would occur if the proposed project would result in the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;

[8] South Sacramento Habitat Conservation Plan. *What is the South Sacramento HCP?* Available at: https://www.southsachcp.com/. Accessed July 2019.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or State habitat conservation plan.

Method of Analysis

The analysis presented herein is based primarily on the Biological Resources Assessment prepared for the proposed project by ECORP. The Biological Resources Assessment includes, as attachments, an Aquatic Resources Delineation and Arborist Survey Report prepared for the project.

Special-Status Species

As part of the Biological Resources Assessment, a list of special-status species with potential to occur within the study area was developed by conducting a query of the following resources:

- CNDDB record search for the “Buffalo Creek, California” 7.5-minute quadrangle and the eight surrounding USGS quadrangles;
- USFWS Information, Planning, and Consultation System Resource Report List for the study area;
- CNPS’ electronic Inventory of Rare and Endangered Plants of California was queried for the “Buffalo Creek, California” 7.5-minute quadrangle and the eight surrounding USGS quadrangles; and
- SSHCP Modeled Species Habitat data for the study area.

Field Assessment for Covered Species and Pallid Bat

Surveys for potential habitat for tricolored blackbird, burrowing owl, Swainson’s hawk, other raptors, and western red bat were conducted per requirements of SSHCP Avoidance and Minimization Measures (AMMs) TCB-1, WBO-1, SWHA-1, RAPTOR-1, and BAT-1. The methods used and results of the surveys are described in Attachment C to the Biological Resources Assessment (see Appendix D). Inaccessible off-site areas and surrounding buffers were visually assessed from within the study area or from publicly accessible roads.

It should be noted that pallid bat is not an SSHCP covered species, but is considered a species of special concern by CDFW. A CNDDB search revealed a nearby occurrence of pallid bat. Therefore, although not an SSHCP-covered species, ECORP Consulting Inc. assessed potential pallid bat habitat within the study area using AMM BAT-1.

Information from the surveys was used to determine whether specific potential habitat features (e.g., nesting trees, burrows) for the covered species were present within the study area. In

addition, surveys for special-status plant species were conducted per AMMs PLANT-1 and ORCUTT-1, as well as guidelines promulgated by USFWS, CDFW, and CNPS. The special-status plant surveys were conducted on April 29, 2019 and June 13, 2019 by ECORP Consulting, Inc. The results of the surveys are described in the Special-Status Plant Survey Report, included as Attachment D to the Biological Resources Assessment (see Appendix D).

Field Assessment for Other Species

Several surveys were conducted by ECORP Consulting, Inc. during fall 2018 and spring 2019. During the surveys, the study area was walked on foot, and topographic maps and aerial imagery were referenced. Biological communities occurring within the study area were characterized and the following biological resource information was collected:

- Potential aquatic features (described in detail under the Aquatic Resources Delineation section below);
- Protected trees occurring on-site;
- Animal and plant species directly observed;
- Habitat and vegetation communities; and
- Representative photographs of the study area.

Aquatic Resources Delineation

The Aquatic Resources Delineation was conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Arid West Region Supplement). The boundaries of aquatic resources were delineated through standard field methods (e.g., paired sample set analyses) and aerial photograph interpretation. Field data were recorded on Wetland Determination Data Forms - Arid West Region. A color aerial photograph was used to assist with mapping and ground-truthing. Munsell Soil Color Charts and the Natural Resources Conservation Services (NRCS) Web Soil Survey were used to aid in identifying hydric soils in the field. The 2012 Jepson Manual, 2nd Edition was used for plant nomenclature and identification.

Field surveys were conducted on October 12, 2018 by ECORP Consulting, Inc. The entire 41.2-acre unverified portion of the delineation area was walked to determine the location and extent of aquatic resources. Paired locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported an aquatic resource determination. At each paired location, one point was located such that it was within the estimated aquatic resource area, and the other point was situated outside the limits of the estimated aquatic resource area. Aquatic resources within the unverified portion of the delineation area were recorded in the field using a post-processing capable global positioning system unit with sub-meter accuracy (Trimble GeoXT). The previously verified portion of the delineation area was reviewed through aerial photograph interpretation and limited field reconnaissance.

As part of the Addendum to the Aquatic Resources Delineation, an assessment of potential waters of the U.S. within the Raymer Way Offsite was conducted on June 13, 2019 by ECORP Consulting, Inc. biologist Matt Spaulding. Access to the property was not authorized; therefore, Mr. Spaulding walked along Raymer Way and assessed potential aquatic features from the publicly accessible roadway. In addition, historic aerial photos were reviewed. Several roadside ditches were mapped and classified as swales according to land cover definitions within the SSHCP.

Arborist Survey Report

ECORP Consulting, Inc. arborist Ben Waitman (ISA Certification #WE-12108), assisted by ECORP biologist Daniel Wong, conducted a field survey of the study area on October 9, 2018 and June 13, 2019. During the field surveys, the entire study area was walked or viewed across level ground, and data were recorded using an iPad paired with a GPS unit accurate to less than one meter. The survey data included species, dsh, dripline radius, tree structure, and tree condition. Each surveyed tree was tagged with a permanent numbered aluminum tag at breast height (approximately 4.5 feet).

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to biological resources is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.2-1 Have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As shown in Table 4.2-2, the study area contains potentially suitable habitat for special-status plant species. Special-status plant species were not detected within the project site during the special-status plant surveys conducted in spring and summer 2019. However, per the Biological Resources Assessment, the unsurveyed Raymer Way Offsite provides suitable habitat for stinkbells and Ahart's dwarf rush.

The proposed project would include ground disturbance and removal of vegetation associated with removal of the existing gravel roadway within the Raymer Way Offsite. The Raymer Way Offsite was not included in the special-status plant surveys prepared for the study area. Thus, in the event that stinkbells and Ahart's dwarf rush occur within the Raymer Way Offsite, the proposed project could result in a ***significant*** impact related to the disturbance of special-status plant species.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

4.2-1(a) *Prior to initiation of ground-disturbing activities within the Raymer Way Offsite, the project applicant shall comply with SSHCP AMM Plant-1 (Rare Plant Surveys). Though stinkbells is not considered an SSHCP Covered Species, the special-status plant surveys conducted per PLANT-1 shall identify whether the species is present in the survey area. If any special-status plant species are found to be present during the focused survey(s), Mitigation Measure 4.2-1(b) shall be implemented. If special-status plant species are not found to be present during the focused survey(s), then no further action is required. A written summary of the survey results shall be submitted to the City of Rancho Cordova Community Development Department.*

- ***PLANT-1 (Rare Plant Surveys):*** *If a Covered Activity project site contains modeled habitat for Ahart's dwarf rush (Juncus leiospermus var. ahartii), Bogg's Lake hedge-hyssop (Gratiola heterosepala), dwarf downingia (Downingia pusilla), Legenere (Legenere limosa), pincushion navarretia (Navarretia myersii), or Sanford's arrowhead (Sagittaria sanfordii), the Covered Activity project site will be surveyed for the rare plant by an approved biologist and following the California Department of Fish and Wildlife (CDFW) rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See Chapter 10 (of the SSHCP) for the process to submit survey information to the Plan Permittee and the Permitting Agencies.*

4.2-1(b) *If any SSHCP-covered plants are determined to be present within the Raymer Way Offsite, SSHCP PLANT-2 (Rare Plant Protection) shall be implemented. If any special-status plant species are determined to be present, a mitigation plan shall be prepared for review and approval by the City of Rancho Cordova; mitigation may include harvesting and transplanting of impacted bulbs into a preserved area with suitable habitat. Avoided areas containing species shall be fenced with orange construction fencing.*

- ***PLANT-2 (Rare Plant Protection):*** *If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs at the project site.*

4.2-2 Have a substantial adverse effect, either directly or through habitat modifications, on special-status invertebrates. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Per the Biological Resources Assessment, the existing vernal pools located within the study area were determined to contain vernal pool fairy shrimp. In addition, the vernal pools provide suitable habitat for other special-status vernal pool branchiopods, including conservancy fairy shrimp, midvalley fairy shrimp, Ricksecker's water scavenger beetle, and vernal pool fairy shrimp. The proposed development footprint would include all 2.613 acres of vernal pool habitat identified within the study area per the Biological Resources Assessment. Therefore, in the event that such pools are occupied by special-status vernal pool branchiopods prior to the start of ground-disturbing activities associated with the proposed project, development of the proposed project could cause a substantial adverse effect to vernal pool branchiopods, and a ***significant*** impact could result.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

4.2-2(a) *Prior to initiation of ground-disturbing activities, the project applicant shall submit a South Sacramento Habitat Conservation Plan (SSHCP) permit application package to the City of Rancho Cordova to request that the incidental take coverage provided by City's SSHCP Incidental Take Permit (ITP) be extended to the proposed activities. The City of Rancho Cordova shall review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency with a copy of the SSHCP requirements for tracking purposes. The project applicant shall be responsible for paying all SSHCP development fees associated with obtaining coverage from the City of Rancho Cordova. Any proposal to provide land in fee title, or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy.*

4.2-2(b) *The project applicant shall comply with SSHCP requirements and all relevant AMMs set forth in the SSHCP Permit obtained for the proposed project.*

4.2-2(c) *Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, or timed as required by the applicable permits if the proposed project is constructed in phases, the project applicant shall ensure that mitigation for impacts to aquatic features and other habitat for special-status species has been implemented through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, RWQCB, USFWS, CDFW, City, and South Sacramento Conservation Agency as appropriate, depending on agency jurisdiction.*

4.2-3 Have a substantial adverse effect, either directly or through habitat modifications, on special-status amphibian species. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As noted in the Biological Resources Assessment, according to SSHCP Modeled Species Habitat, the grassland and aquatic areas within the study area provide suitable foraging habitat for western spadefoot. In addition, while SSHCP Modeled Species Habitat for western pond turtle is not present within the study area, the ponded areas along the Morrison Creek Offsite may provide suitable aquatic habitat and the adjacent grasslands provide suitable upland habitat for the species. Thus, both western spadefoot and western pond turtle have the potential to occur within the study area.

Construction of the proposed project would include disturbance of existing grassland habitat within the study area. Thus, the project could cause a substantial adverse effect, either directly or through habitat modifications, on western spadefoot and western pond turtle. A ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

Western Spadefoot

4.2-3(a) The project applicant shall comply with SSHCP AMMs WS-1 through WS-6.

- ***WS-1 (Western Spadefoot Work Window):*** *Ground-disturbing Covered Activities within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.*

- ***WS-2 (Western Spadefoot Exclusion Fencing):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high- visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below.*

- ***WS-3 (Western Spadefoot Monitoring):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17 [of the SSHCP]) in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below.*

- ***WS-4 (Avoid Western Spadefoot Entrapment):*** *If a Covered Activity occurs in western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6 below.*

- ***WS-5 (Erosion Control Materials in Western Spadefoot Habitat):*** *If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.*

Western Pond Turtle

4.2-3(b) *Prior to initiation of ground-disturbing activities, pre-construction surveys shall be conducted per SSHCP AMM WPT-1. If western pond turtles are detected, WPT-2 through WPT-9 shall be implemented.*

- ***WPT-1 (Western Pond Turtle Surveys):*** *If the SSHCP western pond turtle modeled habitat maps (Figure 3-19 [of the SSHCP]) show that modeled habitat for western pond turtle is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate western pond turtle aquatic habitat within the project footprint and within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-19 (of the SSHCP), western pond turtle aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water, freshwater marsh, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide those maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated western pond turtle habitat must also be noted on plans that are submitted*

to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as western pond turtle habitat is identified and fully avoided. Otherwise, Covered Activities must comply with WPT-2 through WPT-9. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information.

- ***WPT-2 (Western Pond Turtle Work Window):*** *Maintenance and improvements to existing structures may occur throughout the year as long as western pond turtle habitat is identified and avoided, and movement of equipment is confined to existing roads. Otherwise, construction and ground-disturbing Covered Activities must be conducted outside of western pond turtle's active season. Construction and ground-disturbing activities will be initiated after May 1 and will commence prior to September 15. If it appears that construction activities may go beyond September 15, the appropriate Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1, to determine if additional measures are necessary to minimize take.*

- ***WPT-3 (Western Pond Turtle Monitoring):*** *If a Covered Activity is occurring in western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), an approved biologist experienced with western pond turtle identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for western pond turtle prior to construction activities. The approved biologist will also training construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western pond turtle enters an active construction zone (i.e., outside the buffer zone).*

- ***WPT-4 (Western Pond Turtle Habitat Dewatering and Exclusion):*** *If construction activities will occur in western pond turtle aquatic habitat, aquatic habitat for the turtle will be dewatered and then remain dry and absent of aquatic prey (e.g., crustaceans and other aquatic invertebrates) for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to western pond turtle. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed*

extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent turtles from attempting to burrow or move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Western pond turtle habitat outside construction fencing will be avoided by all construction personnel. The fencing and work area will be inspected by the approved biologist to ensure that the fencing is intact and that no turtles have entered the work area before the start of each work day. Fencing will be maintained by the contractor until completion of the project. If, after exclusion fencing and dewatering, western pond turtles are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will discuss the next best steps with the Implementing Entity and Wildlife Agencies.

- ***WPT-5 (Avoid Western Pond Turtle Entrapment):*** *If a Covered Activity occurs within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western pond turtle modeled habitat will be inspected for western pond turtle by the approved biologist prior to being moved.*

- ***WPT-6 (Erosion Control Materials in Western Pond Turtle Habitat):*** *If erosion control (BMP-2) is implemented within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that turtles are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.*

- ***WPT-7 (Western Pond Turtle Modeled Habitat Speed Limit):*** *Covered Activity construction and maintenance vehicles will observe a 20-mile-per-hour speed limit within*

western pond turtle modeled upland habitat (Figure 3-19 [of the SSHCP]).

- ***WPT-8 (Western Pond Turtle Encounter Protocol):*** *If a western pond turtle is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the turtle, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a western pond turtle or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist.*

- ***WPT-9 (Western Pond Turtle Post-Construction Restoration):*** *After completion of ground- disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation and placing appropriate artificial or natural basking areas in waterways and wetlands. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.*

4.2-4 Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As noted previously, the grassland within the study area provides suitable nesting and foraging habitat for burrowing owl and the aquatic features provide suitable foraging habitat for the species, according to SSHCP Modeled Species Habitat. In addition, burrowing owls and occupied burrows were observed along the southeastern boundary of the project site during a preliminary survey of potential habitat. Therefore, burrowing owl is considered present within the study area.

Construction activities associated with implementation of the proposed project would include disturbance of on-site grassland habitat, and would have the potential to disturb existing burrowing owl burrows on the project site. Should individual burrowing owls be present within burrows during ground disturbance within the study area, project construction could result in loss of individual owls. As such, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl. A ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.2-4 *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs WBO-2 through WBO-7. If western burrowing owl is found within the survey area, WBO-3 through 7 shall be implemented as required based on the results of surveys conducted per WBO-2.*

- ***WBO-1 (Western Burrowing Owl Surveys):*** *Surveys within modeled habitat are required for both the breeding and non-breeding season. If the project site falls within modeled habitat, an approved biologist will survey the project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping will be conducted by the approved biologist while walking transects throughout the entire project site plus all accessible areas within a 250-foot radius from the project site. The centerline of these transects will be no more than 50 feet apart and will vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects will be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the project does not fully avoid the habitat, pre-construction surveys will be required. Burrowing owl habitat is fully avoided if project-related activities do not impinge on a 250-foot buffer established by the approved biologist around suitable burrows. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information.*

- ***WBO-2 (Western Burrowing Owl Pre-Construction Surveys):*** *Prior to any Covered Activity ground disturbance, an approved biologist will conduct pre-construction surveys in all*

areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey will last a minimum of 3 hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped. Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction.

- ***WBO-3 (Burrowing Owl Avoidance):*** *If western burrowing owl or evidence of western burrowing owl is observed on the project site or within 250 feet of the project site during pre-construction surveys, then the following will occur:*

  During Breeding Season: *If the approved biologist finds evidence of western burrowing owls within a project site during the breeding season (February 1 through August 31), all project-related activities will avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 250-foot buffer zone. Construction and other project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity and Wildlife Agencies prior to project construction based on the following criteria:*

- *The Implementing Entity and Wildlife Agencies approve of the avoidance and minimization plan provided by the project applicant.*
- *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).*
- *The same approved biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.*

If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies.

If monitoring by the approved biologist indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The approved biologist will excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies.

The Implementing Entity and Wildlife Agencies will respond to a request from the Third-Party Project Proponent to review the proposed construction monitoring plan within 21 days.

During Non-Breeding Season: *During the non-breeding season (September 1 through January 31), the approved biologist will establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer will be allowed. Construction activities within the non-disturbance buffer will be allowed if the following criteria are met to prevent owls from abandoning over- wintering sites:*

- *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).*
- *The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.*
- *If there is any change in owl foraging behavior as a result of construction activities, the approved biologist will*

have authority to shut down activities within the 250-foot buffer.

- o *If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity and Wildlife Agencies that an approved biologist excavate usable burrows and install one-way exclusionary devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue.*

Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

- ***WBO-4 (Burrowing Owl Construction Monitoring):*** *During construction of Covered Activities, 250-foot construction buffer zones will be established and maintained around any occupied burrow. An approved biologist will monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist will also train construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.*

- ***WBO-5 (Burrowing Owl Passive Relocation):*** *Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures described in this condition preclude work from continuing. Passive relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation will only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors will be in place for 48 hours to ensure that owls have left the burrow, and then the biologist will excavate the burrow to prevent reoccupation. Burrows will be excavated using hand tools only. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term.*

- ***WBO-6 (Burrowing Owl Timing of Maintenance Activities):*** *All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas will be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.*

- ***WBO-7 (Rodent Control):*** *Rodent control will be allowed only in developed portions of a Covered Activity project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.*

4.2-5 Have a substantial adverse effect, either directly or through habitat modifications, on raptors and nesting birds. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The study area contains potential habitat for raptors and nesting birds that are protected by the MBTA. The following sections summarize available habitat within the study area for specific SSHCP Covered species and other non-covered species. Potential impacts to Swainson's hawk and tricolored blackbird are discussed separately under Impacts 4.2-6 and 4.2-7.

SSHCP Covered Species

According to SSHCP Modeled Species Habitat, the study area contains suitable habitat for raptors and nesting birds, as follows:

- The grassland and aquatic areas within the study area provide suitable foraging habitat for ferruginous hawk. Suitable nesting habitat is not present.
- The grassland within the study area provides suitable nesting and foraging habitat for loggerhead shrike and northern harrier and the aquatic features provide suitable foraging habitat for both species.
- The grassland and aquatic areas within the study area provide suitable foraging habitat for white-tailed kite. Suitable nesting habitat is not present.
- The grassland and trees within the study area provide suitable nesting habitat for yellow-billed magpie.

Thus, ferruginous hawk, loggerhead shrike, northern harrier, and yellow-billed magpie have potential to occur within the study area.

Other Special-Status Species

The project site provides winter foraging habitat for golden eagle, which is a CDFW fully protected species. The grassland within the study area provides suitable nesting habitat for grasshopper sparrow and suitable wintering habitat for merlin. Grasshopper sparrow is designated as a species of special concern per CDFW. Thus, golden eagle, grasshopper sparrow, and merlin have potential to occur within the study area.

Conclusion

Based on the above, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on raptors and nesting birds protected by the MBTA, including, but not limited to, ferruginous hawk, loggerhead shrike, northern harrier, white-tailed kite, yellow-billed magpie, golden eagle, grasshopper sparrow, and merlin. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.2-5(a) *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs RAPTOR-2 through RAPTOR-4. Raptor surveys conducted per RAPTOR-2 shall include surveying for golden eagle although it is not a SSHCP Covered Species. If raptor species (including golden eagles) are found nesting within the survey area, RAPTOR-3 and RAPTOR-4 shall be implemented as required based on the results of surveys conducted per RAPTOR-2. The following AMMs do not apply to Swainson's hawk or burrowing owl, as specific AMMs have been developed for such covered raptor species and are included in separate mitigation measures.*

- ***RAPTOR-2 (Raptor Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre- construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*

- ***RAPTOR-3 (Raptor Nest/Roost Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged.*

- ***RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring):*** *If project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project*

Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).

4.2-5(b) *A qualified biologist shall conduct a preconstruction nesting bird survey of all areas associated with construction activities, and a 100-foot buffer around such areas, within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31). If active nests are found for any SSHCP Covered Species, the applicable SSHCP AMM(s) TCB-3 through -5, SWHA-3 through -4, WBO-3 through-6, and RAPTOR-3 through-4 shall be implemented. If active nests are found for any other species, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with the CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest, to be determined by a qualified biologist. Once the young are independent of the nest, further measures are not necessary.*

4.2-6 Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The grassland and aquatic areas within the study area provide suitable foraging habitat for Swainson's hawk according to SSHCP Modeled Species Habitat. In addition, a preliminary survey of potential habitat found several trees within the Survey Area and survey buffers that represent potential nesting habitat for the species. Thus, Swainson's hawk has potential to occur within the study area. The proposed project would include removal of a portion of the existing trees within the study area. In the event that Swainson's hawk is present within such trees during ground-disturbance or tree removal activities associated with the proposed project, the project could have a substantial adverse effect, either directly or through habitat modifications, on the species. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.2-6 *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs SWHA-2 through SWHA-4. If Swainson's hawk nesting is found within the survey area during the pre-construction survey conducted per SWHA-2, then SWHA-3 and SWHA-4 shall be implemented as required based on the results of surveys conducted per SWHA-2.*

SWHA-2 (Swainson's Hawk Pre-Construction Surveys): *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*

SWHA-3 (Swainson's Hawk Nest Buffer): *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25-mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.*

SWHA-4 (Swainson's Hawk Nest Buffer Monitoring): *If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and*

protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).

4.2-7 Have a substantial adverse effect, either directly or through habitat modifications, on tricolored blackbird. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

According to SSHCP Modeled Species Habitat, the grassland within the study area provides suitable nesting and foraging habitat for tricolored blackbird, and the aquatic features provide suitable foraging habitat. In addition, a preliminary survey of potential habitat documented evidence of previous tricolored blackbird nesting within patches of bull thistle (*Cirsium vulgare*) in the central portion of the project site, and a small area of riparian habitat along Morrison Creek was determined to represent potential nesting habitat. Tricolored blackbirds were not observed nesting during a site visit on June 13, 2019. However, the species is nomadic and may return to the study area prior to initiation of project construction activities. Thus, tricolored blackbirds are considered to be present within the study area.

In the event that tricolored blackbird is present within the study area during ground-disturbance associated with project construction, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on the species. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.2-7 *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs TCB-2 through TCB-5. If tricolored blackbirds are found within the survey area during the pre-construction survey conducted per TCB-2, then TCB-3 through TCB-5 shall be implemented as required based on the results of surveys conducted per TCB-2.*

- ***TCB-2 (Tricolored Blackbird Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys will be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be*

conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

- ***TCB-3 (Tricolored Blackbird Nest Buffer):*** *If active nests are found within the project footprint or within 500 feet of any project-related Covered Activity, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.*

- ***TCB-4 (Tricolored Blackbird Nest Buffer Monitoring):*** *If nesting tricolored blackbirds are present within the project footprint or within 500 feet of any project-related Covered Activity, then an approved biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).*

- ***TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves):*** *On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.*

4.2-8 Have a substantial adverse effect, either directly or through habitat modifications, on special-status bats. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Per the Biological Resources Assessment, some of the structures within the study area represent potential hibernacula for pallid bat. In addition, according to SSHCP Modeled Species Habitat, the grassland and wetland areas within the study area provide suitable foraging habitat for western red bat, and the Raymer Way Offsite

contains roosting-foraging habitat for the species. A preliminary survey of potential habitat identified some of the trees with cavities along Morrison Creek as potential hibernacula.

Implementation of the proposed project would require removal of existing structures and trees within the proposed development area. Should special-status bat species be present in structures or trees prior to removal, implementation of the proposed project could result in a loss of individual bats. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on pallid bat and western red bat. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.2-8 *Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs BAT-2 through BAT-4. Winter hibernaculum surveys conducted per BAT-2 shall also include surveying for pallid bat although it is not an SSHCP Covered Species. If winter hibernacula of western red bat or pallid bat are found within the survey area, then BAT-3 through BAT-4 shall be implemented as required based on the results of surveys conducted per BAT-2.*

- ***BAT-2 (Winter Hibernaculum Pre-Construction Surveys):*** *If the Third-Party Project Proponent elects not to avoid potential winter hibernaculum sites within the project footprint plus a 300-foot buffer, additional surveys are required. Prior to any ground disturbance related to Covered Activities, an approved biologist will conduct a pre- construction survey within 3 days of ground-disturbing activities within the project footprint and 300 feet of the project footprint to determine the presence of winter hibernaculum sites. Pre-construction surveys will be conducted during the winter hibernaculum season (November 1 through March 31). If a winter hibernaculum is present, then BAT-3 and BAT-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*

- ***BAT-3 (Winter Hibernaculum Buffer):*** *If active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will establish a 300-foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Implementing Entity and Wildlife Agencies concur.*

- ***BAT-4 (Bat Eviction Methods):*** *An approved biologist will determine if non-maternity and non-hibernaculum day and*

night roosts are present on the project site. If necessary, an approved biologist will use safe eviction methods to remove bats if direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided. If a winter hibernaculum site is present, Covered Activities will not occur until the hibernaculum is vacated, or, if necessary, safely evicted using methods acceptable to the Wildlife Agencies.

4.2-9 Have a substantial adverse effect, either directly or through habitat modifications, on American badger. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

The grassland and wetland areas within the study area provide suitable foraging habitat for American badger according to SSHCP Modeled Species Habitat. Thus, American badger has potential to occur within the study area. Implementation of the proposed project would require disturbance of existing grassland and wetland habitat within the study area. In the event that American badger occupies the project site prior to ground-disturbing activities associated with the proposed project, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on the species. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above potential impact to a *less-than-significant* level.

4.2-9 *A qualified biologist shall conduct a preconstruction survey for American badger within 14 days prior to commencement of construction, and results of the survey shall be provided to the City's Community Development Department. If badgers or dens with signs of recent badger use are detected (i.e., fresh scat, claw marks), CDFW shall be consulted and a non-disturbance buffer shall be established around any active dens. The den(s) shall be monitored daily by the qualified biologist during construction. Work shall not occur within the non-disturbance buffer until the qualified biologist determines that the badger(s) have left the work area, or as determined in consultation with CDFW.*

4.2-10 Have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As noted previously, per the Aquatic Resources Delineation and associated addendum, a total of 4.687 acres of aquatic resources have been mapped on the study

area, including 0.215-acre within the Raymer Way Offsite, which has not been verified (see Table 4.2-1 and Figure 4.2-4). The Rio Del Oro Offsite and North Douglas Offsites do not contain any mapped aquatic resources. The identified features include vernal pool, swale, and stream/creek land cover types. Vernal pool communities are the only sensitive natural community known to occur within the study area. With the exception of the Raymer Way Offsite, the aquatic resources identified within the study area have been verified by the USACE.

Per the Biological Resources Assessment, the vernal pools, swales, and stream/creek features within the study area flow directly or indirectly into Morrison Creek, or impoundments of Morrison Creek, along the northern boundary of the study area. Morrison Creek is a tributary to the Sacramento River. The USACE Sacramento District has identified the Sacramento River as Traditional Navigable Water (TNW). Therefore, the aquatic resources within the study area likely have a significant nexus with a downstream TNW, and are likely subject to regulation under Section 404 of the CWA.

The proposed project would include grading and development activities associated with the construction and operation of a residential subdivision, including necessary off-site improvements. The proposed development footprint would include all 4.687 acres of aquatic resources identified within the study area per the Biological Resources Assessment. Thus, the project would have the potential to involve the disturbance, removal, fill or hydrologic interruption of wetlands or other waters of the U.S or state regulated by the USACE, RWQCB and/or the CDFW.

Based on the above, implementation of the proposed project could have a substantial adverse effect on riparian habitat and/or other sensitive natural communities and/or have a substantial adverse effect on State or Federally protected aquatic resources (including, but not limited to, marsh, vernal pool, coastal, etc.), through direct removal, filling, hydrological interruption, or other means. Thus, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

4.2-10(a) *Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that authorization pursuant to Clean Water Act (CWA) Section 404 from the U.S. Army Corps of Engineers (USACE) and CWA Section 401 from the Central Valley Regional Water Quality Control Board (RWQCB) is obtained. CWA Section 404 authorization is anticipated to be obtained through a Letter of Permission issued by USACE under the SSHCP ARP, and CWA Section 401 authorization is anticipated to be obtained through an individual Water Quality Certification issued by the RWQCB under the SSHCP ARP.*

The construction contractor shall adhere to all conditions outlined in the permits. The project applicant shall ensure that the proposed project replaces, restores, or enhances on a "no net loss" basis (in accordance

with the USACE and the Central Valley RWQCB) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded due to project implementation, either through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.

4.2-10(b) *Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that a CDFW 1602 Streambed Alteration Agreement has been obtained. The construction contractor shall adhere to all conditions outlined in the Streambed Alteration Agreement.*

4.2-10(c) *The project applicant shall comply with SSHCP AMM STREAM-2 and a 100-foot setback from Morrison Creek shall be established. Only allowed compatible uses described in the SSHCP shall be sited within the setback.*

- ***STREAM-2 (UDA Stream Setbacks):** A 100-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all streams listed in Table 5-1 (see Table 4.2-3 below) (see also Figure 2-4 [of the SSHCP]). If a stream reach supports woody riparian vegetation, the setback will be equal to the riparian edge plus 25 feet or will be the setback defined above, whichever is greater. If trails are located within the Stream Setback, the nearest edge of the trail will be located at least 50 feet from the top of the bank.*

Table 4.2-3
Stream Setback Minimum Requirements in the Urban Development Area

Stream	Minimum Setback (from the Top of Bank Measured in Aerial Perspective) on Both Sides of the Stream
Elder Creek	100 feet
Frye Creek	100 feet or as depicted as part of the NewBridge development project hardline Preserve (see SSHCP Appendix K)
Gerber Creek	100 feet
Morrison Creek	100 feet
Central Paseo	100 feet or as depicted as part of the Cordova Hills development project hardline Preserve (see SSHCP Appendix K)
Sun Creek	100 feet or as depicted as part of the Sun Creek development project hardline Preserve (see SSHCP Appendix K)

4.2-10(d) *Implement Mitigation Measure 4.2-2(c).*

4.2-11 Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Based on the analysis below, the impact is *less than significant*.

As noted previously, the study area does not fall within an Essential Habitat Connectivity area mapped by the CDFW. In addition, the study area is bordered to the east by Grant Line Road, and the area to the south of the study area is built out with residential uses. Such features limit the ability of wildlife to move through project vicinity. Per the Biological Resources Report, the permanently ponded open waters and the small patches of riparian habitat along the upper reach of Morrison Creek within the Morrison Creek Offsite may represent a marginal wildlife movement corridor. However, consistent with SSHCP AMM STREAM-2, the proposed project would maintain a 100-foot setback from Morrison Creek. Maintenance of the 100-foot setback would be verified through implementation of Mitigation Measure 4.2-9(c). Furthermore, the 185.3 acres of open space area within the northern portion of the site which would not be developed as part of the proposed project. Therefore, implementation of the proposed project would not have the potential to impede the use of a native wildlife nursery site.

Based on the above, the proposed project would not interfere substantially with the movement of any wildlife and a ***less-than-significant*** impact would result.

Mitigation Measure(s)
None required.

4.2-12 Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Per Chapter 19.12, Preservation and Protection of Private Trees, of the City of Rancho Cordova Municipal Code, a tree removal permit is required prior to removal of any tree meeting the City's definition of a "protected tree". Protected tree is defined to include native oaks having a truck diameter of six inches or greater, any tree species other than a native oak with a diameter of 12 inches or greater on a nonresidential property, or any tree species other than a native oak with a diameter of 24 inches or greater on a residential property. The study area contains a total of 149 trees that have a dsh equal to or greater than 12 inches and therefore meet the definition of a Protected Tree as defined in the City's Tree Preservation Ordinance.

The proposed project would include the removal of 140 of the existing protected trees within the study area. The nine protected trees within the Morrison Creek Offsite would be preserved as part of the project. Considering that the proposed project would involve removal of 140 individual protected trees, the proposed project could conflict

with local policies and/or ordinances that protect biological resources, including tree resources. Therefore, a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.2-12 *Prior to removal of any protected trees (as defined by Chapter 19.12 of the City's Municipal Code) within the project site and off-site improvement areas, a tree removal permit shall be procured from the City. In addition, tree species that are native to the Central Valley and Sierra Nevada foothills such as interior live oak (Quercus wislizeni), valley oak (Quercus lobata), blue oak (Quercus douglasii), Fremont cottonwood (Populus fremontii), black walnut (Juglans hindsii), and western redbud (Cercis occidentalis) shall be incorporated into the planned landscaping design in public spaces such as open space, parks, and parkways. Enough plantings of such native trees shall be incorporated into the landscaping such that the number of surviving native trees after five years is equal to or greater than the number of non-native trees removed. Landscaping plans detailing the tree species to be planted shall be provided to the City for approval prior to tree removal.*

4.2-13 Conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or State habitat conservation plan. Based on the analysis below, the impact is *less than significant*.

The study area is covered by the SSHCP. As described above, the following SSHCP Covered Species have the potential to occur within the proposed development area: Ahart's dwarf rush, midvalley fairy shrimp, Ricksecker's water scavenger beetle, vernal pool fairy shrimp, western spadefoot, western pond turtle, burrowing owl, Swainson's hawk, tricolored blackbird, ferruginous hawk, loggerhead shrike, northern harrier, yellow-billed magpie, American badger, and western red bat. However, implementation of Mitigation Measures 4.2-1, 4.2-2, 4.2-3, 4.2-4, 4.2-5, 4.2-6, 4.2-7, 4.2-8, 4.2-9, which have been designed to incorporate applicable SSHCP AMMs, would reduce potential impacts to such species to less-than-significant levels. In addition, per Mitigation Measure 4.2-2, the project applicant would be required to submit a SSHCP permit application package to the City of Rancho Cordova to request that the incidental take coverage provided by City's SSHCP ITP be extended to the proposed activities. Mitigation Measure 4.2-10 would ensure compliance with applicable SSHCP AMMs related to protection of wetlands.

Based on the above, the proposed project would not conflict with any applicable provisions of the adopted SSHCP, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections of this EIR.

4.2-14 Cumulative loss of habitat for special-status species. Based on the analysis below and with implementation of mitigation, the impact is *less than cumulatively considerable*.

Implementation of the proposed project, in combination with other development within the City of Rancho Cordova, would result in a significant cumulative impact related to the loss of special-status species habitat, as well as take of special-status individuals. The General Plan EIR concluded that buildout of the City's Planning Area, including the study area, would result in the loss of biological resources in the region, and a significant and unavoidable impact would occur.

As discussed above, development of the proposed project could result in potential impacts to biological resources, including special-status plants, special-status wildlife species, riparian habitat and wetlands, and protected trees. However, all such impacts would be reduced to less-than-significant levels with implementation of the mitigation measures provided herein. Such mitigation measures include compliance with SSHCP requirements and all relevant AMMs set forth in the SSHCP Permit to be obtained for the proposed project. Per Mitigation Measure 4.2-2(a), the project applicant would be responsible for paying all SSHCP development fees associated with obtaining permit coverage from the City of Rancho Cordova. Payment of such fees, along with implementation of the SSHCP AMMs, would ensure that the project applicant provides a fair share contribution towards ongoing implementation of the SSHCP, including land and easement acquisition, monitoring, habitat management, habitat establishment, and funding for an agricultural enhancement program.

Nonetheless, without payment of applicable SSHCP fees and implementation of appropriate measures to avoid impacts to biological resources, the proposed project's incremental contribution to the significant cumulative impact to biological resources could be ***cumulatively considerable*** and ***significant***.

Mitigation Measure(s)

This Chapter contains mitigation measure sufficient to reduce all project-specific impacts to less-than-significant levels. With implementation of such measures, the project's incremental contribution toward the significant cumulative impact would be *less than cumulatively considerable*.

4.2-14 Implement Mitigation Measures 4.2-1 through 4.2-11.

4.3 Cultural and Tribal Resources

4.3. CULTURAL AND TRIBAL RESOURCES

4.3.1 INTRODUCTION

The Cultural and Tribal Resources chapter of the EIR addresses known historic and prehistoric cultural resources, including tribal cultural resources, in the vicinity of the project area. Cultural resources can be categorized into prehistoric or historic resources. Prehistoric resources are those sites and artifacts associated with indigenous, non-Euroamerican populations, generally prior to contact with people of European descent. Historic resources include structures, features, artifacts, and sites that date from Euroamerican settlement of the region. The chapter summarizes the existing setting with respect to cultural and tribal cultural resources, identifies thresholds of significance, evaluates project impacts to such resources, and sets forth mitigation measures as necessary. Information presented in the chapter is primarily drawn from the Cultural Resources Inventory Report prepared by ECORP Consulting, Inc. (see Appendix E),[1] as well as the City of Rancho Cordova General Plan[2] and the General Plan EIR.[3]

4.3.2 EXISTING ENVIRONMENTAL SETTING

The Central Valley of California contains a rich cultural resource heritage that includes archeological and historical sites and resources. According to the Rancho Cordova General Plan EIR, as of March 2006, a total of 23 historic resources, eight prehistoric sites, and one prehistoric/historic site were recorded in the City of Rancho Cordova. Given the rich heritage of the area, many archeological and historical sites and resources remain undiscovered.

The 279.3-acre project site contains two single-family residences and associated outbuildings on the southern portion of the site, within parcels 072-0300-002 and -005. An orchard is located within the northeastern portion of the site within and parcel 073-0010-011, and a third single-family residence and associated outbuildings are located on APN 072-0300-008. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal drainage corridors and wetlands. Additionally, Morrison Creek runs northeast to southwest through the project site. The project site is located near the North Douglas Residential development to the south, as well as agricultural land and rural residential areas to the north, west, and east.

The following sections provide further details regarding the prehistoric overview, ethnographic overview, and historic overview of the project area, as well as a description of any identified cultural resources associated with the project site and a discussion of tribal cultural resources.

Prehistoric Overview

A recent summary by Rosenthal et al. of the prehistory of California's Sacramento Valley, Sacramento–San Joaquin Delta, and San Joaquin Valley is based on a compilation of previous

1 ECORP Consulting, Inc. *Cultural Resources Inventory Report.* February 5, 2019.
2 City of Rancho Cordova. *Rancho Cordova General Plan*. June 26, 2006.
3 City of Rancho Cordova. *Rancho Cordova General Plan EIR*. March 13, 2006.

research. As devised by Rosenthal and others, and with the timeframes adjusted for modern calibration curves for radiocarbon dates, the chronological sequence for the Central Valley is: Paleo-Indian (11500 to 8550 cal [calibrated] B.C.), Lower Archaic (8550 to 5550 cal B.C.), Middle Archaic (5550 to 550 cal B.C.), Upper Archaic (550 cal B.C. to cal A.D. 1100), and Emergent or Late Prehistoric Period (cal A.D. 1100 to Historic Contact).

Paleo-Indian Period

The Paleo-Indian Period began when the first people started to inhabit what is now known as the California culture area. During the Paleo-Indian Period, the first people commonly survived on big game and minimally processed foods, (i.e., hunters and gatherers), presumably without trade networks. More recent research indicates these people may have been more sedentary, relying on processed foods and trade. Populations likely consisted of small groups traveling frequently to access plant and animal resources.

Archaic Period

The Archaic Period was characterized by an increase in plant exploitation for subsistence, more elaborate burial accoutrements, and an increase in trade network complexity. The period includes the three divisions outlined below.

Lower Archaic Period

In the Central Valley, the Lower Archaic Period is mainly represented by isolated finds, as the early landscape was buried by natural alluvial fan and floodplain deposition. Artifacts from this period include chipped stone crescents, early wide-stemmed points, marine shell beads, eastern Nevada obsidian, and obsidian from north Coast Ranges. The artifacts found on sites dating to the Lower Archaic Period indicate that trade was occurring in multiple directions. Communities relied on a variety of plant and animal species, including acorns, wild cucumber, and manzanita berries.

Middle Archaic Period

The Middle Archaic Period is characterized by a drier climate period. Past studies of the Middle Archaic Period have identified two distinct settlement/subsistence patterns: The Foothill Tradition and the Valley Tradition. Functional artifact assemblages consisting primarily of locally sourced flaked stone and groundstone cobbles characterize the Foothill Tradition, while the Valley Tradition was generally characterized by diverse subsistence practices and extended periods of sedentism.

Upper Archaic Period

The Upper Archaic Period is characterized by abrupt change to wetter and cooler environmental climate conditions. Much greater cultural diversity is evident from this period. More specialized artifacts, such as bone tools, ceremonial blades, polished and groundstone plummets, saucers, saddle Olivella shell beads, Haliotis shell ornaments, and a variety of groundstone implements are characteristic of this period.

Emergent Period

The Emergent Period is most notably marked by the introduction of the bow and arrow, the emergence of social stratification linked to wealth, and expansive trade networks. The Augustine pattern (the distinct cultural pattern of the Emergent Period) is characterized by the appearance of small projectile points (largely obsidian), rimmed display mortars, flanged steatite pipes, flanged

pestles, and chevron-designed bird-bone tubes. Large mammals and small seeded resources appear to have made up a larger part of the diet during this period.

The Windmiller Pattern of the Early Horizon, dates to the Middle Archaic and may be the most extensively studied of all the cultural patterns defined for the Central Valley. In fact, the similarity noted between elements of Windmiller and materials from other sites may have been the catalyst for early archaeologists identifying the material cultural “blending” of groups in the Central Valley during this period.

Further classification of the Middle Archaic into the Foothill Tradition and Valley Tradition helped to clarify the different types of cultural sequences which occurred during the time periods. Functional artifact assemblages consisting primarily of locally sourced flaked-stone and groundstone cobbles characterize the Foothills Tradition, with very few trade goods. Sites that represent the Valley Tradition are much fewer in number, and are generally characterized by much more diverse subsistence practices and extended periods of sedentism. Specialized tools, trade goods, and faunal refuse that indicate year-round occupation are evident on sites of the Valley Tradition. Distinct artifacts attributed to this tradition include one of the oldest dated shell bead lots in central California (4160 BP) and a particular type of pestle used with a wooden mortar. Paleobotanical analysis from sites of the Foothill Tradition confirm that acorns and pine nuts were preferred for subsistence. Sites in the project area associated with the Valley Tradition are rare in the early Middle Archaic but include the Reservation Road site, and two buried sites in the northern Diablo range. Sites associated with later portions of the Middle Archaic (post-2050 cal. BC) in the project area include elaborate material culture and diverse dietary and technological assemblages.

The next era in the region is identified as the Late Horizon, the Hotchkiss Culture, and the Augustine Pattern. The culture was formed by populations during the later Upper Archaic and Emergent periods, and ranges in age from around 550 cal. BC to contact (dates vary between the different models of prehistory developed for the region). The Upper Archaic, as discussed above, corresponds with the late Holocene change in environmental conditions to a wetter and cooler climate. The Emergent Period and Late Horizon are markedly represented by the introduction of bow-and-arrow technology, as well as more pronounced cultural diversity reflected in burial posturing, artifact styles, and material culture. Cultural patterns for this era are represented in the northern Sacramento Valley, namely within the Whiskeytown Pattern.

Despite the varying designations, this Emergent era is distinguished in the archaeological record by intensive fishing, extensive use of acorns, elaborate ceremonialism, social stratification, and cremation of the dead. Artifacts associated with the defined patterns (Augustine, Emergent, Hotchkiss) include bow-and-arrow technology (evidenced by small projectile points), mortars and pestles, and fish harpoons with unilaterally or bilaterally placed barbs in opposed or staggered positions. Mortuary patterns include flexed burials and cremations, with elaborate material goods found in association with prestigious individuals. A local form of pottery, Cosumnes brown ware, emerged in the lower Sacramento Valley. Sites contain this ceramic type in their artifact assemblage, as well as human animal effigies which are also a marker of this Emergent era around the project area.

Ethnographic Overview

Ethnographically, the project area is in the southwestern portion of the territory occupied by the Penutian-speaking Nisenan. Nisenan inhabited the drainages of the Yuba, Bear, and American

rivers, and also the lower reaches of the Feather River, extending from the east banks of the Sacramento River on the west to the mid to high elevations of the western flank of the Sierra Nevada to the east. The territory extended from the area surrounding the current City of Oroville on the north to a few miles south of the American River in the south. The Sacramento River bounded the territory on the west, and in the east, the territory extended to a general area located within a few miles of Lake Tahoe.

Nisenan practiced seasonal migration, a subsistence strategy involving moving from one area or elevation to another to harvest plants, fish, and hunt game across contrasting ecosystems that were in relatively close proximity to each other. Valley Nisenan generally did not range beyond the valley and lower foothills, while foothill and mountain groups ranged across a more extensive area. The area included jointly shared territory whose entry was subject to traditional understandings of priority of ownership and current relations between the groups.

Communally organized Nisenan task groups exploited a wide variety of resources. Communal hunting drives were undertaken to obtain deer, quail, rabbits, and grasshoppers. Bears were hunted in the winter when their hides were at their best condition. Runs of salmon in the spring and fall provided a regular supply of fish, while other fish such as suckers, pike, whitefish, and trout were obtained with snares, fish traps, or with various fish poisons such as soaproot. In addition, birds were caught with nooses or large nets, and were also occasionally shot with bow and arrow.

Like the majority of Native Californians, the Nisenan relied on acorns as a staple food, which were gathered in the fall and stored in granaries for use during the rest of the year. Although acorns were the staple of the Nisenan diet, the Nisenan also harvested roots like wild onion and “Indian potato,” which were eaten raw, steamed, baked, or dried and processed into flour cakes to be stored for winter use. Buckeye, pine nuts, hazelnuts, and other edible nuts further supplemented the diet. Key resources such as acorns, salmon, and deer were ritually managed through ceremonies to facilitate successful exploitation and equitable distribution of resources.

Nisenan groups managed many wild plants, primarily by controlled burning, which removed underbrush and encouraged growth of edible grasses, seed producing plants, and other useful plant resources (e.g., basketry materials). The use of fire for environmental modification and as an aid in hunting is frequently mentioned in the ethnographic literature relating to the Nisenan. In addition to removing underbrush, improving travel conditions, and facilitating plant growth, burning may also have improved areas of deer forage, potentially altering migratory patterns of deer populations by lessening their need to seek fresh forage on a seasonal basis.

The Nisenan experienced early contact with Spanish explorers arriving on the Central Coast of California in 1769. Much of the early contact with the Spanish explorer was limited to the peripheries of Nisenan territory, occurring mainly to the south on the lands of the Miwok, which had been explored by Jose Canizares in 1776, with only ephemeral explorations into Nisenan lands. Nisenan groups are not known to have been removed to missions; however, the Nisenan did receive escapees from the missions as well as pressure of displaced Miwok populations on their southern borders.

In 1833, a deadly epidemic (probably malaria) swept through the Sacramento Valley and had a devastating effect on Nisenan populations. Entire villages were lost, and surviving Nisenan retreated into the hills. An estimated 75 percent of the Nisenan population was wiped out, and only a handful were left to face the gold miners and settlers who were soon to follow. Captain

John Sutter settled in Nisenan territory in 1839, and through force and persuasion he coerced most of the remaining Valley Nisenan to be on peaceful terms.

The mountain Nisenan groups encountered Europeans in their territory, but were not adversely affected by the epidemics and early settlers. The discovery of gold, however, led to the Nisenan territory being overrun within a matter of a few years. The 1848 gold discovery was in the middle of Nisenan territory, and thousands of miners were soon living in the area. This dynamic led to widespread killing, destruction, and persecution of the Nisenan and their culture. The few survivors were relegated to working in agriculture, logging, ranching, or domestic pursuits. A native culture resurgence occurred around 1870 with influence from the Ghost Dance revival, but by 1890s the movement had all but ended in dissolution.

A few people still practiced Nisenan customs through the turn of the twenty-first century, but the old ways have been largely lost. Despite the hardships on their people through the past few centuries, many modern Native American populations participate in pan-Indian activities and celebrations. Nisenan descendants continue to be active in social movements and organizations that seek to improve the Native American situation in the dominant America culture.

Historic Overview

The following sections provide an overview of the Spanish, Mexican, and American Periods, as well as local history associated with the project area.

Spanish, Mexican, and American Periods

Post-contact history for the State of California is generally divided into the following three periods: the Spanish Period from 1769 to1822; the Mexican Period from 1822 to1848; and the American Period from 1848 to present. Although brief visits by Spanish, Russian, and British explorers occurred from 1529 to 1769, the beginning of Spanish settlement in California occurred in 1769 at San Diego. The Spanish and Franciscan Order established 21 missions between 1769 and 1823 along the coast between San Diego and San Francisco. The Spanish expeditions into the Central Valley in 1806 and 1808, led by Lieutenant Gabriel Moraga, explored along the main rivers, including the American, Calaveras, Cosumnes, Feather, Merced, Mokelumne, Sacramento, San Joaquin, and Stanislaus. Moraga is credited with naming the lower Sacramento River and valley region, “Sacramento” (“the Holy Sacrament”). In 1813, Moraga led another expedition in the lower portion of the Central Valley and named the San Joaquin River. The abundance of wildlife, such as waterfowl, fish, and fur-bearing animals, within or along the banks of the rivers attracted immigrants to the Central Valley region. The last Spanish expedition into California’s interior was led by Luis Arguello in 1817 and traveled up the Sacramento River, past the future site of the City of Sacramento to the mouth of the Feather River, before returning to the coast.

After the end of the Mexican Revolution (1810 to 1821), the Mexican Period is marked by extensive land grants, most of which were in the interior of the State, as well as by exploration by American fur trappers west of the Sierra Nevada Mountains. Most of the land grants to Mexican citizens in California (*Californios*) were in the interior because the Mexican Republic sought to increase the population away from the more settled coastal areas where the Spanish settlements had been concentrated. The largest land grants in the Sacramento Valley were awarded to John Sutter, who had become a Mexican citizen. In 1839, he founded a trading and agricultural empire called New Helvetia that was headquartered at Sutter’s Fort near the divergence of the Sacramento and American rivers in today’s City of Sacramento. Only a small portion of the

48,839-acre New Helvetia land grant was located in Sacramento County; the majority was located in today's Sutter and Yuba counties on the east and west sides of the Feather River.

The first American trapper to enter California, Jedediah Smith, explored along the Sierra Nevada in 1826 and in 1827, entered the Sacramento Valley, traveling along the American and Cosumnes rivers. In 1827, Smith also traveled through the San Joaquin Valley. Other trappers soon followed, including employees of the Hudson's Bay Company in 1832. Between 1830 and 1833, and again in 1837, diseases introduced by the non-indigenous explorers, trappers, and settlers, as well as relocation to the missions, military raids, and settlement by non-native groups, decimated native Californian populations, communities, and tribes in the Sacramento and San Joaquin valleys.

The end of the Mexican-American war, marked by the signing of the Treaty of Guadalupe Hidalgo in 1848, initiated the beginning of the American Period. In the same year, gold was discovered at Sutter's Mill on the American River in Coloma, and by 1849, nearly 90,000 people had journeyed to the gold fields. California became the 31st state in 1850, largely as a result of the Gold Rush, and in 1854, Sacramento became the State capital. In contrast to the economic prosperity and population growth associated with statehood, the loss of land and territory, including traditional hunting and gathering locales, as well as malnutrition, starvation, and violence, further contributed to the decline of indigenous Californians in the Central Valley and along the Sierra Nevada foothills.

Local History

The City of Rancho Cordova was incorporated in July 2003 with the desire for local government control over land uses and services. The City is centrally located in the Sacramento region with a strong workforce and growing population. The project area is located in the southeastern part of the 35,500-acre Rancho Rio de los Americanos land grant, issued by Manuel Micheltorena, the Mexican Governor of Alta California, to William Alexander Leidesdorff in October 1844. Leidesdorff acquired land for herding cattle on the bank of the American River. Following the death of Leidesdorff in 1848, his land was bought by Joseph Libby Folsom for $75,000. Folsom founded the town of Granite City on the land grant before the town was eventually renamed to Folsom after his death in 1855.

Later, the Natoma Water and Mining Company purchased more than 9,000 acres of the Rancho Rio de los Americanos land grant in 1857. At this point, with Mr. Folsom being deceased, the property was handled by Mr. Folsom's executors, a Mr. Halleck, and others. In 1857 the Surveyor General of the United States, John Coffee "Jack" Hays, ordered that the grant be surveyed, and the boundaries established. This survey, known as the Hays survey, was submitted to the Land Office in Washington for a patent. Disagreements within the Land Office over the survey results led to a second survey, known as the Mandeville survey, in 1858. In 1860, a legal battle ensued over which survey boundary was correct with the court upholding the boundaries of the Hays survey. Three years later an appeal was approved challenging the earlier ruling and upholding the Mandeville survey. The area owned by the Natomas Company (north of the project area) was later used for dredge mining and this area is now covered by dredge mining tailings.

Grant Line Road is a secondary road which, for much of its length, follows the boundaries of the Rancho Omochumnes and Rancho Rio de los Americanos Mexican land grants. The Rancho Omochumnes land grant is located south of the project area, containing more than 18,000 acres. The land was centered around the modern town of Wilton and along the south bank of the Cosumnes River. The portion of Grant Line Road that stretches from Jackson Road to Kiefer

Boulevard follows the northwestern boundary of the Rancho Omochumnes land grant. Grant Line Road follows this eastern boundary of the land grant for a short distance diagonally to the northeast until the road merges with the meandering White Rock Road. The precise date of construction of Grant Line Road is unclear, but unlabeled roads that appear to follow a similar alignment are partially present on the 1891 USGS Sacramento 1:125,000 scale topographical map.

Known Historic Resources

Archival research was carried out as part of the Cultural Resources Inventory Report prepared for the proposed project by ECORP Consulting, Inc., including review of available historic documents and a records search. On October 11, 2018, ECORP conducted a records search of the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS) at California State University, Sacramento. In addition, ECORP conducted a field survey of the project area on October 15 and 16, 2018. As shown in Figure 4.3-1, the field survey covered an approximately 99.37-acre Area of Potential Effects (APE). The APE does not include the northern portion of the project site, which would not be developed as part of the proposed project. In addition, the APE for the field survey does not include the off-site improvements areas associated with the project. However, the off-site improvement areas were included in the records search conducted by ECORP.

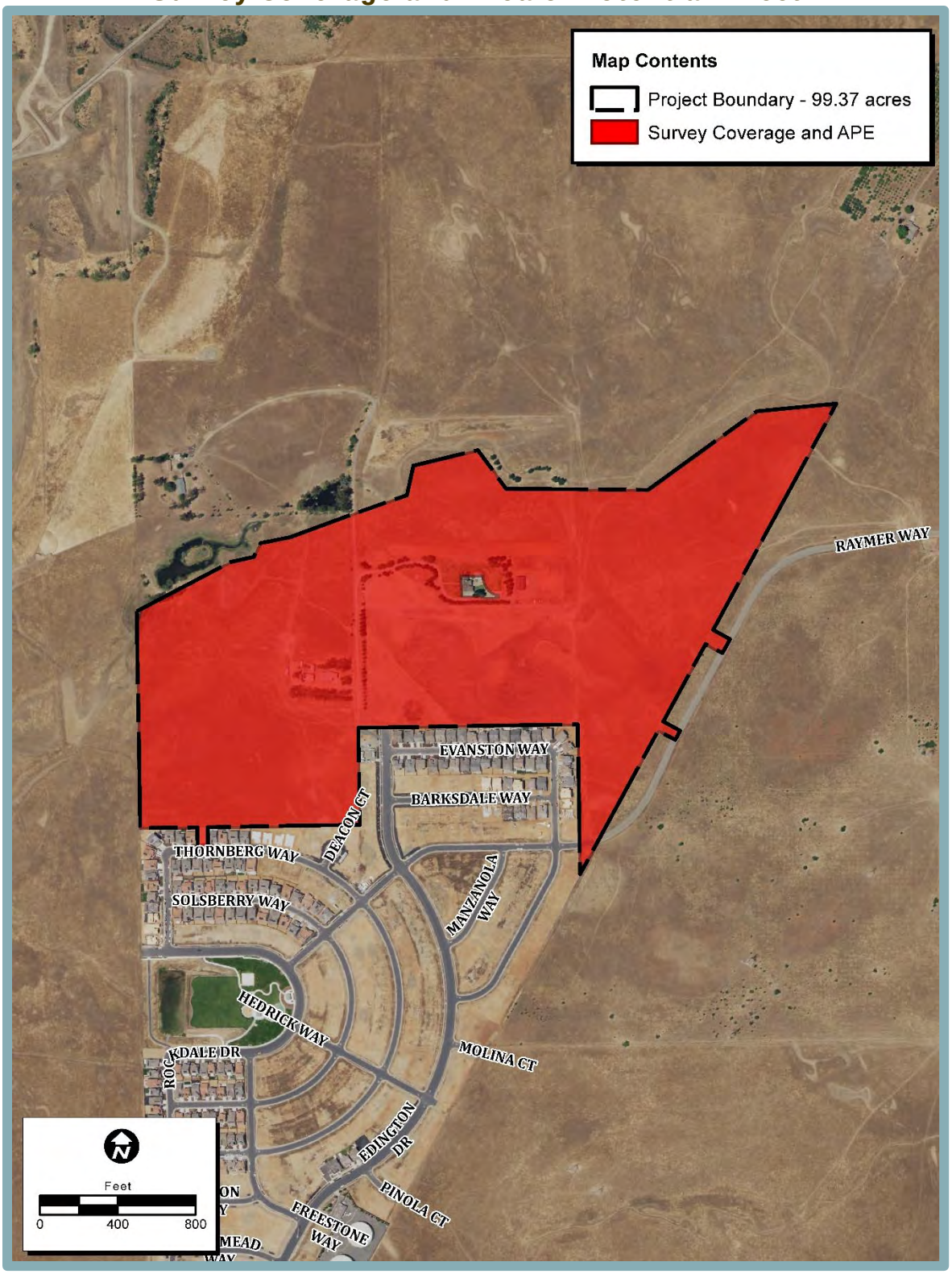
The records search determined that 13 cultural resource investigations have been conducted within 0.5-mile of the APE between 1982 and 2016, covering approximately 50 percent of the total area surrounding the APE within the record search radius. A total of three previously recorded historic-period cultural resources are located within 0.5-mile of the APE, consisting of the American River Mining District (P-34-335, CA-SAC-308), the Douglas Missile Test Facility (P-34-4137), and a historic dredge tailing landscape (P-34-4143). The American River Placer Mining District encompasses the APE; however, features associated with the district have not been identified within the APE. The remaining two resources (P-34-4137 and P-34-4143) are not located within the APE and, thus, are not discussed further. According to the Cultural Resources Inventory Report, the field survey did not find any previously recorded or new cultural resources within the APE.

American River Placer Mining District

The American River Placer Mining District (P-34-335) is considered a “Super District” that includes districts such as the Alder Creek Corridor Mining District, Prairie Diggings Mining District, and others which were originally grouped together arbitrarily to ensure proper consideration during a pulse of development in the region. The American River Placer Mining District includes thousands of acres of land that were subject to mining by hand and mechanical methods. The District also includes mining camps, established towns, cemeteries, tunnels, adits, water diversion systems, pump plant remains, and other features associated with dredging.

The American River Placer Mining District is referred to informally as a “paper district,” meaning that the designation as a “district” does not necessarily meet the technical or regulatory definition of the term. In addition, the American River Placer Mining District boundaries are arbitrarily set, encompassing an area approximately 15 miles long and 11 miles wide.

Figure 4.3-1
Survey Coverage and Area of Potential Effect



Source: ECORP Consulting, Inc., 2019

Tribal Cultural Resources

Based on a search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF), as described in further detail in the Method of Analysis section below, recorded Native American sacred sites or traditional cultural properties are not known to exist within the project site.

4.3.3 REGULATORY CONTEXT

Federal, State, and local governments have developed laws and regulations designed to protect significant cultural resources that may be affected by actions that they undertake or regulate. The following section contains a summary of basic federal, State, and local regulations governing preservation of historic and archaeological resources of national, regional, State, and local significance.

Federal Regulations

The following are the federal environmental laws and policies relevant to cultural resources.

National Historical Preservation Act of 1966

Federal regulations for cultural resources are governed primarily by Section 106 of the National Historical Preservation Act (NHPA) of 1966. Section 106 of the NHPA requires Federal agencies to take into account the effects of their undertakings on historic properties and affords the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings. The Council's implementing regulations, "Protection of Historic Properties," are found in 36 Code of Federal Regulations (CFR) Part 800. The goal of the Section 106 review process is to offer a measure of protection to sites, which are determined eligible for listing on the National Register of Historic Places (NRHP). The criteria for determining NRHP eligibility are found in 36 CFR Part 60. Amendments to the Act (1986 and 1992) and subsequent revisions to the implementing regulations have, among other things, strengthened the provisions for Native American consultation and participation in the Section 106 review process. While federal agencies must follow federal regulations, most projects by private developers and landowners do not require this level of compliance. Federal regulations only come into play in the private sector if a project requires a federal permit or uses federal funding.

National Register of Historic Places

NRHP is the nation's master inventory of known historic resources. The NRHP includes listings of resources, including: buildings, structures, sites, objects, and districts that possess historic, architectural, engineering, archaeological, or cultural significance at the national, State, or local level. Resources over 50 years of age may be listed on the NRHP. However, properties under 50 years of age that are of exceptional significance or are contributors to a district may also be included on the NRHP. Four criteria are used to determine if a potential resource may be considered significant and eligible for listing on the NRHP. Potentially eligible resources include resources that:

A. Are associated with events that have made a significant contribution to the broad patterns of history; or
B. Are associated with the lives of persons significant in our past; or
C. Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Have yielded or may likely yield information important in prehistory or history.

A resource can be individually eligible for listing on the NRHP under any of the above four criteria, or can be listed as contributing to a group of resources that are listed on the NRHP.

A resource can be considered significant in American history, architecture, archaeology, engineering, or culture. Once a resource has been identified as significant and potentially eligible for the NRHP, the resource's historic integrity must be evaluated. Integrity is a function of seven factors: location, design, setting, materials, workmanship, feeling, and association. The factors closely relate to the resource's significance and must be intact for NRHP eligibility.

Historical buildings, structures, and objects are usually eligible under Criteria A, B, and C based on historical research and architectural or engineering characteristics. Archaeological sites are usually eligible under Criterion D, the potential to yield information important in prehistory or history. An archaeological test program may be necessary to determine whether the site has the potential to yield important data. The lead federal agency makes the determination of eligibility based on the results of the test program and seeks concurrence from the State Historic Preservation Officer (SHPO).

Effects to NRHP-eligible resources (historic properties) are adverse if the project may alter, directly or indirectly, any of the characteristics of an historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

State Regulations

The following are the State environmental laws and policies relevant to cultural resources.

California Environmental Quality Act and California Register of Historic Places

State historic preservation regulations affecting this project include the statutes and guidelines contained in CEQA (Public Resources Code [PRC] Sections 21083.2 and 21084.1 and sections 15064.5 and 15126.4 (b) of the CEQA Guidelines). CEQA requires lead agencies to consider the potential effects of a project on historic resources and unique archaeological resources. A "historic resource" includes, but is not limited to, any object, building, structure, site, area, place, record or manuscript that is historically or archaeologically significant (PRC Section 5020.1). Under Section 15064.5 of the CEQA Guidelines, a resource is considered "historically significant" if one or more of the following California Register of Historic Resources (CRHR) criteria have been met:

1. The resource is associated with events that have made a significant contribution to the broad patterns of California history;
2. The resource is associated with the lives of important persons from our past;
3. The resource embodies the distinctive characteristics of a type, period, region or method of construction, or represents the work of an important creative individual or possesses high artistic values; or
4. The resource has yielded, or may be likely to yield, important information in prehistory or history.

In addition, the resource must retain integrity. Cultural resources determined eligible for the NRHP by a federal agency are automatically eligible for the CRHR.

CEQA requires preparation of an EIR if a proposed project would cause a "substantial adverse change" in the significance of a historical resource. A "substantial adverse change" would occur if a proposed project would result in physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CEQA Guidelines Section 15064.5[b][1]).

In addition to historically significant resources, which can include archeological resources that meet the criteria listed above, CEQA also requires consideration of "unique archaeological resources." If a site meets the definition of a unique archaeological resource, the site must be treated in accordance with the provisions of PRC Section 21083.2. Under PRC Section 20183.2(g), an archaeological resource is considered "unique" if it:

1) Is associated with an event or person of recognized significance in California or American history or recognized scientific importance in prehistory;
2) Can provide information that is of demonstrable public interest and is useful in addressing scientifically consequential and reasonable research questions;
3) Has a special kind or particular quality such as oldest, best example, largest, or last surviving example of its kind;
4) Is at least 100 years old and possesses substantial stratigraphic integrity; or
5) Involves important research questions that can be answered only with archaeological methods.

CEQA also includes specific guidance regarding the accidental discovery of human remains. Specifically, CEQA Guidelines Section 15064.5(e) requires that if human remains are uncovered, excavation activities must be stopped and that the county coroner be contacted. If the county coroner determines that the remains are Native American, the coroner must contact the NAHC within 24 hours. The NAHC identifies the most likely descendant, and that individual or individuals can make recommendations for treatment of the human remains under the procedures set forth in Section 15064.5 of the CEQA Guidelines.

The SHPO maintains the CRHR. Properties that are listed on the NRHP are automatically listed on the CRHR, along with State Landmarks and Points of Interest. The CRHR can also include properties designated under local ordinances or identified through local historical resource surveys.

Assembly Bill 52

Assembly Bill (AB) 52 adds tribal cultural resources to the categories of cultural resources in CEQA, which had formerly been limited to historic, archaeological, and paleontological resources. "Tribal cultural resources" are defined as either:

(1) Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
    (A) Included or determined to be eligible for inclusion in the California Register of Historical Resources.
    (B) Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
(2) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Section 5024.1. In applying the criteria set forth in subdivision (c) of Section 5024.1 for the

purposes of this paragraph, the lead agency shall consider the significance of the resource to a California Native American tribe.

Under AB 52, a project that may cause a substantial adverse change in the significance of a Tribal Cultural Resource is defined as a project that may have a significant effect on the environment. Where a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document must discuss the impact and whether feasible alternatives or mitigation measures could avoid or substantially lessen the impact. AB 52 (PRC 21080.3.1) requires lead agencies to provide notice to tribes that are traditionally and culturally affiliated with the geographic area of a proposed project if they have requested notice of projects proposed within that area. If the tribe(s) requests consultation within 30 days upon receipt of the notice, the lead agency must consult with the tribe(s). Consultation may include discussing the type of environmental review necessary, the significance of tribal cultural resources, the significance of the project's impacts on the tribal cultural resources, and alternatives and mitigation measures recommended by the tribe(s).

Senate Bill 18

SB 18, authored by Senator John Burton and signed into law by Governor Arnold Schwarzenegger in September 2004, requires local (city and county) governments to consult with California Native American tribes, when amending or adopting a general plan or specific plan, or designating land as open space, in order to aid in the protection of traditional tribal cultural places ("cultural places"). The intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to, cultural places. The consultation and notice requirements apply to adoption and amendment of both general plans (defined in Government Code Section 65300 et seq.) and specific plans (defined in Government Code Section 65450 et seq.). The proposed project includes a General Plan Amendment, and, thus, is subject to SB 18 consultation requirements.

Local Regulations

The following are the local environmental laws and policies relevant to cultural resources.

City of Rancho Cordova General Plan

Goals and policies from the City's General Plan related to cultural resources are presented below.

Goal CHR.1: Identify and preserve the history of Rancho Cordova for future generations.

Policy CHR.1.3 Establish review procedures for development projects that recognize the history of the area in conjunction with State and federal laws.

South Sacramento Habitat Conservation Plan

The South Sacramento Habitat Conservation Plan (SSHCP) is intended to streamline federal and State permitting processes for SSHCP-covered development and infrastructure projects while protecting habitat, open space and agricultural lands.[4] The SSHCP plan area encompasses 317,656 acres that are bordered by US. Route 50 (US 50) on the north, San Joaquin County on

[4] South Sacramento Habitat Conservation Plan. *What is the South Sacramento HCP?* Available at: https://www.southsachcp.com/. Accessed July 2019.

the south, El Dorado County and Amador County to the east, and the Sacramento River to the west, including Galt and most of Rancho Cordova. The Rancho Cordova City Council adopted the SSHCP on October 15, 2018.

The SSHCP includes a specific process for permit applications which outlines requirements that must be satisfied by a project proponent prior to receiving permit coverage. A project proponent of a ground-disturbing activity, including habitat re-establishment or establishment in the Preserve System, must ensure that cultural resources potentially occurring in these areas are properly evaluated and protected. Per Section 10.4.2.7 of the SSHCP, permit applications are required to include a description of how the project complies with requirements for protection of cultural resources and tribal consultation.

4.3.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to cultural and tribal cultural resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, an impact related to cultural or tribal cultural resources is considered significant if the proposed project would:

- Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5;
- Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5;
- Disturb any human remains, including those interred outside of dedicated cemeteries; and/or
- Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC, Section 21074.

Method of Analysis

The analysis presented within this chapter is based primarily on the Cultural Resources Inventory Report prepared for the proposed project. The Cultural Resources Inventory Report included a cultural resources literature search, archival research, consultation with the NAHC, and a field survey. The methods of analysis are described in further detail below, along with a discussion of the tribal consultation efforts conducted by the City pursuant to AB 52 and SB 18.

Records Search Methods

A cultural resources records search for the project area was completed at the NCIC of the CHRIS at California State University, Sacramento, on October 11, 2018. The records search was conducted to determine the extent of previous surveys within 0.5-mile radius of the proposed project location, and whether previously documented pre-contact or historic archaeological sites, architectural resources, or traditional cultural properties exist within the area. The archival searches of the archaeological and historical records, national and State databases, and historic maps included the following:

- California Register of Historical Resources;
- National Register Information System website;
- Historic Property Data File (HPDF) for Sacramento County (OHP 2012);
- California Inventory of Historical Resources (National Park Service 2018);
- Office of Historic Preservation, California Historical Landmarks website (OHP 2018);
- California Historical Landmarks (OHP 1996 and updates);
- California Points of Historical Interest (OHP 1992 and updates);
- Directory of Properties in the Historical Resources Inventory (1999);
- Caltrans Local and State Bridge Surveys (Caltrans 2018a and 2018b); and
- Historic Spots in California (Kyle 2002).

Other Cultural Archival Sources

ECORP searched the land patent records maintained by the Bureau of Land Management and reviewed historical maps and aerial photographs that were not available at the NCIC. The results of the reviews of historic maps and aerial photographs have been incorporated into the Local History section above. The following historic maps and aerial photographs were reviewed:

- 1856 GLO Plat for Township 8 North, Range 7 East;
- 1885 Official Map of Sacramento County;
- 1892 and 1929 USGS California, Sacramento Sheet (1:125,000);
- 1908 and 1916 USGS Buffalo Creek, California (scale 1:31,680);
- 1954 and 1967 USGS Buffalo Creek, California (7.5-minute); and
- 1967 photo revised 1980 USGS Buffalo Creek, California (7.5-minute).

In addition, ECORP contacted the NAHC on October 16, 2018 to request a search of the SLF to determine whether known tribal cultural resources are located within or near the project area. The SLF is populated by members of the Native American community who have knowledge about the locations of tribal resources. In requesting a search of the SLF, ECORP solicited information from the Native American community regarding tribal cultural resources; however, the responsibility to formally consult with the Native American community lies exclusively with the federal and local agencies under applicable State and federal law. A discussion of formal tribal outreach efforts conducted by the City pursuant to AB 52 and SB 18 is provided below.

Field Survey Methods

On October 15 and 16, 2018, ECORP subjected the project APE to an intensive-level pedestrian survey using transects spaced at 15 meters. The entirety of the visible ground surface within the project area was examined for indications of surface or subsurface cultural resources, such as circular depressions or ditches. Whenever possible, the locations of subsurface exposures caused by such factors as rodent activity, water or soil erosion, or vegetation disturbances were examined for artifacts or for indications of buried deposits. Subsurface investigations or artifact collections were not undertaken during the pedestrian survey.

Native American Tribal Consultation

In compliance with AB 52 (PRC Section 21080.3.1) and SB 18, project notification letters were distributed to the appropriate tribes in the project area. On October 29, 2019, the City sent AB 52 letters with offers to consult to the following tribes: Buena Vista Rancheria of Me-Wuk Indians, Colfax-Todds Valley Consolidated Tribe, Ione Band of Miwok Indians, Nashville Enterprise Miwok-Maidu-Nishinam Tribe, Shingle Springs Band of Miwok Indians, Tsi Akim Maidu, United

Auburn Indian Community of the Auburn Rancheria, and the Wilton Rancheria. The City received a response from the Wilton Rancheria on November 19, 2019, requesting formal consultation under AB 52 and to observe and participate in all cultural resource surveys, including initial pedestrian surveys for the project. Wilton Rancheria also requested copies of all environmental documentation for the proposed project related to cultural resources.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

4.3-1 Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5. Based on the analysis below, the impact is *less than significant*.

The proposed project would include subdivision of the project site to develop a total of 440 single-family lots and various associated improvements including, but not limited to, parks, open space areas, landscaping, circulation improvements, and utility installation. The proposed project would also include the demolition of existing on-site residences and associated outbuildings. However, in order to determine whether the residences and associated outbuildings are considered historically significant, the structures were evaluated using the NRHP and the CRHR eligibility criteria. In order to be listed on the NRHP or CRHR, the resource must be at least 50 years old, except in exceptional circumstances. The existing buildings to be demolished are less than 50 years old. Given that the existing structures are less than 50 years old, the existing structures within the site would not be considered eligible for listing under the NRHP or CRHR. In addition, according to the Cultural Resources Inventory Report, previously recorded or new cultural resources were not identified within the project site. Thus, the proposed project would not result in a substantial adverse change in the significance of a historical resource.

As part of the Cultural Resources Report, ECORP requested a records search of the CHRIS. The CHRIS search results indicate that boundaries of the American River Placer Mining District encompass the project's APE. Past studies have recommended that the American River Placer Mining District be considered eligible for the NRHP or the CRHR. An inquiry was made as to whether the California SHPO concurs with this eligibility finding; however, evidence of concurrence has not been found to date. Nevertheless, for the purposes of this analysis, the American River Placer Mining District is considered eligible for the NRHP and CRHR. However, physical features of the American River Placer Mining District do not exist within the project APE. Therefore, the proposed project would not alter, directly or indirectly, the integrity of any characteristics of the American River Placer Mining District that make the resource significant. As such, the proposed project would not result in a substantial adverse change in the significance of the American River Placer Mining District.

Based on the above, the existing structures on the project site would not be considered eligible for listing under the NRHP or CRHR. In addition, the proposed project would not adversely affect the historical significance of the American River Placer Mining District, which encompasses the project APE. Therefore, the proposed project would

not result in a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines, Section 15064.5, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.3-2 Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As part of the cultural resource investigation of the project site, ECORP conducted a pedestrian field survey, which did not reveal any evidence of archaeological resources. Given the project site's history of disturbance through agricultural use, as well as the grading and construction of roadways and residences in the area, the potential for buried archeological deposits to occur in the sediments underlying the project site is low. However, due to the presence of alluvium along Morrison Creek, and the likelihood of pre-contact archaeological sites to be located along waterways, the potential exists for previously unknown archaeological resources to exist in the project area.

In addition, the project area is in the southwestern portion of the territory once occupied by the Penutian-speaking Nisenan. While field surveys conducted by ECORP did not detect human remains, cultural sites, or artifacts of ceremonial significance within the project site, the potential for human remains to be discovered during construction cannot be eliminated due to the known prehistoric occupation of the project area by Native American tribes.

Although archeological resources have not been identified on the project site and, due to past ground disturbance, are not anticipated to occur, the possibility exists that previously unknown resources could be discovered within the project site or off-site improvement areas during construction activities. Therefore, construction activities associated with buildout of the proposed project, including off-site improvements, could uncover undocumented archaeological resources and/or human remains. As such, the proposed project could cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred outside of dedicated cemeteries, and a ***significant*** impact could occur.

Mitigation Measure(s)
Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.3-2 The following requirements shall be included through a notation on all project improvement plans prior to the issuance of grading permits, to the satisfaction of the City Engineer.

In the event subsurface deposits believed to be cultural or human in origin are discovered during construction, all work shall halt within a 50-foot radius of the discovery. A qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:

- *If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and agency notifications are not required.*
- *If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the City of Rancho Cordova and applicable landowner. The project applicant shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Appropriate treatment measures that preserve or restore the character and integrity of a find may be, but are not limited to, processing materials for reburial, minimizing handling of historical objects, leaving objects in place within the landscape, construction monitoring of further construction activities, and/or returning objects to a location within the project area where they will not be subject to future impacts. Work shall not resume within the no-work radius until the applicant, through consultation, as appropriate, determines that the site either: 1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to the City's satisfaction.*
- *If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the City of Rancho Cordova and the Sacramento County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner shall notify the NAHC, which then shall designate a Native American Most Likely Descendant (MLD) for the proposed project (Section 5097.98 of the PRC). The designated MLD shall have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC shall mediate (Section 5097.94 of the PRC). If an agreement is not reached, the landowner shall rebury the remains where they shall not be further disturbed*

(Section 5097.98 of the PRC). The burial shall also include either recording the site with the NAHC or the appropriate information center, using an open space or conservation zoning designation or easement, or recording a reinternment document with Sacramento County (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to their satisfaction.

4.3-3 Cause a substantial adverse change in the significance of a tribal cultural resource as defined in PRC Section 21074. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As part of AB 52 and SB 18 requirements, the City sent project notification letters with offers to consult to the necessary tribes in the project area on October 29, 2019. The City received a response from the Wilton Rancheria requesting formal consultation to observe and participate in all cultural resource surveys, including initial pedestrian surveys for the project. Wilton Rancheria also requested copies of all environmental documentation for the proposed project related to cultural resources.

As noted previously, records searches of the NAHC SLF did not indicate the presence of tribal cultural resources within the project site or the off-site improvement areas. Considering the results of the literature search and the prehistory and history of the area, the project site was determined by ECORP to have a low probability for prehistoric or historic cultural resources, which would include tribal cultural resources. Nonetheless, even though the likelihood is low, the possibility still exists that buried tribal cultural resources associated with local tribes could occur in the project site and the off-site improvement areas. Thus, ground-disturbing activities associated with the proposed project could cause a substantial change in the significance of a Tribal Cultural Resource as defined in PRC Section 21074, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

4.3-3(a) Implement Mitigation Measures 4.3-2.

4.3-3(b) Prior to initiation of ground-disturbing activities associated with the proposed project, a consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training shall be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program shall include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for

avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential tribal cultural resources are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values. Documentation of the brochure and training program (i.e., a sign-in sheet) shall be submitted along with all applicable reports to the City's Community Development Department.

4.3-3(c) Prior to the start of ground-disturbing activities associated with the proposed project, the project applicant and construction contractor(s) shall implement the following measures to minimize the potential for destruction of or damage to existing or previously undiscovered burials, archaeological, and tribal cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities:

- *Native American monitors from culturally affiliated Native American Tribes shall be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any ground-disturbing activities begin.*
- *Native American representatives and Native American monitors have the authority to identify sites or objects of significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative shall recommend appropriate treatment of such sites or objects.*

Compliance with the aforementioned measures shall be documented and submitted with applicable reports to the City's Community Development Department.

4.3-3(d) Develop a standard operating procedure, points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed.

If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other project personnel during construction activities, work shall cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources specialist and

Native American Representatives and Monitors from culturally affiliated Native American Tribes shall assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations shall be documented in the project record.

If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with Wilton Rancheria regarding mitigation contained in the Public Resources Code Sections 21084.3(a) and (b) and CEQA Guidelines Section 15370 shall occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

4.3-4 Cause a cumulative loss of cultural resources. Based on the analysis below, the cumulative impact is *less than significant*.

Generally, while some cultural resources may have regional significance, the resources themselves are site-specific, and impacts to them are project-specific. For example, impacts to a subsurface archeological find at one project site would not generally be made worse by impacts to a cultural resource at another site due to development of another project. Rather, the resources and the effects upon them are generally independent. A possible exception to the aforementioned general conditions would be where a cultural resource represents the last known example of its kind or is part of larger cultural resources such as a single building along an intact historic Main Street. For such a resource, cumulative impacts, and the contribution of a project to them, may be considered cumulatively significant.

As described throughout this Chapter, the project site is included within the American River Placer Mining District, which is considered eligible for listing in the NRHP and CRHR; however, because physical features of the American River Placer Mining District are not present within the project site, the proposed development would not result in adverse effects to the historical significance of the District. Furthermore, implementation of the project-specific mitigation measures set forth in this chapter (Mitigation Measures 4.3-2 and 4.3-3[a] through 4.3-3[c]) would ensure that potential impacts related to disturbance of unknown cultural or tribal cultural resources within the site are reduced to less-than-significant levels.

Similar to the proposed project, future development projects within the City would be required to implement project-specific mitigation to ensure any potential impacts to identified cultural resources are reduced to a less-than-significant levels. For example, General Plan Action CHR.1.3.1 requires historic resources and paleontological studies for all applicable discretionary projects, in accordance with CEQA. In addition, General

Plan Action CHR.1.3.2 requires that the Community Development Department be notified immediately if any cultural resources or human remains are uncovered during construction, with all construction in the vicinity of the find ceasing immediately and appropriate steps taken subsequent to the find to determine next steps. Given that cultural resource impacts are generally site-specific and each future project within the City would be required to adhere to City policies, any potential impacts associated with cumulative buildout of the planning area would not combine to result in a significant cumulative impact.

Based on the above information, implementation of the aforementioned mitigation measures would reduce all project-specific impacts to less-than-significant levels, and the potential for impacts related to a cumulative loss of cultural resources, to which implementation of the proposed project might contribute, would be ***less than significant.***

Mitigation Measure(s)

None required.

4.4 Geology and Soils / Mineral Resources

4.4 GEOLOGY AND SOILS / MINERAL RESOURCES

4.4.1 INTRODUCTION

The Geology and Soils/Mineral Resources chapter of this EIR describes the geologic and soil characteristics of the project site and evaluates the extent to which implementation of the proposed project could be affected by unstable earth conditions and various geologic and geomorphic hazards. In addition, the chapter evaluates known mineral resources on the project site, any potential adverse effects of the proposed project on the availability of such resources, and any adverse impacts on paleontological resources.

Information presented within this chapter is primarily drawn from a Geology and Soils Report prepared by Youngdahl Consulting Group, Inc. and peer reviewed by Geocon Consultants, Inc. (see Appendix F),[1] the City of Rancho Cordova General Plan,[2] and the associated EIR.[3]

4.4.2 EXISTING ENVIRONMENTAL SETTING

Background setting information regarding the geology and soils, seismicity, mineral resources, and paleontological resources associated with the project site and the surrounding region is provided below.

Regional Setting

The project site is located within the Sacramento Valley, which, together with the San Joaquin Valley, comprises the Great Valley geomorphic province. The Great Valley is a forearc basin composed of thousands of feet of sedimentary deposits that has undergone periods of subsidence and uplift over millions of years. The Great Valley basin began to form during the Jurassic period as the Pacific oceanic plate was subducted underneath the adjacent North American continental plate. The subduction zone and associated trench shifted 80 miles seaward to the present location of the Coast Ranges, and a new trench formed offshore; buckling at the edge of the new continent creating a forearc basin. In the western portion of the Great Valley, Upper Jurassic to Upper Cretaceous rock sequences rest on Upper Jurassic oceanic crust sequences. In contrast, the eastern portion of the Great Valley is composed of shallow Pleistocene nonmarine deposits over a layer of Cretaceous marine/deltaic deposits, which rests on the metamorphic and igneous rocks of the Sierra Nevada, which is the western edge of the continental margin.

During the Jurassic and Cretaceous periods of the Mesozoic era, the Great Valley existed as a marine depositional environment. By the end of the Mesozoic, the northern portion of the Great Valley began to fill with considerable gigantic debris as tectonic forces caused uplift of the basin. Several formations were deposited during the Cenozoic Era, including but not limited to, the Ione Formation at the edge of inland sea, the Mehrten Formation and the Laguna Formation in the Sacramento Valley, and the Modesto Formation near stream channels. In the Holocene era, after

1 Youngdahl Consulting Group, Inc. *Geology and Soils for The Preserve.* June 2019.
Geocon Consultants, Inc. *Subject: The Preserve, Grant Line Road and Raymer Way, Rancho Cordova, California. Geotechnical Peer Review*. March 24, 2020.
2 City of Rancho Cordova. *Rancho Cordova General Plan.* Adopted June 26, 2006.
3 City of Rancho Cordova. *Ranch Cordova General Plan Environmental Impact Report*. June 2006.

the last glaciation, stream flows dropped and streams became undersized compared to the valleys, with alluvium consisting of unconsolidated gravel, sand, silt, and clay, deposited along stream channels.

Most of the surface of the Great Valley is covered with Holocene and Pleistocene-age alluvium. The alluvium is composed of sediments from the Sierra Nevada to the east and the Coast Range to the west, which were carried by water and deposited on the valley floor. Siltstone, claystone, and sandstone are the primary types of sedimentary deposits.

Regional Seismicity

A fault is defined as a fracture or zone of closely associated fractures along which rocks on one side have been displaced with respect to those on the other side. A fault zone is a zone of related faults that is commonly braided and subparallel, but may be branching or divergent. Movement within a fault causes an earthquake. When movement occurs along a fault, the energy generated is released as waves that cause ground shaking. Ground shaking intensity varies with the magnitude of the earthquake, the distance from the epicenter, and the type of rock or sediment through which the seismic waves move.

The potential risk of fault rupture is based on the concept of recency and recurrence. The more recently a particular fault has ruptured, the more likely the fault would rupture again. The California Geological Survey defines an “active fault” as one that has had surface displacement within the past 11,000 years (Holocene). Potentially active faults are defined as those that have ruptured between 11,000 and 1.6 million years before the present (Quaternary). Faults are generally considered inactive if evidence of displacement is not present during the Quaternary. The Midland Fault and the Bear Mountain Fault Zones, considered the faults of greatest concern in Sacramento County due to their location and size, are older than 1.6 million years old.

The Foothills fault system is anticipated to have the greatest potential impact. The California Geologic Survey (CGS) identifies low, medium, and high severity earthquake zones within California. The General Plan places the City in Seismic Zone 3, which is an area that can expect to experience ground motion of low severity.[4] Based upon seismologic and geologic conditions, the maximum level of ground motion potentially experienced in the City would occur as a result of a 6.5 magnitude earthquake on the Foothills Fault zone or the Great Valley fault. Minor ground shaking can result in partial collapse of buildings, and extensive damage in poorly built or sub-standard structures.

Project Site Characteristics

The project site consists of approximately 279.3 acres located northwest of Raymer Way and Grant Line Road, within the Grant Line West Planning Area of the City. The project site is located on the southern edge of the Sacramento Valley, adjacent to the Sierra Nevada foothills. The topography of the area is generally flat with elevations ranging from approximately 220 feet above mean sea level to 225 feet above sea level. The CGS lists the project site and surrounding area as being underlain by the Pliocene Age Laguna Formation and some Quaternary Age Alluvium.

Currently, the 279.3-acre project site contains two single-family residences and associated outbuildings on the southern portion of the site, within parcels 072-0300-002 and -005. An orchard is located within the northeastern portion of the site within and parcel 073-0010-011, and a third

[4] City of Rancho Cordova. *Rancho Cordova General Plan Environmental Impact Report*. June 2006.

single-family residence and associated outbuildings are located on APN 072-0300-008. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. The site is interspersed with seasonal drainage corridors and wetlands, and Morrison Creek runs northeast to southwest through the site.

The geologic conditions on the project site are discussed below in further detail, including descriptions of existing site geology, soil conditions, seismicity and ground shaking, potential for earthquake-induced liquefaction, and expansive soils. In addition, this section includes a description of known mineral and paleontological resources within the project area.

Site Geology and Subsurface Conditions

Based on the Geology and Soils Report, subsurface soil conditions on the project site consist of a heterogeneous mixture of materials. Soils were observed to consist of clayey silty sands, clayey sands, clayey sandy silts, and silty sandy clays containing varying amounts of gravel from the surface to a depth of about two to four feet below the existing ground surface. In some areas, the soils extend to a depth of as much as 10 feet. Underlying the relatively fine-grained soils are clayey and silty, gravel and cobbles. According to the Department of Water Resources Water Data Library Web Site, the ground elevation of the water table on the project site is approximately 76 feet above sea level.

The soils in the area have been mapped by the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) (see Figure 4.4-1). The results of the Custom Soil Survey completed for the project site are summarized in Table 4.4-1 below.

Seismicity and Ground Shaking

Fault rupture hazards occur near active faults and tend to reoccur along the surface traces of previous fault movements. A total of eight faults and/or fault zones have been identified as potential seismic sources within a 100-kilometer (62.14-mile) radius of the project site. The fault zones expected to have the greatest impact to are the faults associated with the Foothills fault system. The Foothills fault system is located along the western flank of the Sierra Nevada Mountain range. The site does not include any active faults and is not located within an Alquist-Priolo Special Studies Zone.[5]

The intensity of ground shaking resulting from an earthquake is a function of the size of the earthquake, the duration of the energy release, the distance from the subject location, and the ability of the geologic materials to transmit the energy. In general, the greater the energy release and the closer the center of release to the site, the greater the intensity of the ground shaking. Per the Geology and Soils Report, the project site is in a region of California characterized by low historical seismic activity and a low ground-shaking hazard. According to the City's General Plan EIR, the City's Planning Area is considered to be in a relatively moderate ground shaking zone due to the distance to active faults

[5] California Department of Conservation. *EQ Zapp: California Earthquake Hazards Zone Application.* Available at: https://www.conservation.ca.gov/cgs/geohazards/eq-zapp. Accessed September 2020.

Figure 4.4-1
Soil Resource Report Map



Note: See corresponding map unit numbers in Table 4.4-1.

Table 4.4-1
Soil Characteristics On-Site

Soil Map Unit	Map Unit Symbol	Percent of Site	Shrink-Swell Potential	Permeability	Water Erosion Hazard	Runoff Rating
Hicksville gravely loam, 0 to 2 percent slopes	159	21.4	0.31	Moderately High	7	C/D
Red Bluff loam, 2 to 5 percent slopes	192	7.2	0.50	Moderately High	6	C
Red Bluff-Redding complex, 0 to 5 percent slopes	193	38.3	0.50	Moderately High	6	C
Redding gravelly loam, 0 to 8 percent slopes	198	33.1	0.99	Moderately High	6	D

[1] The NRCS online soil database uses 0-1 values to describe factors such as shrink-swell potential with 0 being very low and 1.0 being very high.

[2] NRCS Saturated hydraulic connectivity (Ksat) refers to the ease with which pores in a saturated soil transmit water based on NRCS class limits.

[3] Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/B, B/D, and C/D). The groups are defined as follows: Group A soils have a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission. Group B soils have a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. Group C soils have a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission. Group D soils have a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high-water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission. If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Source: Youngdahl Consulting Group, Inc.

Liquefaction and Subsidence

Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading. The CGS has designated certain areas within California as potential liquefaction hazard zones, which are areas considered at risk of liquefaction-related ground failure during a seismic event based upon mapped surficial deposits and the depth to the areal groundwater table.

Per the General Plan, subsidence is the gradual settling or sinking of surface soil deposits with little horizontal motion. Sacramento County is affected by five causes of land subsidence: 1) compaction of unconsolidated soils from earthquakes; 2) compaction by heavy structures; 3) erosion of peat soils; 4) peat oxidation; and 5) groundwater withdrawal.

The project site is not in a mapped liquefaction hazard zone. In addition, the depth to the groundwater table and aquifer system is generally greater than 50 feet. The potential for other secondary hazards (i.e., ground lurching, differential settlement, or lateral spreading) occurring during or after seismic events in the City of Rancho Cordova Planning Area is also considered to be low due to the distance of active faults. Therefore, the potential for liquefaction is considered low.

Expansive Soils

Expansive soils are characterized by their ability to undergo significant volume change due to variation in moisture content. Compressible materials consisting of surficial organic material, loose soils, undocumented fills, debris, rubble, rubbish, etc., are considered unsuitable materials for support of proposed structures as such materials can differentially settle. Changes in soil moisture content can result from rainfall, landscape irrigation, utility leakage, roof drainage, perched groundwater, drought, or other factors and may cause unacceptable settlement of structures. The NRCS reports that shrink-swell potentials for on-site soils range from 0.31 to 0.99, using a scale of 0 to 1.0 where 1.0 represents a high potential (see Table 4.4-1). As shown in Table 4.4-1, the on-site soils with the highest expansive potential are located in the northern portion of the project site.

Groundwater

The project site is located within the Central Sacramento County Groundwater Basin (Central Basin). The Central Basin is roughly bordered to the north by the American River and the Cosumnes River to the south. Zone 40 is located within the Central Basin and includes the project site. Groundwater in the Central Basin is stored within a shallow aquifer in the Laguna or Modesto Formations, and in a deeper underlying aquifer zone in the Mehrten Formation. Overall, groundwater within the City of Rancho Cordova is anticipated to be found at depths greater than 50 feet.[6] The project site is primarily underlain by Mehrten features and, thus, groundwater is anticipated to be deeper than other regions of the City.

Mineral Resources

Department of Conservation maps were reviewed to examine the potential of a mine or prospect being located on the project site.[7] Maps contained in the Mineral Land Classification of the Folsom 15-Minute Quadrangle do not identify any documented mines or prospects on the project site or in the project vicinity. While the General Plan identifies mining operations to the north and east of the project site, the site does not contain any such operations. Furthermore, the California Division of Mines and Geology indicates that the project site is classified as either MRZ-3 or MRZ-4 for Placer gold, copper, zinc, and industrial minerals. MRZ-3 and MRZ-4 are considered areas where the significance of mineral deposits either cannot be evaluated from existing data or the data is inadequate for placement in any other mineral resource zone. According to the City's General Plan, the site is not listed as a locally important mineral resource recovery site.

Paleontological Resources

Paleontological resources include fossil remains, as well as fossil localities and formations, which have produced fossil material in other nearby areas. A search of the paleontological records on the University of California Museum of Paleontology (UCMP) database was performed by the City of Rancho Cordova in the General Plan EIR. According to the results of the records search, the

6 City of Rancho Cordova. *Rancho Cordova General Plan Environmental Impact Report*. June 2006.
7 Department of Conservation. *Mineral Land Classification Map Folsom 15-Minute Quadrangle*. May 30, 2018.

City does not appear sensitive for the presence of paleontological resources, and paleontological resources have not been identified in the City's Planning Area. However, fossils have been discovered from the Riverbank Formation. The finds have been dated to the late Pleistocene period and include fish, frogs, snakes, turtles, and plant species.

4.4.3 REGULATORY CONTEXT

The following section is a brief summary of the regulatory context under which geology and soils, mineral resources, and paleontological resources are managed at the federal, State, and local levels.

Federal Regulations

The following are the federal environmental laws and policies relevant to geology and soils, mineral resources, and paleontological resources.

Federal Earthquake Hazards Reduction Act

Passed by Congress in 1977, the Federal Earthquake Hazards Reduction Act is intended to reduce the risks to life and property from future earthquakes. The Act established the National Earthquake Hazards Reduction Program (NEHRP). The goals of NEHRP are to educate and improve the knowledge base for predicting seismic hazards, improve land use practices and building codes, and to reduce earthquake hazards through improved design and construction techniques.

International Building Code

The Uniform Building Code (UBC) was first published in 1927 by the International Council of Building Officials and is intended to promote public safety and provide standardized requirements for safe construction. The UBC was replaced in 2000 by the new International Building Code (IBC), published by the International Code Council (ICC), which is a merger of the International Council of Building Officials' UBC, Building Officials and Code Administrators International's National Building Code, and the Southern Building Code Congress International's Standard Building Code. The intention of the IBC is to provide more consistent standards for safe construction and eliminate any differences between the three preceding codes. All State building standard codes are based on the federal building codes.

Federal Clean Water Act

The Clean Water Act (CWA) establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating quality standards for surface waters. The basis of the CWA was enacted in 1948 and was called the Federal Water Pollution Control Act, but the Act was significantly reorganized and expanded in 1972. The CWA made it unlawful to discharge any pollutant from a point source into navigable waters, unless a permit was obtained through the National Pollutant Discharge Elimination System (NPDES) permit program or point sources are discrete conveyances such as pipes or man-made ditches.

National Pollutant Discharge Elimination System

The NPDES permit program addresses water pollution by regulating point sources that discharge pollutants to waters of the United States. Created in 1972 by the Clean Water Act, the NPDES permit program is authorized to California's Regional Water Quality Control Board (RWQCB) by the U.S. Environmental Protection Agency (EPA) to perform many permitting, administrative, and enforcement aspects of the program. The terms of the NPDES permits implement pertinent

provisions of the Federal Clean Water Act to protect surface waters, including lakes, rivers, streams, bays, dry steam beds, wetlands, and storm sewers.

State Regulations

The following are the State environmental laws and policies relevant to geology and soils, mineral resources, and paleontological resources.

Alquist-Priolo Earthquake Fault Zoning Act

The 1972 Alquist-Priolo (AP) Earthquake Fault Zone Act was passed to prevent the new development of buildings and structures for human occupancy on the surface of active faults. The Act is directed at the hazards of surface fault rupture and does not address other forms of earthquake hazards. The locations of active faults are established into fault zones by the AP Fault Zone Act. Local agencies regulate any new developments within the appropriate zones in their jurisdiction.

The AP Fault Zone Act regulates development near active faults so as to mitigate the hazard of surface fault rupture. The AP Fault Zone Act requires that the State Geologist (Chief of the California Department of Mines and Geology [CDMG]) delineate “special study zones” along known active faults in California. Cities and counties affected by the special study zones must regulate certain development projects within the special study zones. The AP Fault Zone Act prohibits the development of structures for human occupancy across the traces of active faults. According to the AP Fault Zone Act, active faults have experienced surface displacement during the last 11,000 years. Potentially active faults are those that show evidence of surface displacement during the last 1.6 million years. A fault may be presumed to be inactive based on satisfactory geologic evidence; however, the evidence necessary to prove inactivity sometimes is difficult to obtain and may not exist.

Seismic Hazards Mapping Act

The California Seismic Hazards Mapping Act of 1990 (California Public Resources Code Section 1690-2699.6) addresses non-surface rupture earthquake hazards, including liquefaction, induced landslides, and subsidence. A mapping program is also established by this Act, which identifies areas within California that have the potential to be affected by such non-surface rupture hazards. The Seismic Hazards Mapping Act specifies that the lead agency for a project may withhold development permits until geologic or soils investigations are conducted for specific sites and mitigation measures are incorporated into plans to reduce hazards associated with seismicity and unstable soils.

California Building Standards Code

The State of California regulates development within the State through a variety of tools that reduce or mitigate potential hazards from earthquakes or other geologic hazards. The 2019 California Building Standards Code (CBSC) (California Code of Regulations, Title 24) governs the design and construction of all building occupancies and associated facilities and equipment throughout California. In addition, the CBSC governs development in potentially seismically active areas and contains provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards. The California building standards include building standards in the national building code, building standards adapted from national codes to meet California conditions, and building standards adopted to address particular California concerns. It should be noted that the CBSC is updated on a triennial cycle. The 2019 CBSC, which contains new code changes, became effective on January 1, 2020.

Local Regulations

The following are the local environmental laws and policies relevant to geology and soils, mineral resources, and paleontological resources.

City of Rancho Cordova General Plan

Goals and policies from the City's General Plan related to geology and soils, mineral resources, and paleontological resources that are applicable to the proposed project are presented below:

Goal S.3 Reduce the risk of adverse effects to residents or businesses as a result of geologic or seismic instability.

- Policy S.3.1 Support efforts by federal, State, and local jurisdictions to investigate local seismic and geologic hazards and support those programs that effectively mitigate these hazards.
- Policy S.3.2 Ensure that new structures are protected from damage caused by geologic and/or soil conditions to the greatest extent feasible.

Goal NR.5 Protect the quantity and quality of the City's water resources.

- Policy NR.5.5 Minimize erosion to stream channels resulting from new development in urban areas consistent with State law.

City of Rancho Cordova Municipal Code

Sections of the Municipal Code related to geology and soils, mineral resources, and paleontological resources that are applicable to the proposed project are presented below.

Chapter 16.04, Building Code

Chapter 16.04, Building Codes, of the Rancho Cordova Municipal Code is meant to provide minimum standards to safeguard life or limb, health, property, and public welfare by regulating and controlling the design, construction, and installation of all buildings within the City. Section 16.04.030 adopts Title 24 of the California Code of Regulations, and any rules and regulations incorporated within Title 24.

Chapter 16.44, Land Grading and Erosion Control

Chapter 16.44, Land Grading and Erosion Control, of the Rancho Cordova Municipal Code, includes definitions, conditions, and permit requirements for new development to minimize damage to surrounding properties and public rights-of-way, degradation of water quality, disruption of natural or City-authorized drainage flows caused by clearing, grading, filling, and excavating, and sediment and pollutant runoff.

4.4.4 IMPACTS AND MITIGATION MEASURES

This section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to geology and soils, mineral resources, and paleontological resources. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would result in any of the following:

- Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:
    - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area based on other substantial evidence of a known fault;
    - Strong seismic ground shaking;
    - Seismic-related ground failure, including liquefaction;
    - Landslides;
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property;
- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state;
- Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan; and/or
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Issues Dismissed in the Initial Study

The Initial Study prepared for the proposed project (see Appendix A) determined that development of the proposed project would result in a less-than-significant impact related to the following:

- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

For the reasons cited in the Initial Study, the potential impacts associated with the use of septic tanks or alternative wastewater disposal systems are not analyzed further in this EIR.

Method of Analysis

The analysis of the proposed project's potential impacts related to geology, soils, and mineral resources is based primarily on the Geology and Soils Report prepared for the proposed project by Youngdahl Consulting Group, Inc. Information related to paleontological resources is sourced primarily from the City of Rancho Cordova General Plan.

Geology and Soils Report

The Geology and Soils Report prepared for the proposed project by Youngdahl Consulting Group, Inc. drew on information from previous studies, including a 2004 Geotechnical Engineering Report performed by Wallace-Kuhl & Associates, Inc., regional geologic maps and fault maps prepared by the California Department of Conservation's CGS, and soil maps and information provided by the USDA NRCS. Impacts related to geology, soils, and seismicity were evaluated based on

available data (maps, soil surveys, reports), and professional judgement. The analysis focuses on the proposed project's potential to result in the risk of personal injury, loss of life, and damage to property as a result of existing geologic and geotechnical conditions within the project area. The analysis of impacts assumes that the project applicant would conform to the latest stormwater pollution prevention requirements and all applicable policies, standards, and ordinances set forth by the County, City, and other agencies.

Mineral Resources

As part of the Geology and Soils Report, the proposed project's potential to affect mineral resources was evaluated by examining the project footprint in comparison to resource locations mapped by the CGS.

Paleontological Resources Analysis

The assessment of paleontological resources and the potential for discovery on the project site was based primarily on the General Plan EIR. The General Plan EIR included a search of the University of California, Berkeley, Museum of Paleontology collections database, as well as historical maps and aerial photographs.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

4.4-1 Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, or landslides. Based on the analysis below, the impact is *less than significant*.

As discussed above, the project site is not located within an AP Fault Zone. Evidence of recent faulting within the project site area has not been detected, nor have any active faults been mapped at or near the project site.

The project site is located in an area of relatively low ground shaking hazard. However, a large earthquake on a nearby fault could cause minor ground shaking in the vicinity of the project, potentially resulting in an increased risk of structural loss, injury, or death. Liquefaction and related seismic hazards such as lateral spreading and differential settlement have the potential to compromise the structural integrity of the proposed residences. Despite the potential for seismic events to cause damage to the structures on the project site, all residences would be designed in accordance with the CBSC, and would be able to: 1) resist minor earthquakes without damage; 2) resist moderate earthquakes without structural damage, but with some non-structural damage; and 3) resist major earthquakes without collapse, but with some structural, as well as non-structural, damage.

As noted in the Geology and Soils Report, due to the absence of a permanently elevated groundwater table and the relatively low seismicity of the project area, the potential for seismically induced damage to the proposed structures due to

liquefaction, surface rupture, and settlement is minimal. Furthermore, because the project site does not contain any steep slopes, the risk of landslide the site would not be substantial.

Overall, the proposed residential development would not be subject to substantial risks related to fault rupture hazards. Due to the relatively low seismicity of the area, compliance with CBSC requirements related to seismic design, and the lack of substantial natural slopes on-site, the potential for the project to expose people or structures to the risk of loss, injury, or death involving rupture of an earthquake fault, strong ground shaking, ground failure, liquefaction, or landslides would be ***less-than-significant***.

Mitigation Measure(s)
None required.

4.4-2 Result in substantial soil erosion or the loss of topsoil. Based on the analysis below, the impact is *less than significant*.

Erosion refers to the removal of soil from exposed bedrock surfaces by wind or water. Although naturally occurring, erosion is often accelerated by human activities that disturb soil and vegetation. Grading, excavation, removal of vegetation cover, and loading activities associated with construction could temporarily increase erosion, runoff, and sedimentation. Ground-disturbing activities associated with the proposed project could also result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential within the construction and staging areas. Ground-disturbing activities that would occur as part of the proposed project would occur within the portion of the site to the south of Morrison Creek. The 185.3 acres of open space area within the northern portion of the site would not be included in development of the proposed project.

NPDES permits are required for discharges of pollutants to waters of the United States, which includes any discharge to surface waters, including lakes, rivers, streams, bays, dry stream beds, wetlands, and storm sewers. The RWQCB issues permits in lieu of direct issuance by the Environmental Protection Agency. The terms of the NPDES permits implement pertinent provisions of the Federal Clean Water Act. In accordance with the NPDES General Construction Permit, a Stormwater Pollution Prevention Plan (SWPPP) is required for any project that disturbs at least one acre of soil. Given that the proposed project would disturb approximately 98.9 acres within the site, the project would be required to prepare a SWPPP and submit a Notice of Intent (NOI) to the RWQCB.

The SWPPP would be kept on site during construction activity and made available upon request to representative of the City of Rancho Cordova, the County of Sacramento, or the Central Valley RWQCB. The SWPPP would identify pollutant sources that may affect the quality of stormwater associated with construction activity, and identify stormwater pollution prevention measures to be implemented to reduce pollutants in stormwater discharges during and after construction. Therefore, the SWPPP would also include a description of potential pollutants and hazardous materials present on site during construction. The SWPPP would include details of

how the sediment and erosion control practices, also known as best management practices (BMPs) would be implemented. Implementation of the SWPPP would comply with County, State, and federal water quality requirements. Development of the SWPPP would include plans to treat stormwater runoff in accordance with the standards of the California Stormwater Management Practice New Development and Redevelopment Handbook and the Sacramento Stormwater Quality Partnership Municipal Stormwater Permit (MS4). The plan would include drainage design from all paved surfaces, including streets, parking lots, driveways, and roofs, as well as landscaping.

Furthermore, Chapter 16.44 of the City's Municipal Code regulates grading and erosion by requiring all projects that grade more than one acre of land submit an application for review by the City prior to approval of a grading permit. The application must include a grading and erosion plan which would be reviewed for safety of grading and potential for erosion. The project would be subject to compliance with Chapter 16.44 of the City's Municipal Code and the project applicant would be required to prepare a grading and erosion plan. The grading and erosion plan would include erosion control measures and sediment control measures to ensure the stability of the ground surface and soil within the project site during construction activities.

Based on the above, development of the proposed project would not result in substantial soil erosion or the loss of topsoil with the preparation of an SWPPP in accordance with the NPDES General Construction Permit and preparation of a grading and erosion plan in accordance with the City's Municipal Code. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.4-3 Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Issues associated with unstable geologic units and/or soils, including expansive soils, landslide, lateral spreading, subsidence, liquefaction, and collapse are discussed below.

Landslide

Per the CGS the project site is not currently within a State of California Seismic Hazard Zone for seismically induced land sliding.[8] In addition, the project site is relatively

[8] Department of Conservation. *CGS Information Warehouse: Landslides*. Available at: http://maps.conservation.ca.gov/cgs/informationwarehouse/. Accessed April 2, 2020.

gently rolling to flat and does not have any steep slopes. Given that the project site is not mapped in a landslide zone and the site does not contain any slopes that could be subject to landslide risks, development of the southern portion of the project site with 440 single-family units and associated improvements would not result in on- or off-site landslide hazards.

Lateral Spreading

Lateral spreading is associated with terrain near free faces such as excavations, channels, or open bodies of water. The project site is relatively level with gentle undulation throughout the property. The Geology and Soils Report concluded that the soil materials at the site would not create any excavation difficulties, nor would the relatively shallow slopes present within the project site create any slope instability. Additionally, the proposed residences would be setback at least 100 feet from Morrison Creek within the project site. The setbacks would ensure that project development would not destabilize the channel or otherwise result in lateral spreading issues. Because the proposed project would establish appropriate setbacks from the Morrison Creek channel, and because the proposed development area does not contain any steep slopes or free faces, the proposed project would not be subject to substantial risks related to lateral spreading.

Liquefaction

Liquefaction occurs when saturated fine-grained sand and/or silts lose their physical strength temporarily during earthquake-induced shaking and behave as a liquid. The CGS has designated certain areas within California as potential liquefaction hazard zones; however, the project site is not currently mapped for potential liquefaction hazard by the CGS. Additionally, the Geology and Soils Report indicates that a low probability of liquefaction exists at the project site. Therefore, the proposed structures and associated improvements would not be subject to substantial risks associated with liquefaction.

Collapse

As discussed above, all structures constructed as part of the proposed project would be required to adhere to the provisions of the most recent version of the CBSC in effect at the time of building permit issuance. Structures built according to the seismic design provisions of current building codes would be able to resist major earthquakes without collapse, but with some structural, as well as non-structural damage. Given the project's adherence to the CBSC requirements, the proposed project would not be subject to substantial risks associated with building collapse.

Expansive Soils

According to the preliminary geotechnical evaluation performed by Wallace-Kuhl & Associates, the site contains soils made of clay with a moderately high expansion potential. As shown in Table 4.4-1 above, the shrink-swell potential of soils on the project site ranges from 0.31 to 0.99, on a scale of 0 to 1.0, where 1.0 represents a high potential. Expansive soils have the potential to compromise the structural integrity of project features, which could be a significant impact. However, in order to meet the CBSC Chapter 18 requirements, the project applicant's geotechnical engineer would be responsible for conducting final geotechnical evaluations of the on-site soils to further determine the extent of soils with adverse shrink-swell properties prior to

grading and construction activities. Based on subsurface conditions, the project applicant's geotechnical engineers would make recommendations for project element designs to accommodate for the effects of expansive soils. Corrective actions may include excavation of potentially problematic soils during construction and replacement with engineered backfill, ground treatment processes, and direction of surface water away from foundation soils. The applicants would select one or more of the measures in consultation with qualified engineers before grading activities begin. Therefore, with implementation of the aforementioned corrective actions, the proposed project would not be exposed to substantial risks related to expansive soils.

Conclusion

From a geotechnical standpoint, the project site is preliminarily considered suitable for the proposed construction. Thus, the proposed project would not likely be subject to issues associated with lateral spreading, subsidence, liquefaction, collapse, or expansive soils. However, implementation of recommendations included in a final geotechnical engineering report would be required in order to ensure adequate support of the proposed improvements. Because a final geotechnical engineering report has not yet been prepared, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.4-3 *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for review and approval by the Rancho Cordova Community Development Department. The report shall address and make recommendations on the following:*

A. Road, pavement, and parking area design;
B. Structural foundations, including retaining wall design (if applicable);
C. Grading practices;
D. Erosion/winterization;
E. Special problems discovered on-site, (i.e., open bodies of water, expansive/unstable soils, etc.); and
F. Slope stability.

Once approved by the Rancho Cordova Community Development Department, two copies of the final report shall be provided to the Rancho Cordova Community Development Department and one copy to the Rancho Cordova Building and Safety Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.

4.4-4 Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State or of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Based on the analysis below, the impact is *less than significant*.

According to the Geology and Soils Report performed by Youngdahl Consulting, the project site does not contain any known mineral resources that would be of value to the region or the residents of the State. Furthermore, the City of Rancho Cordova General Plan does not list the project site as a locally-important mineral resource recovery site. The site has been previously designated for residential uses, and mineral resource extraction on the site would be incompatible with the existing residential development to the south of the site. Therefore, development of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.4-5 Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

According to the City's General Plan EIR, paleontological resources have not been identified in the Planning Area. However, fossils have been recovered from the Riverbank Formation. The General Plan EIR concluded that build out of the City's General Plan could result in a significant impact to unknown cultural resources. With implementation of Policy CHR.3.3 and Action CHR.3.3.4 which require all new development projects to comply with established procedures upon discovery of unique paleontological resources, impacts related to disturbance of paleontological resources were determined to be less than significant.

Although the proposed project would not have the potential to result in the destruction of unique geological features, previously unknown paleontological resources could exist within the project site and off-site improvement areas. Therefore, ground-disturbing activity, such as grading, trenching, or excavating associated with implementation of the proposed project, could have the potential to disturb or destroy unknown paleontological resources. Thus, the proposed project could result in the direct or indirect destruction of a unique paleontological resources, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level

4.4-5 *Should construction or grading activities result in the discovery of unique paleontological resources, all work within the vicinity of the discovery shall cease. The City of Rancho Cordova Community Development Department shall be notified, and the resources shall be examined by a qualified paleontologist at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The paleontologist shall submit to the Community Development Department for review and approval a report of the findings and method of curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.*

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections, of this EIR.

4.4-6 Cumulative impacts to geology and soils, mineral resources, and paleontological resources. Based on the analysis below, the cumulative impact is *less than significant*.

Impacts to geology and soils, mineral resources, and paleontological resources related to implementation of the proposed project are analyzed throughout this chapter. As discussed above, existing geological and soil conditions on the site would be adequate to support development of the proposed project. Mitigation Measure 4.4-3, which requires preparation and submittal of a final geotechnical report, would ensure that project-specific impacts related to soil stability would be reduced to less-than-significant levels.

While some geologic characteristics may affect regional construction practices, impacts and mitigation measures are primarily site-specific and project-specific. For example, impacts resulting from development on expansive soils at one project site are not worsened by impacts from development on expansive soils or undocumented fill at another project site. Rather, the soil conditions, and the implications of such conditions for each project, are independent.

As such, the potential for cumulative impacts related to geology, soils, seismicity, paleontological resources, and mineral resources, to which implementation of the proposed project might contribute, is ***less than significant***.

Mitigation Measure(s)

None required.

4.5 Hazards and Hazardous Materials

4.5. HAZARDS AND HAZARDOUS MATERIALS

4.5.1 INTRODUCTION

The Hazards and Hazardous Materials chapter of the EIR describes existing and potentially occurring hazards and hazardous materials within the project area. The chapter includes a discussion of potential impacts posed by such hazards to the environment. In addition, surrounding land uses are discussed in order to provide an assessment of whether the project could impact surrounding land uses. The question of whether surrounding land uses could impact the project's future residents is not a question requiring analysis under CEQA.[1]

The Hazards and Hazardous Materials chapter is primarily based on information drawn from a Phase I Environmental Site Assessment (ESA) (see Appendix G) prepared for the project site by Youngdahl Consulting Group, Inc.,[2] as well as the City of Rancho Cordova General Plan[3] and associated EIR.[4]

4.5.2 EXISTING ENVIRONMENTAL SETTING

The following section includes a definition of hazardous materials and descriptions of the existing conditions associated with the project site related to hazards and hazardous materials.

Hazardous Materials

The term hazardous substance refers to both hazardous materials and hazardous wastes. A material is defined as hazardous if the material appears on a list of hazardous materials prepared by a federal, State, or local regulatory agency or if the material has characteristics defined as hazardous by such an agency. The California Environmental Protection Agency (CalEPA), California Department of Toxic Substance Control (DTSC) defines hazardous waste, as found in the California Health and Safety Code Section 25141(b), as follows:

> […] its quantity, concentration, or physical, chemical, or infectious characteristics: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; (2) pose a substantial present or potential hazard to human health or the environment, due to factors including, but not limited to, carcinogenicity, acute toxicity, chronic toxicity, bioaccumulative properties, or persistence in the environment, when improperly treated, stored, transported, or disposed of, or otherwise managed.

1 Per the *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 (*CBIA*), the California Supreme Court held that "agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project's future users or residents. But when a proposed project risks exacerbating those environmental hazards or conditions that already exist, an agency must analyze the potential impact of such hazards on future residents or users. In those specific instances, it is the project's impact on the environment – and not the environment's impact on the project – that compels an evaluation of how future residents or users could be affected by exacerbated conditions." (*Id.* at pp. 377-378.).

2 Youngdahl Consulting Group, Inc. *Phase I Environmental Site Assessment, The Preserve, Sacramento County APNs 072-0300-001, 002, -005, 008, -010, and 073-0010-011, Rancho Cordova, California.* June 2019.

3 City of Rancho Cordova. *General Plan*. Adopted June 26, 2006.

4 City of Rancho Cordova. *General Plan Environmental Impact Report.* 2006.

The following discussion focuses on the potential Recognized Environmental Conditions (RECs) associated with the project site. A REC indicates the presence or likely presence of any hazardous substances in, on, or at a property due to any release into the environment, under conditions indicative of a release to the environment, or under conditions that pose a material threat of a future release to the environment.[5]

Additionally, the following includes a discussion of historical RECs associated with the project site. A historical REC indicates a past release of hazardous substances or petroleum products that has occurred in connection with a property and has been addressed to the satisfaction of the applicable regulatory authority. A historical REC does not have any property use restrictions, and, thus, does not have any use limitations in respect to future activities on the property.

Project Area Conditions

The project site is comprised of multiple parcels identified by Assessor's Parcel Numbers (APNs) 072-0300-001, -002, -005, -008, and 073-0010-010, and -011. Morrison Creek runs northeast to southwest through the project site. Currently, the 279.3-acre project site contains two single-family residences and associated outbuildings on the portion of the site to the south of Morrison Creek, within parcels 072-0300-002 and -005. An orchard is located within the northeastern portion of the site within and parcel 073-0010-011, and a third single-family residence and associated outbuildings are located on APN 072-0300-008, north of Morrison Creek. The remainder of the site consists primarily of ruderal grasses. Currently, the undeveloped portions of the site are used for livestock grazing.

Surrounding land uses include the Camden at Somerset Ranch residential subdivision directly to the south, vacant agricultural lands and a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, two single-family residences and industrial/open space to the north, and vacant land approved for the development of the Rio Del Oro residential community immediately adjacent to the west. The area further to the north of the site contains known contamination areas associated with the Aerojet General Corporation National Priorities List Superfund Site. A monitoring well associated with the Superfund site is located within the project site.

The site is located within California's Great Valley Geomorphic Province, a geologically young, large, flat-lying alluvial plain in the central portion of California. The project site and the surrounding area is underlain by the Laguna Formation and a thin strip of Quaternary Alluvium along the central drainage feature within the site. The Laguna Formation consists of Tertiary age fluvial granitic sands and silts. According to Spring 2017 Department of Water Resources (DWR) well records, one irrigation well is located approximately 0.5-mile to the southeast of the site. The most recent data obtained from the well in October of 2018 shows a groundwater depth of 183 feet below the ground surface (bgs). Groundwater elevation contour maps produced in 2018 by Geosyntec Consultants show each groundwater layer flowing towards the southwest in the vicinity of the project site.

The potential hazards associated with the project area identified in the Phase I ESA prepared for the project site are described in further detail below. It should be noted that the 2019 Phase I ESA incorporates the findings of multiple prior Phase I ESAs that were completed for various portions of the project site between 2015 and 2018.

[5] ASTM International. *ASTM E1527, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* 2013.

On-Site Recognized Environmental Conditions

Based on the Phase I ESA prepared for the project site, the site does not contain any polychlorinated biphenyl (PCB) containing equipment, substantial soil staining, or stressed vegetation. However, potential RECs were identified associated with groundwater contamination, soil vapor intrusion, an on-site underground storage tank (UST) and fuel storage vessels, asbestos, lead-based paint, and termiticides. In addition, the Phase I ESA noted the presence of domestic wells and septic systems within the site. Figure 4.5-1 provides an overview of the site features described in the Phase I ESA.

Groundwater Contamination

As noted above, the project site is located within the vicinity of known contamination areas associated with the Aerojet General Corporation National Priorities List Superfund Site. Past environmental sampling has identified a contaminant plume of trichloroethylene (TCE) associated with the Aerojet area. As part of the Phase I ESA prepared for the project site, the Fall 2018 iso-concentration maps prepared by Geosyntec Consultants depicting the extent of contamination of the Aerojet area for TCE, perchlorate, and N-Nitrosodimethylamine (NDMA) were reviewed.

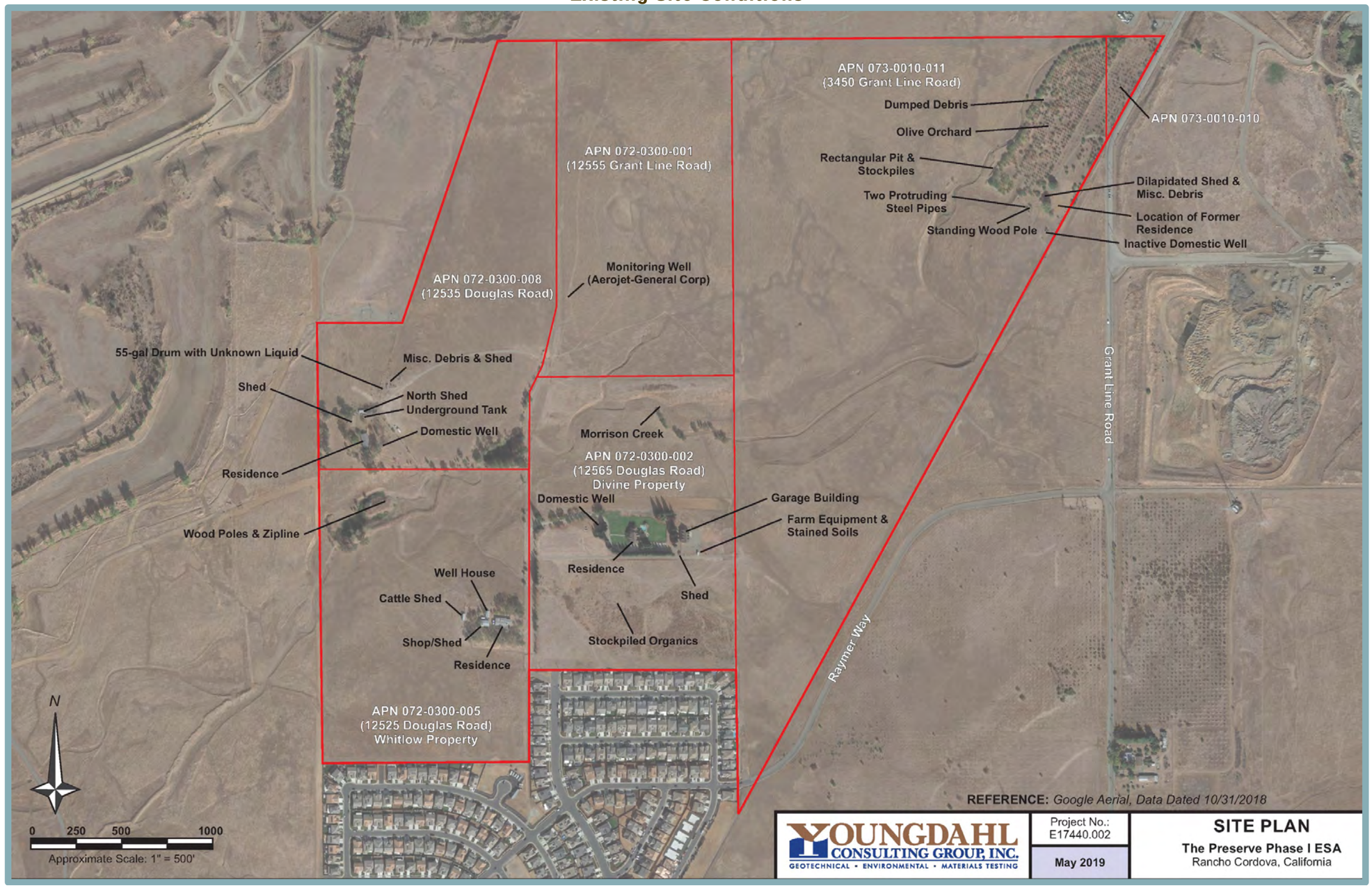
Per the maps, the NDMA contours do not intersect the project site. However, the maps show that the five parts per billion (ppb) contour for TCE in groundwater Layers C and D reach monitoring wells OS-10C1/OS-10C2 located in the southwest of parcel 072-0300-001 (12555 Grant Line Road), partially encroaches into parcel 072-0010-011, and continues west through parcel 072-0300-008 to the west adjacent parcel where an extraction well (#4757) is located. The 50 ppb contour for Layer C encroaches near the northern part of parcel 072-0300-001, near a monitoring well just outside the north property boundary (well OS-5C). The four ppb contour for perchlorate in Layer C intersects the subject property at the northeast corner of the site within parcels 072-0010-010 and -011.

The maximum contaminant level (MCL) for groundwater and drinking water established by the Environmental Protection Agency (EPA) is five ppb for TCE and six ppb for perchlorate. Perchlorate was found to be below the MCL at the subject property. In addition, perchlorate does not pose a soil vapor intrusion risk. The five ppb TCE contour does not intersect any domestic wells within the project site, but has potential to create a soil vapor intrusion scenario for future development on the site.

Vapor Encroachment

Vapor intrusion is the term used to describe the migration of volatile organic compounds (VOCs) through soil vapor from the sub-surface soil and/or groundwater upward into buildings, potentially causing unacceptable chemical exposure for building occupants. Soil vapor is one of the pathways of contamination to the subject property, along with ground water and soil. ASTM E1527-13 requires that vapor migration be treated no differently than contaminated groundwater. Thus, the soil vapor contaminant pathway needs to be considered in evaluation of RECs or other environmental concerns. The ASTM Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions (ASTM E2600-10) is the industry-accepted guidance for using Phase I ESA information to determine if a vapor encroachment condition (VEC) exists at a subject property. Per a VES conducted as part of the Phase I ESA, the Aerojet groundwater contamination plume was identified as having a potential to create a soil vapor intrusion scenario at the project site.

Figure 4.5-1
Existing Site Conditions



Underground Storage Tank and Fuel Storage Vessels

As part of a site reconnaissance survey conducted for the Phase I ESA, two steel pipes were observed protruding out of the ground within APN 073-0010-011 (3450 Grant Line Road). Per Youngdahl Consulting Group, Inc., the two protruding pipes have potential to be connected to an UST, which is considered an REC. In addition, the Phase I ESA identified an unknown underground system within APN 072-0300-008 adjacent to the shed located north of the residence. A 55-gallon drum was found northeast of the residence with an unknown liquid inside. Both the underground storage system and the drum are considered RECs if these vessels were used for fuel storage.

Asbestos-Containing Building Materials

Asbestos is a set of six naturally occurring silicate minerals used commercially for their desirable physical properties. The prolonged inhalation of asbestos fibers can cause serious illnesses including malignant lung cancer, mesothelioma, and asbestosis. In the industrialized world, asbestos was phased out of building products mostly in the 1970s, with most of the remainder phased out by the 1980s. For buildings constructed prior to 1980 (29 Code of Federal Regulations [CFR] 1926.11) all thermal system insulation and surface materials must be designated as presumed asbestos-containing building materials (ACBMs) unless proved otherwise through sampling. The residences and associated outbuildings within APN 072-0300-008 (12535 Douglas Road) were built sometime between 1975 and 1980; therefore, ACBM may be present within such structures. All other structures on the project site were found to have been built after 1980 and, thus, are unlikely to be contaminated with ACBMs.

Lead-Based Paint

Lead is considered to be a harmful environmental pollutant. Within the U.S., most homes and other buildings built before 1960 contain heavily leaded paint. Some homes built as recently as 1978 may also contain lead paint. Within the project site, the residence and outbuildings within APN 072-0300-008 (12535 Douglas Road) were built sometime between 1975 and 1980 and, thus, potentially contain lead-based paint. In addition, the Whitlow property (APN 072-0300-005, 12525 Douglas Road) contains a residence and associated outbuildings built sometime between 1980 and 1984; and the Divine property (APN 072-0300-002, 12565 Douglas Road) contains a residence that was built in 1994; while less likely, the potential exists for such structures to also contain lead-based paint.

Termiticides

Organochlorine termiticides (OC termiticides) are a group of persistent pesticides that were formerly used for termite control in and around wooden structures from the mid-1940s to the late 1980s. Such OC termiticides included chlordane, aldrin, dieldrin, heptachlor, and DDT. Chlordane and other organochlorine pesticides (OCPs) were commonly used as termiticides around structures until 1988. Above-ground use of chlordane was phased out between 1978 and 1983 by the U.S. Environmental Protection Agency (USEPA); although chlordane was used as a termiticide for wooden structures until it was prohibited in 1988. Due to the dates of construction, all wooden structures within the project site except for the Divine Property (APN 072-0300-002, 12565 Douglas Road) are at risk of having termiticides present, which is considered an REC.

Pesticides

Between the 1940s and 1970s, OCPs were commonly used in the U.S. for public health vector control, agricultural crop production, and pest control around structures. Although most OCPs were banned or withdrawn from use in the 1970s (including DDT), the compounds remain in the

environment where surface soils associated with historical agricultural and termite control pesticides are present. An orchard is visible starting in the 1984 historical aerial photo at the northeast corner of the subject site within APNs 073-0010-011 (3450 Grant Line Road) and 073-0010-010. The orchard is not shown in the 1980 topographic map. Per the Phase I ESA, due to the date in which the orchard was created, lead arsenate pesticides or OCPs are not likely to be present.

Domestic Wells and Septic Systems

Based on a records review conducted as part of the Phase I ESA, a domestic well was identified within the project site at 3450 Grant Line Road (073-0010-011). The well was permitted to be inactive in February 2015. Past sampling of the well for the Aerojet contamination plume showed that the well had trace levels of NDMA; the well did not contain any VOCs or perchlorate. The well was sealed in October 2014 and was planned for destruction; however, the well has not yet been destroyed at this time. Additional domestic wells were identified within APNs 072-0300-002, 072-0300-005, and 072-0300-008.

A septic system was identified within the lawn to the north of the existing residence at APN 072-0300-005. In addition, the Phase I ESA noted the possible presence of a septic tank adjacent to the northernmost shed on APN 072-0300-010.

Nearby Recognized Environmental Conditions

In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to identify sites listed on regulatory agency databases within approximate minimum search distances from the subject property with potential of existing environmental problems. The following sites were identified in the project vicinity:

- Aerojet General Corporation – U.S. Route 50 and Aerojet Road;
- North Douglas – Northeast of Douglas Road;
- American River Asphalt – 3417 Grant Line Road;
- Grantline Plant – 3417 Grant Line Road;
- Inactive Rancho Cordova Test Site (IRCT) – Nimbus Road;
- Automotive Importing MFG Inc. – 3920 Security Park Drive;
- General Electric Medical Systems – 3920 Security Park Drive.

With the exception of the groundwater plume associated with the Aerojet site, the Phase I ESA did not identify any potential risks to the project site associated with the above listed properties.

4.5.3 REGULATORY CONTEXT

The following discussion contains a summary of regulatory controls pertaining to hazardous substances, including federal, State, and local laws and ordinances.

Federal Regulations

Federal agencies that regulate hazardous materials include the USEPA, the Occupational Safety and Health Administration (OSHA), the Department of Transportation (DOT), and the National Institute of Health (NIH). Prior to August 1992, the principal agency at the federal level regulating the generation, transport, and disposal of hazardous waste was the USEPA under the authority of the Resource Conservation and Recovery Act (RCRA). As of August 1, 1992, however, the California DTSC was authorized to implement the State's hazardous waste management program

for the USEPA. The USEPA continues to regulate hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The following federal laws and related regulations govern hazardous materials.

Occupational Safety and Health Act

Congress passed the Occupational and Safety Health Act (29 U.S.C. Section 651 et seq. [1970]) to ensure worker and workplace safety. Their goal was to make sure employers provide their workers a place of employment free from recognized hazards to safety and health, such as exposure to toxic chemicals, excessive noise levels, mechanical dangers, heat or cold stress, or unsanitary conditions. In order to establish standards for workplace health and safety, the Act also created the National Institute for Occupational Safety and Health (NIOSH) as the research institution for OSHA. OSHA is a division of the U.S. Department of Labor that oversees the administration of the Act and enforces standards in all 50 states. OSHA requires 40 hours of training for hazardous materials operators, as well as an annual eight-hour refresher course, which includes training regarding personal safety, hazardous materials storage and handling, and emergency response.

Comprehensive Environmental Response, Compensation, and Liability Act

The CERCLA (42 U.S.C. Section 9601 et seq. [1980]) provides a federal "Superfund" to clean up uncontrolled or abandoned hazardous-waste sites as well as accidents, spills, and other emergency releases of pollutants and contaminants into the environment. Through CERCLA, the USEPA was given power to seek out those parties responsible for any release and assure their cooperation in the cleanup. The USEPA cleans up orphan sites when potentially responsible parties cannot be identified or located, or when they fail to act. Through various enforcement tools, USEPA obtains private party cleanup through orders, consent decrees, and other small party settlements. The USEPA also recovers costs from financially viable individuals and companies once a response action has been completed. The USEPA is authorized to implement the Act in all 50 states and U.S. territories.

Superfund Amendments and Reauthorization Act of 1986

The Superfund Amendments and Reauthorization Act (SARA) of 1986, (Title III; Section 305(a)) reauthorized CERCLA to continue cleanup activities around the country. Several site-specific amendments, definitions clarifications, and technical requirements were added to the legislation, including additional enforcement authorities. In addition, Title III of SARA authorized the Emergency Planning and Community Right-to-Know Act (EPCRA). SARA, Title III provides funding for training in emergency planning, preparedness, mitigation, response, and recovery capabilities associated with hazardous chemicals. Title III of SARA addresses concerns about emergency preparedness for hazardous chemicals, and emphasizes helping communities meet their responsibilities in preparing to handle chemical emergencies and increasing public knowledge and access to information on hazardous chemicals present in their communities.

Resource Conservation and Recovery Act

The RCRA (42 U.S.C. Section 6901 et seq. [1976]) gives USEPA the authority to control hazardous waste from the "cradle-to-grave," which includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled USEPA to address environmental problems that could result from underground tanks storing petroleum

and other hazardous substances. The federal Hazardous and Solid Waste Amendments (HSWA) are the 1984 amendments to RCRA that focused on waste minimization and phasing out land disposal of hazardous waste as well as corrective action for releases. Some of the other mandates of this law include increased enforcement authority for USEPA, more stringent hazardous waste management standards, and a comprehensive underground storage tank program. States have the authority to implement individual hazardous waste programs in lieu of the RCRA as long as the state program is as stringent as federal RCRA requirements and is approved by the USEPA.

Toxic Substances Control Act

The Toxic Substances Control Act (TSCA) of 1976 (15 U.S.C. Section 2601 et seq. [1976]) provides USEPA with authority to require reporting, record-keeping and testing requirements, and restrictions relating to chemical substances and/or mixtures. Certain substances are generally excluded from TSCA, including, among others, food, drugs, cosmetics and pesticides. TSCA addresses the production, importation, use, and disposal of specific chemicals including PCBs, asbestos, radon, and lead-based paint.

U.S. Department of Transportation

Transportation of hazardous materials is regulated by the DOT's Office of Hazardous Materials Safety. The office formulates, issues, and revises hazardous materials regulations under the Federal Hazardous Materials Transportation Law. The hazardous materials regulations cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications. The hazardous materials transportation regulations are codified in 49 CFR Parts 100–185.

The hazardous materials transportation regulations require carriers transporting hazardous materials to receive required training in the handling and transportation of hazardous materials. Training requirements include pre-trip safety inspections, use of vehicle controls and equipment including emergency equipment, procedures for safe operation of the transport vehicle, training on the properties of the hazardous material being transported, and loading and unloading procedures. All drivers must possess a commercial driver's license as required by 49 CFR Part 383. Vehicles transporting hazardous materials must be properly placarded. In addition, the carrier is responsible for the safe unloading of hazardous materials at the site, and operators must follow specific procedures during unloading to minimize the potential for an accidental release of hazardous materials.

Asbestos Hazard Emergency Response Act

The 1986 Asbestos Hazard Emergency Response Act (AHERA) was signed into law as Title II of the TSCA, requiring the Asbestos Model Accreditation Plan (MAP) for accrediting individuals conducting asbestos inspection and corrective-action activities in schools and public and commercial buildings. The MAP provides guidance on the minimum training requirements for accrediting asbestos professionals such as, procedural entry, exit, sampling, and monitoring, safety hazards, and relevant federal, state, and local regulatory standards.

Lead-based Paint Regulations

Lead pollutants are regulated by several laws administered by the USEPA, including the Toxic TSCA, the Residential Lead-Based Paint Hazard Reduction Act of 1992, the California Apartment Association (CAA), the California Waterfowl Association (CWA), the Safe Drinking Water Act (SDWA), the RCRA, and CERCLA. The aforementioned regulations address lead in paint, dust and soil, lead in air and water, and the disposal of lead wastes. Regulations specific to lead-based

paint include, but are not limited to, the Lead Renovation Repair and Painting Program Rule, the Lead Abatement Program, the residential Lead-based Paint Disclosure Program, and Residential Hazards of Lead in Paint, Dust and Soil. Such regulations require risk assessments, inspections, and work practices that work to minimize exposure to lead hazards.

State Regulations

The CalEPA and the State Water Resources Control Board (SWRCB) establish rules governing the use of hazardous materials and the management of hazardous waste. Within CalEPA, DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the State agency, for the management of hazardous materials and the generation, transport, and disposal of hazardous waste under the authority of the Hazardous Waste Control Law (HWCL). The following discussion contains the applicable State laws.

Regional Water Quality Control Board

The CalEPA and the Office of Emergency Services (OES) establish regulations governing the use of hazardous materials in California. Within CalEPA, DTSC has primary regulatory responsibility for hazardous waste management. Enforcement of regulations can be delegated to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the HWCL. Along with the DTSC, the Regional Water Quality Control Board (RWQCB) is responsible for implementing regulations pertaining to management of soil and groundwater investigation and cleanup. The RWQCB's regulations are contained in Title 27 of the California Code of Regulations (CCR). The DTSC, RWQCB, and/or a local agency typically oversees investigation and cleanup of contaminated sites.

Department of Toxic Substances Control

The DTSC was established to protect California against threats to public health and degradation to the environment and to restore properties degraded by past environmental contamination. Through statutory mandates, DTSC cleans up existing contamination, regulates management of hazardous wastes, and prevents pollution by working with businesses to reduce hazardous waste and use of toxic materials in California. DTSC regulates the generation, transportation, treatment, storage, and disposal of hazardous waste in California. In addition, DTSC's Site Mitigation and Brownfields Reuse Program oversees the cleanup of State Superfund Sites. State Superfund sites are additionally known as Annual Workplan sites, listed sites, or Cortese List sites. Superfund sites demonstrate evidence of a hazardous substance release or releases that could pose a significant threat to public health and/or the environment. DTSC requires responsible parties to cleanup such sites. When responsible parties cannot be found or where they do not take proper and timely action, DTSC may use State funds to undertake the cleanup.

California Code of Regulations

Hazardous waste is characterized and defined in CCR, Title 22, Sections 66261.20-24. Soils that meet the descriptions of the characteristics of hazardous waste defined in Sections 66261.20-24 and contain contaminants above regulatory screening levels are considered hazardous waste and must be handled and disposed of as such. The CCR includes the California Health and Safety Code.

California Health and Safety Code

The handling and storage of hazardous materials is regulated on the federal level by the USEPA under CERCLA as amended by the SARA. Under SARA Title III, a nationwide emergency

planning and response program was established that imposed reporting requirements for businesses which store, handle, or produce significant quantities of hazardous or acutely toxic substances as defined under federal laws. SARA Title III required each state to implement a comprehensive system to inform federal authorities, local agencies, and the public when a significant quantity of hazardous, acutely toxic substances are stored or handled at a facility.

Ammonia is an example of an acutely hazardous material (AHM) that is regulated by the California Office of Emergency Services under the California Accidental Release Program (CalARP), the USEPA under the Risk Management Program (40 CFR 68), and the OSHA under the Process Safety Management Program (OSHA 1910.119). The CalARP and Risk Management Program require that all facilities that store, handle, or use AHMs above a minimum quantity, known as the threshold planning quantity, are required to develop a plan and prepare supporting documentation that summarizes the facility's potential risk to the local community and identifies safety measures to reduce potential risks to the public.

The HWCL, Chapter 6.5 of the California Health and Safety Code, is administered by the Cal-EPA to regulate hazardous wastes. While the HWCL is generally more stringent than RCRA, until the USEPA approves the California program, both the State and federal laws apply in California. The HWCL lists 791 chemicals and about 300 common materials that may be hazardous; establishes criteria for identifying, packaging, and labeling hazardous wastes; prescribes management controls; establishes permit requirements for treatment, storage, disposal and transportation; and identifies some wastes that cannot be disposed of in landfills.

In California, the underground storage of hazardous materials is regulated by Chapter 6.7 of the California Health and Safety Code per the Underground Storage of Hazardous Substances Act. Under section 25280, the USTs used for the storage of substances hazardous to the public health and safety and to the environment are stored prior to use or disposal in thousands of underground locations in the State. The USTs are potential sources of contamination of the ground and underlying aquifers, and may pose other dangers to public health and the environment. Chapter 6.7 establishes orderly procedures that will ensure that newly constructed USTs meet appropriate standards and that existing tanks be properly maintained, inspected, tested, and upgraded so that the health, property, and resources of the people of the state will be protected.

California Vehicle Code Section 31303

The California Highway Patrol (CHP) and California Department of Transportation (Caltrans) are the enforcement agencies for hazardous materials transportation regulations. Hazardous materials and waste transporters are responsible for complying with all applicable packaging, labeling, and shipping regulations. California Vehicle Code Section 31303 regulates the transport of hazardous materials.

Emergency Response to Hazardous Materials Incidents

California has developed an emergency response plan to coordinate emergency services provided by federal, state, and local governments and private agencies. Response to hazardous material incidents is one part of this plan. The plan is managed by the Governor's OES, which coordinates the responses of other agencies, including CalEPA, CHP, California Department of Fish and Wildlife (CDFW), and the Central Valley RWQCB.

Unified Hazardous Materials Management Regulatory Program

On January 1, 1996, CalEPA adopted implementing regulations and implemented a unified hazardous waste and hazardous materials management regulatory program (Unified Program), to consolidate the administration of specified statutory requirements for the regulation of hazardous wastes and materials. The Unified Program is implemented at the local level by government agencies certified by the Secretary of CalEPA. The Certified Unified Program Agency (CUPA) is responsible for implementation of the Unified Program. CUPA is certified and responsible for oversight of the following consolidated programs: Hazardous Materials Release Response Plans and Inventories (Business Plans); California Accidental Release Program; Underground Storage Tank Program; Aboveground Petroleum Storage Act; Hazardous Waste Generator and Onsite Hazardous Waste Treatment (tiered permitting) Programs; and California Uniform Fire Code: Hazardous Materials Management Plans and Hazardous Material Inventory Statements.

Local Regulations

Relevant goals and policies from the County of Sacramento and the City of Rancho Cordova General Plan related to hazards and hazardous materials are discussed below.

Sacramento County

The County of Sacramento OES implements the State's Right-to-Know Ordinance that gives the OES the authority to inventory hazardous materials used by businesses. The County is also in the process of collecting information regarding existing and proposed locations of hazardous material disposal, storage, handling, and transportation facilities.

Additionally, the Sacramento County Environmental Management Department (EMD) is responsible for enforcing the State regulations on both the city and county level, governing hazardous waste generators, hazardous waste storage, underground storage tanks (including inspections, enforcement, and removals), and environmental health (including inspections and enforcement). Sacramento County's Environmental Management Department has been designated as the Sacramento region's CUPA by CalEPA. The Program is housed within Department's Environmental Compliance Division. CUPA Programs are administered throughout the County of Sacramento and its incorporated cities, including the City of Rancho Cordova.

EMD also regulates the use, storage, and disposal of hazardous materials in the County and abandonment of wells and septic systems in the County by issuing permits, monitoring regulatory compliance, investigating complaints, and other activities. EMD reviews technical aspects of hazardous waste site cleanups, and oversees remediation of certain contaminated sites resulting from leaking underground storage tanks. EMD is also responsible for providing technical assistance to public and private entities that seek to minimize the generation of hazardous waste.

Sacramento County Area Plan

The Sacramento County EMD established the Sacramento County Area Plan (SCAP) as a guideline for hazardous material related accidents or occurrences. The purpose of the SCAP is "to delineate responsibilities and actions by various agencies in Sacramento County required to meet the obligation to protect the health and welfare of the populace, natural resources (environment), and the public and private properties involving hazardous materials." The SCAP is used for making initial decisions at a hazardous materials incident. The SCAP uses Level I, Level II and Level III classifications for hazardous material incidents, which are determined by the following planning basis:

- Level of technical expertise required to abate the incident;
- Extent of Municipal, County, and State Government involved;
- Extent of evacuation of civilians; and
- Extent of injuries and/or deaths.

Sacramento County Multi-Hazard Disaster Plan

The Sacramento County Multi-Hazard Disaster Plan (SCMDP) was established to address a planned response to extraordinary emergency situations associated with natural disasters and technological incidents. The SCMDP focuses on operational concepts related to large-scale disasters, which can pose major threats to life and property requiring unusual emergency responses. The SCMDP was designed to include Sacramento County as part of the California Standardized Emergency Management System (SEMS), which assigns responsibilities to support implementation of the SCMDP and to ensure successful response during a major disaster.

City of Rancho Cordova General Plan

The following goals and policies from the City of Rancho Cordova General Plan related to hazards and hazardous materials are applicable to the proposed project:

Goal S.1: Establish Rancho Cordova as a safe community and environment for all persons.

Policy S.1.5 The City shall require written confirmation from applicable local, regional, state, and federal agencies that known contaminated sites have been deemed remediated to a level appropriate for land uses proposed prior to the City approving site development or provide an approved remediation plan that demonstrates how contamination will be remediated prior to site occupancy. This documentation will specify the extent of development allowed on the remediated site as well as any special conditions and/or restrictions on future land uses.

Goal S.5: Reduce the possibility of serious harm to residents, employees, or the environment as the result of an accidental release of toxic or hazardous substances.

Policy S.5.2 Consider the potential impact of hazardous facilities on the public and/or adjacent or nearby properties posed by reasonably foreseeable events. The City considers an event to be “reasonably foreseeable” when the probability of the event occurring is greater than one in one million per year.

Policy S.5.3 Regulate the storage of hazardous materials and waste consistent with State and Federal law.

Policy S.5.5 Separate hazardous or toxic materials from the public.

4.5.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hazards and hazardous materials. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

In accordance with CEQA Guidelines Appendix G, an impact is considered significant if the proposed project would:

- Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials; or
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.

Issues Not Discussed Further

The Initial Study prepared for the proposed project (see Appendix A) determined that development of the proposed project would result in no impact or a less-than-significant impact related to the following impacts:

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires; and/or
- If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:
    - Substantially impair an adopted emergency response plan or emergency evacuation plan;
    - Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire;
    - Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment; or
    - Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

Method of Analysis

Site conditions and impacts for this chapter are based primarily on the Phase I ESA prepared for the project site. The goal of a Phase I ESA is to identify whether RECs exist at a property, where RECs are defined by ASTM as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. […]." The Phase I ESA meets or exceeds the requirements of the ASTM "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E 1527-05."

The Phase I ESA included a review of federal, State, and local environmental databases for information regarding documented and suspected releases of regulated materials within the project site vicinity based upon reference to an environmental database search performed by EDR, an environmental database search firm. Additional historical use information regarding the project site and surrounding properties was pulled from the following sources:

- Aerial photographs;
- Fire insurance (Sanborn) maps;
- Building department records;
- Chain-of-title documents;
- City directory abstracts;
- Land use records; and
- U.S. Geological Survey (USGS) Topographic Maps.

Historical photographs of the project site dating to 1937 and historic topographic maps dating to 1891 were reviewed to provide a historical context of the project site. In addition, a site reconnaissance of the project site was conducted on May 9, 2019. The site reconnaissance consisted of walking the project site and driving by nearby adjacent properties from public vantages to observe apparent uses. Photographs of the site were taken during the site reconnaissance.

Project-Specific Impacts and Mitigation Measures

The project site conditions have been compared to the standards of significance presented above in order to determine the project's impact significance. If significant impacts are identified for the construction and operational phases of the proposed project, recommended mitigation measures have been included to reduce the identified impacts to less-than-significant levels.

4.5-1 Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Based on the analysis below, the impact is *less than significant*.

A significant hazard to the public or the environment could result from the routine transport, use, or disposal of hazardous materials. Projects that involve the routine transport, use, or disposal of hazardous materials are typically industrial in nature. The proposed project would not be industrial in nature. Operations of the proposed 440-unit single-family residential project would not include any activities that would involve the routine transport, use, disposal, or generation of substantial amounts of hazardous

materials. During operations, hazardous material use would be limited to landscaping products such as fertilizer, pesticides, as well as typical commercial and maintenance products (cleaning agents, degreasers, paints, batteries, and motor oil). Proper handling and usage of such materials in accordance with label instructions would ensure that adverse impacts to human health or the environment would not result. Thus, operations of the proposed project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Construction activities associated with implementation of the proposed project would involve the use of heavy equipment, which would contain fuels and oils, and various other products such as concrete, paints, and adhesives. The project contractor is required to comply with all California Health and Safety Codes and local County ordinances regulating the handling, storage, and transportation of hazardous and toxic materials. Pursuant to California Health and Safety Code Section 25510(a), except as provided in subdivision (b),[6] the handler or an employee, authorized representative, agent, or designee of a handler, shall, upon discovery, immediately report any release or threatened release of a hazardous material to the unified program agency (in the case of the proposed project, the Sacramento County EMD) in accordance with the regulations adopted pursuant to Section 25510(a). The handler or an employee, authorized representative, agent, or designee of the handler shall provide all State, city, or county fire or public health or safety personnel and emergency response personnel with access to the handler's facilities. In the case of the proposed project, the contractors are required to notify the Sacramento County EMD in the event of an accidental release of a hazardous material, who would then monitor the conditions and recommend appropriate remediation measures.

Based on the above, the project would not create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous materials. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.5-2 Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

As discussed previously, the Phase I ESA identified various potential RECs and other hazards on the project site, including groundwater contamination/soil vapor intrusion, an on-site UST and other potential fuel storage vessels, asbestos, lead-based paint, and termiticides. In addition, the Phase I ESA noted the presence of domestic wells and septic systems within the site. The potential for development of the proposed

[6] Subdivision (a) does not apply to a person engaged in the transportation of a hazardous material on a highway that is subject to, and in compliance with, the requirements of Sections 2453 and 23112.5 of the Vehicle Code.

project to result in risks or hazards related to such existing environmental hazards is described below.

Groundwater Contamination

Per the Phase I ESA, a contaminant plume of TCE was discovered to encroach within portions of the northernmost parcels within the project site (APNs 072-0300-001, 072-0300-008, and 073-001-011. The five ppb contour of TCE (the maximum contaminant level) extends to onsite and adjacent monitoring wells, but does not extend to any domestic wells identified on the project site. Although existing domestic wells aren't necessarily impacted, the presence of TCE within project site has potential to create a soil vapor intrusion risk.

The proposed project would not include development of residential uses on any of the three potentially impacted parcels. Rather, the 185.3 acres of open space area within the northern portion of the site would not be disturbed, as this portion of the project site would not be included in development of the proposed project. Therefore, the proposed residential uses would not be subject to risks related to groundwater contamination or vapor intrusion. In addition, ground-disturbing activities associated with project construction would not have the potential to result in upset of contaminated soils. Thus, a less-than-significant impact would occur.

Underground Storage Tank and Other Fuel Storage Vessels

Within APN 073-0010-011, Youngdahl Consulting Group, Inc. identified two protruding steel pipes that have the potential to be connected to a UST, which is considered an REC. The California Health and Safety Code, the CCR, and the Sacramento County Code of Ordinances require that a UST owner or operator must obtain a permit from the Sacramento County EMD to remove a UST. In addition, the Phase I ESA identified an unknown underground system within APN 072-0300-008 adjacent to the shed located north of the residence, as well as a 55-gallon drum was found northeast of the residence with an unknown liquid inside. Development of the proposed project would require removal of the potential UST, the underground system on APN 072-0300-008, and the 55-gallon drum, all of which are considered potential RECs. Given that such RECs could pose a risk to workers during project construction, a significant impact could occur.

Asbestos and Lead-Based Paint

Per the Phase I ESA, ACBM may be present within the existing residences and associated outbuildings located within APN 072-0300-008. In addition, lead-based paint may be present within all of the on-site structures. The potential presence ACBMs and lead contamination is considered an REC. During demolition and ground-disturbing activities associated with the proposed project, construction workers could come into contact with, and be exposed to, ACBMs or lead-based paint materials present in the existing structures. Additionally, workers could potentially be exposed to elevated concentrations of lead in the soil in the vicinity of the structures. Collection and disposal of ACBMs and lead materials, including lead-based paint, by untrained personnel could cause asbestos and lead dust emissions to be transported off-site, resulting in the release of hazardous material into the environment. Thus, a significant impact could occur.

Termiticides

As discussed above, the soils in the vicinity of the wooden structures located on APN 072-0300-002 (12565 Douglas Road) and APN 072-0300-008 (12535 Douglas Road) are at risk of having termiticides present, which is considered an REC. Additional sampling is necessary to evaluate the potential presence of termiticides in the soils.

Domestic Wells and Septic Systems

The Phase I ESA identified existing wells located on APNs 073-0010-011, 072-0300-002, 072-0300-005, and 072-0300-008. Proper abandonment of these wells would need to occur in accordance with the standards set forth in Department of Water Resources Bulletin 74-81. As discussed in Part III of Bulletin 74-81, the top of the well or well casing shall be provided with a cover, that is secured by a lock or by other means to prevent its removal without the use of equipment or tools, to prevent unauthorized access, to prevent a safety hazard to humans and animals, and to prevent illegal disposal of wastes in the well. The cover shall be watertight where the top of the well casing or other surface openings to the well are below ground level, such as in a vault or below known levels of flooding.

All abandoned wells shall be destroyed. The objective of destruction is to restore as nearly as possible those subsurface conditions which existed before the well was constructed taking into account changes, if any, which have occurred since the time of construction. Destruction of a well shall consist of the complete filling of the well in accordance with Section 23 of Part III of Bulletin 74-81. As discussed further below, Mitigation Measure 4.5-2(e) is proposed to ensure any existing wells that need to be removed are abandoned in conformance with all applicable laws.

A septic system was identified within the lawn to the north of the existing residence at APN 072-0300-005. In addition, the Phase I ESA noted the possible presence of a septic tank adjacent to the northernmost shed on APN 072-0300-010. The proposed project would be required to properly abandon all existing septic systems prior to connection of the project to the existing County sewer infrastructure.

Conclusion

Based on the above, groundwater contamination would not pose a substantial risk to workers or residents on the project site. However, the potential UST, unknown underground storage system, and other potential fuel storage vessels located within APNs 073-0010-011 and 072-0300-008 could pose a risk to workers during project construction. In addition, the project site contains existing structures that were built prior to 1980 and 1970, and are likely to contain ACBMs and lead-based paints. Furthermore, the soils in the vicinity of the wooden structures located at APN 072-0300-002 and APN 072-0300-008 have the potential to be contaminated with termiticides.

Therefore, implementation of the proposed project could create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact to a *less-than-significant* level.

4.5-2(a) *Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall complete and submit, for both the underground storage units identified on APNs 073-0010-011 and 072-0300-008, a Consolidated Application For Authority to Remove Under Ground Storage Tanks to the Sacramento County Environmental Management Department (EMD) for review. Upon issuance of a permit (Authority Letter to Remove) from the EMD, removal of the UST shall proceed in accordance with all permit conditions, including, but not limited to, inspection, testing, and plan/report submittal requirements.*

4.5-2(b) *Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall retain a licensed contractor to remove the existing 55-gallon drum located on APN 072-0300-008, to the northeast of the existing residence. The drum shall be disposed of in accordance with all applicable federal, State, and local regulations related to the handling, transport, and disposal of hazardous waste. Proof of safe disposal shall be provided to the Community Development Department.*

4.5-2(c) *Prior to issuance of a demolition permit for any on-site structures, the project applicant shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the Community Development Department an asbestos and lead survey. If asbestos-containing materials or lead-containing materials are not discovered during the survey, further mitigation related to asbestos-containing materials or lead containing materials shall not be required. If asbestos-containing materials and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site asbestos-containing materials and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA) Administration regulations and disposed of in accordance with all CalEPA regulations, prior to the demolition and/or removal of the on-site structures. The plan shall include the requirement that work shall be conducted by a Cal-OSHA registered asbestos and lead abatement contractor in accordance with Title 8 CCR 1529 and Title 8 CCR 1532.1 regarding asbestos and lead training, engineering controls, and certifications. The applicant shall submit the work plan to the Community Development Department for review and approval. Materials containing more than one (1) percent asbestos that is friable are also subject to SMAQMD regulations. Removal of materials containing more than one (1) percent friable asbestos shall be completed in accordance with SMAQMD Rule 902.*

4.5-2(d) *Prior to issuance of a demolition permit for any on-site structures, the project applicant shall retain the services of a licensed environmental professional to prepared a Phase II Environmental Assessment (ESA) for the project site. The Phase II ESA shall evaluate, at a minimum, potential lead contamination in the soils in the vicinity of the structures located on APN 072-0300-008, as well as potential termiticide contamination in the soils in the vicinity of the wooden structures located on APN 072-0300-002 and APN 072-0300-008. In the event that the lead and/or termiticide contamination is determined to occur, the project applicant shall implement all recommended measures in the Phase II ESA necessary to address such hazards. Such measures may include, but shall not be limited to, capping contaminated soil in place and deed-restricting the subject property, excavation and off-haul of contaminated soils by a licensed contractor, or other appropriate methods deemed acceptable by the Sacramento County Environmental Management Department (EMD).*

4.5-2(e) *Prior to Improvement Plan approval, the applicant shall hire a licensed well contractor to obtain a well abandonment permit from the Sacramento County Environmental Management Department (EMD) for all on-site wells, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III), for review and approval by the EMD. In addition, prior to Improvement Plan approval, the project applicant shall ensure that any on-site septic systems are abandoned in compliance with applicable EMD standards. Verification of abandonment shall be ensured by the City of Rancho Cordova Community Development Department.*

4.5-2(f) *If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities at the project site, work shall stop in the area of potential contamination, and the type and extent of contamination shall be identified by a Registered Environmental Assessor (REA) or qualified professional. The REA or qualified professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations, relevant environmental screening levels for identified contaminants, whether the contaminants exceed ESLs, thus warranting remediation, and recommendations for appropriate handling and disposal. Site preparation or construction activities shall not recommence within the contaminated areas until any necessary remediation identified in the report is complete. The report and verification of proper remediation and disposal shall be submitted to the City of Rancho Cordova Community Development Department for review and approval.*

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections, of this EIR.

4.5-3 Cumulative exposure to potential hazards and increases in the transport, storage, and use of hazardous materials. Based on the analysis below, the cumulative impact is *less than significant*.

As discussed, project-specific impacts associated with hazardous materials related to implementation of the proposed project were found to be less than significant with implementation of mitigation. Hazardous materials and other public health and safety issues are generally site-specific and/or project-specific, and would not be significantly affected by other development within the project area. Cumulative development projects would be subject to the same federal, State, and local hazardous materials management requirements as would the proposed project, which would minimize potential risks associated with increased hazardous materials use in the community. Therefore, cumulative impacts associated with hazardous materials transport, storage, and use associated with implementation of past, present, and reasonably foreseeable future projects, as well as the proposed project, would be ***less than significant***.

Mitigation Measure(s)

None required.

4.6 Hydrology and Water Quality

4.6. HYDROLOGY AND WATER QUALITY

4.6.1 INTRODUCTION

The Hydrology and Water Quality chapter of the EIR describes existing drainage patterns on the project site, current stormwater flows and stormwater infrastructure. The chapter also evaluates potential impacts of the proposed project with respect to increases in impervious surface area and associated stormwater flows, degradation of water quality, and increases in on- and off-site flooding. Information used for this chapter was primarily drawn from the Drainage Study prepared for the proposed project by Ruggeri-Jensen-Azar (see Appendix H),[1] as well as the City of Rancho Cordova General Plan[2] and associated EIR.[3] It should be noted that issues associated with water supply and availability are addressed in Chapter 4.9, Public Services and Utilities, of this EIR.

4.6.2 EXISTING ENVIRONMENTAL SETTING

The section below describes regional hydrology, the existing drainage patterns within the project site, including peak flows, existing water quality, and groundwater conditions.

Regional Hydrology

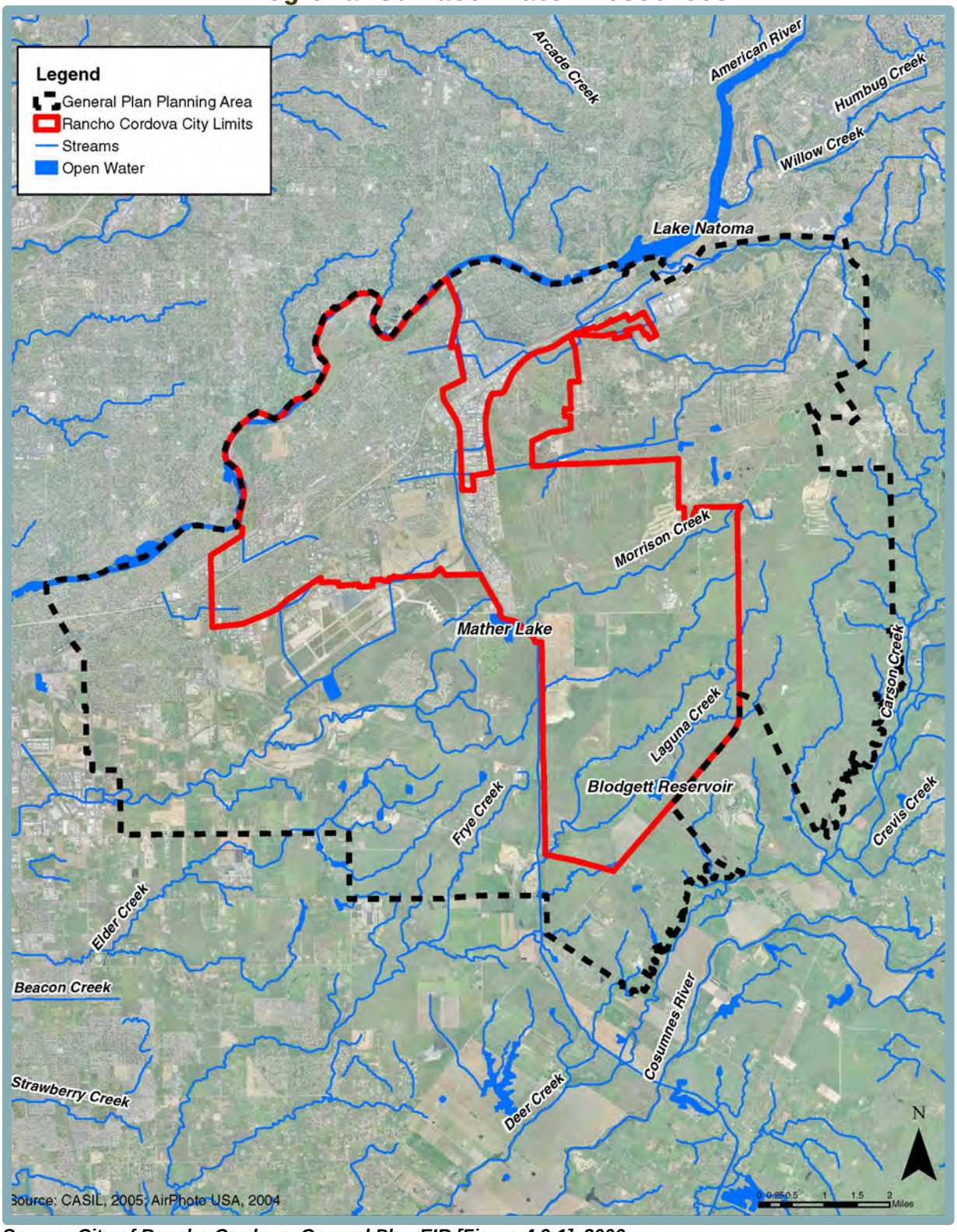
The City of Rancho Cordova is located within the 27,000 square mile Sacramento River watershed, which includes the Sacramento, American, and Cosumnes Rivers. The American River is located along the northern boundary of the City's Planning Area and the Cosumnes River is located to the south of the Planning Area. More specifically, the project site is located within the Morrison Creek Stream Group watershed, which covers 192 square miles, and includes the waterways of Elder, Rancho Cordova, Florin, Gerber, Laguna (and tributaries), Morrison, Strawberry, Union House, and Whitehouse Creeks, which generally flow in a southwesterly direction (see Figure 4.6-1). The Morrison Creek Stream Group watershed ultimately flows to the Sacramento River. The topography within the Planning Area includes gently rolling terrain, such as that found in the eastern Great Central Valley, interrupted by numerous seasonal creeks and streams. Such creeks and streams are largely ephemeral and intermittent, which is typical of areas that experience dry summers and cool, wet winters, as is the case for the project region.

Project Site and Surrounding Area Drainage

Currently, the 279.3-acre project site contains two single-family residences and associated outbuildings on the southern portion of the site, within parcels 072-0300-002 and -005. An orchard is located within the northeastern portion of the site within parcel 073-0010-011, and a third single-family residence and associated outbuildings are located on APN 072-0300-008. The remainder of the site consists primarily of ruderal grasses. Morrison Creek conveys runoff from the east side of Grant Line Road at the project site's eastern boundary through the project limits to the western edge of the project site. Two man-made ponds are located along the reach of Morrison Creek near the northwestern portion of the project site. The existing on-site drainage conditions are shown in Figure 4.6-2.

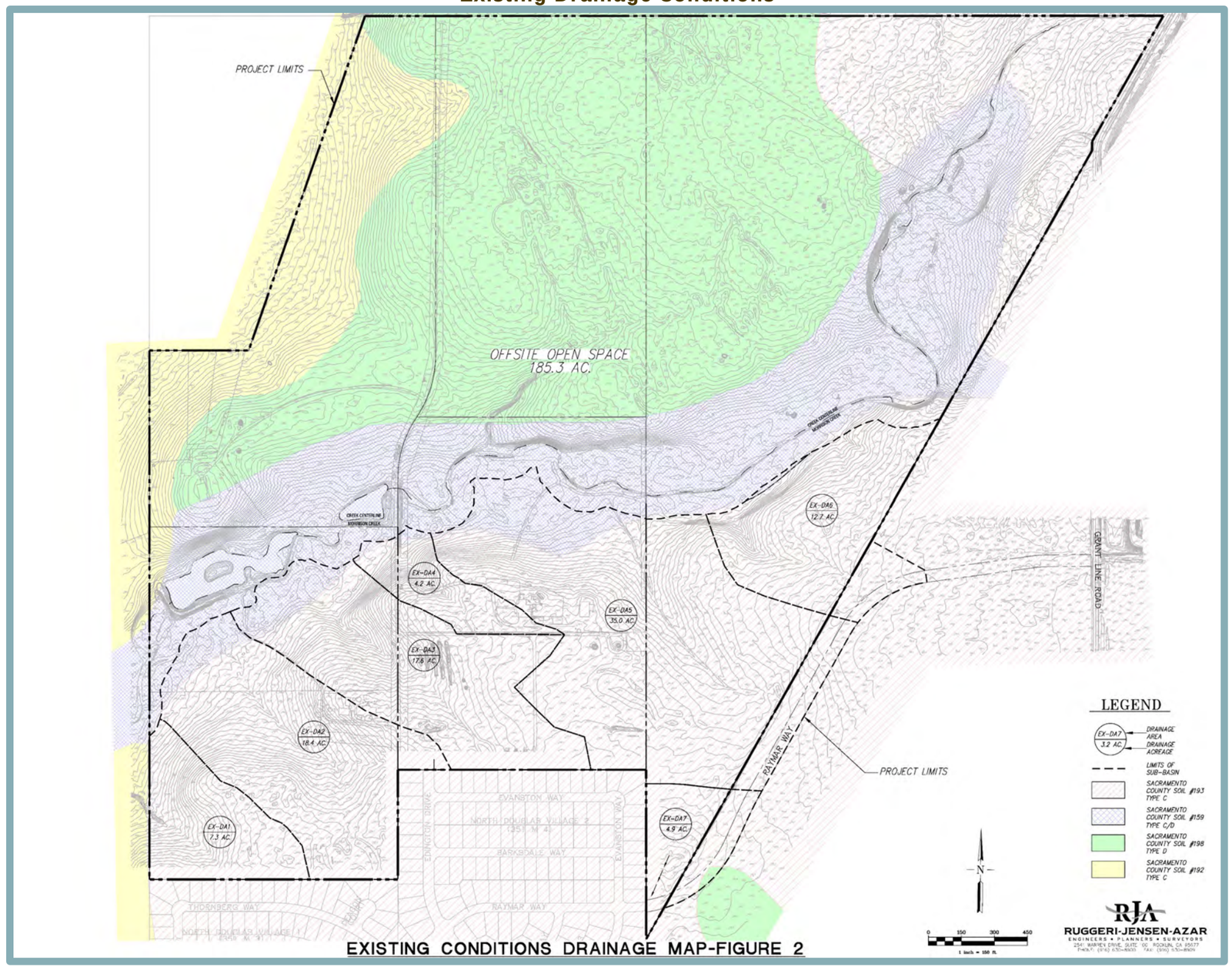
1 Ruggeri-Jensen-Azar. *Drainage Study for the Preserve.* Updated October 2019.
2 City of Rancho Cordova. *General Plan*. Adopted June 26, 2006.
3 City of Rancho Cordova. *General Plan Environmental Impact Report.* 2006.

Figure 4.6-1
Regional Surface Water Resources



Source: City of Rancho Cordova, General Plan EIR [Figure 4.9-1], 2006.

Figure 4.6-2
Existing Drainage Conditions



Source: Ruggeri-Jensen-Azar, 2019.

According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for the project area, the entirety of the project site is located within Zone X, defined as an area of minimal flood hazard that is located outside of the designated 100-year floodplain.[4]

According to the Drainage Study prepared for the proposed project, the existing 10-year, 24-hour and 100-year, 24-hour storm flowrates for Morrison Creek are 194 cubic feet per second (cfs) and 361 cfs, respectively. The flowrates were developed for the Master Drainage Study (MDS) for the Rio Del Oro Specific Plan in August 2005 by Wood Rodgers and include a total drainage area of 1,003 acres consisting of the area identified within the MDS as US3 (Figure F from the MDS; included in Appendix H to this EIR), including the project site, which forms the western boundary of the US3 drainage area. It should be noted that the northwestern portion of the project site, which is included in drainage area US2 of the MDS, would not be developed as part of the proposed project and, thus, the drainage conditions in that shed are not discussed further herein.

As calculated at the location of the proposed stormwater outfall location into Morrison Creek, pre-development runoff rates from the project site are 79 cfs for the 10-year, 24-hour storm event and 134 cfs for the 100-year, 24-hour storm event.

Water Quality

Activities and/or conditions that have the potential to degrade water quality include but are not limited to, construction activities and urban stormwater runoff.

Construction activities have the potential to cause erosion and sedimentation associated with groundbreaking and clearing activities, which could cause unstabilized soil to be washed or wind-blown into nearby surface water. In addition, the use of heavy equipment during construction activities, especially during rainfall events, have the potential to cause petroleum products and other pollutants to enter nearby drainages.

Water quality degradation from urban stormwater runoff is primarily the result of runoff carrying pollutants from the land surface (i.e., streets, parking lots, etc.) to the receiving waters (i.e., streams and lakes). Pollutants typically found in urban runoff include facility maintenance and lawn-care/landscaping chemicals (insecticides, herbicides, fungicides and rodenticides), heavy metals (such as copper, zinc and cadmium), oils and greases from automobiles and other mechanical equipment, and nutrients (nitrogen and phosphorus).

Groundwater

The proposed project site is located within the South American Subbasin. The South American Subbasin is bounded on the east by the Sierra Nevada Mountains, on the west by the Sacramento River, on the north by the American River, and on the south by the Cosumnes and Mokelumne Rivers. As part of the South American Subbasin, the Rancho Cordova Planning Area covers a shallow unconfined aquifer system, known as the water table aquifer, approximately 200 hundred feet below ground surface, and a deeper confined groundwater aquifer system ranging from a few hundred feet to over 2,000 feet below ground surface. The deeper aquifer system that becomes confined with depth is separated from the shallow aquifer by a discontinuous clay layer, not completely impermeable.

[4] Federal Emergency Management Agency. *Flood Insurance Rate Map, Map Number 06067C0250H.* August 16, 2012.

The groundwater in the Central Basin portion of the South American Subbasin within which the project site is located is managed by the Sacramento Central Groundwater Authority (SCGA).[5] The SCGA was formed in 2006 through a joint powers agreement signed by the cities of Elk Grove, Folsom, Rancho Cordova, and Sacramento, and the County of Sacramento. SCGA was formed for several purposes including maintaining the long-term sustainable yield of the Central Basin, managing the use of groundwater in the Central Basin, and facilitating the implementation of a conjunctive use program. The SCGA Groundwater Management Plan, which was adopted in 2006, establishes a framework for maintaining sustainable groundwater resources in the Central Basin. The framework includes specific goals, objectives, and an action plan to manage the basin. The SCGA Groundwater Management Plan also prescribes a well protection program to protect existing private domestic well and agricultural well owners from declining groundwater levels resulting from increased groundwater pumping due to new development in the basin. The SCGA Groundwater Management Plan includes a detailed groundwater management implementation plan to comply with the requirements of their basin management objectives. Additionally, SCGA prepares a biennial report to evaluate progress on Groundwater Management Plan implementation and to report on basin conditions.

4.6.3 REGULATORY CONTEXT

The following is a description of federal, State, and local environmental laws and policies that are relevant to the review of hydrology and water quality under the CEQA process.

Federal Regulations

The following section includes federal environmental goals and policies relevant to the CEQA review process pertaining to the hydrology and water quality aspects of the proposed project.

Federal Emergency Management Agency

The FEMA is responsible for determining flood elevations and floodplain boundaries based on U.S. Army Corps of Engineers (USACE) studies. FEMA is also responsible for distributing the FIRMs, which are used in the National Flood Insurance Program (NFIP). The FIRMs identify the locations of special flood hazard areas, including the 100-year floodplains.

FEMA allows non-residential development in the floodplain; however, construction activities are restricted within flood hazard areas, depending upon the potential for flooding within each area. Federal regulations governing development in a floodplain are set forth in Title 44, Part 60 of the Code of Federal Regulations (CFR). These standards are implemented at the State level through construction codes and local ordinances; however, these regulations only apply to residential and non-residential structure improvements. Although roadway construction or modification is not explicitly addressed in the FEMA regulations, the California Department of Transportation (Caltrans) has also adopted criteria and standards for roadway drainage systems and projects situated within designated floodplains. Standards that apply to floodplain issues are based on federal regulations (Title 23, Part 650 of the CFR). At the State level, roadway design must comply with drainage standards included in Chapters 800-890 of the Caltrans Highway Design Manual. CFR Section 60.3(c)(10) restricts cumulative development from increasing the water surface elevation of the base flood by more than one foot within the floodplain.

[5] Sacramento County Water Agency. *2015 Urban Water Management Plan.* May 2016.

Federal Clean Water Act

The National Pollutant Discharge Elimination System (NPDES) permit system was established in the federal Clean Water Act (CWA) to regulate municipal and industrial discharges to surface waters of the U.S. Each NPDES permit contains limits on allowable concentrations and mass emissions of pollutants contained in the discharge. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the Environmental Protection Agency (EPA) must consider in setting effluent limits for priority pollutants.

Nonpoint sources are diffuse and originate over a wide area rather than from a definable point. Nonpoint pollution often enters receiving water in the form of surface runoff, but is not conveyed by way of pipelines or discrete conveyances. As defined in the federal regulations, such nonpoint sources are generally exempt from federal NPDES permit program requirements. However, two types of nonpoint source discharges are controlled by the NPDES program – nonpoint source discharge caused by general construction activities, and the general quality of stormwater in municipal stormwater systems. The 1987 amendments to the CWA directed the federal EPA to implement the stormwater program in two phases. Phase I addressed discharges from large (population 250,000 or above) and medium (population 100,000 to 250,000) municipalities and certain industrial activities. Phase II addresses all other discharges defined by EPA that are not included in Phase I.

Section 402 of the CWA mandates that certain types of construction activities comply with the requirements of the NPDES stormwater program. The Phase II Rule, issued in 1999, requires that construction activities that disturb land equal to or greater than one acre require permitting under the NPDES program. In California, permitting occurs under the General Permit for Stormwater Discharges Associated with Construction Activity, issued to the State Water Resources Control Board (SWRCB), implemented and enforced by the nine Regional Water Quality Control Boards (RWQCBs).

As of July 1, 2010, all dischargers with projects that include clearing, grading or stockpiling activities expected to disturb one or more acres of soil are required to obtain compliance under the NPDES Construction General Permit Order 2009-0009-DWQ. The General Permit requires all dischargers, where construction activity disturbs one or more acres, to take the following measures:

1. Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to include a site map(s) of existing and proposed building and roadway footprints, drainage patterns and stormwater collection and discharge points, and pre- and post- project topography;
2. Describe types and placement of Best Management Practices (BMPs) in the SWPPP that will be used to protect stormwater quality;
3. Provide a visual and chemical (if non-visible pollutants are expected) monitoring program for implementation upon BMP failure; and
4. Provide a sediment monitoring plan if the area discharges directly to a water body listed on the 303(d) list for sediment.

To obtain coverage, a SWPPP must be submitted to the RWQCB electronically and a copy of the SWPPP must be submitted to the City of Rancho Cordova. When project construction is completed, the landowner must file a Notice of Termination (NOT).

State Regulations

The following section includes the State regulations relevant to the CEQA review process pertaining to the hydrology and water quality aspects of the proposed project.

State Water Resources Control Board

The SWRCB and the RWQCBs are responsible for ensuring implementation and compliance with the provisions of the federal CWA and California's Porter-Cologne Water Quality Control Act. The project site is situated within the jurisdictional boundaries of the Central Valley RWQCB (CVRWQCB) (Region 5). The CVRWQCB has the authority to implement water quality protection standards through the issuance of permits for discharges to waters at locations within their jurisdiction.

Central Valley Regional Water Quality Control Board

As authorized by the Porter-Cologne Water Quality Control Act, the CVRWQCB primary function is to protect the quality of the waters within its jurisdiction for all beneficial uses. State law defines beneficial uses of California's waters that may be protected against quality degradation to include, but not be limited to: domestic; municipal; agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

The CVRWQCB implements water quality protection measures by formulating and adopting water quality control plans (referred to as basin plans, as discussed below) for specific groundwater and surface water basins, and by prescribing and enforcing requirements on all agricultural, domestic, and industrial waste discharges. The CVRWQCB oversees many programs to support and provide benefit to water quality, including the following major programs: Agricultural Regulatory; Above-Ground Tanks; Basin Planning; CALFED; Confined Animal Facilities; Landfills and Mining; Non-Point Source; Spills, Leaks, Investigations, and Cleanups (SLIC); Stormwater; Total Maximum Daily Load (TMDL); Underground Storage Tanks (UST), Wastewater Discharges (including the NPDES); Water Quality Certification; and Watershed Management.

The CVRWQCB is responsible for issuing permits for a number of varying activities. Activities subject to the CVRWQCB permitting requirements include stormwater, wastewater, and industrial water discharge, disturbance of wetlands, and dewatering. Permits issued and/or enforced by the CVRWQCB include, but are not limited to, the NPDES Construction General Permit, NPDES Municipal Stormwater Permits, Industrial Stormwater General Permits, Clean Water Act Section 401 and 404 Permits, and Dewatering Permits.

Basin Plans and Water Quality Objectives

The Porter-Cologne Water Quality Control Act provides for the development and periodic review of water quality control plans (basin plans) that are prepared by the regional water quality control boards. Basin plans designate beneficial uses of California's major rivers and groundwater basins, and establish narrative and numerical water quality objectives for those waters. Beneficial uses represent the services and qualities of a water body (i.e., the reasons why the water body is considered valuable), while water quality objectives represent the standards necessary to protect and support those beneficial uses. Basin plans are primarily implemented through the NPDES permitting system and by issuing waste discharge regulations to ensure that water quality objectives are met.

Basin plans provide the technical basis for determining waste discharge requirements and taking regulatory enforcement actions if deemed necessary. The project site is located within the jurisdiction of the CVRWQCB. A basin plan has been adopted for the Sacramento and San Joaquin River Basin (Basin Plan), which covers all of the project area.

The Basin Plan sets water quality objectives for the surface waters in its region for the following substances and parameters: ammonia, bacteria, biostimulatory substances, chemical constituents, color, dissolved oxygen, floating material, oil and grease, pH, radioactivity, salinity, sediment, settleable material, suspended material, taste and odor, temperature, toxicity, turbidity, and pesticides. For groundwater, water quality objectives applicable to all groundwater have been set for bacteria, chemical constituents, radioactivity, taste, odors, and toxicity.

Senate Bill 5

In 2007, the State of California set the 200-year event as the Urban Level of Flood Protection (ULOP) for the State through a series of laws included in Senate Bill (SB) 5. Along with other related legislation, SB 5 established a mandate for local governments to amend their general plans and zoning codes to be consistent with State law on floodplain management. Specifically, SB 5 requires all cities and counties within the Sacramento-San Joaquin Valley, as defined in California Government Code Sections 65007(h) and (j), to make findings related to an ULOP or the national FEMA standard of flood protection before: (1) entering into a development agreement for any property that is located within a flood hazard zone; (2) approving a discretionary permit or other discretionary entitlement, or a ministerial permit that would result in the construction of a new residence, for a project that is located within a flood hazard zone; or (3) approving a tentative map, or a parcel map for which a tentative map was not required, for any subdivision that is located within a flood hazard zone. The primary purpose of the law is to ensure that appropriate flood protection is provided in urban and urbanizing areas.

A project would be subject to the requirements of SB 5 if the project would meet all of the following five criteria:

1. Located within an urban area that is a developed area, as defined by CFR Title 44, Section 59.1, with 10,000 residents or more, or an urbanizing area that is a developed area or an area outside a developed area that is planned or anticipated to have 10,000 residents or more within the next 10 years.
2. Located within a flood hazard zone that is mapped as either a special hazard area or an area of moderate hazard on FEMA's official (i.e., effective) FIRM for the NFIP.
3. Located within the Sacramento-San Joaquin Valley.
4. Located within an area with a potential flood depth above 3.0 feet, from sources of flooding other than localized conditions that may occur anywhere in a community, such as localized rainfall, water from stormwater and drainage problems, and water from temporary water and wastewater distribution system failure.
5. Located within a watershed with a contributing area of more than 10 square miles.

The proposed project would meet criteria 1, 3, and 5 above. However, per the FEMA FIRM for the project area, the entirety of the project site is located within Zone X, defined as an area of minimal flood hazard that is located outside of the designated 100-year floodplain. The proposed development footprint would not be located within an area with a potential flood depth above three feet. Thus, the project would not meet criteria 2 or 4. Thus, the proposed project would not be subject to the requirements of SB 5.

Local Regulations

Relevant goals and policies from the City of Rancho Cordova General Plan as well as various other local guidelines and regulations related to hydrology and water quality, are discussed below.

City of Rancho Cordova General Plan

The following goals and policies from the City of Rancho Cordova General Plan related to hydrology and water quality are applicable to the proposed project:

Goal NR.5: Protect the quantity and quality of the City's water resources.

Policy NR.5.3 Protect surface and ground water from major sources of pollution, including hazardous materials contamination and urban runoff.

Policy NR.5.4 Prevent contamination of the groundwater table and surface water, and remedy existing contamination to the extent practicable.

Policy NR.5.5 Minimize erosion to stream channels resulting from new development in urban areas consistent with State law.

Policy NR.5.6 Incorporate Storm Water, Urban Runoff, and Wetland Mosquito Management Guidelines and Best Management Practices into the design of water retention structures, drainage ditches, swales, and the construction of mitigated wetlands in order to reduce the potential for mosquito-borne disease transmission.

Policy NR.5.7 Continue to cooperate and participate with the County, other cities, and the Regional Water Quality Control Board regarding compliance with the joint National Pollutant Discharge Elimination System Permit (NPDES No. CAS082597) or any subsequent permit and support water quality improvement projects in order to maintain compliance with regional, state and federal water quality requirements.

Policy NR.5.8 The City shall require groundwater impact evaluations be conducted for the Grant Line West, Westborough, Aerojet, Glenborough, Mather and Jackson Planning Areas to determine whether urbanization of these areas would adversely impact groundwater remediation activities associated with Mather and Aerojet prior to the approval of large-scale development. Should an adverse impact be determined, a mitigation program shall be developed in consultation with applicable local, state, and federal agencies to ensure remediation activities are not impacted. This may include the provision of land areas for groundwater remediation facilities, installation/extension of necessary infrastructure, or other appropriate measures.

Goal S.2: Reduce the possibility of a flooding or drainage issue causing loss of life or damage to property.

Policy S.2.2 Manage the risk of flooding by discouraging new development located in an area that is likely to flood.

Policy S.2.4 Ensure that adequate drainage exists for both existing and new development.

City of Rancho Cordova NPDES Small Municipal Separate Storm Sewer System (MS4) General Permit

The NPDES Municipal Stormwater Permitting Program regulates stormwater discharges from separate storm sewer systems. NPDES Municipal Stormwater Permits are issued in two phases. Phase I regulates stormwater discharges from large- and medium-sized municipal separate storm sewer systems (those serving more than 100,000 persons). Most Phase I permits are issued to a group of co-permittees encompassing an entire metropolitan area. Phase II provides coverage for smaller municipalities, including nontraditional small storm sewer systems, which include governmental facilities such as military bases, public campuses, and prison and hospital complexes. The NPDES Municipal Stormwater Permits require the discharger to develop and implement a Stormwater Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable.

The CVRWQCB issued the NPDES General Permit No. CAS0085324, Order R5-2016-0040 Waste Discharge Requirements for Stormwater Discharges from Municipal Separate Storm Sewer Systems, which became effective in October 2016. An “MS4” is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) designed or used for collecting or conveying stormwater; (ii) which is not a combined sewer; and (iii) which is not part of a Publicly Owned Treatment Works (POTW). The City of Rancho Cordova is a Phase I MS4 permittee. Projects subject to the requirements of the Phase I MS4 NPDES permit must submit the appropriate Post-Construction Stormwater Plan based on the project type/development category. Regulated Projects include residential projects that create or replace one acre or more of impervious surface. Regulated Projects that create and/or replace one or more acres of impervious surface are subject to hydromodification management, treatment, low impact development, and trash capture requirements. The proposed project would create more than one acre of impervious area, and, thus, is considered a Regulated Project subject to the Phase I MS4 NPDES permit post-construction stormwater requirements.

Regulated Projects are required to divide the project area into Drainage Management Areas (DMAs) and implement and direct water to appropriately-sized Site Design Measures (SDMs) and applicable Post Construction Measures to each DMA to the Maximum Extent Practicable (MEP). Regulated Projects must additionally include Source Control BMPs where possible. SDMs and post construction measures include, but are not limited to:

- Rooftop and impervious area disconnection;
- Porous pavement;
- Rain barrels and cisterns;
- Vegetated swales;
- Bio-retention facilities;

- Green roofs; or
- Other equivalent measures.

A detailed description of the requirements for Regulated Projects, such as the proposed project, is included in the 2018 *Stormwater Quality Design Manual* for the Sacramento region.[6] Per Figure 5-2 of the *Stormwater Quality Design Manual*, the project site is located within an area that is subject to hydromodification management.

Rancho Cordova Municipal Code

The City's Municipal Code includes ordinances associated with hydrology and water quality. The applicable ordinances are discussed in further detail below.

Chapter 15.12: Storm Water Management and Discharge Control

The purpose of Chapter 15.12, Storm Water Management and Discharge Control, of the City's Municipal Code, is to protect and enhance the water quality of watercourses, water bodies, and wetlands within the City area in a manner consistent with the Federal Clean Water Act, the Porter-Cologne Water Quality Control Act, and Municipal Discharge Permit No. CA0085324 by controlling the contribution of urban pollutants to storm water runoff which enters the City's stormwater conveyance system. Per Section 15.12.040 of the Municipal Code, the provisions of Chapter 15.12 are applicable to all users and potential users located within the incorporated area of the City and all users that discharge either directly or indirectly into the County storm water conveyance system.

Land Grading and Erosion Control

The intent of Chapter 16.44, Land Grading and Erosion Control, is to minimize damage to surrounding properties and public rights-of-way, the degradation of the water quality of watercourses, and the disruption of natural or city-authorized drainage flows caused by the activities of clearing and grubbing, grading, filling and excavating of land, and sediment and pollutant runoff from other construction-related activities, and to comply with the provisions of the City's NPDES permit No. CA0085324, issued by the CVRWQCB. Except as provided by Sections 16.44.060, 16.44.065, or 16.44.070 of the Municipal Code, a grading and erosion control permit is required to (A) grade, fill, excavate, store or dispose of 350 cubic yards or more of soil or earthly material or (B) clear and grub one acre or greater of land within the City of Rancho Cordova.

4.6.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to hydrology and water quality. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would result in any of the following:

- Violate any water quality standards or waste discharge requirements, or otherwise substantially degrade water quality;

[6] City of Citrus Heights, City of Elk Grove, City of Folsom, City of Galt, City of Rancho Cordova, City of Sacramento, County of Sacramento. *Sacramento Region Stormwater Quality Design Manual.* July 2018.

- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:
    - Result in substantial erosion or siltation on- or off-site;
    - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
    - Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or;
    - Impede or redirect flood flows;
- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation;
- Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

The proposed project's impacts associated with erosion or siltation on- or off-site are discussed in Chapter 4.4, Geology and Soils/Mineral Resources, of this EIR.

Issues Not Discussed Further

The Initial Study prepared for the proposed project (see Appendix A) determined that development of the proposed project would result in no impact related to the following:

- In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation.

For the reasons cited in the Initial Study, the potential impacts associated with the above are not analyzed further in this EIR.

Method of Analysis

The impacts analysis for this chapter is based primarily on the Drainage Study prepared for the proposed project by Ruggeri-Jensen-Azar.[7] The Drainage Study included hydrologic modeling for the proposed project (both pre-project and post-project conditions) using the HEC computer program. In particular, Ruggeri-Jensen-Azar used a combination of the HEC Hydrologic Modeling System (HEC-HMS) and HEC River Analysis System (HEC-RAS) software.

Hydrographs for the HEC-HMS program were developed using the Sacramento Method, which includes calculation of peak flows from the hydrographs produced. The hydrographs are developed based on a design storm, initial losses, constant losses, lag time, and land use. The major contributor in loss coefficients is soil type. Table 4.6-1 below, adopted from the Drainage Study, summarizes the hydrology coefficients applied to the SacCalc program, which was used to calculate the Sacramento Method.

[7] Ruggeri-Jensen-Azar. *Drainage Study for the Preserve.* Updated January 2020.

Table 4.6-1
Hydrology Coefficients

Land Use	Initial Loss (inches)	Constant Loss (inches/hour)	Percent Impervious	Precipitation Zone
Open Space (Grassland)	0.10	0.10	2	2
Recreation (Park)	0.10	0.10	5	2
Low Density Residential (6-8 units/acre)	0.10	0.10	50	2

Note: Constant losses are based on a combination of Type C and D soils.

Source: Ruggeri-Jensen-Azar, 2020.

The design storm selected for proposed project is the 100-year, 24-hour storm, which, according to the Drainage Study, is appropriate for an analysis of a hydromodification basin designed to reduce the peak flow from a developed condition to the existing condition peak flow and is consistent with County analysis standards. The 10-year, 24-hour storm was also evaluated for the developed condition for informational purposes. As part of the Drainage Study, the hydrograph created for the project using the Sacramento Method was applied to the HEC-HMS program to evaluate stormwater flows through the proposed LID drainage features. The modeling results are included in the appendices to the Drainage Study.

Furthermore, Ruggeri-Jensen-Azar performed a floodplain analysis of Morrison Creek under both existing and post-development conditions using the HEC-RAS program. The existing condition cross sections for the HEC-RAS model were developed from the existing topography for the project site and supplemental field survey points. The developed condition cross sections used the existing topography, survey points, and the preliminary grading plan for the proposed project. The developed condition 100-year water surface elevations from the HEC-RAS model were plotted on the proposed Tentative Subdivision Map.

The cross sections begin at the downstream end of the project site (western boundary) and continue upstream until the final cross section located east of Grant Line Road. The beginning water surface elevation at the downstream cross section is calculated based on a normal depth condition with a slope along the creek flowline at S=0.004. Along the way are two man-made ponds and an existing driveway. The two ponds are assumed full for the HEC-RAS analysis. The water surface for each pond is the lowest overflow elevation. The overflow elevation for the downstream pond is elevation 210.5 and the upper pond overflow elevation is 215.2. The existing driveway crosses the creek upstream of the upper pond. The typical Manning's 'n' Value used for the creek is 0.035. This value is appropriate for the grasses that grow along the creek. The 'n' values were increased to 0.04 at the overflows from the two ponds. The existing overflows from the two ponds show erosion and the output from the HEC-RAS model show higher velocities in both areas.

The City has reviewed the technical analysis prepared for the proposed project and preliminarily concurs with the methodology applied by Ruggeri-Jensen-Azar, as well as the conclusions provided therein.

Project Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in comparison with the standards of significance identified above.

4.6-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Construction of the proposed project would include grading, excavation, trenching for utilities, and other construction-related activities that could cause soil at an accelerated rate during storm events. All such activities have the potential to affect water quality and contribute to localized violations of water quality standards if impacted stormwater runoff from construction activities enters Morrison Creek.

Soils exposed by the aforementioned types of construction activities have the potential to affect water quality in two ways: 1) suspended soil particles and sediments transported through runoff; or 2) sediments transported as dust that eventually reach local water bodies. Spills or leaks from heavy equipment and machinery, staging areas, or building sites also have the potential to enter runoff. Typical pollutants include, but are not limited to, petroleum and heavy metals from equipment and products such as paints, solvents, and cleaning agents, which could contain hazardous constituents. Sediment from erosion of graded or excavated surface materials, leaks or spills from equipment, or inadvertent releases of building products could result in water quality degradation if runoff containing the sediment or contaminants should enter receiving waters in sufficient quantities. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements. However, in general, impacts from construction-related activities would generally be short-term and of limited duration.

Because the proposed project would require construction activities that would result in a land disturbance of over an acre, the project applicant would be required by the State to comply with the most current Construction General Permit requirements. Per the requirements, a SWPPP would be prepared for the overall project, which would include the site map, drainage patterns and stormwater collection and discharge points, BMPs, and a monitoring and reporting framework for implementation of BMPs, as necessary. In addition, a Notice of Intent (NOI) would be filed with CVRWQCB.

As discussed in further depth in Chapter 4.4, Geology and Soils/Mineral Resources, of this EIR, development of the SWPPP would include plans to treat stormwater runoff in accordance with the standards of the California Stormwater Management Practice New Development and Redevelopment Handbook and the MS4 Permit standards. The plan would include drainage design from all paved surfaces, including streets, parking lots, driveways, and roofs, as well as landscaping. In addition, the project would be subject to Chapter 16.44 of the City's Municipal Code and Section 11 of the City's Improvement Standards. Implementation of BMPs to control erosion, and, thus, sediment related pollution, is further mandated by Mitigation Measure 4.4-2 within Chapter 4.4 of this EIR.

Non-stormwater management and material management controls reduce non-sediment-related pollutants from potentially leaving the construction site to the extent practicable. The Construction General Permit prohibits the discharge of materials

other than stormwater and authorized non-stormwater discharges (such as irrigation and pipe flushing and testing). Non-stormwater BMPs tend to be management practices with the purpose of preventing stormwater from coming into contact with potential pollutants. Examples of non-stormwater BMPs include preventing illicit discharges, and implementing good practices for vehicle and equipment maintenance, cleaning, and fueling operations, such as using drip pans under vehicles. Waste and materials management BMPs include implementing practices and procedures to prevent pollution from materials used on construction sites. Examples of materials management BMPs include the following:

- Good housekeeping activities such as storing of materials covered and elevated off the ground, in a central location;
- Securely locating portable toilets away from the storm drainage system and performing routine maintenance;
- Providing a central location for concrete washout and performing routine maintenance;
- Providing several dumpsters and trash cans throughout the construction site for litter/floatable management; and
- Covering and/or containing stockpiled materials and overall good housekeeping on the site.

While the final materials management BMPs to be used during construction of the proposed project are currently unknown, the project would likely include a combination of the BMP examples listed above. Final BMPs for the proposed project construction would be chosen in consultation with the applicable California Stormwater Quality Association Stormwater BMP Handbooks and Section 11 of the City's Improvement Standards, and implemented by the project contractor.

In accordance with the Construction General Permit, the project site would also be inspected during construction before and after storm events and every 24 hours during extended storm events in order to identify maintenance requirements for the implemented BMPs and to determine the effectiveness of the implemented BMPs. As a "living document", the site-specific SWPPP that would be prepared for the proposed project would be modified as construction activities progress. A Qualified SWPPP Practitioner (QSP) would ensure compliance with the SWPPP through regular monitoring and visual inspections during construction activities. The QSP for the project would amend the SWPPP and revise project BMPs, as determined necessary through field inspections, to protect against substantial erosion or siltation on- or off-site.

Compliance with the State's Construction General Permit, Chapter 11 of the Improvement Standards, and Chapter 16.44 of the Rancho Cordova Municipal Code, as described above and required by Mitigation Measure 4.4-2 within this EIR, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the proposed project. In addition, BMPs would be required to be designed in accordance with the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction and for New Development/Redevelopment and Chapter 11 of the Improvement Standards (or other similar source as approved by the City). In order to further minimize the

potential for, and effects from, accidental spills of hazardous, toxic, or petroleum substances during construction activities, Mitigation Measure 4.6-1(b) below requires the project to prepare and implement a Spill Prevention Countermeasure and Control Plan (SPCC). Without implementation of the aforementioned measures, the proposed project could result in a ***significant*** impact related to short-term construction-related water quality.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

4.6-1(a) *Implement Mitigation Measure 4.4-2.*

4.6-1(b) *Prior to the commencement of ground-disturbing activities, the project applicant shall submit, and obtain approval of, a Spill Prevention Countermeasure and Control Plan (SPCC) to the Sacramento County Environmental Management Department. The SPCC shall specify measures and procedures to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112.*

4.6-2 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations. Based on the analysis below and with implementation of mitigation, the impact is *less than significant*.

Development of the proposed project would result in the conversion of a rural area to single-family residential uses and associated amenities, such as parks and landscaping. Such new land uses could result in new stormwater pollutants being introduced to the project area. Pollutants associated with the operational phase of the proposed project could include nutrients, oil and grease, metals, organics, pesticides, bacteria, sediment, trash, and other debris. Nutrients that could be present in post-construction stormwater include nitrogen and phosphorous resulting from fertilizers applied to landscaping. Excess nutrients could affect water quality by promoting excessive and/or a rapid growth of aquatic vegetation, which reduces water clarity and results in oxygen depletion. Pesticides, which are toxic to aquatic organisms and can bioaccumulate in larger species, such as birds and fish, can potentially enter stormwater after application to landscaped areas within the project site. Oil and grease could enter stormwater from vehicle leaks, traffic, and maintenance activities. Metals could enter stormwater as surfaces corrode, decay, or leach. Clippings associated with landscape maintenance and street litter could be carried into storm drainage systems. Pathogens (from pets, wildlife, and human activities) have the potential to affect downstream water quality.

Development of the proposed project could also increase polluted non-stormwater runoff (e.g., car wash water, other wash water, and landscape irrigation runoff). Such non-stormwater runoff could flow down sidewalks, parking areas, and streets, and pick

up additional pollutants deposited on impervious surfaces prior to discharge into the storm drain system and surface waters. Discharge of polluted stormwater or non-stormwater runoff could violate waste discharge requirements.

Phase I MS4 Permit Requirements

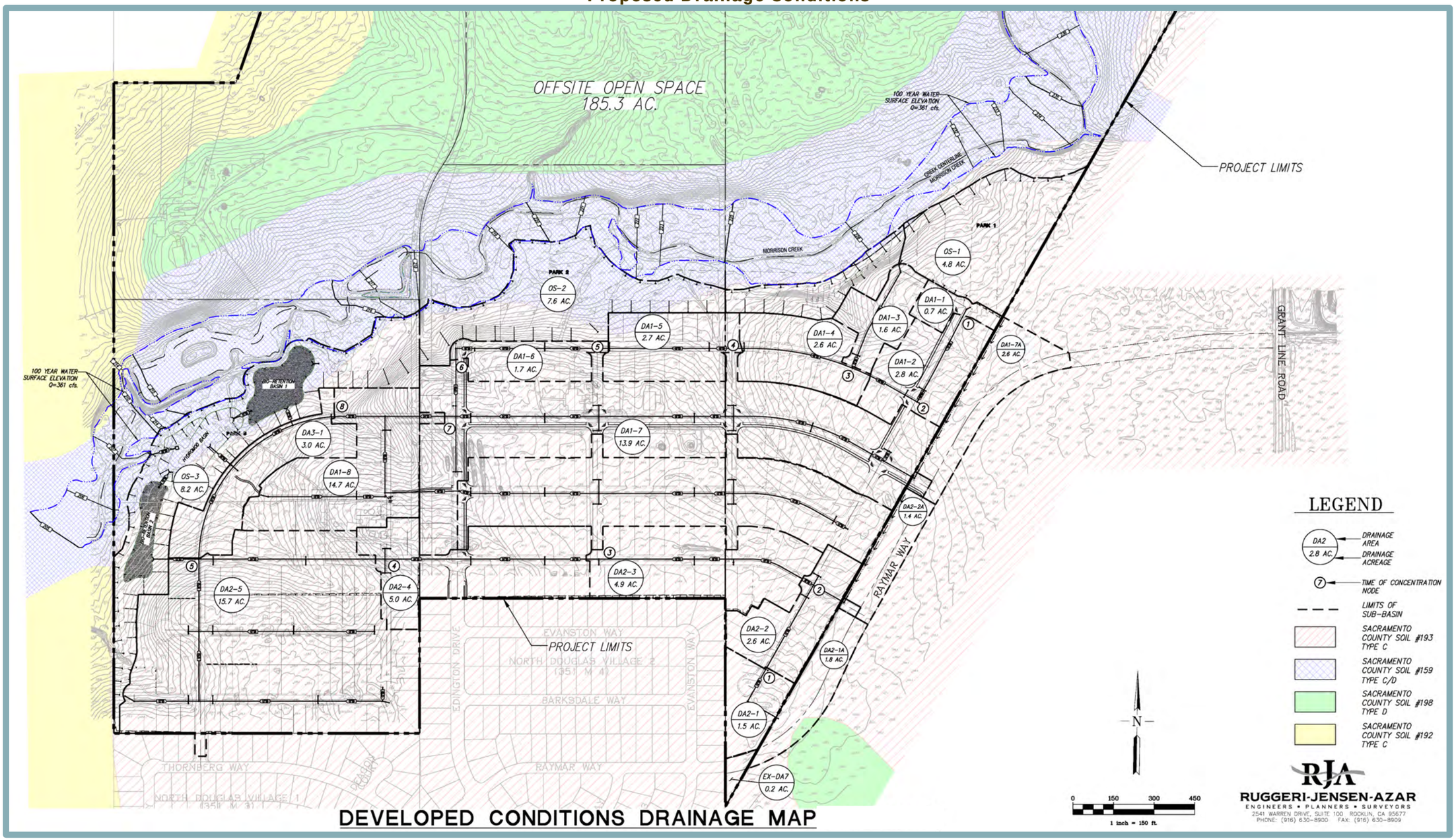
As discussed previously, the proposed project is located within the permit area covered by City's MS4 Permit (NPDES General Permit No. CAS0085324, Order R5-2016-0040 Waste Discharge Requirements for Stormwater Discharges from Municipal Separate Storm Sewer Systems), pursuant to the NPDES Phase I program. Project-related stormwater discharges are subject to all applicable requirements of said permit. Specifically, as noted above, regulated projects are required to divide the project area into DMAs and implement and direct water to appropriately-sized post construction stormwater quality measures to each DMA. Source control measures must be designed for pollutant-generating activities or sources consistent with recommendations from the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, the Sacramento region *Stormwater Quality Design Manual*, or equivalent manual, and must be shown on the Improvement Plans. Additional details related to post construction stormwater quality requirements associated with the Phase I MS4 permit are discussed under Impact 4.6-4 below.

Proposed Storm Drain System

Per the Drainage Study prepared for the proposed project, the proposed project would include an on-site storm drain system composed of the following post construction stormwater quality measures: Low Impact Development (LID) components-dedication of open space, disconnected pavement, disconnected roof drains, interceptor trees, a hydromodification basin, and two bio-retention basins. Consistent with MS4 permit requirements and the Sacramento region *Stormwater Quality Design Manual*, the proposed development area and the Raymer Way off-site improvement area would be divided into DMAs. The portion of the project site located to the north of Morrison Creek, which would not be developed as part of the project, would not be included in the proposed stormwater management system.

Impervious surfaces proposed as part of the project include building roofs, driveways, and roadways. Runoff from such surfaces would be captured by a series of drain inlets located within the internal roadways and routed, through new underground 12- to 24-inch storm drains, to two bio-retention basins located within the northwest portion of the development area, as shown in Figure 4.6-3. Consistent with the *Stormwater Quality Design Manual*, the bio-retention basins would include a six-inch deep topsoil layer underlain by at least 18 inches of bio-retention soil media. A nine-inch gravel layer with a perforated underdrain would be located underneath the bio-retention soil media. In addition, each basin would include an overflow structure connected to the underdrain. Treated stormwater would be captured by the perforated underdrain and flow, through new 15-inch storm drains, to a hydromodification basin located in between the two bio-retention basins. During large storm events, excess stormwater in the bio-retention basins would flow directly through to the hydromodification basin. The hydromodification basin would allow for detention of captured runoff prior to discharging through a new 36-inch storm drain and outlet structure to Morrison Creek.

Figure 4.6-3
Proposed Drainage Conditions



DEVELOPED CONDITIONS DRAINAGE MAP

The proposed bio-retention basins would be sized to treat the first flush, which includes a majority of the larger pollutants (sand, soil, silt, grease and trash), as well as smaller pollutants (sediment, nutrient, metals, pesticides and organics).

As demonstrated in Table 4.6-2 below, the proposed LID features would be sufficiently sized to meet the required storage volumes. Thus, project runoff entering Morrison Creek would be properly treated, and would not pollute downstream waterways.

Table 4.6-2
Proposed LID Control Sizing

Basin	Required Water Quality Volume (acre-feet)	Storage Volume Proposed (acre-feet)	Flow from Hydromodification Basin at Storage Volume (cfs)	Bio-Retention Area (sf)
Hydromodification Basin	1.73	1.73	1.6	-
Bio-Retention Basin 1	-	-	-	39,000
Bio-Retention Basin 2	-	-	-	26,700

Source: Ruggeri-Jensen-Azar, 2019.

Maintenance and Inspection

In order to ensure continued operation of the proposed LID control features, a detailed site-specific inspection and maintenance procedures plan should be implemented by the project applicant. For example, plants and vegetation within the bio-retention basins and hydromodification basin should be inspected monthly, and the basins should be inspected for the presence of standing water 72 hours after rain events. Required maintenance activity should include, but not necessarily be limited to, removal of debris from basins and removal of debris from outlets of basins. Without implementation of such measures, the basins could fail to ensure that polluted runoff would not enter downstream water bodies during the continued operation of the project.

Conclusion

Based on the above, the proposed project includes site design measures to ensure that stormwater runoff is properly treated prior to discharge to Morrison Creek. Thus, urban pollutants entering and potentially degrading local water quality would not be expected to occur as a result of the project. However, because a final BMP and water quality maintenance plan has not been prepared, ongoing maintenance of the proposed bio-retention basins and the incorporation of proper source control measures cannot be ensured. Should the project applicant fail to prepare and implement such documentation, the proposed project could result in a ***significant*** impact related to a violation of water quality standards or waste discharge requirements or otherwise substantial degradation of surface or ground water quality during operations.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.6-2 *Prior to approval of final project improvement plans, the project applicant shall submit a detailed Best Management Practice (BMP) and water quality maintenance plan to the City for review and approval. The BMP and water quality maintenance plan shall meet the standards of the City's NPDES Permit (No. CAS0085324), the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, and the Stormwater Quality Design Manual for the Sacramento region. Site design measures, source control measures, hydromodification management, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the improvement plans.*

4.6-3 *Prior to approval of final project improvement plans, the project applicant shall submit a maintenance covenant to the City for review and approval. The maintenance covenant shall be recorded with the property deed and executed following property ownership to ensure the long-term maintenance of stormwater quality measures.*

4.6-3 Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin or conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Based on the analysis below, the impact is *less than significant*.

The proposed project would result in an increase in on-site impervious surfaces, which would reduce the infiltration of groundwater as compared to existing conditions. Groundwater relies on annual rainfall and percolation through pervious soils to recharge the system. The U.S. Soil Conservation Service (SCS) has classified soils into four hydrologic categories (A, B, C, and D) based on infiltration rates from prolonged wetting. Soil Type A has the highest infiltration rate and Type D has the lowest infiltration rate. According to the Drainage Study, the majority of the project site consists of Type C soils, while a small portion of the site along Morrison Creek consists of Type C/D soils. Because the majority of the site is characterized by Type C or D soils, the project site would not be considered an important groundwater recharge area. Furthermore, the proposed project would not include any development within the channel of Morrison Creek; thus, infiltration of water moving through the creek would continue to occur and contribute to groundwater recharge.

Given the limited recharge potential of the portion of the project site that would be developed with impervious surfaces, the proposed project would not interfere substantially with groundwater recharge. Furthermore, the groundwater subbasin within which the project site is located is not currently in a state of overdraft. As further discussed in Chapter 4.9, Public Services and Utilities, of this EIR, the water supply for the proposed project would only include groundwater sources during dry and critically dry years.

Considering that the project site is not considered an important groundwater recharge area, stormwater from the project site would continue to replenish groundwater through percolation into soils within Morrison Creek, and that the project would not involve substantially increased demand on groundwater supplies within an area in a state of overdraft, the proposed project would not create a conflict with, or impede the implementation of, a sustainable groundwater plan. Thus, impacts related to groundwater would be ***less than significant***.

Mitigation Measure(s)
None required.

4.6-4 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; or create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Based on the analysis below, the impact is *less than significant*.

It should be noted that the potential for the proposed project to result in substantial additional sources of polluted runoff, including erosion, is addressed under Impacts 4.6-1 and 4.6-2 above. Further discussion regarding erosion is provided in Chapter 4.4, Geology and Soils/Mineral Resources, of this EIR.

Increases to peak runoff flows or volumes resulting from alterations to the existing drainage pattern of the site have the potential to result in exceedance of existing or planned stormwater drainage systems or flooding on- or off-site.

As discussed previously, runoff from impervious surfaces created as part of the proposed project would be routed to two new bio-retention basins in the northwest portion of the development area. The bio-retention basins would detain and treat runoff prior to discharging treated runoff to a hydromodification basin located in between the two bio-retention basins. The hydromodification basin would allow for metering of flows discharged to Morrison Creek. In addition to the bio-retention basins and hydromodification basin, the project would incorporate LID controls such as disconnected pavement, disconnected roof drains, and interceptor trees to help reduce stormwater runoff. Such strategies are consistent with the *Stormwater Quality Design Manual* for the Sacramento region.

To assess the changes in runoff volumes from the project site that could occur due to the proposed project, Ruggeri-Jensen-Azar calculated the pre- and post-construction peak flow runoff volumes at the location of the proposed stormwater outlet at Morrison Creek. Pre- and post-construction peak flows are presented in Table 4.6-3 below for the 10-year, 24-hour and 100-year, 24-hour storm events.

Table 4.6-3 Pre- and Post-Project Peak Flows		
Project Condition	**Combined Peak Flow at Outlet Location (cfs)**	
	10-year, 24-hour	**100-year, 24-hour**
Pre-Project	79	134
Post-Project (without LID)	107	171
Post-Project (with LID)	65.9	116.7
Source: Ruggeri-Jensen-Azar, 2020.		

As shown in the table, with inclusion of the proposed LID features, the proposed project would result in reduced peak flows relative to existing conditions for the design storm event, as well as during the 10-year, 24-hour storm event. Therefore, the proposed project would be consistent with applicable hydromodification requirements, and would not increase the rate or amount of runoff leaving the project site during the design storm event. In addition, the outlet invert elevation from the hydromodification basin would be above the 100-year water surface elevation calculated from the HEC-RAS model of Morrison Creek.

Therefore, the proposed project would result in a ***less-than-significant*** impact related to substantially altering the drainage pattern of the site or area, or increasing the rate or amount of surface runoff.

Mitigation Measure(s)

None required.

4.6-5 Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows. Based on the analysis below, the impact is *less than significant*.

As discussed previously, per the FEMA FIRM for the project area, the entirety of the project site is located within Zone X, defined as an area of minimal flood hazard that is located outside of the FEMA-designated 100-year floodplain. In addition, per the Drainage Study prepared for the proposed project, under post-development conditions, the proposed residences would be located outside of the modeled 100-year floodplain associated with Morrison Creek. The proposed project would not include any grading activities within the 100-year floodplain. Furthermore, the outlet invert elevation from the hydromodification basin would be above the 100-year water surface elevation calculated from the HEC-RAS model of Morrison Creek.

Based on the above, the proposed project is not anticipated to result in the impediment or redirection of flood flows such that on- or off-site structures would be exposed to flood risk. Thus, a ***less-than-significant*** impact would occur related to alteration of the existing drainage pattern of the site or area, including through alteration of a course

of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections of this EIR. The cumulative setting for impacts related to hydrology and water quality would be the US3 drainage area identified within the MDS.

4.6-6 Cumulative impacts related to the violation of water quality standards or waste discharge requirements, groundwater quality, management, and recharge, and impacts resulting from the alteration of existing drainage patterns. Based on the analysis below, the cumulative impact is *less than significant*.

As noted previously, the proposed project is located within the drainage area identified as US3 in the MDS prepared for the Rio Del Oro Specific Plan. The northwestern portion of the project site, which is located within the drainage area identified in the MDS as US2, would not be developed as part of the project; thus, drainage conditions within US2 are assumed to remain unchanged for the purpose of this analysis.

The US3 drainage shed encompasses a total of 1,003 acres, including the project site. Excluding the project site, the remainder of the US3 drainage shed is located within unincorporated Sacramento County. The portions of the drainage shed within the unincorporated County are primarily undeveloped, with the exception of existing industrial mining operations within the central portion of the drainage shed and limited agricultural operations within the far eastern portion of the drainage shed. According to the Sacramento County General Plan, the existing mining operation area is currently designated Extensive Industrial, while the remainder of US3 is designated General Agriculture. Thus, the County has not anticipated any substantial new development within the US3 drainage shed under buildout of the County's General Plan. As such, drainage conditions within the reach of Morrison Creek located upstream of the project site within US3 are not anticipated to change substantially.

As discussed in Impacts 4.6-1 through 4.6-5 above, all identified project-level impacts would be reduced to less-than-significant levels with implementation of the mitigation measures set forth herein. In the absence of any additional planned or pending future development within the US3 drainage area, significant cumulative impacts related to

hydrology and water quality would not occur. Therefore, the cumulative impact would be considered ***less than significant***.

Mitigation Measure(s)

None required.

4.7 Land Use and Planning/Population and Housing

4.7. LAND USE AND PLANNING / POPULATION AND HOUSING

4.7.1 INTRODUCTION

The purpose of the Land Use and Planning/Population and Housing chapter of the EIR is to examine the proposed project's compatibility with existing and planned land uses in the area and identify any incompatibilities with applicable land use plans, policies and regulations adopted by the City for the purpose of avoiding environmental effects, including the City of Rancho Cordova General Plan[1] and associated EIR.[2] In addition, the chapter assesses the compatibility of the proposed project with the surrounding land uses, both existing and proposed. Furthermore, the chapter includes discussion of the potential for the project to induce substantial population growth in the project area, either directly or indirectly. The reader is referred to the various environmental resource evaluations presented in the other technical chapters of this EIR for a discussion of potential physical/environmental effects that may result from the proposed land use changes.

4.7.2 EXISTING ENVIRONMENTAL SETTING

This section describes the existing land uses on the project site and within the surrounding area at the time the NOP was published, as well as the existing plans and policies that guide the development of the project site. In addition, the Existing Environmental Setting section describes current population and housing trends in the project region.

Project Site Characteristics and Surrounding Land Uses

The project site is located in the City of Rancho Cordova, northwest of Raymer Way and Grant Line Road. The site is located within the Grant Line West Planning Area of the City.

Currently, the 279.3-acre project site consists primarily of ruderal grasses, with two single-family residences and associated outbuildings located within the southern portion of the site, and a third single-family residence and associated outbuildings located in the northwestern portion of the site. A private road, identified as Douglas Road, leads from south of the project site to the two residences. Currently, the undeveloped portions of the site are used for livestock grazing.

Surrounding land uses include the Camden at Somerset Ranch residential subdivision directly to the south, vacant agricultural lands and a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, two single-family residences and industrial/open space to the north, and vacant land approved for the development of the Rio Del Oro residential community immediately adjacent to the west. The area further to the north of the site contains known contamination areas associated with the Aerojet General Corporation National Priorities List Superfund Site.

1 City of Rancho Cordova. *General Plan*. Adopted June 26, 2006.
2 City of Rancho Cordova. *General Plan Environmental Impact Report.* 2006.

Land Use and Zoning Designations

Per the City of Rancho Cordova General Plan, the project site is located within the Grant Line West Planning Area and is designated Natural Resources and Residential-Mixed Density. The site is zoned Agricultural (AG-80) and Industrial Reserve (IR).

Table 4.7-1 below provides a summary of the current General Plan land use and zoning designations of the properties adjacent to the project site. The land uses to the north of the site, as well as the areas east of the site beyond Grant Line Road, are located within unincorporated Sacramento County, but are included in the City's planning area and are assigned land uses per the City's General Plan. The adjacent areas to the south and west of the site are located within the City of Rancho Cordova.

Table 4.7-1
Summary of Adjacent Community Plan Land Use and Zoning Designations

Relationship to Project Site	Present Land Use	City General Plan Land Use Designation	Zoning Designation
North	Superfund site	Residential-Mixed Density	Interim-Agricultural Reserve (IR) *(Sacramento County)*
		Natural Resources	
South	Single-family residential	Residential-Mixed Density	Residential 5 (RD 5)
		Low Density Residential	Agricultural 80 (AG-80) *(Sacramento County)*
East	Industrial/vacant	Residential-Mixed Density	Agricultural 80 (AG-80) *(Sacramento County)*
West	Vacant	Residential-Mixed Density	Single Family Residential (SF) *(Rio Del Oro Specific Plan)*
		Natural Resources	Wetland Preserve (WP) *(Rio Del Oro Specific Plan)*

It should be noted that within the Grant Line West Planning Area, as well as other Planning Areas in the project vicinity, the land use designations provided by the City's General Plan are conceptual; detailed planning efforts are required in such areas prior to approval of development. In addition, while the General Plan contains conceptual land uses for each of the Planning Areas within the project vicinity, some of the Planning Areas are located outside the City limits. The land use designations endorsed by the General Plan for the Planning Areas located outside the City limits are merely advisory in nature. The General Plan does not change land use designations for land located outside of the City's jurisdiction.

Land Use Designation Definitions

The following sections provide definitions of the land use designations noted above, as summarized from the City's General Plan.

Residential-Mixed Density

The Residential-Mixed Density conceptual land use designation is intended to represent a mix of residential densities with target average densities in the medium density range.

Natural Resources
Land within the Natural Resources category is set aside as natural habitat and typically does not include any urban development.

Low Density Residential
The Low Density Residential land use category is intended to include traditional single-family neighborhoods with a majority of single-family detached homes. Per the City's General Plan, the Low Density Residential designation is the predominant land use category for the City's neighborhoods.

Zoning Designation Definitions
The following sections provide definitions of the zoning designations noted above, as summarized from the City of Rancho Cordova Zoning Code (Title 23 of the City's Municipal Code) and the Sacramento County Zoning Code.

City of Rancho Cordova Zoning Code
The City defines the IR, AG-80, RD-5, SF, and WP zoning designations as follows:

Industrial Reserve (IR)
Per the City's Zoning Code, properties zoned IR are considered "agricultural land" because general agricultural uses are allowed within the IR zone.

Agricultural 80 (AG-80)
Per the City's Zoning Code, the AG-80 zone district is intended to preserve land for agricultural use and operations and discourage the premature conversion of agricultural land to urban uses. The AG-80 zone is applied to areas of the City to accommodate a wide range of agricultural uses on parcels of land that are 80 acres or larger in size.

Residential 5 (RD-5)
The RD-5 district makes up the vast majority of residential development built within the City prior to incorporation. The zone allows for residential development in the 4.1 to 5.0 dwelling units per acre range, as well as other compatible neighborhood support facilities and public/quasi-public uses, such as parks, religious institutions, and community gathering facilities.

Single Family Residential (SF)
Within the Rio Del Oro Specific Plan area, the SF zoning designation is intended for residential development at densities ranging from 2.1 to 6.0 dwelling units per acre. The size and type of lots anticipated will range from one half-acre executive lots to moderately sized lots. Density ranges, permitted uses and development standards and design guidelines for all residential uses are provided in the Rio Del Oro Specific Plan Development Standards and Design Guidelines.

Wetland Preserve (WP)
The Rio Del Oro Specific Plan area includes a 510-acre WP-zoned area is located in the southern portion of the Specific Plan area, protecting Morrison Creek and approximately 52 percent of the existing vernal pools and associated upland habitat. Vernal pool creation, maintaining approximately 250-foot buffers from existing vernal pool features, will occur within the WP area.

Sacramento County Zoning Code

Sacramento County defines the IR and AG-80 zoning designations as follows:

Interim-Agricultural Reserve (IR)

Per the Sacramento Zoning Code, the IR zone district is an agricultural zoning district with a 20-acre minimum lot size. Single-family residential uses are allowed within the IR zone district. However, the purpose of the IR zone district is to allow for future development with industrial uses.

Agricultural 80 (AG-80)

Within unincorporated Sacramento County, the AG-80 zone district is an agricultural zoning district with an 80-acre minimum lot size. Single-family residential uses are allowed within the AG-80 zone district at a density of one unit per parcel, in addition to accessory dwellings for agricultural employees. The zone district is intended to promote long-term agricultural uses and discourage the premature and unnecessary conversion of agricultural land to urban uses.

Population and Housing

Population growth assumptions, average household sizes, and vacancy rates for the City of Rancho Cordova are discussed below.

Historical and Current Population

Per the City's General Plan, based on the Draft General Plan Land Use Map (see Section 3.0, Project Description) the City of Rancho Cordova Planning Area is anticipated to have a buildout capacity of 126,241 housing units and 310,568 persons. Buildout of the Grant Line West Planning Area, including the project site, has been anticipated to include a total of 3,393 dwelling units, 9,043 residents, 502,893 square feet (sf) of commercial uses, and 143,684 sf of office uses.[3] Maximum buildout is anticipated to occur after year 2030.

The City of Rancho Cordova was incorporated in July 2003. As shown in Table 4.7-2, the population within the city limits has increased steadily, from 53,572 persons in 2010 to 74,566 persons in 2019. As growth has occurred within the City, the average household size has increased, reaching a high of 2.81 in 2019.

Table 4.7-2
City of Rancho Cordova Population and Household Growth

Year	Population	Households	Persons Per Households
2000	53,572	19,909	2.69
2010	64,805	23,468	2.76
2019	74,566	26,559	2.81

Sources:
ESRI Business Analyst, 2010 Census Profile, November 2019.
ESRI Business Analyst, Comparison Report, City of Rancho Cordova, February 2019.

The observed population change within the City, presented in Table 4.7-2, remains well below the buildout estimates presented in the City's General Plan EIR.

[3] City of Rancho Cordova. *General Plan Environmental Impact Report* [Table 3.0-3]. 2006.

Projected Housing Growth

While Table 4.7-2 demonstrates that growth within the City has not reached the maximum growth buildout estimates, development within the City is anticipated to continue to grow as new development occurs within the undeveloped areas within southeastern portion of the City. The Sacramento Area Council of Governments (SACOG) has anticipated growth within the six-county Sacramento region through the 2020 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).[4] Per the 2020 MTP/SCS, the City is anticipated to grow to a total of 39,980 housing units by 2035 and 42,710 housing units by 2040.

Average Household Size

The average size of households is a function of the number of residents living in households within a given area divided by the number of occupied housing units within the given area. As shown in Table 4.7-3, as of 2019, the average household size within the City is approximately 2.81 persons per household, which is similar to average household sizes within Sacramento County but slightly smaller than the statewide average of 2.98 persons/household.

Table 4.7-3
Average Household Size (Persons Per Household)

Area	2019
California	2.98
Sacramento County	2.80
City of Rancho Cordova	2.81

Source: ESRI Business Analyst, Comparison Reports, City of Rancho Cordova, November 2019.

Regional Housing Needs Plan

The Regional Housing Needs Allocation (RHNA) is a minimum projection of additional housing units needed to accommodate projected household growth of all income levels by the end of the housing element's statutory planning period. Based on SACOG's adopted RHNA, each city and county must update the housing element of their General Plan to demonstrate how the jurisdiction will meet the expected growth in housing need over the planning period.

According to the U.S. Department of Housing and Urban Development (HUD), housing is classified as "affordable" if households do not pay more than 30 percent of income for payment of rent (including utilities) or monthly homeownership costs (including mortgage payments, taxes, and insurance). SACOG adopted their Regional Housing Needs Plan (RHNP) on September 20, 2012, which officially assigns the allocations to cities and counties in the six-county Sacramento region. SACOG's RHNP covers the planning period from January 1, 2013 through October 31, 2021, and defines the lower income unit categories as follows:

- Very Low-Income Unit: is one that is affordable to a household whose combined gross household income is at or lower than 50 percent of the Sacramento County median income.
- Low-Income Unit: is one that is affordable to a household whose combined gross household income is at or between 50 and 80 percent of the Sacramento County median income.

[4] Sacramento Area Council of Governments. *2020 Metropolitan Transportation Plan/Sustainable Communities Strategy*. November 18, 2019.

On November 21, 2019, the SACOG Board of Directors approved RHNA Methodology Option C for the RHNA Methodology Cycle 6 (2021 through 2029 planning period).[5] This action provides the number of total housing units that each jurisdiction in the SACOG region must zone for during the eight-year period. Based on the approved RHNA Methodology Option C, the SACOG region requires a minimum of 38,999 new very low-income units and 23,503 new low-income units for the upcoming planning period.[6] The SACOG Board of Directors adopted the 2021-29 RHNP on March 19, 2020.

4.7.3 REGULATORY CONTEXT

Federal laws or regulations pertaining to land use and planning/population and housing are not applicable for this analysis. However, the existing State and local laws and regulations are listed below, as applicable.

State Regulations

The following are applicable State regulations related to land use and planning/population and housing.

Title 14 California Code of Regulations Section 15131

Title 14, California Code of Regulations (CCR) Section 15131 provides that economic or social information may be included in an EIR, but those economic or social effects shall not be considered significant effects on the environment. In an EIR, the lead agency is responsible for researching economic or social changes resulting from a project, which may eventually lead to physical changes in the environment. Such economic or social changes can be used to determine the significance of physical changes on the environment.

Regional Housing Needs Plan

California General Plan law requires each city and county to have land zoned to accommodate a fair share of the regional housing need. The share is known as RHNA and is based on a RHNP developed by councils of government. The state-mandated RHNA process (Government Code Sections 65580 et seq.) requires SACOG to develop a methodology that determines how to divide and distribute an overall allocation that the region receives from the State.

SB 330

California Senate Bill (SB) 330, “The Housing Crisis Act of 2019,” was signed into law by Governor Newsom on October 9, 2019 and became effective January 1, 2020. The bill establishes a statewide housing emergency to be in effect until January 1, 2025. During the housing emergency period, cities and localities in urban areas, including the City of Rancho Cordova, are generally prohibited from rezoning actions or imposing new development standards that would reduce the zoned capacity for housing, or adopting new design standards that are not objective. In such jurisdictions, the demolition of existing housing units is only permitted if replacement units are provided. The demolition of existing low-income units is only permitted if certain conditions related to affordability and tenant protections are met.

[5] Sacramento Area Council of Governments. *Regional Housing Needs Allocation (RHNA) and Housing Issues.* Available at: https://www.sacog.org/regional-housing-needs-allocation-rhna. Accessed December 2019.

[6] Sacramento Area Council of Governments. *Draft Regional Housing Needs Allocation Methodology Menu.* September 19, 2019.

Local Regulations

The following are the local regulations and standards relevant to the CEQA review process with respect to land use and planning/population and housing. Specific goals and policies from the City's General Plan are listed in Table 4.7-5 at the end of this chapter.

Sacramento Area Council of Governments

SACOG is responsible for the preparation of, and updates to, the MTP/SCS for the region and the corresponding Metropolitan Transportation Improvement Program (MTIP). The MTIP identifies short-term projects (seven-year horizon) in more detail.

Metropolitan Transportation Plan/Sustainable Communities Strategy

The 2020 MTP/SCS was adopted by the SACOG board on November 18, 2019.[7] The MTP/SCS is a long-range plan for transportation improvements in the region and provides a 20-year transportation vision and corresponding list of projects. The plan is based on projections for growth in population, housing, and jobs. SACOG determines the regional growth projections by evaluating baseline data (existing housing units and employees, jobs/housing ratio, and percent of regional growth share for housing units and employees), historic reference data (based upon five- and ten-year residential building permit averages and historic county-level employment statistics), capacity data (General Plan data for each jurisdiction), and current MTIP data about assumptions used in the most recent MTP/SCS. SACOG staff then meets with each jurisdiction to discuss and incorporate more subjective considerations about planned growth for each area. Finally, SACOG makes a regional growth forecast for new homes and new jobs, based upon an economic analysis provided by a recognized expert in order to estimate regional growth potential based on market analysis and related economic data, which is incorporated into the MTP/SCS.

4.7.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to land use and planning/ population and housing. A discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, a significant impact would occur if the proposed project would result in any of the following:

- Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect; or
- Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure).

Issues Not Discussed Further

The Initial Study prepared for the proposed project (see Appendix A) determined that development of the proposed project would result in no impact or a less-than-significant impact related to the following impacts:

[7] Sacramento Area Council of Governments. *2020 Metropolitan Transportation Plan/Sustainable Communities Strategy*. November 18, 2019.

- Physically divide an established community; and
- Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere.

Method of Analysis

The following section describes the method of analysis used to evaluate potential impacts of the proposed project related to land use and planning/population and housing.

Land Use and Planning

This chapter analyzes the compatibility of the proposed project with surrounding land uses and compliance of the proposed project with adopted plans and policies. Environmental impacts resulting from the proposed project are discussed in the respective environmental categories. This discussion complies with Section 15125(d) of the CEQA Guidelines, which requires that EIRs discuss inconsistencies with adopted local plans as part of the environmental setting. The ultimate determination of consistency rests with the City Council.

Compatibility with Existing Uses

The proposed project is evaluated for compatibility with the existing land uses adjacent to the project site. The evaluation considers the existing and planned type and intensity of uses in the project vicinity and those proposed for the project site. The analysis assumes the construction and implementation of the proposed project within the existing and planned environment to determine if the project is compatible with those existing and planned uses surrounding the project site.

Consistency with the Applicable Land Use Regulations

The proposed project is examined for consistency with the City's General Plan based on the relevant policies contained therein. The project's consistency with the City's Municipal Code is also discussed.

Population and Housing

The level of significance of the impacts related to population and housing is determined by evaluating whether the proposed project, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure), would induce substantial unplanned population growth in the project area.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.7-1 Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the impact is *less than significant*.

The General Plan Guidelines published by the State Office of Planning and Research defines consistency as, "An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the

general plan and not obstruct their attainment." Therefore, the standard for analysis used in this EIR is based on general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the project is consistent or inconsistent with the City of Rancho Cordova General Plan policies or other City plans and policies is ultimately the decision of the City Council. Furthermore, although CEQA analysis may identify some areas of general consistency with City policies, the City has the ability to impose additional requirements or conditions of approval on a project, at the time of its approval, to bring a project into more complete conformance with existing policies. A discussion of the project's general agreement with policy language and furtherance of policy intent is discussed in further detail below.

The General Plan and Zoning Code carry out the policies of the City of Rancho Cordova General Plan by classifying and regulating the uses of land and structures within the City, consistent with the General Plan. As noted previously, the project site is located within the Grant Line West Planning Area and is currently assigned the conceptual land use designations of Natural Resources and Residential-Mixed Density. The site is zoned Agricultural (AG-80) and Industrial Reserve (IR).

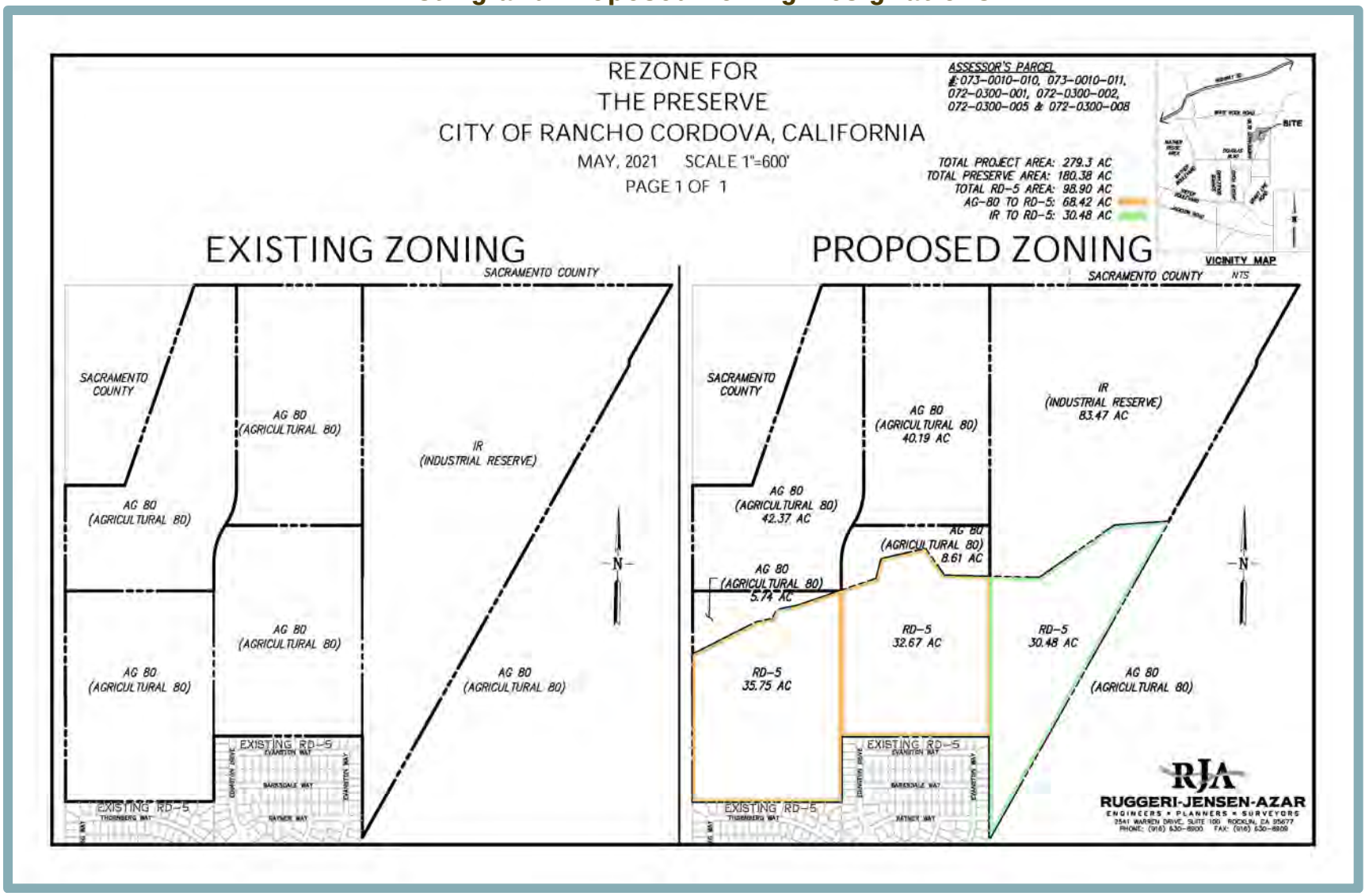
The proposed project would change the land use designation of the entire project site to Low Density Residential. The Low Density Residential designation is intended for single-family detached homes at a density of 2.1 to 6.0 dwelling units/acre. In addition, the project would include an amendment to the Circulation Element of the General Plan to remove the planned alignment of Centennial Drive in the project vicinity. Within the southern portion of the project site, the project would require a rezone to change a total of 68.42 acres of AG-80 zoned land and 30.48 acres of IR zoned land to Residential District (RD-5), which allows for residential development at a density of between 4.1 and 5.0 dwelling units/acre (see Figure 4.7-1). Table 4.7-4 below provides a comparison of the development potential of the project site under the existing and proposed General Plan land use and zoning designations.

Table 4.7-4
Project Site Development Potential

Scenario	Land Use Designation	Zoning	Development Potential
Existing	Natural Resources and Residential-Mixed Density	AG-80, IR	Four units allowable
Proposed	Low Density Residential	RD-5	440 units proposed

As discussed in Table 4.7-5, City of Rancho Cordova General Plan Policy Discussion, the project would be generally consistent with the applicable policies outlined in the General Plan. It should be noted that while potential inconsistencies with specific policies may indicate a significant physical impact, the inconsistency is not itself an impact. The physical impacts of the project are analyzed throughout Chapters 4.1 through 4.10 of this Draft EIR.

Figure 4.7-1
Existing and Proposed Zoning Designations



Approval of the General Plan Amendment and rezone are discretionary actions subject to approval by the City Council. Should the City Council approve the requested entitlements, the project would be rendered consistent with the County's General Plan and Municipal Code.

From a policy perspective, Table 4.7-5 at the end of this chapter demonstrates that the proposed project would be generally consistent with the policies in the General Plan adopted for the purpose of avoiding or mitigating an environmental effect.

Based on the above, the proposed project would not cause a significant environmental impact due to conflicts with a land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (including the policies discussed in Table 4.7-5), and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.7-2 Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure). Based on the analysis below, the impact is *less than significant*.

Growth can be induced in a number of ways, including through the elimination of obstacles to growth or through the stimulation of economic activity within the region. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped. The following sections describe potential effects related to direct and indirect population growth associated with implementation of the proposed project.

Direct Population Growth

The proposed 440-unit single-family residential development would increase the available housing within the City of Rancho Cordova, which would be expected to increase population in the area. Using the 2.81 persons/household average household size for the City (see Table 4.7-3), the project would house an estimated 1,237 residents. However, to provide a more conservative assessment consistent with other technical chapters in this EIR, the analysis in this chapter assumes the proposed project would generate 1,333 residents, as estimated by the VMT analysis prepared for the proposed project.

As noted previously, the City has anticipated buildout of the Grant Line West Planning Area with a total of 3,393 dwelling units, 9,043 residents, 502,893 square feet (sf) of commercial uses, and 143,684 sf of office uses. Currently, the Grant Line West Planning Area is primarily vacant and undeveloped. Thus, population growth associated with the proposed 440-unit subdivision would be within the scope of what

has been anticipated for the project area per the General Plan. It should be noted that potential population growth impacts associated with development of the proposed project and other future cumulative development projects in the City, including the Grant Line West Planning Area, are considered in further depth within Impact 4.7-5 below. Furthermore, the SACOG 2020 MTP/SCS has anticipated the addition of 13,421 residential units to the City's housing stock by 2035. Thus, the proposed 440 units would be consistent with the growth projections included in the 2020 MTP/SCS.

Indirect Population Growth

The proposed project would result in an increase of the permanent population on the project site by approximately 1,333 residents. This new residential population would likely patronize local businesses and services in the area, fostering economic growth. While construction of the proposed project would result in increased employment opportunities in the construction field, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site, employment patterns of construction workers is such that construction workers would not likely, to any significant degree, relocate their households as a result of the construction-related employment opportunities associated with the proposed project.

Although the project would provide short-term employment opportunities, which would likely be filled from the local employee base, with the possible exception of a few household and landscape maintenance jobs, no permanent jobs would be created by the proposed project. Therefore, the project would not result in long-term employment growth in the area. The residential population generated by the proposed project would also result in an increased demand for public services. However, as discussed in Chapter 4.9, Public Services and Utilities, the project's demand for public services could be accommodated by existing services and would not create a need for new or altered governmental facilities. The utility improvements included in the proposed project would be designed to serve the proposed residences only, and would not induce additional population growth within the Grant Line West Planning Area beyond what has been previously anticipated by the City.

Conclusion

Considering the above, the proposed project would include development that would result in direct on-site population growth. However, population growth resulting from the proposed project would be within the General Plan and SACOG growth estimates for the project area. Furthermore, the infrastructure included in the proposed project would be sized to accommodate only the development that had been previously planned for the project area. As a result, the proposed project would not be considered to induce substantial unplanned population growth, and a ***less-than-significant*** impact would result. It should be noted that potential impacts related to growth inducement are discussed further within Chapter 5, Statutorily Required Sections, of this EIR, consistent with Section 15126.2(d) of the CEQA Guidelines.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Additional detail regarding the cumulative setting for the proposed project is included in Chapter 5, Statutorily Required Sections, of this EIR.

4.7-4 Cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Based on the analysis below, the cumulative impact is *less than significant*.

A cumulative analysis of land use is not included because land use plans or policies and zoning generally do not combine to result in cumulative impacts. The determination of significance for impacts related to such issues is whether the project would cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Such a conflict is site-specific, and, thus, is only addressed on a project-by-project basis. As shown in Table 4.7-5 of this chapter, the proposed project would be generally consistent with relevant policies in the City of Rancho Cordova General Plan.

Therefore, the proposed project would not cause a significant cumulative environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, and the cumulative impact would be ***less-than-significant***.

Mitigation Measure(s)

None required.

4.7-5 Cumulative unplanned population growth. Based on the analysis below, the cumulative impact is *less than significant*.

Buildout of the City, including the Grant Line West Planning Area, was anticipated to result in population growth through the buildout of urban and rural developments throughout the City. Since approval of the General Plan, the Rio Del Oro Specific Plan and Sun Creek Specific Plans have been approved by the City, which resulted in a slight increase in the amount of residential development anticipated for the specific plan areas. In addition, several residential development projects have been completed, are underway, or approved within the City's planning area. The 2020 MTP/SCS, prepared by the SACOG, provides regional growth projections for the six-county Sacramento region, including the City of Rancho Cordova.

As discussed within Impact 4.7-3 above, the population growth related to implementation of the proposed project has been anticipated for the region by the 2020 MTP/SCS. Concurrently, the 2020 MTP/SCS explicitly anticipates growth within the Developing Communities shown in Figure 3.5 of the MTP/SCS, which include the Rio Del Oro Specific Plan and Sun Creek Specific Plan areas within the southeastern portion of the City of Rancho Cordova. Thus, the General Plan anticipated cumulative growth of the plan area, and increased urbanization within the General Plan area has been anticipated by regional planning such as the 2020 MTP/SCS. Because development of the project site and buildout of the City has been anticipated in regional development forecasts, buildout of the proposed project in combination with other approved developments within the project area would not result in a significant cumulative contribution to unplanned population growth within the project area or region.

It should be noted that population growth itself does not constitute a significant physical environmental effect. Rather, the determination of significance is based on whether population growth associated with a project has been previously planned for, and whether such growth could result in indirect impacts from associated development. As such, the cumulative analysis within each technical chapter of this EIR evaluates the physical environmental impacts of cumulative development.

Considering the above, implementation of the proposed project, in combination with future development occurring under buildout of the City's General Plan, would result in a ***less-than-significant*** cumulative impact related to unplanned population growth.

Mitigation Measure(s)

None required.

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
Policy LU.1.4	Promote high quality, efficient, and cohesive land utilization that minimizes negative impacts (e.g., traffic congestion and visual blight) and environmental hazards (e.g. flood, soil instability) on adjacent neighborhoods and infrastructure and preserve existing and future residential neighborhoods from encroachment of incompatible activities and land uses.	Adverse environmental effects and environmental hazards are evaluated throughout the technical chapters of this EIR. For each issue area, this EIR includes mitigation, as necessary, to reduce any identified impacts to the maximum extent feasible. The 185.3 acres of undeveloped land on the northern parcels within the project site would not be included in development of the proposed project, thereby avoiding potential flooding impacts associated with Morrison Creek. Furthermore, the proposed project would be compatible with the existing single-family residential development to the south of the site, as well as the planned Rio Del Oro residential community to the west of the site. Thus, the proposed project would be consistent with the policy.
Policy LU.2.7	Promote sustainable development that reduces the impact of projects on energy, water, and transportation systems. Encourage sustainable development to occur in ways that complement the built form.	Issues related to energy efficiency are discussed in Chapter 4.1, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR.
Policy C.1.2	Seek to maintain operations on all roadways and intersections at Level of Service D or better at all times, including peak travel times, unless maintaining this Level of Service would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. Congestion in excess of Level of Service D may be accepted in these cases, provided that provisions are made to improve traffic flow and/or promote nonvehicular transportation as part of a development project or a City-initiated project. Please see Policy C.1.3 for additional policy guidance related to this issue. Examples of system improvements which may be accepted when Level of Service D cannot be maintained include the following, where the improvement or funding is in excess of standard City requirements: • Development of on- or off-street bicycle or pedestrian circulation (not including sidewalks that are constructed as part of roadway improvements);	As detailed in Chapter 4.10, Transportation, of this EIR, the proposed project would be consistent with the City's acceptable LOS standard for all City roadways and intersections evaluated as part of the Transportation Impact Analysis, with the exception of the following intersections, during Existing Plus Project conditions: • SR 16/Grant Line Road intersection under Existing Plus Project conditions; • Grant Line Road/Raymer Way intersection under Existing Plus Project and Cumulative Plus Project conditions; Although, as a result of SB 743, local jurisdictions may no longer rely on LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA, the City considers LOS as a matter of General Plan policy consistency. The City maintains full discretion to require a project to ensure General Plan consistency through project conditions of approval.

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
	• Providing or funding public transportation facilities or services; Other features as determined appropriate by the City.	Therefore, to address the proposed project's inconsistency with applicable LOS standards for the above intersections, the City will require the project to comply with the following conditions of approval: • The applicant shall pay a fair share of required improvements at the SR 16/Grant Line Road intersection and cumulative improvements through payment of City transportation fees; and • The applicant shall convert the Grant Line Road/Raymer Way intersection from side-street-stop-controlled to signalized along the existing Grant Line Road alignment. Satisfying such conditions of approval would ensure that all intersections identified in the TIA would operate in accordance with General Plan Policy C.1.2 under Existing Plus Project and Cumulative Plus Project conditions.
Policy C.1.7	Require the installation of traffic preemption devices for emergency vehicles (police and fire) at all newly constructed intersections and seek to retrofit all existing intersections to incorporate these features.	Per Sections 22.110.040 and 22.110.045 of the City's Municipal Code, the proposed project would be required to design collector streets and minor residential streets to provide rapid and efficient routes of access for emergency vehicles to residential areas. In addition, to ensure consistency with Policy C.1.7, the City will condition the project, if approved, to require installation of traffic preemption devices for emergency vehicles at all applicable intersections. Satisfying such conditions of approval would ensure preemption devices are installed at all applicable intersections in accordance with General Plan Policy C.1.7.
Policy C.1.8	Ensure that where traffic calming devices or techniques are employed, adequate access is provided for police and fire vehicles.	See response to Policy C.1.7 above.
Policy C.1.9	In an effort to reduce automobile traffic and congestion and increase use of other travel modes, support the use of trip reduction programs.	As discussed in Chapter 4.10, Transportation, of this EIR, the project applicant would construct a portion of the regional trail system in the project vicinity and pay a fair share contribution to provide monetary support for the City's CordoVan regional shuttle service. Such actions would ensure the proposed project is generally consistent with Policy C.1.9, to the maximum extent feasible.
Policy OSPT.1.1	Review all proposals for new residential development to ensure each project complies with the City's minimum	Per section 22.40 of the City's Municipal Code, the project would be required to dedicate at least 6.49 acres of parkland based on the inclusion of 440 units within the proposed project. The proposed project would satisfy

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
	standards for parkland dedication, and is consistent with Cordova Recreation and Park District goals.	the Municipal Code requirement, as the project would include dedication of two park areas totaling 8.65 acres. Thus, the proposed project would be consistent with the policy.
Policy ISF.2.1	Ensure the development of public infrastructure that meets the long-term needs of residents and ensure infrastructure is available at the time such facilities are needed.	As discussed in Chapter 4.9, Public Services and Utilities, of this EIR, the proposed project would connect to the existing 10-inch water main within Edington Drive and the existing eight-inch sewer lines within Edington Drive and Thornberg Way. The Sacramento County Water Agency's water conveyance infrastructure network would provide sufficient water pressure at the proposed residences. Additionally, sewer flows generated by the proposed project would be accommodated by the Sacramento Area Sewer District's (SASD) downstream wastewater conveyance system, and expansion of existing infrastructure would not be required to serve the project. The project site would receive natural gas and electricity service from PG&E and SMUD, respectively. The proposed project would connect to existing electrical, natural gas, and telecommunications infrastructure located to the south of the site within the neighboring subdivision. In addition, as required by the General Plan, the project applicant would be required to pay development impact fees, which would contribute towards the cost of future upgrades to public infrastructure and utilities. Because the proposed project would connect to existing public infrastructure in the project vicinity, and such infrastructure would be sufficient to handle the increase in demand associated with the proposed project, the proposed project would be consistent with Policy ISF.2.1.
Policy ISF.2.7	Minimize visual impacts and physical impediments of utility sites, infrastructure, and equipment.	The utility improvements necessary to serve the proposed project would generally be undergrounded, thereby limiting any potential adverse visual affects associated with such infrastructure. Thus, the proposed project would be consistent with the policy.
Policy NR.1.1	Protect rare, threatened, and endangered species and their habitats in accordance with State and federal law.	As discussed in Chapter 4.2, Biological Resources, of this EIR, implementation of Mitigation Measures 4.2-1, 4.2-2, 4.2-3, 4.2-4, 4.2-5, 4.2-6, 4.2-7, 4.2-8, 4.2-9, 4.2-10, and 4.2-11 would reduce all potential impacts to special-status species to less-than-significant levels. As described in Impact 4.2-13, the proposed project would not conflict with any applicable

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
		provisions of the SSHCP. Thus, the proposed project would be consistent with the policy.
Policy NR.1.7	Prior to project approval, the City shall require a biological resources evaluation for private and public development projects in areas identified to contain or possibly contain listed plant and/or wildlife species based upon the City's biological resource mapping provided in the General Plan EIR or other technical materials.	As discussed in Chapter 4.2, Biological Resources, of this EIR, a Biological Resources Assessment has been prepared for the proposed project by ECORP Consulting, Inc. The Biological Resources Assessment evaluated potential impacts to special-status plant and wildlife species, as well as other biological resources. Thus, the proposed project would be consistent with the policy.
Policy NR.1.9	The City shall require that impacts to riparian habitats be mitigated at a no net loss of existing function and value based on field survey and analysis of the riparian habitat to be impacted. No net loss may be accomplished by avoidance of the habitat, restoration of existing habitat, or creation of new habitat, or through some combination of the above.	Implementation of Mitigation Measures 4.2-9(a) through 4.2-9(d) would ensure that potential impacts to wetlands and other riparian habitat would be reduced to a less-than-significant level. For example, Mitigation Measure 4.2-9(a) requires that the proposed project replaces, restores, or enhances on a "no net loss" basis (in accordance with the U.S. Army Corps of Engineers and the Central Valley Regional Water Quality Control Board) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded due to project implementation. Thus, the proposed project would be consistent with the policy.
Policy NR.2.1	Require mitigation that provides for "no net loss" of wetlands consistent with current State and federal policies.	See response to Policy NR.1.9 above.
Policy NR.2.2	Ensure that direct and indirect effects to wetland habitats are minimized by environmentally sensitive project siting and design, to the maximum extent feasible.	The 185.3 acres of undeveloped land on the northern parcels within the project site would not be included in the development of the proposed project the proposed project, thereby avoiding potential impacts to any existing wetlands located on such parcels. Thus, the proposed project would be consistent with the policy.
Policy NR.4.1	Conserve native oak and landmark tree resources for their historic, economic, aesthetic, and environmental value.	Mitigation Measure 4.2-11 would require acquisition of a tree removal permit from the City prior to removal of any protected trees, as defined by Chapter 19.12 of the City's Municipal Code. In addition, Mitigation Measure 4.2-11 requires that existing native tree species are incorporated into the planned landscaping design in public spaces such as open space, parks, and parkways.
Policy NR.4.4	Prior to the approval of any public or private development project in areas identified or assumed to contain trees, the City shall require that a determinate survey of trees species and size be performed. If any native oaks or other native trees six inches or more in diameter at breast height (dbh), multi-trunk	As discussed in Chapter 4.2, Biological Resources, of this EIR, the study area contains a total of 149 trees that meet the definition of a Protected Tree as defined in the City's Tree Preservation Ordinance. The proposed project would include the removal of 140 of the existing protected trees within the study area. The nine protected trees within the Morrison Creek

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
	native oaks or native trees of 10 inches or greater dbh, or non-native trees of 18 inches or greater dbh that have been determined by a certified arborist to be in good health are found to occur, such trees shall be avoided if feasible. If such trees cannot be avoided, the project applicant shall do one of the following: All such trees shall be replaced at an inch- for-inch ratio. A replacement tree planting plan shall be prepared by a certified arborist or licensed landscape architect and shall be submitted to the City of Rancho Cordova for approval prior to removal of trees; or, The project applicant shall submit a mitigation plan that provides for complete mitigation of the removal of such trees in coordination with the City of Rancho Cordova. The mitigation plan shall be subject to the approval of the City. If the City of Rancho Cordova adopts a tree preservation ordinance at any time in the future, any future development activities shall be subject to that ordinance instead.	Offsite would be preserved as part of the project. Implementation of Mitigation Measures 4.2-12 would reduce all potential impacts related to the City's tree protection standards to less-than-significant levels. Thus, the proposed project would be consistent with the policy.
Policy NR.5.3	Protect surface and ground water from major sources of pollution, including hazardous materials contamination and urban runoff.	As discussed under Impact 4.6-1 in Chapter 4.6, Hydrology and Water Quality, of this EIR, the project applicant would be required by the State to comply with the most current Construction General Permit requirements. Per the requirements, a Storm Water Pollution Prevention Plan would be prepared for the overall project, which would include the site map, drainage patterns and stormwater collection and discharge points, Best Management Practices (BMPs), and a monitoring and reporting framework for implementation of BMPs, as necessary. Mitigation Measure 4.4-2 requires the preparation and submittal of a SWPPP. In addition, a Notice of Intent (NOI) would be filed with Regional Water Quality Control Board (RWQCB). In order to further minimize the potential for, and effects from, accidental spills of hazardous, toxic, or petroleum substances during construction activities, Mitigation Measure 4.6-1(b) requires the project to prepare and implement a Spill Prevention Countermeasure and Control Plan (SPCC) prior to the commencement of ground-disturbing activities. The SPCC would specify measures and procedures to minimize the potential for, and

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
		effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112. Furthermore, Mitigation Measure 4.6-2 requires the project applicant to submit a detailed BMP and water quality maintenance plan to ensure the standards of the City's National Pollutant Discharge Elimination System Permit, the California Stormwater Quality Association (CASQA) Stormwater BMP Handbook for New Development and Redevelopment, and the Stormwater Quality Design Manual for the Sacramento region, are met by the proposed project during operation. Compliance with the aforementioned mitigation measures and regulations would ensure the proposed project is consistent with Policy NR.5.3.
Policy NR.5.4	Prevent contamination of the groundwater table and surface water, and remedy existing contamination to the extent practicable.	See response to Policy NR.5.3 above regarding the proposed project's prevention of groundwater and surface water contamination. As discussed in Chapter 4.5, Hazards and Hazardous Materials, of this EIR, groundwater contamination would not pose a substantial risk to workers or residents on the project site. However, the potential UST, unknown underground storage system, and other potential fuel storage vessels located within APNs 073-0010-011 and 072-0300-008 could pose a risk to workers during project construction. In addition, the soils in the vicinity of the wooden structures located at APN 072-0300-002 and APN 072-0300-008 have the potential to be contaminated with termiticides. However, Mitigation Measures 4.5-2(a), (b), (d), and (f) require appropriate procedures be followed in the event that soil or groundwater contamination is identified associated with such sufficient to ensure that any contamination would be adequately remedied and risks to people would not occur. Therefore, the proposed project would be consistent with Policy NR.5.4.
Policy NR.5.5	Minimize erosion to stream channels resulting from new development in urban areas consistent with State law.	Mitigation Measure 4.4-2 requires preparation and submittal of a SWPPP, which would be designed to control pollutant discharges using BMPs and technology to reduce erosion and discharge of sediments associated with project construction activities. In addition, runoff from impervious surfaces created as part of the proposed project would be routed to two bio-retention basins in the northwest portion of the development area, which would

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
		detain and treat runoff prior to discharging treated runoff to a hydromodification basin located in between the two bio-retention basins. The hydromodification basin would allow for metering of flows discharged to Morrison Creek. The project would also incorporate Low Impact Development (LID) controls such as disconnected pavement, disconnected roof drains, and interceptor trees to help reduce stormwater runoff, thereby ensuring that the project would not result in increased erosion of downstream waterways. Thus, the proposed project would be consistent with the policy.
Policy S.1.5	The City shall require written confirmation from applicable local, regional, state, and federal agencies that known contaminated sites have been deemed remediated to a level appropriate for land uses proposed prior to the City approving site development or provide an approved remediation plan that demonstrates how contamination will be remediated prior to site occupancy. This documentation will specify the extent of development allowed on the remediated site as well as any special conditions and/or restrictions on future land uses.	As noted in the Initial Study prepared for the proposed project, the project site has not been listed as a past or present hazardous materials site. The nearest hazardous materials site is a McDonnell Douglas test site, which is located approximately 0.80-mile from the project site. Furthermore, Mitigation Measures 4.5-2(a) through (f) in this EIR would ensure that all potential impacts associated with existing on-site hazards and hazardous materials would be reduced to less-than-significant levels. Thus, the proposed project would be consistent with the policy.
Policy S.3.2	Ensure that new structures are protected from damage caused by geologic and/or soil conditions to the greatest extent feasible.	As discussed under Impact 4.4-3 of this EIR, the project site geological and soil conditions are preliminarily considered suitable for the proposed construction. In addition, the required compliance with the California Building Standards Code would ensure that all proposed structures are designed appropriately. Nonetheless, implementation of Mitigation Measure 4.4-3, which requires preparation of and compliance with a final geotechnical engineering report, would ensure that new structures are protected from damage cause by geologic and/or soil conditions. As a result, the project would comply with Policy S.3.2.
Policy AQ.1.2	Evaluate projects for compliance with State and federal ambient air quality standards and the Sacramento Metropolitan Air Quality Management District's (SMAQMD) thresholds of significance. (Refer to Table AQ-3 in this Element for ambient air quality standards.)	Impacts 4.1-1 and 4.1-2 within this EIR compare project-generated emissions to the SMAQMD's threshold of significance. As noted therein, the project would not result in emissions which exceed such standards and, therefore, the project would be in compliance with State and federal AAQS. As a result, the project would comply with Policy AQ.1.2.
Policy AQ.2.5	Utilize the guidelines in the California Air Resources Control Board Air Quality and Land Use Handbook: A Community Health Perspective when evaluating new development	The EIR includes an evaluation of toxic air contaminant (TAC) emissions under Impact 4.1-3. As noted therein, the proposed project would not involve any land uses or operations that would be considered major

Table 4.7-5
City of Rancho Cordova General Plan Policy Discussion

Policy		Project Consistency
	requests that either would generate toxic air contaminant emissions near sensitive receptors or locate new sensitive receptors near existing sources of air toxic emissions or order to minimize health hazards, and implement all feasible best available control technology, as required by SMAQMD.	sources of TACs. In addition, consistent with the California Air Resources Control Board's Air Quality and Land Use Handbook, construction of the proposed project would not generate substantial TAC emissions that would adversely affect nearby sensitive receptors. As a result, the project would comply with Policy AQ.2.5.
Policy N.1.2	Ensure that the indoor and outdoor areas of new projects will be located, constructed, and/or shielded from noise sources in compliance with the City's noise standards to the maximum extent feasible.	Impacts related to noise are addressed in Chapter 4.8 of this EIR. As discussed under Impact 4.8-2, the project is not located in an area subjected to substantial ambient noise. However, exterior traffic noise and park-related noise at the proposed residences could exceed the City's noise level standards. In order to ensure that the noise levels would be reduced sufficient to comply with the City's standards, the City will require solid noise barriers to be constructed as a condition of approval. As a result, the project would comply with Policy N.1.2.
Policy N.1.4	Mitigate noise created by proposed non-transportation noise sources to comply with the City's noise standards to the maximum extent feasible.	As discussed in Chapter 4.8 of this EIR, considering the project primarily consists of single-family residences, the proposed project is not anticipated to generate substantial non-transportation noise. As a result, the project would comply with Policy N.1.4.
Policy N.1.7	To the extent feasible and appropriate, the City shall require the use of temporary construction noise control measures for public and private project that may include the use of temporary noise barriers, temporary relocation of noise-sensitive land uses or other appropriate measures.	Construction-related noise is addressed under Impact 4.8-1 of this EIR. As noted under Impact 4.8-1, construction noise is exempt from the City's Noise Ordinance during allowable hours, which would be enforced through Mitigation Measure 4.8-1. As a result, the use of additional noise control measures is not warranted during construction of the proposed project, and the project would generally comply with Policy N.1.7.

4.8 Noise

4.8 NOISE

4.8.1 INTRODUCTION

The Noise chapter of the EIR describes the existing noise environment in the project vicinity, and identifies potential impacts and mitigation measures related to noise and vibration associated with construction and operation of the proposed project. The method by which the potential impacts are analyzed is discussed, followed by the identification of potential impacts and the recommended mitigation measures designed to reduce significant noise and vibration impacts to less-than-significant levels, if required. The Noise chapter is primarily based on the Environmental Noise & Vibration Assessment prepared for the proposed project by Bollard Acoustical Consultants, Inc. (see Appendix I),[1] the City of Rancho Cordova General Plan,[2] and the associated EIR.[3]

It is noted that the Environmental Noise & Vibration Assessment was prepared when a prior iteration of the project included only 434 residential units, as compared to the currently-proposed 440 units. Bollard Acoustical Consultants prepared an update memorandum confirming that the changes in noise levels associated with the six additional units would not change the conclusions presented in the Environmental Noise & Vibration Assessment.[4] As a result, all conclusions presented within this chapter remain applicable.

4.8.2 EXISTING ENVIRONMENTAL SETTING

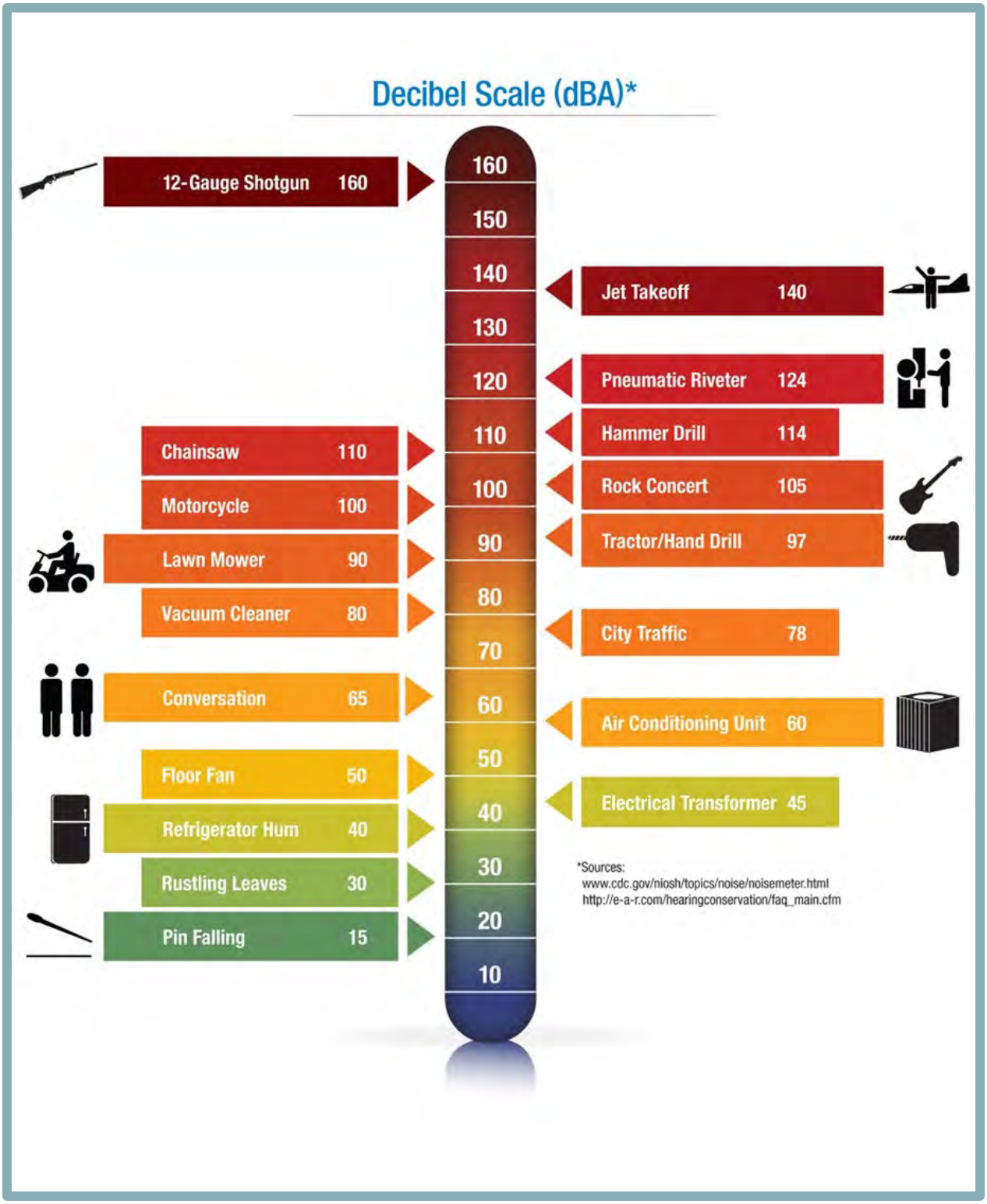
The Existing Environmental Setting section provides background information on noise and vibration, a discussion of acoustical terminology and the effects of noise on people, existing sensitive receptors in the project vicinity, existing sources and noise levels in the project vicinity, and groundborne vibration.

Fundamentals of Noise and Vibration

Decibels (dB) are logarithmic units that compare the wide range of sound intensities to which the human ear is sensitive. The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the typical range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. A-weighting of sound levels best reflects the human ear's reduced sensitivity to low frequencies, and the use of A-weighted sound level, expressed as dBA, has become the standard tool of environmental noise assessment. Noise levels associated with common noise sources are provided in Figure 4.8-1.

1 Bollard Acoustical Consultants, Inc. *Environmental Noise & Vibration Assessment, The Preserve Residential Development.* September 3, 2020.
2 City of Rancho Cordova. *General Plan*. Adopted June 26, 2006.
3 City of Rancho Cordova. *General Plan Environmental Impact Report.* 2006.
4 Bollard Acoustical Consultants, Inc. *Changes in noise levels associated with the addition of six (6) units for the proposed Preserve Residential Development in Rancho Cordova, California*. January 5, 2021.

Figure 4.8-1
Noise Levels Associated with Common Noise Sources



Source: Bollard Acoustical Consultants, Inc. (2020).

Community Noise Equivalent Level (CNEL), which can be used to compare the noise level of neighborhoods, is the weighted average noise level over time, presented in dB. Community noise is also commonly described in terms of the ambient noise level, which is defined as the overall noise level associated with a given environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the day-night average noise descriptor, or L_{dn}, and represents a correlation with community response to noise.

The L_{dn} is based on the average noise level over a 24-hours, with an additional 10 dB weighting applied to noise that occurs during nighttime hours (10:00 PM to 7:00 AM). The 10 dB nighttime penalty is applied to account for the assumption that people are more sensitive to nighttime noise exposures as compared to daytime noise exposures.

Stationary sources of noise, including construction equipment, attenuate at a rate of 6.0 to 7.5 dB per doubling of distance from the source depending on ground absorption. Physical barriers located between a noise source and the noise receptor, such as berms or sound walls, increase the efficacy of noise attenuation that occurs by distance alone.

Vibration is similar to noise in that both involve a source, a transmission path, and a receiver. However, while noise is generally considered to be pressure waves transmitted through air, vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency.

A person's perception to the vibration depends on their individual sensitivity to vibration, as well as the amplitude and frequency of the source and the response of the system which is vibrating. Vibration can be measured in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration levels in terms of peak particle velocities (PPV) in inches per second (in/sec). Standards pertaining to perception as well as damage to structures have been developed for vibration levels defined in terms of peak particle velocities.

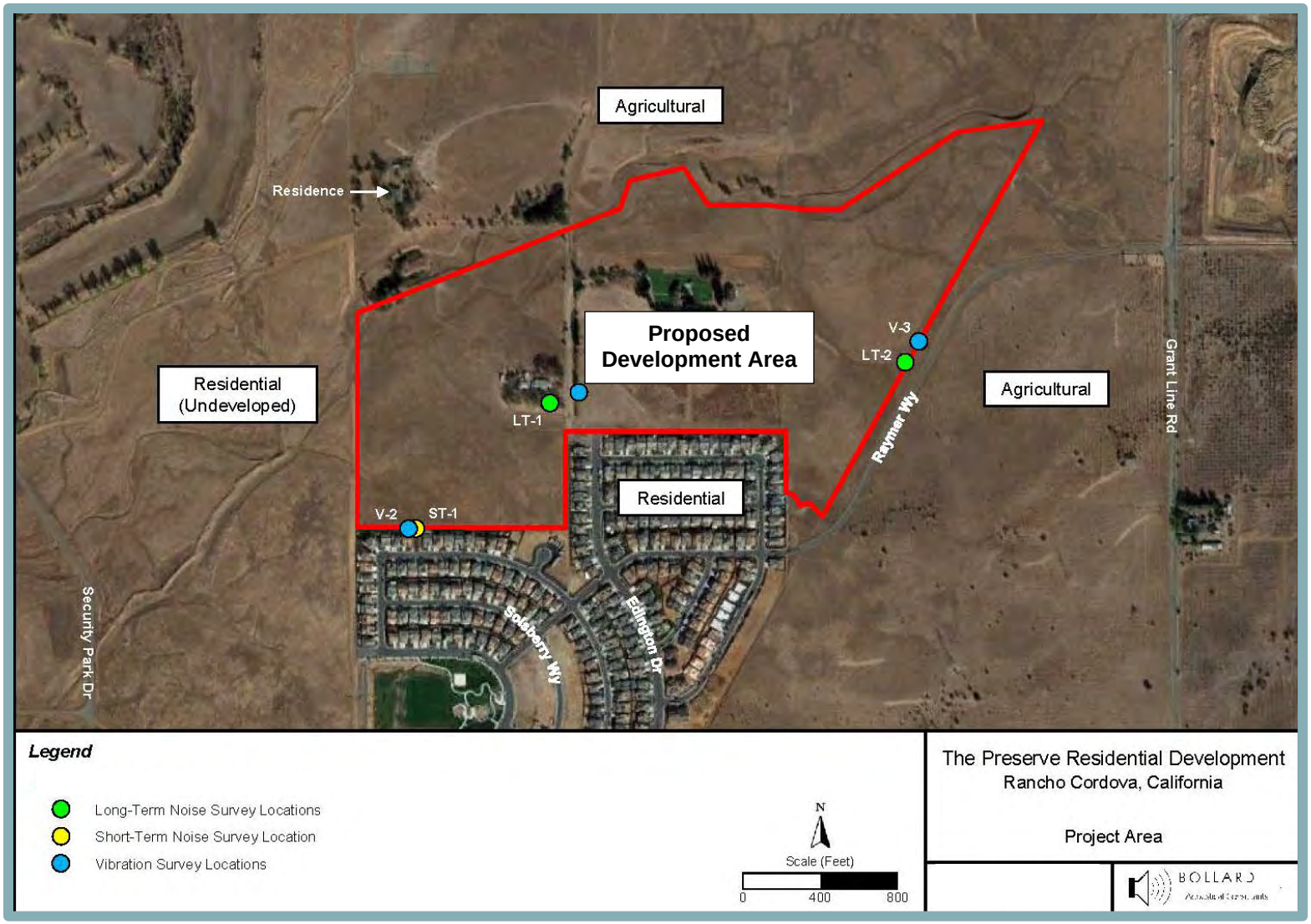
Existing Sensitive Receptors

Certain land uses are more sensitive to ambient noise levels than others due to the amount of noise exposure (in terms of both exposure time and shielding from noise sources) and the type of activities typically involved. Noise sensitive land uses typically include residences, schools, child care centers, hospitals, long-term health care facilities, convalescent centers, retirement homes, and recreation areas. Sensitive receptors in the project vicinity include the single-family residential subdivision located directly south of the site and the existing single-family residence located within the northern portion of the project site. The nearest residence is approximately 25 feet south of the project site boundary.

Existing Noise Sources and Ambient Noise Levels

Per the Environmental Noise & Vibration Assessment, the existing ambient noise environment within the project area is defined primarily by noise from traffic on Grant Line Road and Raymer Way. To quantify existing ambient noise levels in the project vicinity, Bollard Acoustical Consultants conducted two long-term (48-hour) ambient noise surveys from July 10 to 12, 2019 and one short-term (15-minute) ambient noise survey on July 10, 2019. The results of the long-term and short-term noise measurements are summarized in Table 4.8-1 and Table 4.8-2, respectively. The locations of the noise measurement sites are shown in Figure 4.8-2.

Figure 4.8-2
Noise Measurement Locations



Source: Bollard Acoustical Consultant, Inc. (2020).

Table 4.8-1
Long-Term Noise Level Measurement Results[1]

Site[2]	Description	Date	L_{dn}	Average Measured Hourly Noise Levels, dB			
				Daytime[3]		Nighttime[4]	
				L_{eq}	L_{max}	L_{eq}	L_{max}
LT-1	Centrally located on project site, near terminus of Edington Drive	7/10-7/11	47	45	62	40	51
		7/11-7/12	47	45	60	39	53
LT-2	Eastern end of project site, approximately 90 feet from centerline of Raymer Way	7/10-7/11	55	50	69	49	65
		7/11-7/12	55	51	72	48	65

Notes:
[1] Detailed summaries of the noise monitoring results are provided in Appendices D and E of the project-specific Environmental Noise & Vibration Assessment (Appendix I of this EIR).
[2] Noise monitoring locations are identified in Figure 4.8-2.
[3] Daytime hours: 7:00 AM to 10:00 PM.
[4] Nighttime hours: 10:00 PM to 7:00 AM.

Source: Bollard Acoustical Consultants, Inc. (2020).

Table 4.8-2
Short-Term Noise Level Measurement Results

Site[1]	Description	Time of Day	Measured Noise Levels, dB	
			L_{eq}	L_{max}
ST-1	Southwestern end of the project site	12:23 PM	42	58

Notes:
[1] Noise monitoring location is identified in Figure 4.8-2.

Source: Bollard Acoustical Consultants, Inc. (2020).

Existing Traffic Noise Levels

Traffic volumes for existing conditions were obtained from the traffic study prepared for the proposed project by Kimley-Horn & Associates, Inc. The traffic noise levels at 100 feet away from the roadway centerline were calculated based on the traffic volume data and the Federal Highway Administration (FHWA) Model. For this analysis, 88 roadway segments were evaluated. Modeled noise levels at 100 feet from each roadway centerline ranged between 37 and 72 L_{dn}. The modeled traffic noises for each roadway segment are summarized in Table 1 of the Environmental Noise & Vibration Assessment.

Factors such as roadway curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. In addition, existing sensitive receptors within the project vicinity are located varying distances from the roadway centerline. Nonetheless, the 100-foot reference distance is used for the purposed of this analysis to provide a reference position for comparisons between existing and anticipated future traffic noise levels with and without implementation of the proposed project.

Existing Ambient Vibration Levels

To quantify existing vibration levels at the project site, Bollard Acoustical Consultants conducted short-term (15 minute) vibration measurements at the project site on July 10, 2019. The measured

average vibration levels within the project area were less than 0.001 in/sec PPV, as shown in Table 4.8-3.

Table 4.8-3
Ambient Vibration Monitoring Results – July 10, 2019

Site[1]	Description	Time	Average Measured Vibration Level, PPV (in. sec)
V-1	Eastern end of the project site	11:36 AM	<0.001
V-2	Centrally located on the project site	12:23 PM	<0.001
V-3	Southwestern end of the project site	12:58 PM	<0.001

Notes:
[1] Noise monitoring location is identified in Figure 4.8-2.

Source: Bollard Acoustical Consultants, Inc. (2020).

4.8.3 REGULATORY CONTEXT

In order to limit exposure to physically and/or psychologically damaging noise levels, the State of California, various county governments, and most municipalities in the State have established standards and ordinances to control noise. Applicable federal laws or regulations pertaining to noise or vibration do not exist. The following provides a general overview of the existing State and local regulations that are relevant to the proposed project.

State Regulations

The following are the State environmental laws and policies relevant to noise.

California State Building Codes

The State Building Code, Title 24, Part 2 of the State of California Code of Regulations (CCR), establishes uniform minimum noise insulation performance standards to protect persons within new buildings which house people, including hotels, motels, dormitories, apartment houses, and dwellings other than single-family dwellings.

Title 24 mandates that interior noise levels attributable to exterior sources shall not exceed 45 dB L_{dn} or CNEL in any habitable room. Title 24 also mandates that for structures containing noise-sensitive uses to be located where the L_{dn} or CNEL exceeds 60 dB, an acoustical analysis must be prepared to identify mechanisms for limiting exterior noise to the prescribed allowable interior levels. If the interior allowable noise levels are met by requiring that windows be kept closed, the design for the structure must also specify a ventilation or air conditioning system to provide a habitable interior environment.

Local Regulations

The following are the local environmental goals and policies relevant to noise.

City of Rancho Cordova General Plan

The relevant goals and policies from the City of Rancho Cordova General Plan related to noise are presented below.

Goal N.1. Ensure that all new development will be free of noise disturbances.

Policy N.1.1 Establish standards and policies consistent with those in Table 4.8-4 and Table 4.8-5 [General Plan Tables N-1 and N-2] to govern maximum sound levels in new development.

Table 4.8-4
City Noise Standards:
Noise Level Performance Standards for New Projects Affected by or Including Non-Transportation Noise Sources

Stationary Noise Sources	Noise Level Descriptor	Daytime Maximum (7 AM to 10 PM)	Nighttime Maximum (10 PM to 7 AM)
Typical	Hourly, L_{eq}, dB	55	45
Tonal, impulsive, repetitive or consist primarily of speech or music	Hourly, L_{eq}, dB	50	40

Note: The City may impose noise level standards which are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels.

Source*: *Rancho Cordova General Plan, June 2006.

Table 4.8-5
Maximum Transportation Noise Exposure

Land Use	Outdoor Activity Areas[1] L_{dn}/CNEL, dB	Interior Spaces	
		L_{dn}/CNEL, dB	L_{eq}, dB[2]
Residential	60[3]	45	--
Residential subject to noise from railroad tracks, aircraft overflights, or similar noise sources with produce clearly identifiable discrete noise events (e.g., the passing of a single train)	60[3]	40[5]	--
Transient lodging	60[4]	45	--
Hospitals, nursing homes	60[3]	45	--
Theaters, auditoriums	--	--	35
Churches, meeting halls	60[3]	--	40
Office buildings	--	--	45
Schools, libraries, museums	--	--	45
Playgrounds, neighborhood parks	70	--	--

Notes:

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

[2] As determined for a typical worst-case hour during periods of use.

[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn}/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn}/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

[4] In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

[5] The intent of this noise standard is to provide increased protection against sleep disturbance for residences located near railroad tracks.

Source*: *Rancho Cordova General Plan, June 2006.

Policy N.1.2 Ensure that the indoor and outdoor areas of new projects will be located, constructed, and/or shielded from noise sources in compliance with the City's noise standards to the maximum extent feasible.

Policy N.1.4 Mitigate noise created by proposed non-transportation noise sources to comply with the City's noise standards to the maximum extent feasible.

Policy N.1.5 Mitigate noise created by the construction of new transportation noise sources to the maximum extent feasible to comply with the City's standards.

Policy N.1.6 Ensure that comfortable noise levels and adequate privacy are maintained in higher density development.

Policy N.1.7 To the extent feasible and appropriate, the City shall require the use of temporary construction noise control measures for public and private project that may include the use of temporary noise barriers, temporary relocation of noise-sensitive land uses or other appropriate measures.

Rancho Cordova Noise Ordinance

Chapter 6.68 of the Rancho Cordova Municipal Code establishes interior and exterior noise level standards for noise-sensitive receptors. The purpose of the Noise Ordinance is to assess complaints of noises alleged to exceed the ambient noise levels. Relevant provisions of the Noise Ordinance are presented below.

6.68.070 Exterior noise standards.

A. The following noise standards [see Table 4.8-6], unless otherwise specifically indicated in this chapter, shall apply to all properties within a designated noise area:

Table 4.8-6
Rancho Cordova Municipal Code Exterior Noise Standards

Noise Area	City Zoning Districts	Time Period	Exterior Noise
1	RE-1, RD-1, RE-2, RD-2, RE-3, RD-3, RD-4, R-1-A, RD-5, R-2, RD-10, R-2A, RD-20, R-3, RD-30, RD-40, RM-1, RM-2, A-1-B, AR-1, A-2, AR-2, AR-5	7:00 AM – 10:00 PM	55 dBA
		10:00 PM – 7:00 AM	50 dBA

Source: Rancho Cordova Municipal Code, Chapter 6.68, Code Section 6.68.070(A).

B. It is unlawful for any person at any location within the city to create any noise which causes the noise levels on an affected property, when measured in the designated noise area, to exceed for the duration of time set forth following, the specified exterior noise standards in any one hour by [see Table 4.8-7]:

Table 4.8-7
Rancho Cordova Municipal Code Allowable Duration of Intrusive Sound

Cumulative Duration of the Intrusive Sound	Allowable Decibels
Cumulative period of 30 minutes per hour	0
Cumulative period of 15 minutes per hour	+5
Cumulative period of 5 minutes per hour	+10
Cumulative period of 1 minute per hour	+15
Level not to be exceeded for any time per hour	+20
Source: Rancho Cordova Municipal Code, Chapter 6.68, Code Section 6.68.070(B).	

C. Each of the noise limits specified in subsection (B) of this section shall be reduced by 5 dBA for impulsive or simple tone noises, or for noises consisting of speech or music.

D. If the ambient noise level exceeds that permitted by any of the first four noise-limit categories specified in subsection (B) of this section, the allowable noise limit shall be increased in 5 dBA increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

6.68.090 Exemptions.

The following activities shall be exempted from the provisions of this chapter:

E. Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities do not take place between the hours of 8:00 PM and 6:00 AM on weekdays and Friday commencing at 8:00 PM through and including 7:00 AM on Saturday, Saturdays commencing at 8:00 PM through and including 7:00 AM on the next following Sunday, and on each Sunday after the hour of 8:00 PM; provided, however when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to continue work after 8:00 PM, and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner.

As shown above, the maximum allowable exterior noise level for residential districts is 55 dB between the hours of 7:00 AM and 10:00 PM, and 50 dB between the hours of 10:00 PM and 7:00 AM. Construction noise is exempt from the Noise Ordinance if construction activities occur between 6:00 AM and 8:00 PM on weekdays and 7:00 AM and 8:00 PM on weekends.

4.8.4 IMPACTS AND MITIGATION MEASURES

The following section describes the standards of significance and methodology used to analyze and determine the proposed project's potential impacts related to noise and vibration. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Impacts of the environment on a project (as opposed to impacts of a project on the environment) are beyond the scope of required California Environmental Quality Act (CEQA) review. "[T]he purpose of an EIR is to identify the significant effects of a project on the environment, not the

significant effects of the environment on the project." (*Ballona Wetlands Land Trust v. City of Los Angeles,* (2011) 201 Cal.App.4th 455, 473 (*Ballona*).) The impacts discussed in this section of the EIR relate both to noise that may be caused by the proposed project (e.g. construction noise and operational traffic added to surrounding streets) as well as effects of existing environmental noise sources on future residents of the project (e.g. background traffic on surrounding streets). The California Supreme Court recently held that "CEQA does not generally require an agency to consider the effects of existing environmental conditions on a proposed project's future users or residents. What CEQA does mandate… is an analysis of how a project might exacerbate existing environmental hazards." (*California Building Industry Assn. v. Bay Area Air Quality Management Dist.* (2015) 62 Cal.4th 369, 392; see also *Mission Bay Alliance v. Office of Community Investment & Infrastructure* (2016) 6 Cal.App.5th 160, 197 ["identifying the effects on the project and its users of locating the project in a particular environmental setting is neither consistent with CEQA's legislative purpose nor required by the CEQA statutes"], quoting *Ballona*, *supra*, 201 Cal.App.4th at p. 474.) Therefore, for the purposes of the CEQA analysis, the relevant inquiry is not whether the proposed project's future residents will be exposed to preexisting environmental noise-related hazards, but instead whether project-generated noise will exacerbate the pre-existing conditions. Nonetheless, for informational purposes, this chapter considers the proposed project's contribution to the existing noise environment on both existing sensitive receptors and future residents of the proposed project.

Standards of Significance

Consistent with Appendix G of the CEQA Guidelines, the effects of a project are evaluated to determine if they would result in a significant adverse impact on the environment. For the purposes of this EIR, an impact is considered significant if the proposed project would result in any of the following:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies; or
- Generation of excessive groundborne vibration or groundborne noise levels.

Issues Dismissed in the Initial Study

The nearest airport to the project site is the Mather Airport, located approximately five miles to the west of the project site. Therefore, the following impact was dismissed in the Initial Study (Appendix A):

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

Accordingly, the above impact is not analyzed further in this EIR.

Summary of Applicable Noise Standards

Applicable noise level standards related to noise and vibration are summarized below.

Applicable Non-Transportation Noise Criteria

The Noise Element of the General Plan sets forth performance standards for non-transportation sources, as represented in Table 4.8-4. The proposed project would be required to comply with the noise standards presented therein. As such, noise generated by typical stationary noise sources shall not exceed 55 dB L_{eq} during daytime hours or 45 dB L_{eq} during nighttime hours, and noise generated by speech or music sources shall not exceed 50 dB L_{eq} during daytime hours or 40 dB L_{eq} during nighttime hours. In addition, Table 4.8-6 presents the Municipal Code noise standards for areas zoned residential. Considering the nearest noise-sensitive receptors to the project site are residential land uses, the proposed project must not generate noise that would exceed 55 dBA during daytime hours or 50 dBA during nighttime hours at the nearby residences.

Applicable Transportation Noise Criteria

The proposed project would be subject to the Residential Land Use transportation noise exposure limits set forth in the Noise Element of the General Plan. As noted therein, and as shown in Table 4.8-5, the maximum transportation noise at the closest residences must be limited to 60 dB L_{dn} at outdoor activity spaces and 45 dB L_{dn} at indoor spaces.

Substantial Increase Criteria

Generally, a project may have a significant effect on the environment if the project will substantially increase the ambient noise levels for adjoining areas or expose people to measurably severe noise levels. In practice, a noise impact may be considered significant if the project would generate noise that would conflict with local project criteria or ordinances, or substantially increase noise levels at noise sensitive land uses. The potential increase in transportation noise associated with the proposed project is a factor in determining significance.

The City of Rancho Cordova does not have an adopted policy for assessing noise impacts associated with increases in ambient noise levels from project-generated traffic within the project vicinity. As a result, the federal noise criteria established by the Federal Interagency Commission on Noise (FICON) was applied to the project. Table 4.8-8 was developed by FICON as a means of developing thresholds for identifying project-related noise level increases. The rationale for the graduated scales is that test subject's reactions to increases in noise levels vary depending on the starting level of noise. Specifically, in lower ambient noise environments, such as those below 60 dB L_{dn}, a larger increase in noise levels was required to achieve a negative reaction as compared to the change in noise levels that was necessary in environments where noise levels were already elevated. The approach to assessing the significance of increases in off-site traffic noise is consistent with other local EIRs and is considered to be the industry-standard approach.

Table 4.8-8
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project, dB	Increase Required for Significant Impact
<60	+5.0 dB or more
60-65	+3.0 dB or more
>65	+1.5 dB or more

Source: Federal Interagency Committee on Noise (FICON).

Vibration

The City of Rancho Cordova does not have specific policies or standards pertaining to vibration levels. However, vibration levels associated with construction activities and project operations are

addressed as potential vibration impacts associated with project implementation. Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events.

Construction activities have the potential to result in varying degrees of temporary ground vibration depending on the specific construction equipment used and operations involved. Table 4.8-9 indicates that, per California Department of Transportation (Caltrans) standards, the threshold for vibration damage to new residential structures is 1.00 in/sec PPV for transient sources and 0.50 in/sec PPV for continuous sources. For older residential structures, the threshold for damage is 0.50 in/sec PPV for transient sources and 0.30 in/sec PPV for continuous sources.

Table 4.8-9
Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/ Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual (2013).

In addition, as shown in Table 4.8-10, humans are able to perceive vibrations from transient sources at a threshold of 0.40 in/sec PPV and from continuous sources at a threshold of 0.01 in/sec PPV. Transient sources of vibrations of 0.25 in/sec PPV, or greater, and continuous vibrations of 0.04 in/sec PPV, would likely cause annoyance to sensitive receptors.

Method of Analysis

Below are descriptions of the methodologies utilized to measure background and ambient noise and estimate future traffic noise, construction noise, and vibration associated with the project. Further modeling details and calculations are provided in Appendix I to this EIR. The results of the noise and vibration impact analyses were compared to the standards of significance discussed above in order to determine the associated level of impact.

To predict existing noise levels due to traffic, Bollard Acoustical Consultants used the FHWA Traffic Noise Model (FHWA-RD-77-108) to develop existing noise contours expressed in terms of L_{dn} for the major roadways within the project vicinity. The FHWA model is based upon the noise factors for automobiles, medium trucks and heavy trucks, with consideration given to vehicle

volume, speed, roadway configuration, distance to the receiver, and the acoustical characteristics of the site.

Table 4.8-10
Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (inches/second)	
	Transient Sources	Continuous/ Frequent Intermittent Sources
Barely perceptible	0.40	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.40

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual (2013).

The FHWA model was developed to predict hourly L_{eq} values for free-flowing traffic conditions. To predict L_{dn}/CNEL values, determination of the day/night distribution of traffic and adjustment of the traffic volume input data is necessary to yield an equivalent hourly traffic volume. The FHWA model was used in conjunction with traffic volumes provided by Kimley-Horn & Associates to analyze the potential impact of the proposed project and project-generated traffic under Existing Plus Project conditions and future Cumulative Plus Project conditions.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used to conduct the noise level measurement surveys on the project site. The meters were calibrated before use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements, and the equipment met all specifications of the American National Standards Institute requirements for Type 1 sound level meters. An LDL Model LxT precision integrating sound level meter equipped with a vibration transducer was used to complete the ambient vibration measurements.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the baseline and standards of significance identified above.

4.8-1 Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below and with implementation of mitigation, the impact is *less than significant.*

Construction activities associated with the proposed project, including off-site improvements, would require the use of numerous pieces of noise-generating equipment, such as excavating machinery (e.g., backhoes, bulldozers, excavators, front loaders) and other construction equipment (e.g., compactors, scrapers, graders).

Construction worker traffic and construction-related material haul trips could result in temporary noise level increases along local haul routes, depending on the number of haul trips made and types of vehicles used.

The noise levels generated by construction equipment vary depending upon factors such as the type and specific model of the equipment, the operation being performed, the condition of the equipment and the prevailing wind direction. Table 4.8-11 presents typical maximum noise levels for commonly-used construction equipment at a distance of 50 feet. In addition, the table presents the anticipated maximum noise levels that would be experienced by the nearest sensitive receptors, which are located approximately 25 feet away.

Table 4.8-11
Typical Construction Equipment Noise Levels

Equipment Type	Maximum Noise Level at 50 Feet (dBA)	Predicted Maximum Noise Levels at 25 Feet (dBA)
Air compressor	80	86
Backhoe	80	86
Compactor	82	88
Concrete mixer	85	91
Crane, mobile	83	89
Dozer	85	91
Excavator	85	91
Generator	82	88
Grader	85	91
Loader	80	86
Paver	85	91
Pneumatic tool	85	91
Pump	77	83
Saw	76	82
Scraper	85	91
Shovel	82	88
Truck	84	90

Source: Federal Transit Administration Noise and Vibration Impact Assessment Manual, 2018.

As shown in Table 4.8-11, maximum noise levels generated by various types of construction equipment can range from 82 to 91 dBA at 25 feet. Considering the nearest noise-sensitive receptors are located approximately 25 feet away from the proposed development area, such receptors could be exposed to noise levels ranging from approximately 82 dB to 91 dB, which would exceed the applicable Rancho Cordova General Plan noise level limits (see Table 4.8-4).

Given that construction equipment would operate at various portions of the project site at any one time and most construction activity would occur farther than 25 feet from the nearest sensitive receptors, project construction noise at nearby sensitive receptors would likely be lower than the reference levels presented in Table 4.8-11. In addition, on-site construction activities would be temporary in nature and would be limited to the following time periods per Section 6.68.090 of the City's Municipal Code: between 6:00 AM and 8:00 PM on weekdays and 7:00 AM and 8:00 PM on weekends. Per Section 6.68.090 of the Municipal Code, construction noise that occurs during

such hours is exempt from the noise level standards included in the City's Noise Ordinance.

Nonetheless, if construction activities were to occur outside of the exempted hours, construction activity would generate noise levels that would exceed the noise standards set forth in the City's General Plan and Municipal Code. As such, implementation of the project could result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, and a ***significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

4.8-1 *The following criteria shall be noted on project Improvement Plans. Improvement Plans shall be submitted to the City's Community Development Department for review and approval.*

- *Consistent with Section 6.68.090 of the Rancho Cordova Municipal Code, noise-generating construction activities shall be limited to the hours of 6:00 AM to 8:00 PM on weekdays and 7:00 AM to 8:00 PM on weekends.*

4.8-2 Generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Based on the analysis below, the impact is *less than significant.*

The primary noise sources associated with development of the proposed 440-unit single-family subdivision would be noise associated with use of the proposed on-site public park areas and traffic noise associated with increased traffic volumes on the local roadway network. Both noise sources are discussed below with respect to future noise levels at the proposed residences and at existing noise-sensitive receptors in the project vicinity.

Noise Levels at the Proposed Residences

As noted previously, CEQA does not require an analysis of the environment's impact on the project; however, noise-related impacts to future residents of the proposed project is evaluated for informational purposes and to consider consistency with the policies set forth in the City's General Plan.

Park Noise at the Proposed Residences

The proposed project would include development of two public parks adjacent to the proposed residences in the northern portion of the development area, next to Morrison Creek. Noise generated by park activities would primarily consist of human speech (i.e., shouting and cheering during activities) and, thus, would be subject to the

General Plan's more restrictive noise standards (see Table 4.8-4). For this analysis, it is assumed that public park use would be restricted to daytime hours (7:00 AM to 10:00 PM). In addition, to provide a conservative estimate of park noise, this analysis assumed that the proposed public parks would have active uses (i.e., play structures, playing fields) rather than passive uses (i.e., picnic tables, sitting areas).

According to the Environmental Noise & Vibration Assessment, parks consisting of active uses/playing fields typically generate noise levels between 50 dB L_{eq} and 70 dB L_{max} at a distance of 100 feet. The nearest proposed residential uses would be located approximately 70 feet from the center of the park areas. Based on the reference noise levels and standard noise attenuation, park activity noise exposure at the nearest proposed residences was calculated to be approximately 53 dB L_{eq}, which would exceed the applicable Rancho Cordova General Plan daytime hourly average noise level standard of 50 dB L_{eq} for tonal, speech, or music noise sources.

Exterior Traffic Noise at the Project Site

The FHWA Model was used with future traffic data to predict future exterior traffic noise levels at the proposed residential and park uses. The future (Cumulative Plus Project) average daily traffic (ADT) volumes for Grant Line Road and Raymer Way were calculated using data provided in the project traffic impact analysis prepared by Kimley-Horn & Associates, Inc. By using traffic data from Cumulative Plus Project Conditions, as opposed to Existing Plus Project Conditions, this analysis presents a worst-case scenario. The predicted future Grant Line Road and Raymer Way traffic noise levels at the nearest proposed residential and park uses are summarized in Table 4.8-12.

As indicated in Table 4.8-12, predicted future combined Grant Line Road and Raymer Way traffic noise level exposure at the nearest proposed park use would satisfy the applicable Ranch Cordova General Plan exterior noise level standard of 70 dB L_{dn} for playgrounds and neighborhood park uses. However, at the nearest residential backyards, future combined traffic noise level exposure is predicted to exceed the General Plan exterior noise level standard of 60 dB L_{dn} for residential uses.

Interior Traffic Noise at the Project Site

With regard to interior noise levels, modern construction typically provides a 25 dB exterior-to-interior noise level reduction with windows closed and a 15 dB reduction with windows open. The 25 dB level of noise reduction would be adequate to reduce future traffic noise levels within all proposed residences to below the City's General Plan interior noise level standard of 45 dB L_{dn}. Therefore, additional interior noise control measures would not be required in order to reduce traffic noise exposure.

Noise Level Increases at Existing Sensitive Receptors

Traffic data for the Existing and Existing Plus Project conditions in the project area were obtained from the project-specific Transportation Impact Analysis completed by Kimley-Horn & Associates, Inc. Traffic noise levels under Existing and Existing Plus Project conditions are summarized in Table 4.8-13 below.

Table 4.8-12
Future Traffic Noise Levels at Proposed Uses[1]

Roadway[2]	Location	Distance from Centerline (ft)[3]	Future Exterior L_{dn} (dB)[4]
Grant Line Road	Nearest park (Park 1)	1,080	57
	Nearest residential backyards	1,050	57
	Nearest first-floor residential facades	1,060	57
	Nearest upper-floor residential facades	1,060	59
Raymer Way	Nearest park (Park 1)	450	53
	Nearest residential backyards	110	63
	Nearest first-floor residential facades	120	62
	Nearest upper-floor residential facades	120	64
Combined Roadways	Nearest park (Park 1)	--	59
	Nearest residential backyards	--	64
	Nearest first-floor residential facades	--	63
	Nearest upper-floor residential facades	--	65

Notes:
1 A complete listing of FHWA Model inputs and results are provided in Appendix G of the Environmental Noise & Vibration Assessment (see Appendix I to this EIR).
2 Locations of proposed uses are shown on Figure 4.8-2.
3 Distances measured from said locations to the roadway centerline.
4 A +2 dB offset was applied to upper-floor facades for reduced ground absorption of sound at elevated locations.

Source: Bollard Acoustical Consultants, Inc. (2020).

Table 4.8-13
Traffic Noise Modeling Results
Existing vs. Existing Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (L_{dn})		
			Existing	Existing + Project	Change
1	1- Mather Field Rd/ US 50 WB Ramp	North	67.6	67.6	0.0
2		South	68.8	68.8	0.0
3		East	70.1	70.1	0.0
4		West	63.6	63.6	0.0
5	2- Mather Field Rd/ US 50 EB Ramp	North	68.8	68.8	0.0
6		South	69.7	69.7	0.0
7		East	65.0	65.0	0.0
8		West	69.8	69.8	0.0
9	3- Mather Field Rd/ International Dr	North	--	--	--
10		South	60.4	63.0	2.6
11		East	66.8	66.8	0.0
12		West	68.4	69.7	1.3
13	4- Zinfandel Dr/ US 50 WB Ramp	North	68.5	68.5	0.0
14		South	70.0	70.0	0.0
15		East	71.1	71.2	0.1
16		West	64.4	64.4	0.0
17	5- Zinfandel Dr/	North	70.1	70.1	0.0

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Table 4.8-13
Traffic Noise Modeling Results
Existing vs. Existing Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (L_{dn})		
			Existing	Existing + Project	Change
18	US 50 EB Ramp	South	70.3	70.3	0.0
19		East	69.5	69.5	0.0
20		West	71.0	71.0	0.0
21	6- Zinfandel Dr/ White Rock Rd	North	70.3	70.3	0.0
22		South	67.9	67.9	0.0
23		East	65.2	65.4	0.2
24		West	64.8	64.8	0.0
25	7- Zinfandel Dr/ International Dr	North	67.0	67.0	0.0
26		South	66.6	66.6	0.0
27		East	65.0	65.0	0.0
28		West	65.8	65.8	0.0
29	8- Sunrise Blvd/ Zinfandel Dr	North	71.4	71.5	0.1
30		South	71.6	71.6	0.0
31		East	52.6	52.6	0.0
32		West	59.6	59.6	0.0
33	9- Sunrise Blvd/ US 50 WB Ramp	North	71.6	71.6	0.0
34		South	70.8	70.8	0.0
35		East	68.5	68.5	0.0
36		West	69.1	69.1	0.0
37	10- Sunrise Blvd/ US 50 EB Ramp	North	70.8	70.9	0.1
38		South	70.2	70.3	0.1
39		East	64.3	64.3	0.0
40		West	70.9	70.9	0.0
41	11- Sunrise Blvd/ Folsom Blvd	North	70.2	70.2	0.0
42		South	69.7	69.7	0.0
43		East	65.2	65.3	0.1
44		West	65.1	65.1	0.0
45	12- Sunrise Blvd/ White Rock Rd	North	68.6	68.6	0.0
46		South	68.5	68.5	0.0
47		East	65.5	65.8	0.3
48		West	65.7	65.9	0.2
49	13- Zinfandel Dr/ Douglas Rd	North	65.3	65.3	0.0
50		South	58.8	58.8	0.0
51		East	65.3	65.3	0.0
52		West	63.7	63.7	0.0
53	14- Sunrise Blvd/ Douglas Rd	North	68.3	68.2	-0.1
54		South	69.5	69.5	0.0
55		East	64.2	64.2	0.0
56		West	65.3	65.3	0.0
57	15- Americanos Blvd/ Douglas Rd	North	53.4	54.2	0.8
58		South	--	--	--
59		East	60.0	60.0	0.0

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Table 4.8-13
Traffic Noise Modeling Results
Existing vs. Existing Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (L_{dn})		
			Existing	Existing + Project	Change
60		West	61.3	61.5	0.2
61	16- Sunrise Blvd/ Jackson Rd/SR 16	North	68.8	68.8	0.0
62		South	67.6	67.6	0.0
63		East	66.4	66.4	0.0
64		West	64.9	64.9	0.0
65	17- Grant Line Rd/ Jackson Rd/SR 16	North	64.9	65.2	0.3
66		South	64.2	64.5	0.3
67		East	66.5	66.5	0.0
68		West	66.5	66.5	0.0
69	18- Grant Line Rd/ Keifer Blvd	North	65.8	66.1	0.3
70		South	64.9	65.2	0.3
71		East	57.5	57.9	0.4
72		West	37.5	37.5	0.0
73	19- Grant Line Rd/ Douglas Rd	North	66.4	66.7	0.3
74		South	65.7	66.0	0.3
75		East	--	--	--
76		West	60.1	60.1	0.0
77	20- Grant Line Rd/ Raymer Wy	North	67.6	67.8	0.2
78		South	66.7	67.0	0.3
79		East	--	--	--
80		West	56.1	57.7	1.6
81	21- Grant Line Rd/ White Rock Rd	North	68.4	68.7	0.3
82		South	67.0	67.8	0.8
83		East	--	--	--
84		West	61.3	62.2	0.9
85	22- Prairie City Rd/ White Rock Rd	North	65.6	66.0	0.4
56		South	--	--	--
87		East	64.6	64.8	0.2
88		West	66.3	66.6	0.3

Source: Bollard Acoustical Consultants, Inc. (2020).

Based on the FICON standards described above, where ambient noise conditions are between 60 and 65 dB, a three dB increase is considered to be the applicable standard of significance. In areas where ambient noise levels are less than 60 dB, a five dB increase is considered the threshold applicable threshold of significance. As shown in Table 4.8-13, the largest change in noise levels between the Existing and Existing Plus Project conditions would be 2.6 dB. All other changes in noise levels would be less than 2.6 dB, with the majority being less than one dB.

All project-related traffic noise increases would be below the applicable FICON thresholds shown in Table 4.8-8. Thus, project traffic noise level increases at existing

sensitive receptors under the Existing Plus Project conditions would be less than significant.

Park Noise at Existing Sensitive Receptors

According to the Environmental Noise & Vibration Assessment, parks consisting of active uses/playing fields typically generate noise levels between 50 dB L_{eq} and 70 dB L_{max} at a distance of 100 feet. Because public park use is typically limited to daytime hours, the General Plan daytime hourly average noise level standard of 50 dB L_{eq} was applied at the nearest residences. Based on the aforementioned reference noise levels and standard spherical noise attenuation, park activity noise exposure at the nearest existing single-family residences was calculated and is presented in Table 4.8-14.

Table 4.8-14
Predicted Public Park Activity Noise Levels at Nearest Existing Noise-Sensitive Uses

Noise-Sensitive Receptor[1]	Nearest Park[2]	Distance (ft)[3]	Predicted Noise Levels, L_{eq} (dB)[4]	General Plan Daytime Noise Standard, L_{eq} (dB)
Residences in Subdivision – South	Park 2	1,000	<20	**50**
Residence on Ag. Property – Northwest	Park 2	1,300	28	

Notes:
[1] Locations of existing noise-sensitive receptors are shown on Figure 1 of the Environmental Noise & Vibration Assessment.
[2] Locations of proposed park areas are shown on Figure 2 of the Environmental Noise & Vibration Assessment.
[3] Distances measured from center of nearest park area to receptors.
[4] Predicted park activity noise levels at the nearest residences in the subdivision to the south of the project take into consideration the shielding that would be provided by proposed intervening structures of the development (residences), have been conservatively adjusted by -15 dB to account for this screening.

Source: Bollard Acoustical Consultants, Inc. (2020).

As shown in the table, park noise at the existing sensitive receptors would comply with the City's 50 dB L_{eq} daytime noise standard. Thus, a less-than-significant impact would occur.

Conclusion

Based on the above, exterior traffic noise and park-related noise at the proposed residences could exceed the City's noise level standards. However, such an effect would not be considered an impact under CEQA. In order to address this concern, the City would require the following condition of approval to ensure consistency with the City's General Plan noise levels standards:

- Prior to building permit issuance for proposed residential lots, the Improvement Plans shall show that solid noise barriers measuring a minimum of six feet in height (relative to backyard elevation) shall be constructed. The noise barriers

may take the form of masonry wall, earthen berm, or a combination of the two, to the satisfaction of the Community Development Department. Other materials may be acceptable but should be reviewed by an acoustical consultant prior to use. The locations of the required noise barriers shall be consistent with alignments shown in Figure 4.8-3 of this EIR.

Existing sensitive receptors would not experience traffic-related or park-related noise levels in excess of the City's applicable noise level standards. Therefore, a ***less-than-significant*** impact would occur related to generation of a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Mitigation Measure(s)

None required.

4.8-3 Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. Based on the analysis below, the impact is *less than significant*.

During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction activities. Project construction would utilize typical construction equipment and would not require significant sources of vibration such as pile driving or blasting. Table 4.8-15 below shows the typical vibration levels produced by construction equipment.

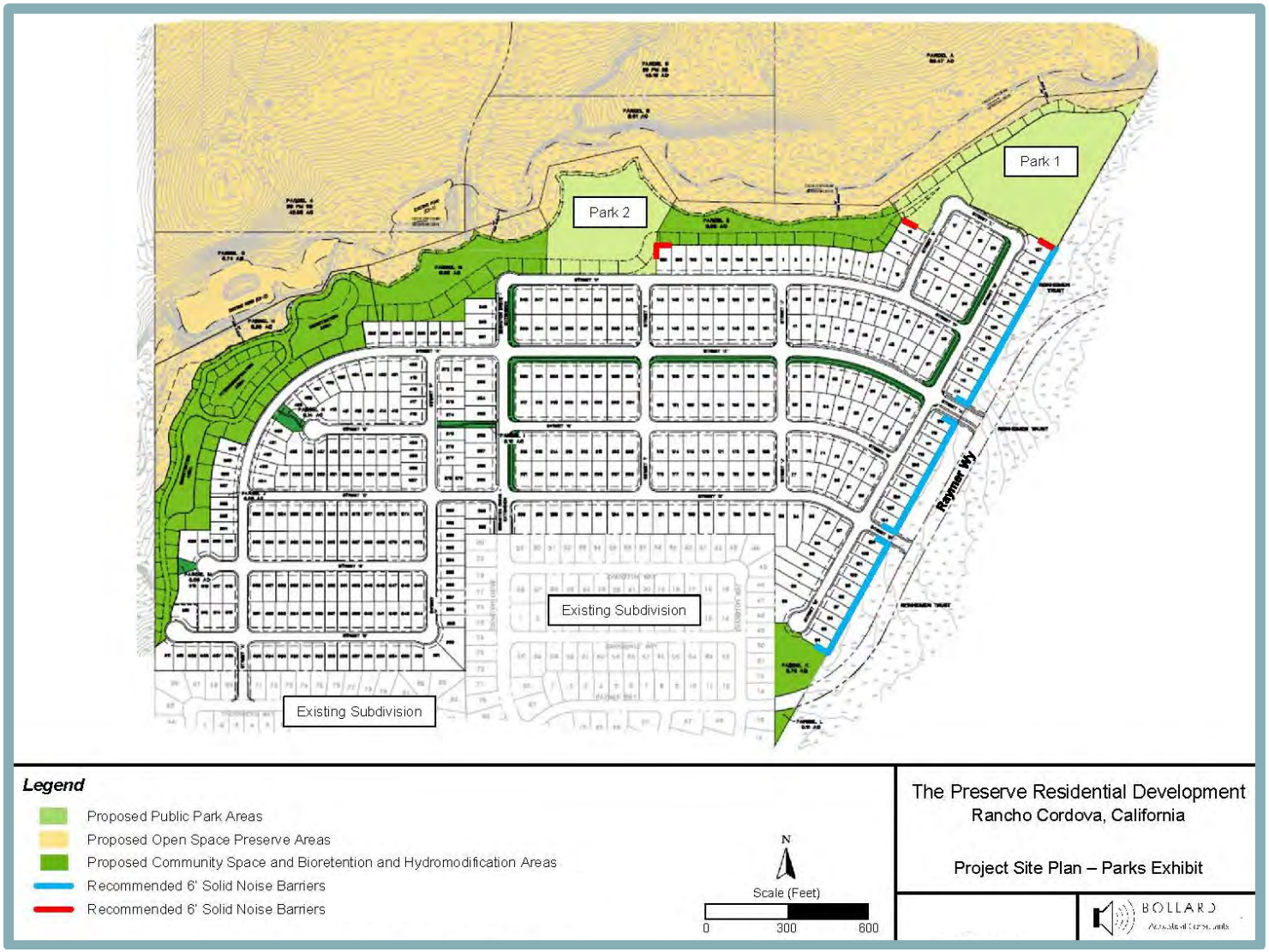
Table 4.8-15
Typical Construction Equipment Vibration Levels

Equipment Type	Maximum PPV (inches/second)	
	Maximum PPV at 25 Feet[1]	Predicted PPV at 30 Feet[1]
Large bulldozer	0.089	0.068
Hoe ram	0.089	0.068
Caisson drilling	0.089	0.068
Loaded trucks	0.076	0.058
Backhoe	0.051	0.039
Excavator	0.051	0.039
Grader	0.051	0.039
Loader	0.051	0.039
Jackhammer	0.035	0.027
Small bulldozer	0.003	0.002

Notes:
[1] Reference vibration level obtained from the Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment Manual (2018).

Source: Bollard Acoustical Consultants, Inc. (2020).

Figure 4.8-3
Noise Barrier Locations



Source: Bollard Acoustical Consultants, Inc. (2020).

As shown in the table, vibration levels generated from on-site construction activities at the nearest existing residence located approximately 25 feet away are predicted to be below the Caltrans thresholds for human annoyance (0.1 in/sec PPV) and damage to residential structures (0.2 in/sec PPV) (see Table 4.8-9).

In addition, the majority of construction activities would occur farther than 25 feet from the nearest receptors, and the average construction-generated groundborne vibration levels at the existing residences would be lower than the levels presented in the table above. Furthermore, construction activities would be temporary in nature. Therefore, construction vibrations associated with the project are not predicted to cause damage to existing buildings or cause annoyance to sensitive receptors.

Based on the above, the proposed project would not result in the generation of excessive groundborne vibration or groundborne noise levels, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, “cumulative impacts” refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections, of this EIR.

4.8-4 Generation of a substantial permanent increase in ambient noise levels associated with cumulative development of the proposed project in combination with future buildout of the General Plan. Based on the analysis below, the cumulative impact is *less than significant*.

Future development projects within the City of Rancho Cordova, including the proposed project, would incrementally affect the future cumulative ambient noise environment. As part of the Environmental Noise & Vibration Assessment, cumulative traffic noise impacts due to traffic increases on the local roadway network were evaluated for Cumulative and Cumulative Plus Project Conditions. The resulting noise levels are summarized in Table 4.8-16.

As shown in Table 4.8-16, the addition of project traffic to Cumulative (no project) traffic volumes would result in noise level increases of 0.3 dB or less along the study roadway segments. Thus, project-generated traffic would not result in a substantial increase in traffic noise levels on the local roadway network relative to the FICON significance criteria identified in Table 4.8-8. Therefore, under Cumulative Plus Project Conditions,

the proposed project would not result in a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Accordingly, the cumulative traffic noise impact would be ***less than significant***.

Mitigation Measure(s)

None required.

Table 4.8-16
Traffic Noise Modeling Results
Cumulative vs. Cumulative Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (L_{dn})		
			Cumulative	Cumulative + Project	Change
1	1- Mather Field Rd/ US 50 WB Ramp	North	69.5	69.5	0.0
2		South	70.8	70.8	0.0
3		East	72.0	72.0	0.0
4		West	65.9	65.9	0.0
5	2- Mather Field Rd/ US 50 EB Ramp	North	70.4	70.4	0.0
6		South	71.2	71.2	0.0
7		East	66.0	66.0	0.0
8		West	70.5	70.5	0.0
9	3- Mather Field Rd/ International Dr	North	--	--	--
10		South	62.0	62.0	0.0
11		East	70.6	70.6	0.0
12		West	71.4	71.4	0.0
13	4- Zinfandel Dr/ US 50 WB Ramp	North	69.5	69.5	0.0
14		South	71.1	71.1	0.0
15		East	72.5	72.5	0.0
16		West	64.8	64.8	0.0
17	5- Zinfandel Dr/ US 50 EB Ramp	North	70.8	70.8	0.0
18		South	71.0	71.0	0.0
19		East	69.9	69.9	0.0
20		West	71.9	72.0	0.1
21	6- Zinfandel Dr/ White Rock Rd	North	71.4	71.4	0.0
22		South	69.3	69.3	0.0
23		East	66.7	66.8	0.1
24		West	65.8	65.8	0.0
25	7- Zinfandel Dr/ International Dr	North	69.8	69.8	0.0
26		South	70.9	70.9	0.0
27		East	69.7	69.7	0.0
28		West	70.7	70.7	0.0
29	8- Sunrise Blvd/ Zinfandel Dr	North	72.3	72.3	0.0
30		South	72.4	72.5	0.1
31		East	53.2	53.2	0.0
32		West	60.1	60.1	0.0
33	9- Sunrise Blvd/ US 50 WB Ramp	North	72.4	72.4	0.0
34		South	71.8	71.7	-0.1

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Table 4.8-16
Traffic Noise Modeling Results
Cumulative vs. Cumulative Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (L_{dn})		
			Cumulative	Cumulative + Project	Change
35		East	69.5	69.0	-0.5
36		West	69.6	69.6	0.0
37	10- Sunrise Blvd/ US 50 EB Ramp	North	71.7	71.7	0.0
38		South	71.3	71.3	0.0
39		East	65.2	65.2	0.0
40		West	71.0	71.0	0.0
41	11- Sunrise Blvd/ Folsom Blvd	North	70.7	70.7	0.0
42		South	70.3	70.3	0.0
43		East	66.3	66.3	0.0
44		West	66.4	66.4	0.0
45	12- Sunrise Blvd/ White Rock Rd	North	69.5	69.5	0.0
46		South	69.4	69.4	0.0
47		East	68.6	68.7	0.1
48		West	68.2	68.3	0.1
49	13- Zinfandel Dr/ Douglas Rd	North	69.6	69.6	0.0
50		South	65.6	65.6	0.0
51		East	69.3	69.3	0.0
52		West	66.7	66.7	0.0
53	14- Sunrise Blvd/ Douglas Rd	North	70.8	70.8	0.0
54		South	71.8	71.8	0.0
55		East	68.3	68.3	0.0
56		West	69.2	69.2	0.0
57	15- Americanos Blvd/ Douglas Rd	North	61.5	61.8	0.3
58		South	60.2	60.2	0.0
59		East	65.2	65.2	0.0
60		West	65.8	66.0	0.2
61	16- Sunrise Blvd/ Jackson Rd/SR 16	North	72.1	72.1	0.0
62		South	71.0	71.0	0.0
63		East	69.0	69.0	0.0
64		West	69.0	69.0	0.0
65	17- Grant Line Rd/ Jackson Rd/SR 16	North	70.2	70.3	0.1
66		South	68.7	68.7	0.0
67		East	68.8	68.8	0.0
68		West	69.0	69.0	0.0
69	18- Grant Line Rd/ Keifer Blvd	North	70.1	70.1	0.0
70		South	69.7	69.8	0.1
71		East	59.1	59.1	0.0
72		West	58.2	58.3	0.1
73	19- Grant Line Rd/ Douglas Rd	North	71.0	71.2	0.2
74		South	70.7	70.8	0.1
75		East	59.4	59.7	0.3
76		West	65.3	65.3	0.0

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Table 4.8-16
Traffic Noise Modeling Results
Cumulative vs. Cumulative Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (L_{dn})		
			Cumulative	Cumulative + Project	Change
77	20- Grant Line Rd/ Raymer Wy	North	72.2	72.4	0.2
78		South	71.4	71.6	0.2
79		East	60.6	60.6	0.0
80		West	61.0	62.3	1.3
81	21- Grant Line Rd/ White Rock Rd	North	73.4	73.4	0.0
82		South	72.2	72.4	0.2
83		East	--	--	--
84		West	68.1	68.3	0.2
85	22- Prairie City Rd/ White Rock Rd	North	69.7	69.7	0.0
56		South	--	--	--
87		East	70.2	70.3	0.1
88		West	71.3	71.4	0.1

Source: Bollard Acoustical Consultants, Inc. (2020).

4.9 Public Services and Utilities

4.9 PUBLIC SERVICES AND UTILITIES

4.9.1 INTRODUCTION

The Public Services and Utilities chapter summarizes the existing setting related to public services and utilities and identifies potential new demands resulting from the proposed project on fire and police protection services, schools, water supply, wastewater systems, solid waste disposal, and gas, electric, and telecommunications infrastructure. Information for this section was drawn primarily from the Water Study[1] and Sewer Study[2] prepared for the proposed project by Ruggeri-Jensen-Azar & Associates, as well as the Unit Count Increase Memorandum prepared by Ruggeri-Jensen-Azar & Associates in January 2021 (see Appendix J).[3] This section also draws on Sacramento County Water Agency's (SCWA) 2015 Urban Water Management Plan (UWMP),[4] the Zone 40 Water Supply Master Plan,[5] and the City of Rancho Cordova General Plan[6] and associated EIR.[7]

4.9.2 EXISTING ENVIRONMENTAL SETTING

The following section describes the existing fire and police protection services, schools, and other public facilities in the area, as well as existing utilities, including water supply, wastewater conveyance and treatment, solid waste, and gas, electric, and telecommunications infrastructure.

Fire Protection

The project site is currently located within the jurisdiction of the Sacramento Metropolitan Fire District (SMFD). The SMFD provides fire suppression, inspection, plan checking, emergency transportation and medical services, public education, advanced life support, and rescue services in the City of Rancho Cordova. SMFD serves a population of 745,000 in a 359 square mile area in the southern portion of Sacramento County. SMFD operates 42 fire stations with approximately 700 paid personnel on staff. The SMFD includes 39 engine companies, 5 truck companies, 12 medic transportation units, eight historical fire apparatus, five crash/rescue units, and various watercraft response units.[8] Within Rancho Cordova, the SMFD has seven fire stations. Station 68, at 4381 Anatolia Drive, is the closest station to the project site, located 2.8 miles southwest of the project site.

The Emergency Medical Services (EMS) Division oversees the SMFD's emergency related services and personnel, including EMT-Paramedics. The SMFD deploys ten 24-hour Advanced Life Support ambulances. The majority of the fire stations within Rancho Cordova are equipped with an ambulance and paramedic combination.

1 Ruggeri-Jensen-Azar & Associates. *Water Study for The Preserve.* September 2018.
2 Ruggeri-Jensen-Azar & Associates. *Sewer Study for The Preserve.* June 2020.
3 Ruggeri-Jensen-Azar & Associates. *The Preserve – Unit Count Increase on Sewer and Water Studies*. January 2021.
4 Sacramento County Water Agency. *Draft 2015 Urban Water Management Plan*. May 2016.
5 Sacramento County Water Agency. *Zone 40 Water Supply Master Plan.* February 2005.
6 City of Ranch Cordova. *Rancho Cordova General Plan*. June 26, 2006.
7 City of Ranch Cordova. *Rancho Cordova General Plan Environmental Impact Report.* June 2006.
8 *Ibid.*

The Insurance Services Office (ISO) rating is the recognized classification for a fire department or district's ability to defend against major fires. According to the ISO, newly developing urban areas should have a fire station opened within 2.5 miles from all residential development when build-out exceeds 20 percent of the City. A rating of ten generally indicates inadequate protection, while an ISO rating of one indicates high firefighting capability. The SMFD has an ISO rating of three for areas containing water flow and established hydrants, and class eight for areas lacking water sources and hydrants. The SMFD has established a goal for a response time of five minutes or less for 80 percent of the time in the urbanized portions of the City. Currently, the SMFD has a response time of five minutes for emergency calls, where staffing levels are adequate.[9]

The SMFD is funded through property taxes and grant funding. The funding and expenditures for the SMFD are facilitated through the Capital Improvement Program. In addition, development impact fees account for a portion of funding for the SMFD. The Capital Fire Facilities Fee was established through Assembly Bill 1600, which provides the authority for SMFD to fund the full cost of providing new fire services and facilities through fees levied on new development within the SMFD service area.

Police Protection

The City of Rancho Cordova Police Department (RCPD) is contracted through the Sacramento County Sheriff's Department (SCSD) Patrol Services. The SCSD is staffed with 2,332 people, consisting of 1,789 officers and 543 nonsworn members. The SCSD also has a reserve force of 168 officers and approximately 621 community volunteers.[10]

The RCPD is comprised of 55 sworn officers and seven non-sworn staff.[11] The Rancho Cordova Police Station is located at 2897 Kilgore Road in the City of Rancho Cordova, approximately 6.7 miles from the project site by way of White Rock Road. The City's goal for staffing standards is one officer per 1,000 residents and one support staff member for every three officers. The RCPD's goal is also to maintain an average response time for Priority One calls for service of five minutes or less. A Priority One call is defined as a call regarding violent crime or requiring immediate life-saving response.

The RCPD is organized into three components:

- *Administration Services Bureau*: The Administration Services Bureau includes the budget coordinator, equipment manager, and volunteer coordinator.
- *Investigations and Community Services Bureau*: The Investigations and Community Services Bureau includes the detective unit, problem-oriented police unit, traffic enforcement, and crime prevention center.
- *Patrol Operations Bureau*: The Patrol Operations Bureau provides first-line emergency response to crimes in progress, accidents, and tactical situations.

The SCSD and the RCPD are funded through Sacramento County tax revenues and special Federal and local grants. The SCSD and the City of Rancho Cordova have agreed that funding for the RCPD will occur using revenues from the City's General Fund, which is the primary source of revenue for law enforcement services.

9 AECOM, Inc. *SunCreek Specific Plan Project DEIR/DEIS*. October 2012.
10 City of Ranch Cordova. *Rancho Cordova General Plan Environmental Impact Report.* June 2006.
11 Ranch Cordova Police Department. *About Us*. Available at: https://www.ranchocordovapd.com/about-us. Accessed September 2020.

Schools

The project site is located within the boundaries of the Folsom Cordova Unified School District (FCUSD), which encompasses approximately 98 square miles in eastern Sacramento County, including the City of Folsom and the majority of the City of Rancho Cordova. The FCUSD is comprised of two preschools, 23 elementary schools, nine middle schools, and eight high schools. The closest schools to the project site are Navigator Elementary School, located 4.5 miles west of the project site, W.E. Mitchell Middle School, located 4.7 miles northwest of the site, and Cordova High School, located six miles west of the site. Table 4.9-1 below presents the existing school enrollment and facility capacity of the schools in the project vicinity. The City of Rancho Cordova falls within the School Facilities Improvement District 1 (SFID 1).

Table 4.9-1
Project Vicinity Schools Enrollment and Optimal Loading

School Facility	2019-2020 Enrollment[1]	District Optimal Loading Capacity[2]
Navigator Elementary School	374	558
W.E. Mitchell Middle School	885	843
Cordova High School	1,851	1,951

Sources:
[1] California Department of Education. District Profile: Folsom-Cordova Unified. Available at: https://www.cde.ca.gov/sdprofile/details.aspx?cds=34673300000000. Accessed March 2021.
[2] Folsom Cordova Unified School District. Facility Master Plan. November 2013.

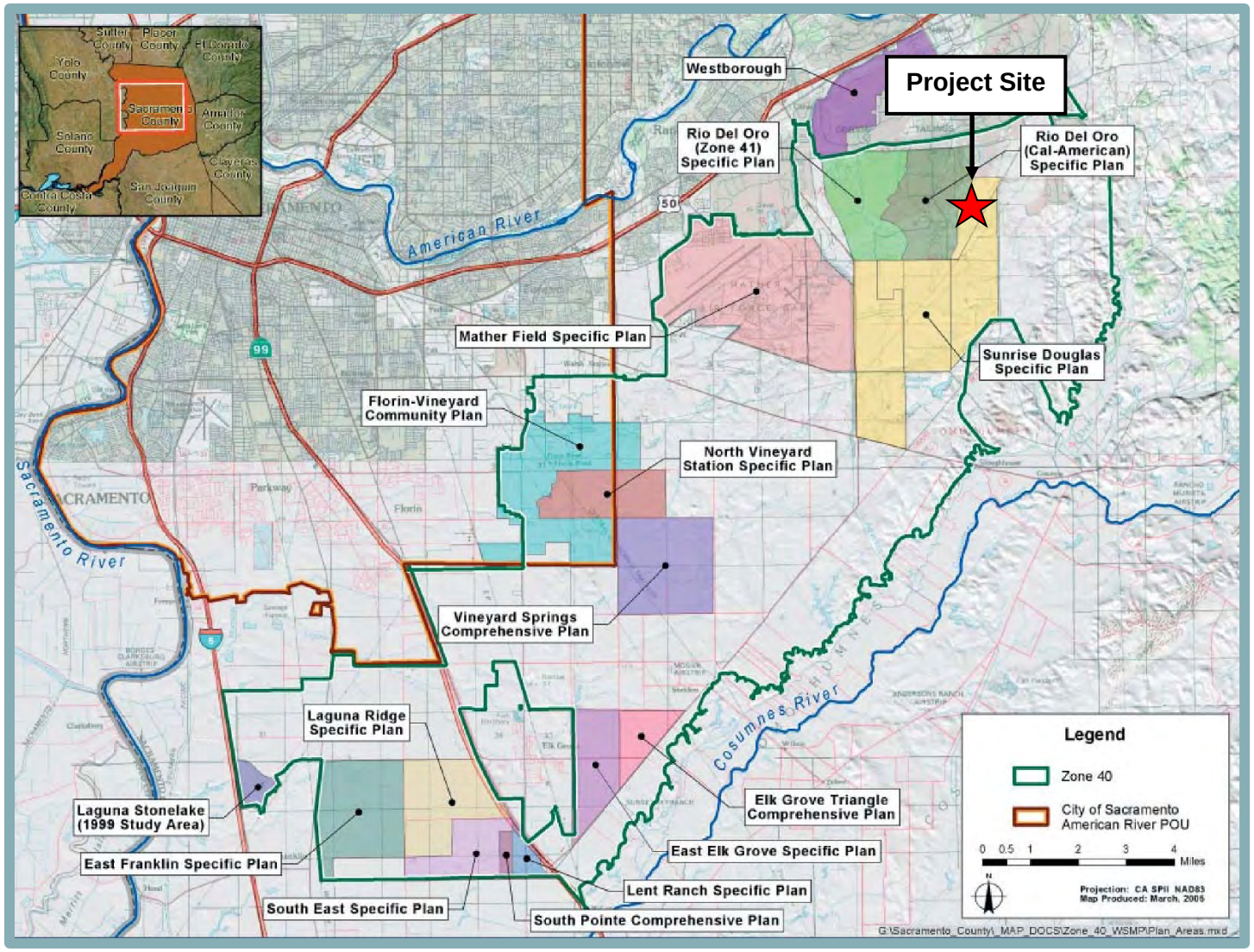
Water Supply

The City of Rancho Cordova is not a water provider, but contracts with four water purveyors to provide water service to residences within the City. The City uses two private water companies, Golden State Water and California American Water, and two public agencies, SCWA and City of Folsom Water District. The project site would be served by the SCWA through the Zone 40 conjunctive-use water supply system (see Figure 4.9-1).

Zone 40 was formed as a result of SCWA Resolution No. 663, which established exact zone boundaries and set goals for future water service projects. SCWA has engaged in a long-term water supply planning process through participation in the regional Water Forum planning process and the adoption of the 2015 UWMP and the Zone 40 Water Supply Master Plan (WSMP).

The Zone 40 WSMP was prepared by the SCWA in 2005 to ensure provision of a reliable and safe water supply to the region's economic health and planned development through the year 2030, and to preserve the fishery, wildlife, recreation, and aesthetic values of the lower American River. The Zone 40 WSMP states that water supply sources within the City include groundwater, surface water, and purchased recycled water. The use of each is discussed in further detail below.

Figure 4.9-1
Zone 40 Water Distribution Area



Groundwater

Three groundwater sub-basins exist under Sacramento County; Zone 40 lies entirely within the Central Sacramento County Groundwater Basin (Central Basin) (see Figure 4.9-2). The Central Basin is considered a shallow aquifer zone, and extends approximately 200 to 300 feet below the ground surface. Recharge to the aquifer system occurs along active river and stream channels, particularly along the American, Cosumnes, and Sacramento River channels. Additional recharge occurs from the percolation of precipitation and applied surface water. Groundwater from the Central Basin is generally high quality, and is treated for the removal of iron, manganese, arsenic, and radon.

The groundwater in the Central Basin is managed by the Sacramento Central Groundwater Authority (SCGA), which was formed in 2006 through an agreement signed by the cities of Elk Grove, Folsom, Rancho Cordova, and Sacramento. The SCGA Groundwater Management Plan, which was adopted in 2006, establishes a framework for maintaining sustainable groundwater resources in the Central Basin. This framework includes specific goals, objectives, and an action plan to manage the basin.

The SCGA Groundwater Management Plan also prescribes a well protection program to protect existing private domestic well and agricultural well owners from declining groundwater levels resulting from increased groundwater pumping due to new development in the basin.

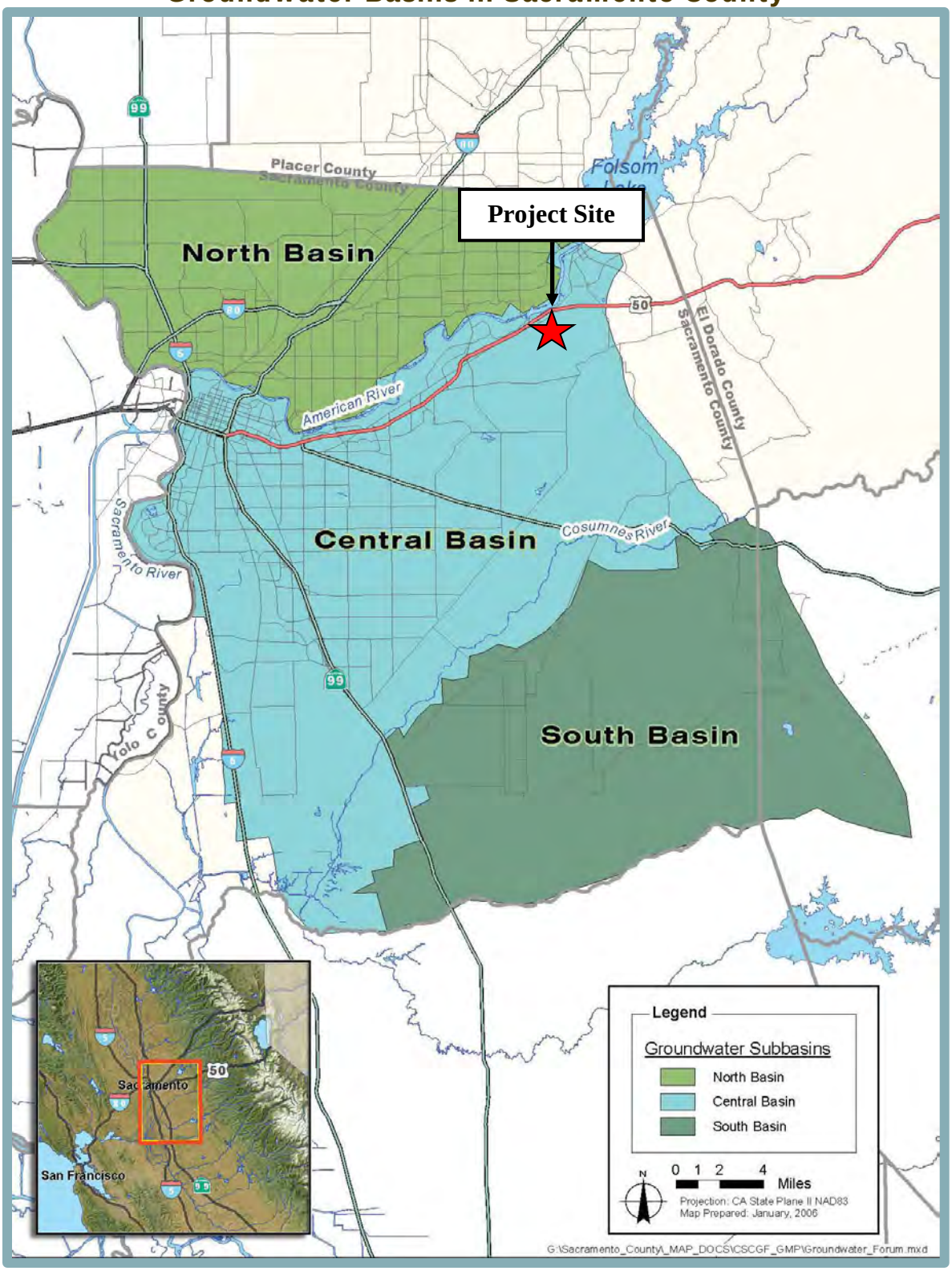
Groundwater is supplied by SCWA's system of groundwater wells and remediated groundwater that is extracted by others. Groundwater pumping was developed to provide sufficient capacity to meet projected maximum day demands and meet conjunctive use objectives. SCWA is obligated to provide groundwater to Sacramento Municipal Utility District (SMUD) in dry and critically dry years. Groundwater is considered to be the last priority in meeting water demands after surface water entitlements and surface water treatment capacity are used. Variability in groundwater use is a result of the conjunctive use program, dry year deliveries to SMUD, and the variability in the availability of surface water supplies. Based on the average of the five years presented within the SCWA's 2015 UWMP, the SCWA pumps approximately 29,230 acre-feet per year (AFY) of groundwater. In 2015, groundwater supplies accounted for approximately 73 percent of total SCWA water supplies.

SCWA also has a remediated groundwater supply of approximately 8,900 AFY per the 2010 agreement, "Agreement between Sacramento County, SCWA, and Aerojet-General Corporation with Respect to Transfer of GET Water." The remediated groundwater is pumped from the northern portion of the South American Subbasin and discharged into the American River from Aerojet's Groundwater Extraction and Treatment (GET) facilities, located in the Rancho Cordova area.

Surface Water

Surface water is defined by the California Department of Water Resources (DWR) as self-supplied water that is drawn from streams, lakes, and reservoirs. SCWA has an appropriative water supply consisting of self-supplied surface water that is drawn from the American and Sacramento rivers. In February 2008, the State Water Resources Control Board (SWRCB) approved SCWA's appropriate right permit application to divert water from the American and Sacramento rivers. The amount of appropriated water for use could range up to 71,000 AFY in wet years, primarily during the winter months. Because SCWA's demands are low in the winter months, the potential exists for not all of the supply to be utilized.

Figure 4.9-2
Groundwater Basins in Sacramento County



Source: Sacramento County Water Agency, 2015 Urban Water Management Plan [pg 64], May 2016.

Surface water is diverted at the Freeport diversion on the Sacramento River, and at or near the mouth of the American River. Water quality at these sources is considered good, and the water is treated with conventional filtration processes. SCWA relies on two sources of purchased surface water, as described below.

Central Valley Project

A majority of SCWA's water supplies are provided to the City of Rancho Cordova by the Central Valley Project (CVP), in accordance with an agreement between SCWA and SMUD. SCWA has entered into two three-party agreements with the City of Sacramento and SMUD for the assignment to SCWA of a total of 30,000 AFY of water from SMUD's existing contract.[12] In 1999, SCWA entered into a contract with the U.S. Bureau of Reclamation for 22,000 AFY of CVP supplies from the American River, pursuant to Public Law 101-514. The contract, often referred to as "Fazio Water," requires that 7,000 AFY be subcontracted to the City of Folsom for diversion from Folsom Lake, with 15,000 FY available for SCWA through the Freeport diversion or Franklin intertie. Most of the CVP water is diverted at the Freeport diversion on the Sacramento River and treated at the Vineyard Surface Water Treatment Plant (SWTP).

SCWA's total CVP supply is subject to reductions in dry years. The water supply allocations are defined by the Bureau of Reclamation on a year-to-year basis and are expressed as a percentage of either the contract amount or amount of average use.

City of Sacramento's American River Place of Use

Part of Zone 40 falls within Sacramento's American River Place of Use (POU), which refers to an area where the City of Sacramento has water rights. The amount of water available to serve the POU within Zone 40 is approximately 9,300 AFY. However, when American River flows are less than applicable requirements (Hodge Flow Criteria), POU water is not available to SCWA. Given the uncertainty of the availability of POU water during dry years, the SCWA 2015 UWMP allocates zero percent water supply from the POU during dry years.

Recycled Water

Recycled water use within the City is a component of tertiary treated wastewater for non-potable use. The uses are primarily landscape irrigation at parks, schools, and rights-of-way. Recycled water is purchased by SCWA from the Sacramento Regional County Sanitation District (SRCSD). Recycled water is not currently used within the project area.

Water Use

The UWMP has identified regional water demand in normal, single dry, and multiple dry years in five-year increments. The projections are based on buildout of the Zone 40 area per the City's General Plan land use designations, with full buildout of Zone 40 anticipated to occur after the year 2040. The projected retail water demands for the project area are based on the projections included in the Zone 40 Water System Infrastructure Plan Update (WSIP).[13] It should be noted that, per the anticipated land use at buildout, the project site would be agriculture on the western half and non-irrigated on the eastern half. As such, water demand from buildout of the proposed project would not have been accounted for in the WSIP.

[12] Sacramento County Water Agency. *Draft 2015 Urban Water Management Plan*. May 2016.
[13] Sacramento County Water Agency. *Zone 40 Water System Infrastructure Plan Update*. September 2016.

Table 4.9-2 and Table 4.9-3 show the projected water supply and demand totals during a normal year and during a single dry year, respectively. Table 4.9-4 shows the projected supply and demand totals under multiple dry year conditions for the first, second, and third years. The multiple dry year scenario mimics the water supply conditions of 2013 to 2015 when CVP allocations were 100 percent, 75 percent, and 25 percent of the average use of supplies during the previous three years. The demands presented in this table are the same as the normal year demands, but the second- and third-year demands might be lower if demand reduction mandates are imposed by the State. Determining the amount of CVP supplies available in the dry years requires first a projection of the use of the CVP supply in normal years. The CVP dry year allocation is determined based on a percentage of the previous three years of use. During dry years SCWA would seek to supplement its reduced CVP supplies with the use of other surface water supplies

Table 4.9-2
Supply and Demand Assessment: Normal Year (AFY)

	2020	2025	2030	2035	2040
Supply totals	82,900	82,900	87,900	97,900	97,900
Demand totals	48,121	55,490	63,288	71,143	79,278
Difference	*34,779*	*27,410*	*24,612*	*26,757*	*18,622*

Source: Sacramento County Water Agency, 2015 Urban Water Management Plan, May 2016.

Table 4.9-3
Supply and Demand Assessment: Single Dry Year (AFY)

	2020	2025	2030	2035	2040
Supply totals	70,200	70,500	74,600	83,600	83,800
Demand totals	48,121	55,490	63,288	71,143	79,278
Difference	*22,079*	*15,010*	*11,312*	*12,457*	*4,522*

Source: Sacramento County Water Agency, 2015 Urban Water Management Plan, May 2016.

Table 4.9-4
Supply and Demand Assessment: Multiple Dry Years (AFY)

		2020	2025	2030	2035	2040
1st Year	Supply Totals	77,900	77,900	81,900	90,900	90,900
	Demand Totals	48,121	55,490	63,288	71,143	79,278
	Difference	*29,779*	*22,410*	*18,612*	*19,757*	*11,622*
2nd Year	Supply Totals	77,900	77,900	81,900	90,900	90,900
	Demand Totals	48,121	55,490	63,288	71,143	79,278
	Difference	*29,779*	*22,410*	*18,612*	*17,757*	*11,622*
3rd Year	Supply Totals	70,200	70,500	74,600	83,600	83,800
	Demand Totals	48,121	55,490	63,288	71,143	79,278
	Difference	*22,079*	*15,010*	*11,312*	*12,457*	*4,522*

Note: Per the UWMP, based on the selected base years, the first year would be normal year supplies, the second year is based on a 75 percent allocation of CVP water, and the third year is the same as the single dry year with a 25 percent CVP allocation.

Source: Sacramento County Water Agency, 2015 Urban Water Management Plan, May 2016.

Wastewater

Sanitary sewer service for the proposed project would be provided by the Sacramento Area Sewer District (SASD) and SRCSD; SASD operates and maintains the main line pipes for wastewater conveyance and collection from the source to the regional interceptors, and SRCSD is

responsible for collection by interceptors and for wastewater treatment in Sacramento County. The SRCSD owns, operates, and is responsible for the collection, trunk, and interceptor sewer systems throughout Sacramento County, as well as the Sacramento Regional Wastewater Treatment Plant (SRWTP) located near Elk Grove. The City of Rancho Cordova Planning Area falls within County Sanitation District 1 (CSD-1).

Within the SASD's sewer system, sewage from customers' homes and businesses enter the system through sewage collecting pipes 10-inches or smaller in diameter. Once in the main line, sewage flows into a system of larger pipes called trunk lines, which are 12-inches or larger in diameter. Trunk lines function as conveyance facilities to transport collected wastewater flows to the SRCSD interceptor system, which carries wastewater directly to the SRWTP. As of 2010, the SRWTP receives and treats an average of 141 million gallons per day (mgd) of wastewater, and, under NPDES NO. CA0077682, is permitted to treat 181 mgd average dry weather flow.[14]

The SRCSD evaluated the environmental impacts of constructing turn and interceptor sewers that would serve the Sacramento region at a program level in the EIR for the Sacramento Regional County Sanitation District Interceptor Master Plan.[15] In addition, the SRCSD developed the Sacramento Regional Wastewater Treatment Plant 2020 Master Plan in order to provide a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2020. The 2020 Master Plan addresses both public and health and environmental protection issues while ensuring reliable service at affordable rates for SRCSD customers. The key goals of the 2020 Master Plan are to provide sufficient capacity to meet growth projections and an orderly expansion of SRWTP facilities, to comply with applicable water quality standards, and to provide for the most cost-effective facilities and programs from a watershed perspective.

Solid Waste

The City of Rancho Cordova's residential solid waste and recycling services are provided by Republic Services, Inc. Sacramento County owns and operates the Kiefer Landfill, which is the primary solid waste disposal facility that would be used to service the project site. The Kiefer Landfill is located at 12701 Keifer Boulevard, approximately four miles south of the project site. Kiefer Landfill is classified as a Class III municipal solid waste landfill facility and is permitted to accept general residential, commercial, and industrial refuse for disposal, including municipal solid waste, construction and demolition debris, green materials, agricultural debris, and other nonhazardous designated debris.

The landfill is permitted to accept a maximum of 10,815 tons per day of solid waste, with a maximum capacity of 117,400,000 cubic yards. As of 2020, the Kiefer Landfill has a remaining capacity of 112,900,000 cubic yards, and is therefore operating below permitted capacity. The estimated closure date of the Kiefer Landfill is anticipated to be 2064.[16] Per the CalRecycle Jurisdiction Diversion/Disposal Rate Summary for Rancho Cordova, the most recent (2018) annual per capita disposal rate is 4.2 pounds per day (PPD) per resident.

[14] De Novo Planning Group. *Environmental Impact Report for The Ranch Project (SCH: 2018072011)* [pg. 3.14-3]. August 2019.

[15] Sacramento County. *Environmental Impact Report for the Sacramento Regional County Sanitation District Interceptor Master Plan 2002 (SCH: 1995012061).* November 2002.

[16] California Department of Resources Recycling and Recovery (CalRecycle). SWIS Facility Detail: Sacramento County Landfill (Kiefer) (34-AA-0001). Available at: https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2070?siteID=2507. Accessed October 2020.

Electricity and Natural Gas

The City of Rancho Cordova receives electricity from SMUD and natural gas services from Pacific Gas & Electric (PG&E). SMUD has provided electricity throughout Sacramento County since 1946, and is responsible for the combination of resources used to generate electricity for its customers. For example, SMUD is in the process of implementing the Statewide Renewable Portfolio Standard (RPS) to increase the proportion of renewable energy within its energy portfolio. PG&E owns and operates approximately 42,141 miles of natural gas distribution pipelines throughout California.[17] PG&E would provide natural gas to the project site through underground transmission lines. Existing electricity and natural gas infrastructure is undergrounded to the south of the project site.

Telecommunications

Residents in the City of Rancho Cordova subscribe to a mix of wireline providers and resellers including AT&T of California, Consolidated Communications, Frontier, Xfinity, T-Mobile, and more. Cable internet fibers are generally co-located and installed concurrently with other utility infrastructure. Within new development projects, such infrastructure is primarily installed underground. Telephone facilities in the City's Planning Area include both aerial and underground fiber and copper transmission lines. Most of the underground and aerial telephone transmission lines are generally co-located with other utilities on poles or underground trenches and are constructed in public and roadway rights-of-way.

4.9.3 REGULATORY CONTEXT

The following discussion contains a summary review of regulatory controls pertaining to public services and utilities, including federal, State, and local laws and ordinances.

Federal Regulations

The following are the federal environmental laws and policies relevant to public services and utilities.

Safe Drinking Water Act (SDWA)

The federal SDWA, which was enacted in 1974, gives the United States Environmental Protection Agency (EPA) the authority to set standards for contaminants in drinking water supplies. The EPA was required to establish primary regulations for the control of contaminants that affected public health and secondary regulations for compounds that affect the taste, odor, and aesthetics of drinking water. Accordingly, the EPA set a maximum contaminant level or treatment technique for each of the 83 contaminants in drinking water listed in the SDWA. Under the provisions of SDWA, the California Department of Health Services (DHS) has the primary enforcement responsibility. Title 22 of the California Administrative Code establishes DHS authority, and stipulates State drinking water quality and monitoring standards.

State Regulations

The following are the State environmental laws and policies relevant to public services and utilities.

[17] Pacific Gas and Electric. *Company Profile*. Available at: https://www.pge.com/en_US/about-pge/company-information/profile/profile.page. Accessed October 2020.

California Fire Code

The California Fire Code contains regulations relating to construction, maintenance, and use of buildings. Topics addressed in the California Fire Code include fire department access, fire hydrants, automatic sprinkler systems, fire alarm systems, fire and explosion hazards safety, hazardous materials storage and use, provisions intended to protect and assist fire responders, industrial processes, and many other general and specialized fire-safety requirements for new and existing buildings and the surrounding premises. The Fire Code contains specialized technical regulations related to fire and life safety.

California Health and Safety Code

State fire regulations are set forth in Sections 13000 et seq. of the California Health and Safety Code, include regulations for building standards (as also set forth in the California Building Standards Code [CBSC]), fire protection and notification systems, fire protection devices such as extinguishers and smoke alarms, high-rise building and childcare facility standards, and fire suppression training.

Senate Bill 610

The California Water Code requires coordination between land use lead agencies and public water purveyors. The purpose of this coordination is to ensure that prudent water supply planning has been conducted and that planned water supplies are adequate to meet both existing demands and the demands of planned development.

Water Code Sections 10910 – 10915 (inclusive), sometimes referred to as Senate Bill (SB) 610, require land use lead agencies: 1) to identify the responsible public water purveyor for a proposed development project, and 2) to request from the responsible purveyor, a “Water Supply Assessment” (WSA). The purposes of the WSA are (a) to describe the sufficiency of the purveyors’ water supplies to satisfy the water demands of the proposed development project, while still meeting the current and projected water demands of customers, and, (b) in the absence of a currently sufficient supply to describe the purveyor’s plans for acquiring additional water. Water Code Sections 10910 through 10915 delineate the specific information that must be included in the WSA.

As stated in CEQA Guidelines Section 15155, which reflects SB 610 requirements, any development with water demand exceeding the equivalent demand associated with 500 dwelling units is considered a “water-demand project” and is required to prepare a WSA. The proposed project would include development of 440 single-family lots and, thus, preparation of a WSA is not required for the proposed project.

Water Conservation in Landscaping Act

The Water Conservation in Landscaping Act of 2006 (Assembly Bill [AB] 1881) enacts many, but not all of the recommendations reported to the Governor and Legislature in December 2005 by the California Urban Water Conservation Council Landscape Task Force. AB 1881 requires DWR, not later than January 1, 2009, by regulation, to update the model ordinance in accordance with specified requirements, reflecting the provisions of AB 2717. AB 1881 requires local agencies, not later than January 1, 2010, to adopt the updated model ordinance or equivalent or it will be automatically adopted by statute. The bill also requires the Energy Commission, in consultation with the department, to adopt, by regulation, performance standards and labeling requirements for landscape irrigation equipment, including irrigation controllers, moisture sensors, emission

devices, and valves to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy or water.

Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act (SGMA), adopted in 2014, requires the formation of local groundwater sustainability agencies (GSAs) that must assess conditions in their local water basins and adopt locally-based management plans. The SGMA provides substantial time (20 years) for GSAs to implement plans and achieve long-term groundwater sustainability. The DWR and the SWRCB are the two lead State agencies implementing the SGMA. The responsibilities required under the SGMA include the following:

1) Developing regulations to revise groundwater basin boundaries;
2) Adopting regulations for evaluating and implementing Groundwater Sustainability Plans (GSPs) and coordination agreements;
3) Identifying basins subject to critical conditions of overdraft;
4) Identifying water available for groundwater replenishment; and
5) Publishing best management practices for the sustainable management of groundwater.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation (i.e., recycling) and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25 percent of all solid waste from landfill facilities by January 1, 1995, and 50 percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan. The plans must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. Cities and counties that do not meet this mandate are subject to $10,000-per-day fines.

Senate Bill 1016

In 2007, SB 1016 amended portions of AB 939, which allows the California Integrated Waste Management Board (CIWMB) to use per capita disposal as an indicator in evaluating compliance with the requirements of AB 939. Jurisdictions track and report their per capita disposal rates to CalRecycle.

Solid Waste Reuse and Recycling Access Act

The Solid Waste Reuse and Recycling Access Act (AB 1327) requires jurisdictions to adopt ordinances requiring development projects to provide adequate storage area for collection and removal of recyclable materials.

Local Regulations and Policies

The following are applicable local regulations relevant to public services and utilities.

City of Rancho Cordova General Plan

Goals and policies from the City's General Plan related to public services and utilities are presented below.

Goal NR.8: Promote waste reduction, reuse, recycling, and composting efforts.

Policy NR.8.5: Meet state mandates for solid waste reduction and recycling. Increase recycling efforts beyond those required by state law through supporting businesses that buy and sell re-used materials, such as materials exchange centers.

Policy NR.8.7: Maintain contact with Sacramento County and Allied Waste (or its successor) regarding the capacity projections of Kiefer Landfill and Lockwood Landfill to ensure an adequate capacity in their disposal facilities for the long-term disposal needs of Rancho Cordova.

Goal NR.5: Protect the quantity and quality of the City's water resources.

Policy NR.5.1: Promote water conservation within existing and future urban uses.

Policy NR.5.3: Protect surface and ground water from major sources of pollution, including hazardous materials contamination and urban runoff.

Policy NR.5.4: Prevent contamination of the groundwater table and surface water, and remedy existing contamination to the extent practicable.

Policy NR.5.5: Minimize erosion to stream channels resulting from new development in urban areas consistent with State law.

Policy NR.5.6: Incorporate Storm Water, Urban Runoff, and Wetland Mosquito Management Guidelines and Best Management Practices into the design of water retention structures, drainage ditches, swales, and the construction of mitigated wetlands in order to reduce the potential for mosquito-borne disease transmission.

Policy NR.5.8: The City shall require groundwater impact evaluations be conducted for the Grant Line West, Westborough, Aerojet, Glenborough, Mather and Jackson Planning Areas to determine whether urbanization of these areas would adversely impact groundwater remediation activities associated with Mather and Aerojet prior to the approval of largescale development. Should an adverse impact be determined, a mitigation program shall be developed in consultation with applicable local, state, and federal agencies to ensure remediation activities are not impacted. This may include the provision of land areas for groundwater remediation facilities, installation/extension of necessary infrastructure, or other appropriate measures.

Goal ISF.2: Ensure the development of quality infrastructure to meet community needs at the time they are needed.

Policy ISF.2.1: Ensure the development of public infrastructure that meets the long-term needs of residents and ensure infrastructure is available at the time such facilities are needed.

Policy ISF.2.3: Ensure that adequate funding is available for all infrastructure and public facilities, and make certain that the cost of improvements is equitably distributed.

Policy ISF.2.4: Ensure the development of public infrastructure that meets the long-term needs of residents and ensure infrastructure is available at the time such facilities are needed.

Policy ISF.2.6: Ensure that sewage conveyance and treatment capacity are available in time to meet the demand created by new development, or are guaranteed to be built by bonds or other sureties.

Goal S.7: Design neighborhoods and buildings in a manner that prevents crime and provides security and safety for people and property.

Policy S.7.1: Use Crime Prevention Through Environmental Design (CPTED) principles in the design of projects and buildings.

Goal S.9: Reduce the probability of fire damage to all of the City's structures.

Policy S.9.2: Provide infill development with adequate off-site improvements to meet onsite fire flow requirements.

Urban Water Management Plan

In 2016, the SCWA prepared the 2015 UWMP as required by the Urban Water Management Planning Act of 1983. The UWMP serves as a long-term planning document for sustainable water supply, and includes a description of water sources, historical and projected water use, and a comparison of water supply and demand during normal and dry years. The UWMP was prepared in compliance with California Water Code, Division 6, Part 2.6, Sections 10610 through 10656, which requires every urban water supplier that provides water to over 3,000 connections to adopt and submit a management plan every five years to the DWR. The UWMP also discusses the conservation and efficient use of water in the service area, and the development and implementation of plans to assure reliable water service in the future. The UWMP contains projections for future water use, discusses the reliability of the SCWA's water supply, describes the SCWA's water treatment system, and contains a water shortage contingency plan. In addition, the UWMP contains best management practices for efficient water use.

City of Rancho Cordova Municipal Code

The City's Municipal Code standards related to public services and utilities that are applicable to the proposed project are presented below.

Title 6: Health and Sanitation

Chapter 6.32, Sanitary Sewage Systems, requires that a drainage system connect to a public sanitary sewer in every building where persons reside, congregate, or are employed. A permit is

required in order to construct, alter, or relocate a sewage disposal system in the City. Section 6.32.170 mandates that,

> "The city council shall establish a special revolving fund to be designated as the sewage connection fund. Payments shall be made out of the fund upon the demand of the director of public works to defray the costs and expenses which may be incurred by the city in doing or causing to be done the necessary work for sewage connections."

Title 15: Water and Sewers

Chapter 15.04, Sewer Use, sets standards to control the quantity and quality of wastewater that enters the public system and assure efficient operation and maintenance of sewerage facilities. The chapter also includes regulations for what discharge types are allowable in sanitary sewers. Public sewer cannot be used until a connection permit is acquired.

Title 16: Buildings and Construction

Chapter 16.83, Development Impact Fees to Finance Cost of Public Facilities, requires that development fees be charges to fund the cost of certain public facilities, such as those related to roadways, transit, parks, and libraries.

Chapter 16.92, Construction and Demolition Debris, declares the following:

> "1. The California Integrated Waste Management Act of 1989 (AB 939) requires each local jurisdiction in the state to divert a minimum of 50 percent of discarded materials away from disposal in landfills.
> 2. CALGreen requires, as part of the California Green Building Standards Code, Title 24, California Code of Regulations, that 50 percent of nonhazardous construction and demolition (C&D) debris be diverted. The diversion requirement imposed by CALGreen is subject to change.
> 3. AB 939 requires jurisdictions to submit an annual report summarizing their progress in diverting solid waste from disposal.
> 4. Senate Bill 1374 requires the annual report to include a summary of progress made in the diversion of C&D debris.
> 5. C&D debris accounts for a significant portion of the waste stream generated in the city. These materials have significant potential for waste reduction and recycling.
> 6. The reuse and recycling of C&D debris will reduce the amount of waste transported for disposal in landfills and return these materials into the economic mainstream, thereby conserving natural resources and stimulating markets for recycled and salvage materials."

In compliance with Chapter 16.92, projects must establish recycling requirements for construction debris in an effort to reduce landfill waste. Developers are required to complete and submit a Waste Management Plan and pay an applicant fee to the City's Building and Safety Division.

Title 17: Fire Prevention

Chapter 17.04 of the Municipal Code establishes and adopts the Fire Code, which is included in the 2019 CBSC, Title 24, California Code of Regulations, Part 9 (California Fire Code), incorporating the International Fire Code, 2015 Edition, with errata. The Chapter mandates that, "all construction, alteration, moving, demolition, repair, and use of any building or structure within the City shall be made in conformance with the state code and any rules and regulations promulgated pursuant thereto, including the IFC and the appendix." The SMFD has authority to enforce the Code and issue citations for any violations.

Title 22: Land Development

Chapter 22.40, Park and Recreation Dedication and Fees, mandates that a certain area of parkland shall be dedicated per number of dwelling units. The area of dedicated parkland is equal the number of dwelling units multiplied by a conversion factor that varies per dwelling type. The multiplication factor for single-family dwelling units, such as those proposed by the project, is equal to 0.01475.

If a project does not meet the parkland ratio, the developer shall be required to pay an in-lieu fee equal to the amount of land (acres) required for dedication multiplied by the fair market value (dollars/acre) of the subject property.

4.9.4 IMPACTS AND MITIGATION MEASURES

The section below describes the standards of significance and methodology utilized to analyze and determine the proposed project's potential project-specific impacts related to public services and utilities. In addition, a discussion of the project's impacts, as well as mitigation measures where necessary, is also presented.

Standards of Significance

In accordance with Appendix G of the CEQA Guidelines, an impact related to public services and utilities is considered significant if the proposed project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
    - Fire protection;
    - Police protection;
    - Schools;
    - Parks; or
    - Other public facilities.
- Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals; or
- Comply with federal, state, and local management and reduction statutes and regulations related to solid waste.

Impacts related to storm drainage facilities are addressed in Chapter 4.6, Hydrology and Water Quality, of this EIR.

Issues Dismissed in the Initial Study

The Initial Study prepared for the proposed project (see Appendix A) determined that development of the proposed project would result in no impact or a less-than-significant impact related to resulting in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for the following public services:

- Parks; and
- Other public facilities.

For the reasons cited in the Initial Study, such impacts are not analyzed further in this EIR.

Method of Analysis

The following sections describe the methodologies employed in the Water Study and Sewer Study prepared for the proposed project by Ruggeri-Jensen-Azar & Associates, as well as the methods used to analyze impacts related to electricity, natural gas, telecommunications facilities, and solid waste. Impacts to public services (i.e., fire protection, police protection, and schools) were based primarily on the City's General Plan EIR.

Water Supplies

The Water Study prepared for the proposed project evaluated the availability of existing water supply conveyance infrastructure in the project area to serve the original 434-unit count proposed by the project. In addition, the Water Study prepared modeling to demonstrate what sized system would appropriately accommodate the resulting flows and pressures that are anticipated for the proposed project. The water system design criteria used for the model were determined using the Zone 40 Water System Infrastructure Plan Update (WSIP), which considers of the following components: water demand, peaking factors, water system materials and sizes, and water system performance criteria.

The Zone 40 WSIP determined that the average daily water demand per single-family residence in Zone 40 is 490 gallons per day (gpd)/connection. Based on the WSIP demand factors, the average daily water demand for the proposed project was estimated to by approximately 212,688 gpd (490 gpd/connection X 434 connections = 212,688 gpd), or 148 gallons per minute (gpm). Such water demand values were split and applied throughout the nodes in the model as the Average Day Demand (ADD). Based on the information presented within the WSIP, a Maximum Day Demand (MDD) peaking factor of 2.0 ADD and Peak Hour Demand peaking factor of 2.0 MDD was applied to the model.

The *Sacramento County Water Agency's 2018 Improvement Standards* specify that water distribution pipes be made of cement-lined pipe, polyvinyl chloride pipe, or ductile iron pipe. As such, the aforementioned materials were used for the modeling conducted in the Water Study. The minimum size for all distribution pipes was assumed to be eight inches in diameter.

The full water distribution system, shown in Figure 4.9-3, was modeled using Bentley WaterCAD V8i software, and the modeled outputs were compared to the County's water distribution performance goals.

Figure 4.9-3
Proposed Water Distribution System Layout



Existing pipelines that were modeled to be connected to the new system included the distribution mains in Edington Way, Thornberg Way, and Raymer Way. Water pressures were modeled at ground level, and building heights were not considered.

Wastewater

The Sewer Study prepared for the proposed project evaluated the wastewater generation associated with the project, as well as the capacity of downstream wastewater conveyance infrastructure.

The proposed project is located within the BR East Rancho Area 1 Trunk Shed area, and would receive wastewater treatment services from the Aerojet Interceptor Section 2S. The 185.3 acres of open space were not incorporated in the study because the land is not anticipated to be developed.

The project would include two points of connection to the existing wastewater system, and offsite upstream areas that would contribute to the flows produced by the proposed project do not exist.

As part of the Sewer Study, a detailed collection system was established, the major sewer sheds were defined, and the major sewer sheds were split into sub-sheds to define that areas that would contribute flows to specific nodes in the collection system. To estimate sewage flows, the area of land to be developed was multiplied by the average number of Equivalent Single-Family Dwelling Units (ESDs) per acre. The predicted volume of wastewater flows per land use area is used to determine the total number of ESDs entering each pipe system.

Sewage flows used in the model were estimated per the 2019 Sacramento Area Sewer District Standards and Specifications methodology. The model used a minimum plan density of RD-6 to assume approval of the General Plan Amendment (GPA)/Rezone. The assumptions applied in the model are presented in Table 4.9-5.

Table 4.9-5
Sewer Study Design Criteria

Category	Conditions
Development Density	Planned Development Density
Flow Generation	310 gpd/ESD
Peaking Factor	$3.5 - 1.8Q_a^{0.05}$
Velocity Criteria	Minimum 2 fps at Peak Wet Weather Flow
Hydraulic Grade Line	Maximum HGL at crown of pipe, Peak Wet Weather Flow
Friction Factor	N = 0.013
Minimum Depth	6.3’ at periphery of plan 6.3’ minimum depth at last line manhole
Minimum Slope	0.007

Source: Ruggeri-Jensen-Azar & Associates. Sewer Study for The Preserve. June 2020.

Solid Waste

Solid waste generated by the proposed project was estimated and considered with respect to the anticipated capacity at the solid waste facilities that would serve the proposed project. Sources of solid waste generation for the proposed project include demolition waste, construction material waste, and waste associated with long-term operations of the proposed residences. The U.S. EPA’s report, *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*,

was used to calculate solid waste generation associated with construction and demolition of the proposed project.[18] Operational solid waste generation was calculated using the 2018 CalRecycle Jurisdiction Diversion/Disposal Rate Summary for Rancho Cordova.[19]

Natural Gas and Electricity

The natural gas and electricity discussion evaluates whether new or expanded natural gas and electrical infrastructure would be necessary to serve the proposed project. Gas and electricity demand for the project are estimated and provided separately in Chapter 5, Statutorily Required Sections, of this EIR.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts is based on implementation of the proposed project in comparison with the standards of significance identified above.

4.9-1 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire protection services. Based on the analysis below, the impact is *less than significant*.

The proposed project would include the development of 440 single-family residences and various associated improvements including, but not limited to, parks, landscaping, circulation improvements, and utility installation. By introducing new residences to the project area, the proposed project could increase the demand for fire protection services within the City.

The relevant CEQA threshold is whether new or physically altered stations are needed to meet response times or other performance objectives, the construction of which could cause environmental impacts. As noted previously, Rancho Cordova is serviced by the SMFD. The nearest station is Station 68, located 2.8 miles southwest of the project site. The ISO recommends that new urban developments have a fire station within 2.5 miles from residential projects when build-out exceeds 20 percent of the City. Thus, the distance between the proposed development and Station 68 would only slightly exceed the ISO-recommended distance. The SMFD has a response time goal of five minutes or less for 80 percent of calls in the City. The SMFD currently meets this goal, and the response time goal is anticipated to be feasible for servicing the proposed project given the proximity of project site to the nearest fire stations.

All structures constructed as part of the proposed project would be designed in compliance with Title 17 of the Municipal Code and all applicable provisions of the California Fire Code. Buildings would be required to include features such as smoke

[18] U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts.* 2009.

[19] CalRecycle. *Jurisdiction Diversion/Disposal Rate Summary (2007 – Current).* Available at: https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionPost2006. Accessed October 2020.

alarms, fire hydrants, and fire department access to reduce potential fire hazards. The SMFD has authority to enforce the California Fire Code and issue citations for any violations. Compliance with the aforementioned standards would reduce the demand for fire protection services associated with the proposed development.

The SMFD is currently funded through development impact fees, taxes, and grants from the Capital Improvement Program. The proposed project would be subject to payment of the SMFD's Capital Fire Facilities Fee, which was established through AB 1600. The Capital Fire Facilities Fee provides the authority for SMFD to fund the full cost of providing new fire services and facilities to new development within the SMFD service area. Required payment to the SMFD would ensure that adequate fire protection facilities are available to serve the project.

For the above-discussed reasons, the proposed project would not result in substantial adverse physical effects associated with the provision of new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts. Thus, the proposed project would have a ***less-than-significant*** impact.

Mitigation Measure(s)

None required.

4.9-2 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police protection services. Based on the analysis below, the impact is *less than significant*.

Police protection for the project site would be provided by the RCPD, which is headquartered approximately 4.3 miles northwest of the project site. As noted previously, the project is expected to generate approximately 1,333 new residents, which could, in turn, increase demand for police protection services. The project applicant would be required to pay the City's applicable Community Facility Fees, which are used to fund new and expanded public service facilities, including police facilities, within the City's Planning Area. Payment of the Community Facility Fees would ensure that adequate police protection facilities are available to serve the project. Staff at the RCPD have confirmed that, given payment of applicable development impact fees, impacts related to police protection are not anticipated.[20]

Furthermore, the proposed project would be designed in accordance with the Safety Element of the City's General Plan. Policy S.7.1 requires that neighborhoods use CPTED principles to provide security and safety for people and property. CPTED principles include strategies such as natural surveillance and access control, which are implemented by using: adequate outdoor lighting, door and windows that look out onto streets, distinguishing property lines, including window licks and dead bolts, etc.

[20] Jeff Rodrigues, Crime Analyst, Rancho Cordova Police Department. Personal communication [phone] with Joe Baucum, Associate, Raney Planning and Management, Inc. May 11, 2021

The inclusion of the aforementioned design features would help to reduce the project's demand on police services.

Because the proposed development would be designed in compliance with Policy S.7.1 and would include payment of the applicable development impact fees, the proposed project would not result in substantial adverse effects associated with for the provision of new or physically altered police protection facilities, the construction of which could cause significant environmental impacts. Therefore, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.9-3 Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools. Based on the analysis below, the impact is *less than significant*.

The project site falls within the boundaries of the FCUSD, which is comprised of two preschools, 23 elementary schools, nine middle schools, and eight high schools. As of the 2018-2019 school year, the total enrollment is 20,487 students across the FCUSD.[21] Based on the 2019 School Facility Needs Analysis, the FCUSD has a current capacity of 25,529 students.[22]

The proposed project would include residential development, and, thus, would increase the number of students attending local school facilities. The student generation estimates presented in Table 4.9-6 are based on the rates provided in the FCUSD's School Facility Needs Analysis.[23]

Table 4.9-6
Student Generation Estimates

Housing Type	# of Units	K-5 Students		6-8 Students		9-12 Students	
		Rate	New Students	Rate	New Students	Rate	New Students
Single Family	440	0.33	145	0.14	62	0.17	75
						Total New Students	**282**

Source: Folsom Cordova Unified School District Department of Facilities and Planning, 2019 School Facility Needs Analysis [pg 9], April 2019.

[21] Department of Education, California School Dashboard. *District Performance Overview: Folsom-Cordova Unified.* 2019.

[22] Folsom Cordova Unified School District Department of Facilities and Planning. *2019 School Facility Needs Analysis.* April 2019.

[23] Folsom Cordova Unified School District Department of Facilities and Planning. *2019 School Facility Needs Analysis* [pg 9]. April 2019.

As shown in the table, the proposed project is expected to result in 282 new students, which would bring the total enrollment in the FCUSD to 20,769 students (20,487 + 282 = 20,769).

The Rancho Cordova General Plan EIR concluded that the, FCUSD is operating at or near capacity for elementary and high schools, and that the school district has experienced considerable growth in the past few years. However, according to more recent data, the district is currently operating at 80.2 percent capacity, and implementation of the proposed project would bring enrollment up to 81.3 percent capacity. As such, the FCUSD has the capacity to support the increase in students resulting from the proposed project.

The project applicant would be subject to required payment of the FCUSD's development impact fees, which are used to fund new and expanded school facilities.[24] Proposition 1A/SB 50 prohibits local agencies from using the inadequacy of school facilities as a basis for denying or conditioning approvals of any "[…] legislative or adjudicative act…involving …the planning, use, or development of real property" (Government Code 65996(b)). Satisfaction of the Proposition 1A/SB 50 statutory requirements by a developer is deemed to be "full and complete mitigation."

Based on the above, the proposed project would not be likely to result in new capacity exceedances within FCUSD schools. In addition, the project would be subject to payment of applicable development impact fees for school facilities. Thus, the proposed project would not result in substantial adverse effects associated with the provision of new or physically altered school facilities, the construction of which could cause significant environmental impacts. Therefore, the impact would be ***less than significant***.

Mitigation Measure(s)

None required.

4.9-4 Require or result in the relocation or construction of new or expanded water, wastewater treatment, or electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. Based on the analysis below, the impact is *less than significant*.

The following sections describe the water, wastewater treatment, electric power, natural gas, and telecommunications facilities improvements that would be necessary to serve the proposed project.

Water Conveyance Infrastructure

The proposed project would include connection of new eight-inch water mains to an existing 10-inch water main located within Edington Drive. The new water lines would

[24] Folsom Cordova Unified School District. *Development Impact Fees*. Available at: https://www.fcusd.org/Page/2291. Accessed October 2020.

run throughout the drive aisles with the proposed residential development and would service all units.

The design of the new water lines would be required to comply with all *Sacramento County Water Agency's 2018 Improvement Standards*. Sacramento County sets performance standards for water distribution systems, presented in Table 4.9-7 below.

As part of the Water Study, the proposed project was modeled to evaluate the ability of the existing and proposed water conveyance infrastructure to serve the proposed project. As shown in Table 3 of the Water Study (see Appendix J), all of the County's operating goals would be met throughout the water distribution system under all conditions that were tested.

Table 4.9-7
Performance Goals for SCWA Water Distribution Systems

Operating Goal	Requirement
Peak Hour Minimum Pressure	35 pounds per square inch (psi)
Peak Hour Maximum Pressure	65 psi
Average Day Maximum Velocity	5 foot-pound-second (fps)
Peak Hour Maximum Velocity	7 fps
Peak Hour Maximum Unit Headloss	3 ft/1,000 ft
Maximum Day Demand + Fire Flow Minimum Pressure	20 psi
Maximum Day Demand + Fire Flow Maximum Velocity	10 fps

Source: Ruggeri-Jensen-Azar & Associates, Water Study, September 2018.

The modeling results demonstrate that the water conveyance infrastructure network would provide sufficient water pressure at the proposed residences. Although the Water Study primarily analyzed the water distribution system using the original unit count of 434, Ruggeri-Jensen-Azar & Associates determined that an additional six lots (a 1.4 percent increase in unit count) would have a negligible impact on the water model; therefore, the water distribution system would continue to have sufficient water pressure even with the six-unit increase, and the conclusion remains applicable.

Wastewater Infrastructure

The proposed project would include new eight-inch sanitary sewer connections to the existing eight-inch sewer lines within Edington Drive and Thornberg Way.

As part of the Sewer Study (see Appendix J), the proposed project was modeled to evaluate the ability of the existing and proposed wastewater conveyance infrastructure to serve the proposed project. Per the Sewer Study, the proposed project is expected to generate approximately 310 gpd of wastewater per dwelling unit and result in a combined Peak Wet Weather Flow of 0.365 mgd. Upstream sewer sheds do not exist. Per the modeling conducted as part of the Sewer Study, 0.210 mgd would leave the site at Node WP/MH-1, 0.155 mgd would leave the site at Node WP-6/MH-26A, and all wastewater would ultimately flow through Node DR-4 in Douglas Road. Node DR-4 has a capacity of 6.697 mgd. The proposed project would increase flows at Node DR-4 from 5.442 mgd to 5.927 mgd. As such, the wastewater generated by the

proposed project could be adequately accommodated by the existing sewer infrastructure.

Based on the results of the modeling, sewer flows generated by the proposed project would be accommodated by the downstream wastewater conveyance system, and expansion of existing infrastructure would not be required to serve the proposed project.

Electricity, Natural Gas, and Telecommunications

The project site would receive natural gas and electric service from PG&E and SMUD, respectively. The proposed project would connect to existing electrical, natural gas, and telecommunications infrastructure located to the south of the site within the neighboring subdivision.

Although the proposed project would increase the demand for natural gas service on the project site, the increase in demand would be relatively small in comparison to overall demand within the City of Rancho Cordova, and PG&E is anticipated to have adequate capacity to handle the increase in natural gas demand resulting from the proposed project. Furthermore, pursuant to the 2019 CBSC, the proposed residences would be required to include on-site renewable energy systems sufficient to meet 100 percent of the project's electricity demands; thus, any increase in electricity demand is anticipated to be met by on-site sources of electricity.

Several purveyors provide internet, telephone and other cable-related services to the City. While implementation of the proposed project would result in population growth and require the expansion of these services, most of the underground and aerial telecommunication transmission lines are generally co-located with other utilities on poles or underground trenches. As such, the existing telecommunication infrastructure would be sufficient to serve the proposed project and a need to upsize or upgrade the existing dry utilities is not anticipated.

Conclusion

Based on the above, the proposed project would not require or result in the relocation or construction of new or expanded water, wastewater treatment, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects. In addition, as required by the General Plan, the project applicant would be required to pay development impact fees which would contribute towards the cost of future upgrades to public infrastructure and utilities. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.9-5 Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years. Based on the analysis below, the impact is *less than significant*.

Development of the proposed residential subdivision would result in increased demand for water supplies relative to existing conditions. As noted previously, per the WSIP and the 2015 UWMP, the SCWA has not previously anticipated domestic water demands associated with the project site, given that the City's General Plan designates the site for agricultural uses.

Based on the Water Study, the proposed project is expected to result in an overall maximum day domestic water demand of 212.688 gpd, or 148 gpm, which is equivalent to approximately 239 AFY. As shown in Table 4.9-2, Table 4.9-3, and Table 4.9-4 above, per the 2015 UWMP, the SCWA has projected a surplus of at least 4,522 AFY for average year, single dry year, and multiple dry year conditions. Given the SCWA's surplus of at least 4,522 AFY, the proposed project's estimated increase in water demand, even with an additional six units included in the water model, could be accommodated by the SCWA's water supplies without new or expanded entitlements.

Based on the above, sufficient water supply would exist to serve the proposed project's operational water demand and reasonably foreseeable future development during normal, dry, and multiple dry years. In addition, as required by the General Plan, the project applicant would be required to pay development impact fees which would contribute towards the cost of future upgrades to public infrastructure and utilities, including water supply systems. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.9-6 Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. Based on the analysis below, the impact is *less than significant*.

Wastewater services for the proposed project would be provided by CSD-1 of the SRCSD, and wastewater from the project would be treated at the SRWTP. Based on the Sewer Study, the proposed project is expected to generate an Average Dry Weather Flow (ADWF) of 0.136 mgd (310 gpd/unit x 440 units = 136,540 gpd) and a combined Peak Wet Weather Flow of 0.365 mgd. The existing permitted capacity at the SRWTP is 181 mgd ADWF.[25] Per the SRWTP's NPDES Permit (No. CA0077682), adopted in April of 2016, the ADWF at that time was approximately 120 mgd.[26] As

[25] Sacramento Regional Community Services District. *Final Executive Summary: Sacramento Regional Wastewater Treatment Plant* [pg 7]. May 2008.
[26] California Regional Water Quality Control Board, Central Valley Region. *Order No. R5-2016-0020-01 NPDES No. CA0077682* [pg I-7]. April 2016.

such, the SRWTP was operating at approximately 63 percent of permitted capacity. Therefore, adequate capacity exists to treat the additional 0.136 mgd of ADWF that would be generated by the proposed project.

Furthermore, the project applicant would be required to pay sewer impact fees to the City, which would contribute towards the cost of future upgrades of the City's wastewater conveyance system and the SRWTP. Impact fees are intended to fund system improvements and maintenance, and new residential projects are required to pay a connection fee.[27] Required payment of sewer impact fees would ensure that the SRWTP receives adequate funding for necessary future improvements.

Based on the above, the proposed project would not result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments. In addition, as required by the General Plan, the project applicant would be required to pay development impact fees which would contribute towards the cost of future upgrades to public infrastructure and utilities, including wastewater treatment systems. Thus, a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required

4.9-7 Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals, or conflict with federal, state, and local management and reduction statutes and regulations related to solid waste. Based on the analysis below, the impact is *less than significant*.

Solid waste generated from the proposed project would be disposed of at the Kiefer Road Landfill. The landfill is located at 12701 Kiefer Boulevard, near the intersection of Kiefer Boulevard and Grant Line Road. According to the City's General Plan EIR, the Kiefer Road Landfill has a total capacity of 117 million cubic yards and is permitted to accept a maximum of 10,815 tons per day, or 3.9 million tons per year, of solid waste. The Kiefer Road Landfill is operating below permitted capacity and has a current anticipated closure date of 2064.

The proposed project would require demolition of the two on-site single-family residences and associated outbuildings in the southern portion of the project site. Such structures total approximately 12,000 square feet (sf). According to the U.S. EPA's report, *Estimating 2003 Building-Related Construction and Demolition Materials Amounts*, residential demolition results in an average of 127 pounds of waste per sf.[28] Considering the project would require demolition of 12,000 sf, the demolition activities

[27] City of Rancho Cordova. *Development Related Processes and Fees*. May 2018.
[28] U.S. Environmental Protection Agency. *Estimating 2003 Building-Related Construction and Demolition Materials Amounts.* 2009.

would generate approximately 1,524,000 lbs of solid waste. In addition, the proposed project would include construction of approximately 781,200 sf of single-family residential uses. Per the same report from the U.S. EPA, residential construction activities generate an average of 4.39 lbs/sf of waste. As such, the proposed construction activities would produce approximately 3,429,468 lbs of waste. In total, construction and demolition would generate approximately 2,406 tons of solid waste.

The construction debris estimate presented above represents a conservative analysis of the maximum potential waste production from the construction process. Under Sections 4.408 and 5.408 of the 2019 California Green Building Standards Code, applicable projects to divert at least 65 percent of all construction and demolition debris through recycling, reuse and/or waste reduction. As such, a minimum of 1,564 tons of waste would be diverted away from landfill disposal during construction.

Waste generated by the construction process would be spread over approximately two years. However, in order to provide a conservative analysis, the total estimated waste that would be generated by construction was assumed to occur during only one year. Therefore, the project's anticipated total construction waste of 600 tons was compared to the Kiefer Road Landfill's total yearly capacity and remaining yearly capacity. With the conservative assumption that construction waste occurs in a single year, the estimated waste generation would equal approximately 0.02 percent (600 tons/3,947,475 tons X 100 = 0.015) of the Landfill's total remaining annual capacity. Thus, construction waste associated with the proposed project could be accommodated by the Kiefer Road Landfill.

Once constructed, the proposed residences would generate solid waste. Per the CalRecycle Jurisdiction Diversion/Disposal Rate Summary for Rancho Cordova, the most recent (2018) annual per capita disposal rate is 4.2 PPD per resident. Given that the proposed project would house approximately 1,333 future residents, operation of the proposed project would generate approximately 5,599 lbs of waste per day (2.8 tons).

Operational waste generation of 2.8 tons per day would equal approximately 0.03 percent (2.8 tons/10,815 tons X 100 = 0.0237) of the Kiefer Road Landfill's remaining daily capacity. Therefore, the proposed project's operational waste generation could be accommodated by the existing capacity of the Kiefer Road Landfill.

It should be noted that in 2016, California achieved a Statewide residential waste diversion rate of 61 percent.[29] The diversion rate represents the percentage of the State's solid waste stream that is diverted from landfills and recycled or composted. Assuming a similar diversion rate for the City of Rancho Cordova, approximately 623.42 tons of waste (1,022 tons X 0.61 diversion rate = 623.42 tons) generated by operation of the proposed project would be diverted from the Kiefer Road Landfill annually.

[29] California Department of Resources Recycling and Recovery (CalRecycle). *California's Estimated Statewide Diversion Rates Since 1989*. Available at: http://www.calrecycle.ca.gov/lgcentral/goalmeasure/disposalrate/Graphs/EstDiversion.htm. Accessed July 2019.

Based on the above, the proposed project would not exceed the permitted capacity of the Kiefer Road Landfill in the project's construction and/or operational phases. Additionally, the proposed project would be required to abide by all aforementioned local, State, and federal regulations. As a result, the proposed project would be serviced by a landfill with adequate capacity and would not violate any relevant statutes related to solid waste disposal. Therefore, a ***less-than-significant*** impact related to solid waste would occur.

Mitigation Measure(s)
None required.

Cumulative Impacts and Mitigation Measures

The following discussion of impacts is based on the implementation of the proposed project in combination with other proposed and pending projects in the region. Refer to Chapter 5, Statutorily Required Sections, of this EIR for more detail.

4.9-8 Cumulative impacts to fire and police protection services. Based on the analysis below, the cumulative impact is *less than significant*.

The proposed project would be provided police protection services by the RCPD, and fire protection services by SMFD. The environmental effects of construction of fire and police facilities in the planning area have been considered in the technical analyses of the General Plan EIR as part of overall development of the Planning Area. The General Plan EIR concluded that buildout of the City of Rancho Cordova would result in a less-than-significant impact related to increased demand on fire protection services, provided that the proposed project complies with all existing SMFD and Sacramento County standards and guidelines. With regard to police protection services, impacts were similarly determined to be less than significant.

The proposed project would have the potential to result in increased demands for fire and police protection services at the project site. However, as discussed under Impacts 4.9-1 and 4.9-2 above, although new or physically altered facilities are not anticipated to be required, the proposed project would be subject to the payment of development impact fees to ensure that any required expansion of facilities or staffing numbers can occur. The proposed structures would be designed in compliance with all applicable provisions of the California Fire Code and would include features, such as smoke alarms, to reduce potential fire hazards. In addition, the proposed project would be designed in accordance with the safety element of the City's General Plan. Policy S.7.1 requires that certain design features be included in building and neighborhood designs to prevent crime and provide safety and security. Furthermore, the proposed project would be subject to payment of the City's applicable Community Facility Fees to support adequate provision of fire and police facilities and equipment. Similar to the proposed project, other future development projects within the City would be required by the City to pay their fair-share fees toward the provision of adequate public services and facilities.

Based on the above, a ***less than cumulatively considerable*** impact would occur related to resulting in a need for new or expanded fire and police protection facilities, the construction of which could cause significant environmental impacts.

Mitigation Measure(s)
None required.

4.9-9 Cumulative impacts to public schools. Based on the analysis below, the cumulative impact is *less than cumulatively considerable.*

Buildout of the project area would result in an increase in population and a subsequent increase in demand for public schools. As noted in the Ranch Cordova General Plan EIR, implementation of the General Plan in combination with other reasonably foreseeable regional developments proposed in eastern Sacramento County would result in a cumulative increase in student enrollment. In order to accommodate the increase in student enrollment, the FCUSD would require additional schools and related facilities.

However, SB 50 funding would partially mitigate impacts to public schools. In addition, the existing funding mechanisms, bond measures within the school district, and implementation of the Sacramento County General Plan and proposed Rancho Cordova General Plan policies and associated action items would reduce the cumulative impacts on public school facilities. Additionally, pursuant to State law, payment of statutory impact fees represents full and complete school facilities mitigation. As such, although cumulative regional development would result in an increased demand for public schools, payment of impact fees and implementation of General Plan policies would ensure that impacts would remain less than significant.

Based on the above, a ***less than cumulatively considerable*** impact would occur related to a need for new or expanded public school facilities, the construction of which could cause significant environmental impacts.

Mitigation Measure(s)
None required.

4.9-10 Cumulative impacts to utilities and service systems. Based on the analysis below, the project's incremental contribution to this cumulative impact would be *less than cumulatively considerable*.

A discussion of potential cumulative impacts on utility systems is provided below.

Water Supply
The Rancho Cordova General Plan EIR analyzed cumulative impacts to water supply and water conveyance infrastructure under Impact 4.12.3.2. As noted therein, the land uses associated with buildout of the Rancho Cordova General Plan would require considerable modifications and improvements to the existing water supply delivery

system to meet the projected water demands. Additional water treatment, storage capacity, and the extension of the existing water system, including pipelines and other transmission and conveyance infrastructure, would be required to meet the demand for the General Plan growth and other anticipated regional growth. The General Plan concluded that impacts related to water supply utilities would be cumulatively considerable and significant and unavoidable.

According to the WSIP, the Zone 40 service area would be fully built out in the year 2052. At full buildout, the water demand for Zone 40 would be 102,400 AFY. According to WSIP Table 4-3, Zone 40 has a long-term average water supply of 121,418 AFY, which would be sufficient to meet the projected water demand. Even after three dry years, the SCWA would have approximately 11,800 AFY excess water supply after meeting the demand from cumulative buildout of the service area. As such, sufficient water supplied exist to meet the demand of the proposed project in conjunction with cumulative buildout of the region.

The WSIP identifies a Capital Improvement Plan to provide the necessary infrastructure improvements throughout Zone 40 as buildout occurs. Implementation of the Capital Improvement Plan may result in environmental impacts. However, the Water Study concluded that the proposed project would not adversely affect the downstream system, and the existing infrastructure is sufficient to serve the proposed project. As such, the proposed project's incremental contribution to the cumulative impact would be less than cumulatively considerable.

Based on the above, the water conveyance infrastructure is adequately sized to accommodate cumulative development within the SCWA service area, including the proposed project, and sufficient water supplies are available to serve such cumulative development. Therefore, the project's incremental contribution to cumulative impacts related to water conveyance and water supplies would be less than cumulatively considerable.

Wastewater

The Rancho Cordova General Plan EIR analyzed cumulative impacts to wastewater treatment capacity and conveyance infrastructure under Impact 4.12.4.2. Development under the General Plan and other development planned in Sacramento County and SRCSD's service area would substantially increase cumulative demands for wastewater services and related facilities. While planned improvements to the wastewater infrastructure network have been analyzed in the General Plan EIR, future growth may require modification and expansion of currently planned wastewater facility improvements. Overall, the General Plan EIR concluded that impacts related to cumulative wastewater service demands are less than cumulatively considerable, but impacts related to infrastructure/facility expansion are cumulatively considerable and significant and unavoidable.

As discussed under Impact 4.9-4 above, wastewater generation associated with buildout of the project site was modeled by Ruggeri-Jensen-Azar & Associates. Based on the results of the modeling in the Sewer Study, implementation of the proposed project would not adversely affect the downstream sewage system, and the existing infrastructure is sufficient to serve the proposed project. The Sewer Study considered

cumulative development in the area, and noted that future upstream areas would not be served through the project site. Therefore, considering the wastewater conveyance system can adequately accommodate flows from the proposed project, and future upstream areas would not be served through the same conveyance system, it follows that the wastewater conveyance system would be able to accommodate cumulative development in the area. Any new additional development upstream of the proposed project would be subject to subsequent environmental review. Overall, the proposed project's incremental contribution to the cumulative impact would be less than cumulatively considerable.

The SRWTP currently has a permitted capacity of 181 mgd for ADWF and 400 mgd of Average Wet Weather Flows (AWWF). The SRCSD is in the process of expanding the SRWTP to accommodate 250 ADWF and maintain the 400 mgd for AWWF.[30] Per the City's General Plan EIR, projected wastewater generation rates by year 2030 are estimated to be 36.5 mgd and under buildout conditions 42.2 mgd. As such, wastewater generated from the proposed project (0.136 mgd) would constitute 0.3 percent of the wastewater treatment demand at buildout of the City's planning area. The wastewater treatment projections used in the General Plan, presented above, were determined based on population growth estimates, and land use designations were not considered. As such, even though the proposed project includes a change in land use designation, the project would be included as part of the City's planned regional growth estimated. Therefore, impacts to wastewater treatment facilities have been anticipated in the General Plan EIR. While the General Plan EIR concluded that impacts related to infrastructure/facility expansion would be cumulatively considerable and significant and unavoidable, the proposed project would be subject to payment of development fees to fund the planned Capital Improvement Program, and the project's increment contribution to the impact would be less than cumulatively considerable.

Solid Waste

The Rancho Cordova General Plan EIR analyzed cumulative impacts related to solid waste under Impact 4.12.5.2. Using the per capita solid waste generation identified and assuming implementation of mandatory reduction and diversion programs, cumulative development associated with the General Plan would generate approximately 111,804 tons of solid waste per year. The Kiefer Landfill, the Forward Landfill in Manteca, and the Lockwood Regional Landfill in Nevada would accommodate the City's Planning Area solid waste disposal demands. Such landfills would have adequate capacity to accommodate projected population growth and subsequent solid waste generation in the City's Planning Area at buildout under the General Plan. As such, the General Plan EIR concluded that implementation of the Rancho Cordova General Plan would not require additional landfill capacity, and impacts would be less than cumulatively considerable.

The proposed project would contribute construction, demolition, and operational waste to the Kiefer Landfill. As discussed above, numerous State and federal regulations exist regarding the composition and volume of solid waste being directed to landfills, as well as the amount of solid waste being diverted for recycling or reuse programs. The Kiefer Landfill currently has remaining capacity of 112 million cubic yards, and the

[30] City of Rancho Cordova. *City of Rancho Cordova General Plan Environmental Impact Report* [pg 4.12-47]. June 2006.

current permitted capacity is anticipated to allow operation of the landfill to continue until the year 2064. The solid waste attributable to the proposed project would not be considered substantial considering the landfill's existing capacity of 800 tons per day and the remaining capacity of 112 million cubic yards. Therefore, the proposed project in combination with future buildout of the City's Planning Area would not result in a significant cumulative impact related to solid waste.

Energy, Natural Gas, and Telecommunications

The Rancho Cordova General Plan EIR analyzed cumulative impacts related to electrical, telephone, and cable services under Impact 4.12.8.2. As noted therein, the local Cosumnes Power Plant and Upper American River Project would ensure a guaranteed and adequate long-term energy supply to meet buildout conditions in the City's Planning Area. In addition, PG&E has also indicated that it has adequate natural gas supply and would extend infrastructure, as needed, to serve the growth anticipated under cumulative conditions. Overall, the General Plan EIR concluded that impacts related to energy, natural gas, and telecommunications would be less than cumulatively considerable.

The project would receive electricity from SMUD and natural gas from PG&E. Energy use associated with operation of the proposed project would be typical of residential uses requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air condition (HVAC), electronic equipment, machinery, appliances, security systems, and more.

The 2019 CBSC requires that new single-family residences include solar panels sufficient to generate 100 percent of the residents' electricity demand. As such, the operational demand for grid energy from SMUD associated with the proposed project would be zero kWh/hr. Thus, the project would not result in a net increase in electricity demand, and would not contribute to electricity demand associated with cumulative development under the General Plan.

Based on the air quality modeling prepared as part of Chapter 4.1, Air Quality, Greenhouse Gas Emissions, and Energy, of this EIR, the project's natural gas consumption would total approximately 10,654,300 kBTU/yr, or 106,568 therms. The Countywide consumption of natural gas in 2018 was 194 million therms.[31] Thus, the project would account for less than one percent of the County's total usage. Because the proposed project would increase natural gas demand by a relatively nominal percentage, the proposed project's incremental increase in natural gas consumption would not result in a cumulatively considerable increase in demand in combination with future buildout of the City.

While cumulative development within the City of Rancho Cordova would increase demand on the City's telecommunications service providers (i.e., Comcast, AT&T, etc.), such services are readily scalable and would be expanded as necessary to accommodate future growth. Thus, cumulative impacts related to electricity, natural gas, and telecommunications would be less than significant.

[31] California Energy Commission. *Gas Consumption by County: Sacramento County, Residential Sector, Year 2018*. Available at: https://ecdms.energy.ca.gov/gasbycounty.aspx. Accessed January 24, 2020.

Conclusion

The proposed project, in conjunction with buildout of the City's Planning Area, would increase demand on utilities in the area and have the potential to result in a significant cumulative impact. However, this analysis has demonstrated that the proposed project's incremental contribution to this cumulative impact would be considered ***less than cumulatively considerable***.

Mitigation Measure(s)

None required.

4.10 Transportation

4.10 TRANSPORTATION

4.10.1 INTRODUCTION

The Transportation chapter of the EIR addresses the existing and cumulative transportation conditions associated with the development of the proposed project. The analysis includes consideration of vehicle traffic impacts on roadway capacity, circulation, transit, and bicycle and pedestrian facilities, as well as vehicle miles travelled (VMT). Where development of the proposed project would conflict with applicable policies or guidelines, mitigation measures are identified. The information contained within this chapter is primarily based on the Traffic Impact Analysis (TIA),[1] Vehicle Miles Traveled (VMT) Evaluation,[2] Supplemental Analysis,[3] and The Preserve Centennial Drive Considerations Memorandum (Centennial Drive Memorandum)[4] prepared for the proposed project by Kimley-Horn (see Appendix K), as well as the City of Rancho Cordova General Plan,[5] and the City of Rancho Cordova General Plan EIR.[6]

4.10.2 EXISTING ENVIRONMENTAL SETTING

The following setting information provides an overview of the existing conditions of the project site and surrounding area in relation to the existing transportation system within the project region, including the roadway network, transit, bicycle and pedestrian facilities.

Regional Setting

The project region is primarily characterized by a rural setting. The region includes agricultural areas, grasslands, wetlands, and valley oaks. Surrounding land uses include the Camden at Somerset Ranch residential subdivision directly to the south, vacant agricultural lands and a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, two single-family residences and industrial/open space to the north, and vacant land approved for the development of the Rio Del Oro residential community immediately adjacent to the west.

Regional access to the project area is provided by U.S. Route 50 (US 50). The portion of US 50 that runs through the City of Rancho Cordova connects to the City of Sacramento to the west and the County of El Dorado to the east.

Project Setting

Currently, the 279.3-acre project site contains two single-family residences and associated outbuildings on the southern portion of the site. An orchard is located within the northeastern portion of the site. A third single-family residence and associated outbuildings is located in the northwestern portion of the site. The remainder of the site consists primarily of non-native grasses, with scattered trees located in the vicinity of the existing residences and associated access roads. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal

1 Kimley-Horn. *Traffic Impact Analysis for The Preserve, City of Rancho Cordova, California.* November 4, 2020.
2 Kimley-Horn. *The Preserve, Vehicle Miles Traveled (VMT) Evaluation*. August 16, 2021.
3 Kimley-Horn. *Supplemental Analysis for Six Additional Units.* February 8, 2021.
4 Kimley-Horn. *Memorandum: The Preserve Centennial Drive Considerations*. August 16, 2021.
5 City of Rancho Cordova. *Rancho Cordova General Plan*. Adopted June 26, 2006.
6 City of Rancho Cordova. *Rancho Cordova General Plan Environmental Impact Report*. June 2006

drainage corridors and wetlands. Additionally, Morrison Creek runs northeast to southwest through the project site. The elevation of the site ranges from 210 to 250 feet above mean sea level.

Access to the project site is provided by way of Raymer Way and the neighborhood roadways associated with the Camden at Somerset Ranch residential subdivision directly to the south. The following are descriptions of the primary roadways in the vicinity of the project site.

United States Route 50

US 50 is an east-west interstate facility located approximately five miles from the proposed project. US 50 connects the City of Rancho Cordova to the City of Sacramento to the west and the County of El Dorado to the east. Primary access to the project site from US 50 is provided at the Sunrise Boulevard, Zinfandel Drive and Mather Field Road interchanges. Near Zinfandel Drive, US 50 carries approximately 180,000 vehicles per day with five lanes in each direction and a speed limit of 65 miles per hour (mph) within the project vicinity.

State Route 16

State Route (SR) 16 is an expressway connecting the County of Amador and County of Sacramento, along the southern edge of the City of Rancho Cordova limits and connects with US 50 west of the project site. The expressway is also designated as Jackson Road in the project vicinity; however, for the purposes of this chapter, the roadway is cited as SR 16. South of the project site, between Sunrise Boulevard and Grant Line Road, SR 16 carries approximately 13,000 vehicles per day with one lane in each direction and a speed limit of 55 mph within the project vicinity.

Sunrise Boulevard

Sunrise Boulevard is a north-south arterial, connecting the project site to north Rancho Cordova and the County of Placer. Sunrise Boulevard is a six-lane roadway with a speed limit of 45 mph within the project vicinity.

Zinfandel Drive

Zinfandel Drive is a north-south arterial, connecting the project site to US 50, as well as the commercial, industrial, and residential areas northwest of the project site. Zinfandel Drive is a four-lane roadway with a speed limit of 45 mph within the project vicinity.

Raymer Way

Raymer Way is a local roadway adjacent to the project site and provides access to Grant Line Road to the east. Raymer Way is a two-lane roadway.

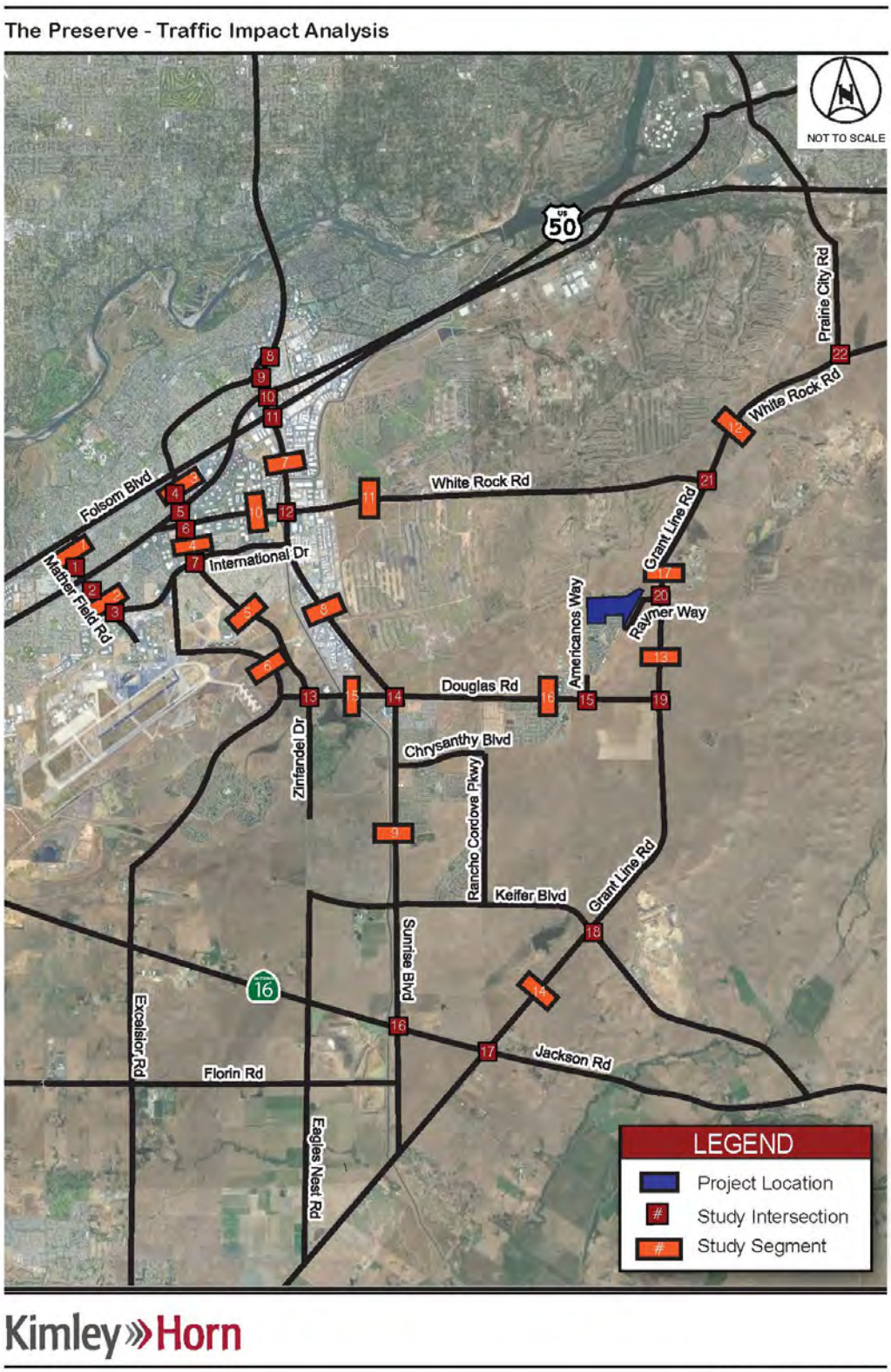
Americanos Boulevard

Americanos Boulevard is a local roadway that would provide access to the project site from the south. The roadway is a two-lane roadway that would serve as a connection between the project site and Douglas Road.

Study Area

The following intersections and roadway segments were selected for analysis in the TIA based on the project location, estimates of project-generated traffic, and locations of planned roadways in the project vicinity (see Figure 4.10-1).

Figure 4.10-1
Study Area



Intersections

1. Mather Field Road/US 50 Westbound Ramps;
2. Mather Field Road/US 50 Eastbound Ramps;
3. Mather Field Road/International Drive;
4. Zinfandel Drive/US 50 Westbound Ramps;
5. Zinfandel Drive/US 50 Eastbound Ramps;
6. Zinfandel Drive/White Rock Road;
7. Zinfandel Drive/International Drive;
8. Sunrise Boulevard/Zinfandel Drive;
9. Sunrise Boulevard/US 50 Westbound Ramps;
10. Sunrise Boulevard/US 50 Eastbound Ramps;
11. Sunrise Boulevard/Folsom Boulevard;
12. Sunrise Boulevard/White Rock Road;
13. Douglas Road/Zinfandel Drive;
14. Douglas Road/Sunrise Boulevard;
15. Douglas Road/Americanos Boulevard;
16. SR 16/Sunrise Boulevard;
17. SR 16/Grant Line Road;
18. Grant Line Road/Kiefer Boulevard;
19. Grant Line Road/Douglas Road;
20. Grant Line Road/Raymer Way;
21. Grant Line Road/White Rock Road; and
22. White Rock Road/Prairie City Road.

Roadway Segments

1. Mather Field Road, between Folsom Boulevard and US 50 Westbound Ramps;
2. Mather Field Road, between US 50 Eastbound Ramps and International Drive;
3. Zinfandel Drive, between Folsom Boulevard and US 50 Westbound Ramps;
4. Zinfandel Drive, between White Rock Road and International Drive;
5. Zinfandel Drive, between International Drive and Douglas Road;
6. Mather Boulevard, between Femoyer Street and Douglas Road;
7. Sunrise Boulevard, between Folsom Boulevard and White Rock Road;
8. Sunrise Boulevard, between White Rock Road and Douglas Road;
9. Sunrise Boulevard, between Douglas Road and SR 16;
10. White Rock Road, between Zinfandel Drive and Sunrise Boulevard;
11. White Rock Road, between Sunrise Boulevard and Grant Line Road;
12. White Rock Road, between Grant Line Road and Prairie City Road;
13. Grant Line Road, between Raymer Way and Douglas Road;
14. Grant Line Road, between Douglas Road and SR 16;
15. Douglas Road, between Mather Boulevard and Sunrise Boulevard;
16. Douglas Road, between Sunrise Boulevard and Grant Line Road; and
17. Grant Line Road, between White Rock Road and Raymer Way.

Vehicle Miles Traveled

Per the CEQA Guidelines, VMT is the primary metric used to identify transportation impacts under CEQA. VMT is a measure of the total amount of vehicle travel occurring on a given roadway system.

In 2013, Senate Bill (SB) 743 was passed to amend Sections 65088.1 and 65088.4 of the Government Code, amend Sections 21181, 21183, 21186, 21187, 21189.1, and 21189.3 of the Public Resources Code (PRC), to add Section 21155.4 to the PRC, to add Chapter 2.7 (commencing with Section 21099) to Division 13 of the PRC, to add and repeal Section 21168.6.6 of the PRC, and to repeal and add Section 21185 of the PRC, relating to environmental quality. As a result of SB 743, as discussed in further detail below, local jurisdictions may no longer rely on vehicle level of service (LOS) and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA. Thus, consistent with the CEQA Guidelines, VMT is the primary metric used to identify transportation impacts to roadway systems within this chapter.

For residential development projects requiring a detailed evaluation of VMT, this analysis relied on guidance from the California Governor's Office of Planning and Research (OPR) to establish the threshold for determination of a significant VMT impact as 15 percent below the regional average VMT per capita. The VMT analysis prepared for the proposed project included the existing average VMT per capita for the entire Sacramento Area Council of Governments (SACOG) region. The existing VMT per capita average for the SACOG region was calculated using the same methodology used to calculate the proposed project's average VMT per capita, which is discussed in the Method of Analysis section. As shown Table 4.10-1, the existing average VMT per capita in the SACOG region is 23.2.

Table 4.10-1
Existing VMT per Capita in the SACOG Region

Trip Type	Internal VMT	External VMT	Total VMT
Origin	18,765,997	8,788,214	27,554,210
Destination	18,765,997	8,788,214	27,554,210
Total	**37,531,994**	**17,576,427**	**55,108,421**
Total Population			**2,376,311**
VMT per Capita			**23.2**

Source: Kimley-Horn. The Preserve, Vehicle Miles Traveled (VMT) Evaluation. August 16, 2021.

Transit System

Sacramento Regional Transit (SRT) offers multiple transit services with stops in the City of Rancho Cordova. SRT's Light Rail trains begin operation at 4:00 AM with service every 15 minutes during the day Monday through Friday and every 30 minutes in the evening and weekends. SRT has four stops in the City on the Gold Line, which runs along Folsom Boulevard Folsom to Downtown Sacramento and connects with the Green and Blue lines for easy access to other areas in the Sacramento region. The Gold and Blue lines operate until midnight on weekdays, and 10:30 PM on weekends. The Green Line only operates Monday through Friday.

SRT's Bus Service also runs through the City and includes five bus routes. The routes connect to the cities of Carmichael, Fair Oaks, Citrus Heights, and Rosemont. All bus routes connect with light rail stops. The routes nearest to the project site include Route 175, running along Douglas Road and Sunrise Boulevard; Route 176, running along Rancho Cordova Parkway, Kiefer Boulevard, and Sunrise Boulevard; and Route 177, running along Zinfandel Drive.

Bicycle and Pedestrian System

Per the City of Rancho Cordova Bicycle Master Plan,[7] the City has 235 miles of roadways, 17 miles of on-street bikeways, and 14 miles of off-street paths. Key regional connections include the American River Parkway Bicycle Trail that runs along the river at the north edge of the City, extending 31 miles from the Discovery Park in Sacramento to the Folsom Reservoir.

The Bicycle Master Plan classifies bike paths throughout the City into three types:[8]

- Class I – Off-street facilities dedicated exclusively for use by bicyclists, pedestrians, and in some cases, equestrians and other non-motorized travel such as roller skating and skateboarding;
- Class II – Delineated bike lanes, which comprise a portion of a street and are meant for bicyclists; and
- Class III – Bike routes, where the travel lane is shared by drivers and bicyclists and are generally designated on roadways with low levels of motor vehicle traffic where bicyclists may share the travel lane.

Due to the rural nature of the project site, existing bicycle and pedestrian facilities are minimal in the immediate vicinity of the site. US 50 does not offer paths designed to accommodate bikes or pedestrians, as the roadway's purpose is to serve high-speed vehicular travel. SR 16 includes shoulders on both sides of the expressway that could accommodate bicyclists; however, the expressway is not officially designated as a bike path in the Bicycle Master Plan. Sunrise Boulevard features sidewalk paths on both sides for pedestrian use; however, the roadway does not include officially designated bike paths. Within the stretch of roadway inside the City limits, Zinfandel Drive serves as a Class II bike path and offers shoulders outside the City limits that could accommodate bicyclists. Raymer Way does not include bike paths or sidewalks. The small stretch of Americanos Boulevard that connects to Edington Drive includes bike paths along both sides of the roadway, and the roadway also includes a sidewalk on the northbound side.

4.10.3 REGULATORY CONTEXT

The following is a description of federal, State, and local environmental laws and policies that are relevant to the review of transportation under the CEQA process.

Federal Regulations

Federal regulations applicable to transportation within the project area do not exist.

State Regulations

The following are the State environmental laws and policies relevant to transportation.

California Department of Transportation

The California Department of Transportation (Caltrans) is responsible for planning, designing, constructing, operating, and maintaining all State-owned roadways in Sacramento County.

[7] City of Rancho Cordova. *City of Rancho Cordova Bicycle Master Plan*. Available at: https://www.cityofranchocordova.org/home/showdocument?id=11416. Accessed January 2021.

[8] While not described in the City of Rancho Cordova Bicycle Master Plan, a Class IV Bikeway, or a separated bikeway or cycle track, is a bikeway for the exclusive use of bicycles and includes a separation between bicycles and vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

Federal highway standards are implemented in California by Caltrans. Any improvements or modifications to the State highway system within the County need to be approved by Caltrans. The County does not have the ability to unilaterally make improvements to the State highway system. The Caltrans Traffic Analysis Framework and Focused Transportation Impact Study Guide outlines when a VMT impact study is needed and what should be included in the scope of the study. US 50 and SR 16 are the facilities within the project vicinity that are under the oversight of Caltrans.

Caltrans has completed transportation or route concept reports for a number of State freeways and highways in the County. The reports identify long-range improvements for specific State freeway and highway corridors and establish the "concept," or desired, LOS for specific corridor segments. The reports also identify long-range improvements needed to bring an existing facility up to expected standards needed to adequately serve 20-year traffic forecasts. Additionally, the reports identify the ultimate design concept for conditions beyond the immediate 20-year design period.

Senate Bill 743

SB 743 (Stats. 2013, ch. 386) requires the Governor's Office of Planning and Research (OPR) to establish new metrics for determining the significance of transportation impacts of projects within transit priority areas (TPAs) and allows OPR to extend use of the metric beyond TPAs. In response, OPR released the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, which identified VMT as the preferred transportation impact metric. OPR applied their discretion to require the use of VMT statewide. SB 743 requires that as of April 27, 2019, vehicle LOS and similar measures related to delay shall not be used as the sole basis for determining the significance of transportation impacts. Determination of impacts based on VMT is required Statewide as of July 1, 2020.

CEQA Guidelines Section 15064.3

Section 15064.3 of the CEQA Guidelines was added in 2018 to address the requirements of SB 743 and the OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA*. Section 15064.3 states the following:

> (a) Purpose.
>
> This section describes specific considerations for evaluating a project's transportation impacts. Generally, vehicle miles traveled is the most appropriate measure of transportation impacts. For the purposes of this section, "vehicle miles traveled" refers to the amount and distance of automobile travel attributable to a project. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in subdivision (b)(2) below (regarding roadway capacity), a project's effect on automobile delay shall not constitute a significant environmental impact.
>
> (b) Criteria for Analyzing Transportation Impacts.
>
> (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared

to existing conditions should be presumed to have a less than significant transportation impact.

(2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in Section 15152.

(3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.

(4) Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.

(c) Applicability.

The provisions of this section shall apply prospectively as described in section 15007. A lead agency may elect to be governed by the provisions of this section immediately. Beginning on July 1, 2020, the provisions of this section shall apply statewide.

Technical Advisory on Evaluating Transportation Impacts in CEQA

The OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* includes potential significance thresholds for different types of land use projects and transportation projects. Distinct threshold recommendations are provided for residential, office, and retail projects. Such uses tend to have the greatest influence on VMT. Lead agencies, using more location-specific information, may develop their own more specific thresholds, which may include other land use types. In developing thresholds for other project types, the *Technical Advisory on Evaluating Transportation Impacts in CEQA* directs lead agencies to consider the purposes described in Section 21099 of the PRC and regulations in the CEQA Guidelines on the development of thresholds of significance (e.g., CEQA Guidelines Section 15064.7). The *Technical Advisory on Evaluating Transportation Impacts in CEQA* suggests that lead agencies may screen out VMT impacts using project size, map-based approaches to low-VMT areas, transit availability, and provision of affordable housing.

Local Regulations

The following are the regulatory agencies and regulations pertinent to the proposed project on a local level.

Sacramento Area Council of Governments VMT Threshold

SACOG has two recommended methods for developing a project-specific VMT estimation:

- Method 1: Use of a "regional" transportation model, either by running the model directly to estimate VMT with and without the project (for large projects) or through use of screening methodologies (for small projects). The transportation model used for VMT estimation could either be the SACOG regional model (SACSIM19) or one of the many variants of the regional model developed by local agencies to provide more detailed analysis within their jurisdictions. If one of the local models is used, it should be sufficiently documented and maintained; or
- Method 2: Use of a customized spreadsheet or web-based tool for a specific study area or jurisdiction that uses information from a regional transportation model to provide VMT analysis.

VMT per capita includes all vehicle "tours" (both work/commute vehicle tours and non-work vehicle tours) that start and end at residential units. The VMT from these tours are grouped and summed to the home location of those tours. The VMT for each home is then summed for all homes in a particular area and divided by the total population of that area to arrive at VMT per capita.

SACSIM19 model is a "tour-based" Travel Demand Model (TDM). The vehicle tours estimated by SACSIM19 that begin and end at home include intermediate stops. For example, a work/commute vehicle tour could include stops on the way to work to drop a child at school and get coffee and a stop on the way home to go to a gym or get groceries. A non-work vehicle tour that begins and ends at home can also include more than one stop. The VMT from these tours must include the full mileage of the entire round-trip tour including all stops based on the City's focused version of the SACSIM19 model, both for Method 1 or Method 2 described above.

Tours made by a household resident that do not begin or end at home (called "business tours") are not included in the VMT per capita estimate. Such tours that begin and end at a work site can include trips for lunch or personal business but also job-related tours, such as deliveries, business meetings etc. These "business tours" are not included for the following reasons:

- The amount of business tours made by individuals can vary more based on their job type than their residential location. In the regional model, the number and length of those tours can vary greatly;
- Including business tours would require that all projects, including small to medium size residential projects, be evaluated using SACSIM19. Excluding business tours from VMT per capita allows use of Method 2 described above. Such methods can involve use of typical Institute of Transportation Engineers-based trip generation estimates (adjusted for relevant factors) along with full tour lengths from SACSIM19 that can be provided by the City for traffic analysis zone (TAZ); and
- The trip generation aspect of the selected method is equivalent to use of only "home-based trips," which is recommended by the OPR Technical Advisory when the regional model is "trip-based". However, by using the full length of home-based tours from SACSIM19, the selected method provides a more accurate estimate of VMT.

Using the State's guidance, absent other substantial evidence, thresholds should be set to 15 percent below the average VMT per capita. Per the VMT Evaluation prepared for the proposed

project, the average VMT per capita in the SACOG region, calculated using the same methodology used to determine the project's average VMT per capita, is 23.2. Therefore, the applicable threshold for project-specific VMT within the SACOG region would be 19.7 VMT per capita.

City of Rancho Cordova General Plan

The following goals and policies related to transportation are applicable to the proposed project:

Goal C.1 Develop a roadway system that accommodates future land uses at the City's desired level of service, provides multiple options for travel routes, protects residential areas from excessive traffic, coexists with other travel modes, and contributes to the quality of the City's residential, commercial, office, and industrial areas.

Policy C.1.1 Implement the Circulation Plan with the Roadway System and Sizing Diagram, shown as Figure C-1 (in the General Plan), as a modified grid network.

Policy C.1.2 Seek to maintain operations on all roadways and intersections at Level of Service D or better at all times, including peak travel times, unless maintaining this Level of Service would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. Congestion in excess of Level of Service D may be accepted in these cases, provided that provisions are made to improve traffic flow and/or promote non-vehicular transportation as part of a development project or a City-initiated project.

Policy C.1.3 Recognize that regional traffic beyond the City's control, as well as circulation system decisions made prior to incorporation or by other agencies, will make it infeasible to achieve the City's desired Level of Service on all roadways. Subject development projects which affect these roadways to the provisions of Policy C.1.2 to provide offsetting improvements to the vehicular and/or non-vehicular transportation system.

Policy C.1.4 Discourage the creation of private roadways, except when the roadways are constructed to public roadway standards and private maintenance is assured, or are used in an affordable residential development.

Policy C.1.5 Design the circulation system serving the City's industrial areas to safely accommodate heavy truck traffic.

Policy C.1.6 Strongly discourage the use of cul-de-sacs on local roads, except where they are necessary due to site-specific concerns, such as habitat areas, that preclude construction of through routes. When cul-de-sacs are used, they should include bicycle and pedestrian connections to trail systems or adjacent major or connector streets.

Policy C.1.7 Require the installation of traffic pre-emption devices for emergency vehicles (police and fire) at all newly constructed intersections and seek to retrofit all existing intersections to incorporate these features.

Policy C.1.8 Ensure that where traffic calming devices or techniques are employed, adequate access is provided for police and fire vehicles.

Policy C.1.9 In an effort to reduce automobile traffic and congestion and increase use of other travel modes, support the use of trip reduction programs.

Policy C.1.10 Encourage maximum block lengths that provide multiple vehicular paths and increase pedestrian circulation around the City at the neighborhood level. The City's preferred block length is less than 600 feet. Block lengths between 600 and 800 feet may be acceptable on a case-by-case basis, and block lengths greater than 800 feet are generally considered unacceptable.

Goal C.2 Establish an extensive, complete, smooth, interconnected, and continuous pedestrian and bicycle network that is a safe and attractive option for local or regional trips or recreation and that connects to the City's neighborhoods, parks and schools, employment areas, and retail centers.

Policy C.2.1 Create a system of on- and off-street trails and multi-use paths, as generally illustrated on Figure C-2 (in the General Plan), that are used for walking and bicycling and that are attractive, natural, and safe transportation corridors.

Policy C.2.3 In designing development projects, design for the pedestrian first.

Policy C.2.4 Provide sidewalks throughout the City. Meandering sidewalks are discouraged, except where necessary to accommodate site-specific features such as trees or habitat.

Policy C.2.5 Provide safe and convenient bicycle access to all parts of the community.

Policy C.2.6 Provide on-street bike lanes along all connector roadways and on local and major roadways when necessary to provide for interconnected routes. On-street bike routes may be provided on local, connector, and major roadways as deemed necessary by the City.

Policy C.2.8 Promote bicycling and walking as a safe and attractive activity. Educate all road users to share the road and interact safely.

Policy C.2.10 Create safe and efficient at-grade crossings of roadways for pedestrian and bicyclists.

Goal C.3 Establish a viable transit system that connects all parts of the City and links with regional destinations.

Policy C.3.1 Advocate and develop transit services which meet the needs of residents and employees in Rancho Cordova.

Policy C.3.2 Maintain and improve access and mobility for seniors, youth, and the disabled with programs that meet their mobility needs.

Policy C.3.3 Promote the integration of transit facilities into new development.

Goal C.5 Fund the circulation system adequately to provide all desired services.

Policy C.5.2 Require proposed new development projects to analyze their contribution to increased traffic and to implement improvements necessary to address their impact on facilities not covered by a fee program.

Policy C.5.3 Assess fees sufficient to cover the fair share portion of all new development impacts on the local and regional transportation system.

Goal C.6 Provide a circulation system that is properly maintained and maximizes safety for all users.

Policy C.6.1 Maintain and repair streets, trails, and other circulation components according to priorities established on an annual basis.

City of Rancho Cordova Capital Improvement Plan

The 2019-2024 Capital Improvement Plan (CIP) represents the fiscal year (FY) 2019-2020 and FY 2020-2021 Capital Improvement Budgets and the three-year plan for FY 2021-2022 to FY 2023-2024. The CIP provides program summary information for the City's various capital improvement funding programs, as well as project summary information (revenue and expenditures) for the specific projects selected for implementation during the CIP period.

The currently adopted CIP allocated a total of $98.483 million in FY 2019-2020 and $35.455 million in FY 2020-2021. The amounts consist of new funding and reallocated funds for existing projects that are crossing fiscal years. Some of the funding allocated to FY 2018-2019 is expected to be needed to be reallocated (rolled over) to FY 2019-2020 as capital projects usually cross fiscal years. The reallocation of prior funding is to the same projects previously approved. Some of the projects are currently under construction and estimates have been made as to how much will be carried over to the next fiscal year. Funding for current planned projects from FY 2019/20 through Post FY 2023/24 total $495.568 million.

City of Rancho Cordova Transportation Impact Guidelines

The City's *Transportation Impact Guidelines* document establishes protocol for transportation impact studies and reports. At the time of this study, the City had not formally revised its guidelines

to address the requirements of SB 743. As such, Kimley-Horn relied heavily on OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* for this analysis.

The requirements to prepare a CEQA transportation VMT analysis apply to all land development projects, except for those that meet at least one of the VMT-related criteria described in OPR's guidance.

4.10.4 IMPACTS AND MITIGATION MEASURES

The standards of significance to be used in identifying transportation impacts are presented below. The standards are based on OPR guidance. In addition, the methods used to analyze the impacts of the project on the roadway, bicycle, pedestrian, and transit systems are provided in this section. A discussion of the project's impacts, as well as mitigation measures where necessary, are also presented.

Standards of Significance

The significance criteria used for this analysis were developed from Appendix G of the CEQA Guidelines. A transportation impact is considered significant if the proposed project would:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities;
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b);
- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment); or
- Result in inadequate emergency access.

Method of Analysis

Documents referenced to prepare this chapter include a TIA and VMT Evaluation prepared for the project by Kimley-Horn. The methodology used within both documents is summarized below.

Level of Service

Pursuant to CEQA Guidelines, VMT is the primary metric used to identify transportation impacts to roadway systems within this chapter. However, in order to analyze the proposed project's compliance with a program, plan, ordinance, or policy addressing the circulation system as outlined in the General Plan's Circulation Element, the analysis below will incorporate LOS. LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity.

The TIA's analysis of LOS was performed in accordance with the County of Sacramento's traffic study guidelines and standards established by the Circulation Element of the City's General Plan. The TIA based its conclusions on the following thresholds of significance:

- Roadways/Signalized Intersections: A project is considered to have a significant effect if it would:
    - Result in a roadway or a signalized intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS; or
    - Increase the V/C ratio by more than 0.05 at a roadway or at a signalized intersection that is operating at an unacceptable LOS without the project.

- Unsignalized Intersections: A project is considered to have a significant effect it if would:
    - Result in an unsignalized intersection movement/approach operating at an acceptable LOS to deteriorate to an unacceptable LOS, and also cause the intersection to meet a traffic signal warrant; or
    - For an unsignalized intersection that meets a signal warrant, increase the delay by more than five seconds at a movement/approach that is operating at an unacceptable LOS without the project.

It should be noted that the TIA's analysis was based on subdivision of the project site into 434 lots. Subsequent to the preparation of the TIA, the applicant modified the project to include six additional lots. A Supplemental Analysis was prepared for the proposed project with the additional six units, which determined that the proposed project's 440 lots would not compromise or deteriorate LOS to an extent that would alter the conclusions in the TIA. Therefore, the TIA's analysis remains applicable. Further information on the methodology incorporated as part of the LOS analysis is included in the TIA (see Appendix K).

Project Vehicle Miles Travelled

Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of VMT attributable to a project is the most appropriate measure of transportation impacts. While changes to driving conditions that increase intersection delay are an important consideration for traffic operations and management, the method of analysis does not fully describe environmental effects associated with fuel consumption, emissions, and public health. Section 15064.3(3) changes the focus of transportation impact analysis in CEQA from measuring impact to drivers to measuring the impact of driving.

OPR's *Technical Advisory on Evaluating Transportation Impacts in CEQA* provided recommendations on many aspects of conducting a CEQA transportation analysis using VMT; however, OPR's guidance was not comprehensive and some key decisions were left for lead agencies to determine. In the absence of formally adopted thresholds and screening criteria, this study followed OPR's technical advisory to the greatest extent.

For residential development projects requiring a detailed evaluation of the VMT produced by the project, the threshold for determination of a significant VMT impact of 15 percent below the regional average of VMT per capita was applied. Consistent with OPR guidance, residential development projects exceeding the threshold carry a significant impact.

Calculating VMT per Capita

VMT per capita is determined using the City's adopted TDM, which is a focused version of SACOG's adopted SACSIM19 regional model. As part of the "SB 743 Implementation Tools Project," SACOG has two recommended methods for project-specific VMT estimation: Method 1 and Method 2, described above.

The VMT Evaluation for the proposed project used the City's version of SACOG's SACSIM19 model with a base year of 2016. A TAZ representing the project area with no other land use was used to isolate the proposed project from all surrounding land uses. The 440 residential units, as planned for the proposed project, were added to the project's TAZ to represent the project. Using socioeconomic characteristics of developments in the immediate vicinity of the project to develop

a profile of the households and persons expected to inhabit the proposed project, a population of 1,333 was estimated.

Using the output trip table from the TDM, automobile trips either starting or ending in the proposed project were selected. These trips were factored based on the auto occupancy; single-occupancy trips were multiplied by one, two-person vehicle trips were multiplied by 0.5, and three-or-more-person trips were multiplied by 0.3. Each trip was multiplied by the model-determined distance based on the model's skim matrix determining the distance between each TAZ during the peak periods to determine the trip's VMT. Each trip's VMT was totaled to determine the total internal-internal VMT related to the proposed project. External-internal and internal-external VMT was calculated based on the methodologies outlined in OPR's guidance. A script file provided by SACOG and included in SACOG's model for VMT post-processing was run, which determined the VMT for trips that either started or ended outside of the model area by TAZ. As the project was separated into its own TAZ, the VMT for the project's TAZ was added to the internal-internal total VMT to determine the total VMT associated with the proposed project. The total VMT was then divided by the population of the proposed project to determine a VMT per capita associated with the proposed project.

VMT Thresholds

As discussed above, the OPR *Technical Advisory on Evaluating Transportation Impacts in CEQA* recommends that lead agencies establish project-specific thresholds for VMT analysis. Per Section 15064.3(b)(3) of the CEQA Guidelines, a lead agency has discretion to choose the most appropriate methodology to evaluate a project's VMT, including whether to express the change in absolute terms, per capita, per household or in any other measure.

The VMT per capita average for the SACOG region was calculated using the same methodology used to calculate the proposed project's average VMT per capita. As detailed in Table 4.10-1, the average VMT per capita in the SACOG region is 23.2. Using the State's guidance, absent other substantial evidence, thresholds should be set 15 percent below the average VMT per capita. Thus, the threshold for the SACOG region is 19.7 VMT per capita.

Cumulative VMT Analysis

Increasingly, the comparison of Existing and Existing Plus Project VMT analysis scenarios has been recognized to result in an evaluation of the worst-case scenario. Such a result is a byproduct of the fact that cumulative analyses include additional developments, which typically have the effect of shortening trips, as the proximity of complementary land uses improves with increasing densities (i.e., houses are closer to shopping opportunities, houses are closer to employment opportunities, etc.). According to State guidelines, when a significant impact is determined under Existing Plus Project conditions, a Cumulative analysis may be required. Therefore, a Cumulative VMT analysis was also performed for the proposed project, the details of which are discussed under Impact 4.10-6.

Project-Specific Impacts and Mitigation Measures

The following discussion of impacts related to transportation is based on implementation of the proposed project in comparison to existing conditions and the standards of significance presented above.

4.10-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and

pedestrian facilities. Based on the analysis below, the impact is *less than significant*.

The proposed project would include subdivision of the 279.3-acre project site into 440 lots, new entry points along Raymer Way, connection to the existing Camden at Somerset Ranch subdivision through an extension of Edington Drive, a new connection to Thornburg Way, and associated improvements. The proposed project's internal circulation system would consist of several drive aisles with circulation to all residences within the subdivision. The project would include construction of five-foot attached sidewalks and three-foot gutters along the majority of internal streets. Six-foot margins along the sides of each street would allow for street parking. Additionally, 0.45-acre of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to surrounding parks. The following discussions evaluate whether the proposed project would result in inconsistencies with the City's LOS standard or impacts from modifying Centennial Drive or to existing or planned pedestrian, bicycle, or transit facilities and services within the project vicinity.

Consistency with LOS Standard

As detailed above, as a result of SB 743, local jurisdictions may no longer rely on vehicle LOS and similar measures related to delay as the basis for determining the significance of transportation impacts under CEQA. However, because the City considers LOS a matter of General Plan policy, a nexus exists for requiring a project to ensure General Plan consistency through project conditions of approval. Per General Plan Policy C.1.2, the City seeks to maintain operations on all roadways and intersections at LOS D or better, including peak travel times, unless maintaining LOS D would, in the City's judgement, be infeasible and/or conflict with the achievement of other goals. For the purposes of the TIA's analysis, inconsistency with applicable LOS standards under Existing Plus Project conditions is determined if a roadway or signalized intersection previously operating at an acceptable LOS deteriorates to an unacceptable level or if the volume-to-capacity ratio (v/c ratio) increases as a result of the proposed project by more than 0.05 at a roadway or signalized intersection already operating at unacceptable LOS. For unsignalized intersections, inconsistency with applicable LOS standards is determined if the intersection under Existing Plus Project conditions deteriorates from an acceptable to an unacceptable LOS or if the intersection meets a traffic signal warrant and would have an increase in delay by more than five seconds.

The TIA analyzed 17 roadway segments in the project vicinity and concluded LOS of 15 segments under Existing Plus Project conditions would continue at acceptable conditions. The remaining two roadway segments (Sunrise Boulevard, between Douglas Road and SR 16; and Grant Line Road, between Raymer Way and Douglas Road) already operate below the applicable standard at LOS F and E, respectively. Under Existing Plus Project conditions, neither segments' v/c ratio would increase by more than 0.05. Therefore, the TIA determined LOS of all roadway segments following implementation of the proposed project would be consistent with applicable LOS standards.

However, out of the 22 intersections analyzed in the TIA, two intersections would operate at unacceptable LOS under Existing Plus Project conditions: the SR 16/Grant Line Road intersection and the Grant Line Road/Raymer Way intersection (see Table 4.10-2).

Table 4.10-2
Existing Plus Project Unacceptable Intersection LOS

ID	Intersection	Control	Peak Hour	Delay (sec)	LOS
Existing Conditions					
17	SR 16/Grant Line Road	Signal	AM	90.9	F
			PM	108.5	F
20	Grant Line Road/Raymer Way	SSSC	AM	2.2 (37 EB)	E
			PM	0.7 (28.1 EB)	D
Existing Plus Project					
17	SR 16/Grant Line Road	Signal	AM	103.7	F
			PM	120.4	F
20	Grant Line Road/Raymer Way	SSSC	AM	146.3 (606 EB)	F
			PM	84.1 (545 EB)	F

Source: Kimley-Horn. Traffic Impact Analysis for The Preserve, City of Rancho Cordova, California. November 4, 2020.

Therefore, to ensure the aforementioned intersection's consistency with the City's acceptable LOS standard set forth in the General Plan, the City shall require the project, if approved, to implement the following conditions of approval:

- The applicant shall pay a fair share of required improvements to the the SR 16/Grant Line Road intersection through payment of City transportation fees; and
- The applicant shall convert the Grant Line Road/Raymer Way intersection from side-street-stop-controlled to signalized along the existing Grant Line Road alignment.

Satisfying such conditions of approval would ensure all intersections identified in the TIA operate in accordance with General Plan Policy C.1.2 under Existing Plus Project conditions.

Centennial Drive

The Centennial Drive Memorandum prepared for the proposed project assessed the potential impacts that could result from modifying Centennial Drive, a future roadway included in the General Plan and depicted in the Circulation Element's Circulation Plan with Roadway System and Sizing map (see Figure 4.10-2). If constructed as portrayed, Centennial Drive would consist of four lanes and run through the project site in an east-west direction. As noted in the Circulation Element, the City's future circulation system, of which Centennial Drive would be a part, has been designed to create a complete transportation network that links together all parts of the City's Planning Area through a variety of interconnected and overlapping modes and travel options.

However, as part of the proposed project's General Plan Amendment (GPA), the stretch of Centennial Drive previously planned to run through the project site would not be constructed. Therefore, the Centennial Drive Memorandum evaluates the potential effects of eliminating the portion of Centennial Drive that would have run through the project site.

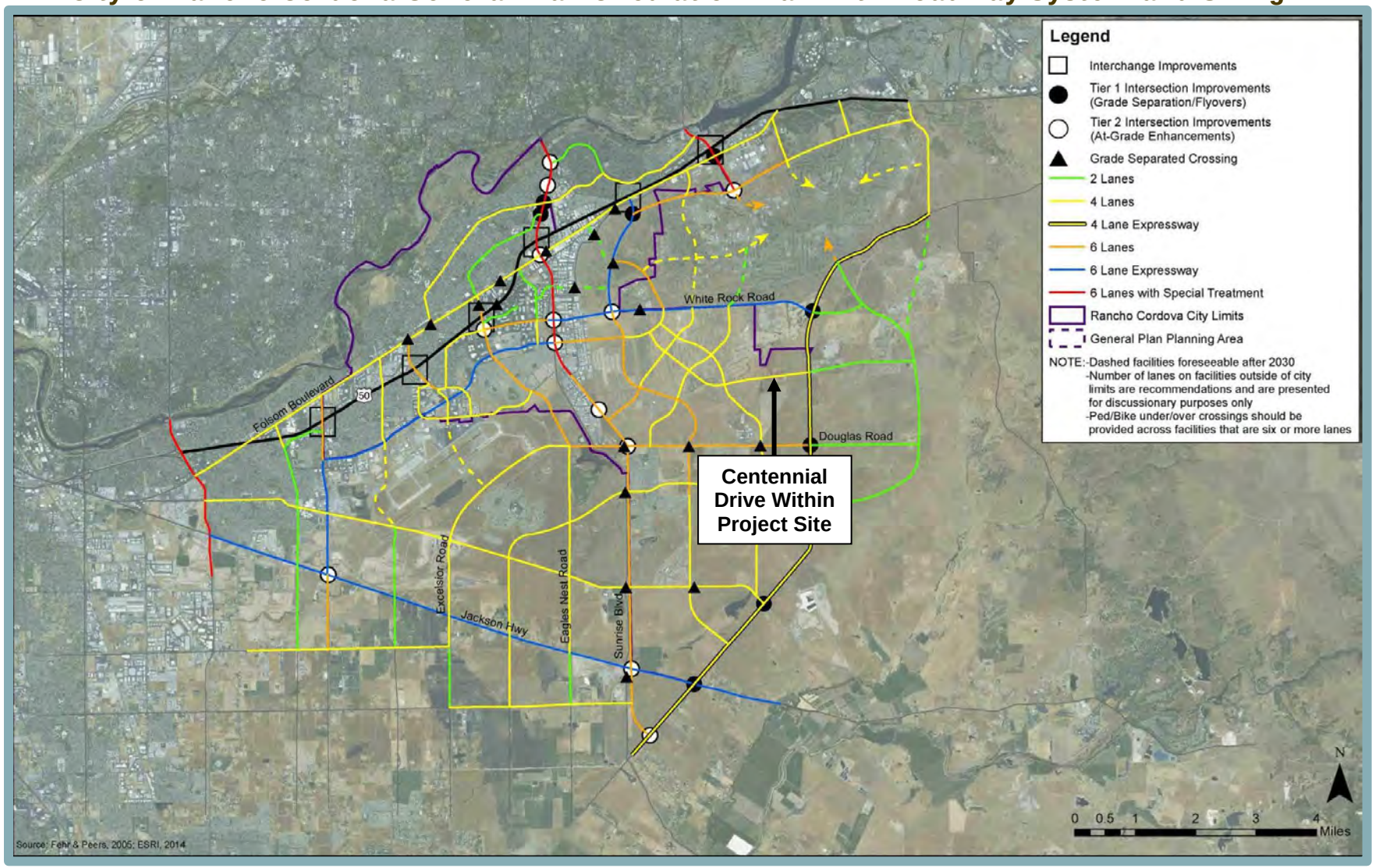
As part of analyzing the effects of modifying Centennial Drive, two versions of the City's TDM were run to predict 2035 traffic volumes along project vicinity roadways, the first version of the model without modifications to Centennial Drive and the second version with the stretch of Centennial Drive between Americanos Boulevard and Grant Line Road removed. The resulting volumes from the two model runs were compared. The largest daily volume increase as a result of modifying Centennial Drive would occur along White Rock Road, immediately west of Grant Line Road. The largest daily volume decrease would be along the stretch of Centennial Drive that would still be constructed, immediately west of Americanos Boulevard. Minimal daily volume differences would occur along Sunrise Boulevard and Rancho Cordova Parkway. As shown in Figure 4.10-3, volumes are expected to fluctuate between increasing by almost 6,500 daily vehicles along White Rock Road to decreasing by 6,600 daily vehicles along Centennial Drive. However, the Centennial Drive Memorandum concluded the change in daily volumes would not noticeably affect operations along any roadway segment.

Additionally, the Centennial Drive Memorandum included an LOS analysis for select roadways in the vicinity of Centennial Drive, both with and without the Centennial Drive connection between Americanos Boulevard and Grant Line Road. Based on the evaluation, roadways are expected to operate in accordance with applicable LOS standards, both with and without the Centennial Drive connection between Americanos Boulevard and Grant Line Road. The results of the LOS analysis are included in Table 4.10-3. Furthermore, the Centennial Drive Memorandum included a follow-up LOS analysis of previously analyzed roadway segments from the Rio del Oro Specific Plan EIR[9] (see Table 4.10-4) to determine to what extent modifying Centennial Drive would affect the previously evaluated roadways' consistency with applicable LOS standards. The evaluation included analysis of SR 16. Based on the results (see Table 4.10-5), the modification of Centennial Drive would not result in any new inconsistencies with applicable LOS standards from what was previously identified in the Rio del Oro Specific Plan EIR.

Finally, the Centennial Drive Memorandum included a VMT assessment that specifically addresses the impact of modifying Centennial Drive (potential VMT impacts from implementing the proposed project are discussed in further detail under Impact 4.10-2). The assessment included the regional (SACOG) VMT for the model runs with and without the Centennial Drive extension and found that VMT was reduced by 6,820 without the Centennial Drive extension; however, it should be noted that the difference reflects a 0.008-percent difference in regional VMT. The model used to perform the analysis includes an iterative process for assigning traffic to the model network. As such, an inherent randomness was introduced, and, thus, the difference should be considered as indication that the removal of Centennial Drive would result in a negligible difference to regional VMT.

[9] EDAW, Inc. *Rio del Oro Specific Plan Project Final EIR*. June 24, 2010.

Figure 4.10-2
City of Rancho Cordova General Plan Circulation Plan with Roadway System and Sizing



Source: City of Rancho Cordova. City of Rancho Cordova General Plan. June 26, 2006.

Figure 4.10-3
2035 Daily Volume Change Without Centennial Drive

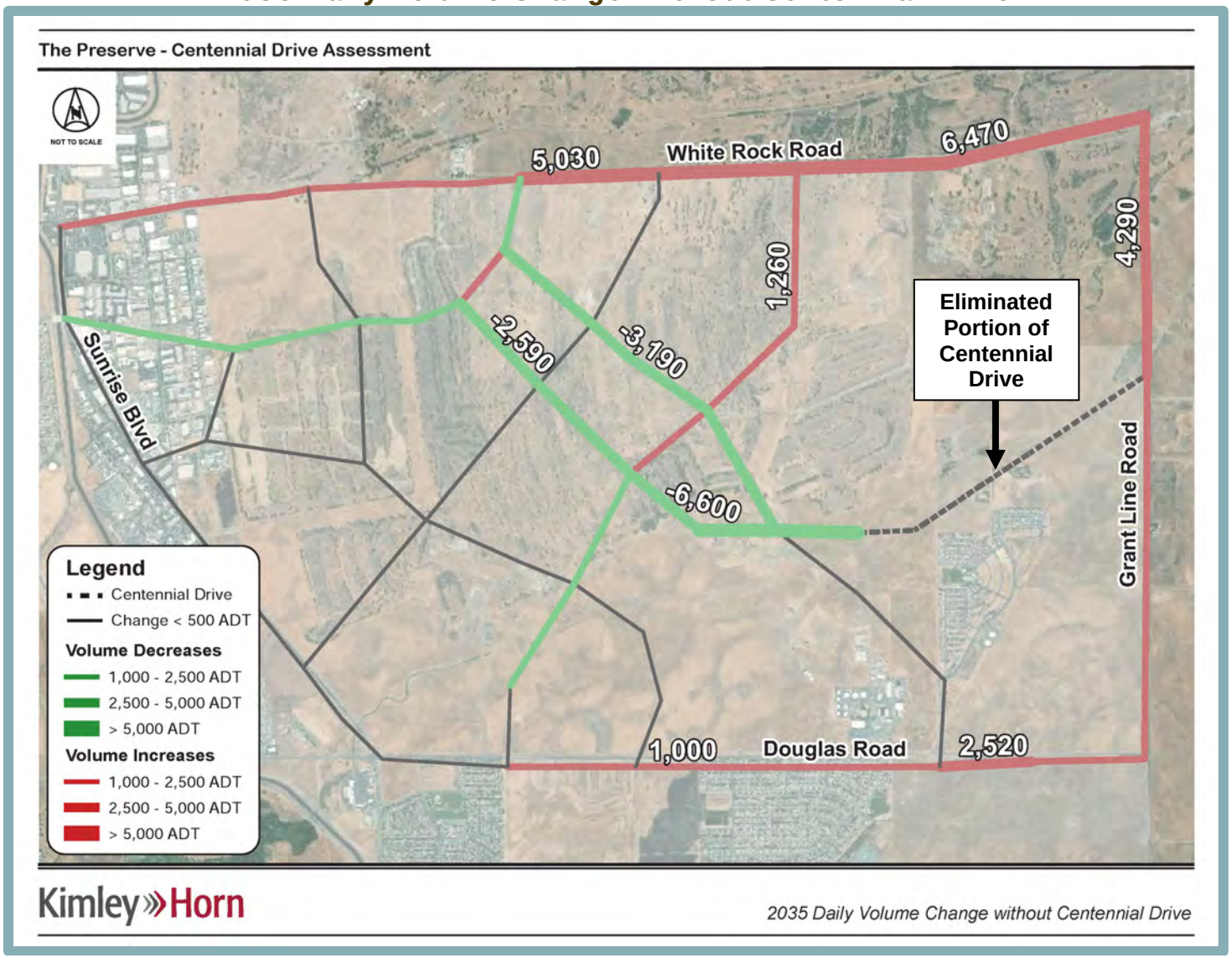


Table 4.10-3
2035 Centennial Drive Modification LOS Analysis

ID	Roadway	Segment	Daily Volume	V/C Ratio	LOS
With Centennial Drive					
1	Douglas Road	Mather Blvd. to Sunrise Blvd.	36,880	0.68	B
2	Douglas Road	Rancho Cordova Pkwy. to Americanos Blvd.	17,550	0.49	A
3	Douglas Road	Americanos Blvd. to Grant Line Road	15,770	0.44	A
4	White Rock Road	Sunrise Blvd. to Rancho Cordova Pkwy.	31,510	0.58	A
5	White Rock Road	Americanos Blvd. to Grant Line Road	22,940	0.42	A
6	White Rock Road	Grant Line Road to Prairie City Road	59,900	0.83	D
7	Sunrise Blvd.	White Rock Road to Douglas Road	47,780	0.88	C
8	Grant Line Road	White Rock Road to Douglas Road	48,230	0.67	B
9	Rancho Cordova Pkwy.	White Rock Road to Rio Del Oro Pkwy.	33,170	0.61	B
10	Rancho Cordova Pkwy.	Rio Del Oro Pkwy. To Douglas Road	17,680	0.49	A
11	Americanos Blvd.	International Road to Centennial Drive	11,170	0.62	B
12	Americanos Blvd.	Centennial Drive to Douglas Road	10,070	0.56	A
Without Centennial Drive					
1	Douglas Road	Mather Blvd. to Sunrise Blvd.	36,840	0.68	B
2	Douglas Road	Rancho Cordova Pkwy. to Americanos Blvd.	18,230	0.51	A
3	Douglas Road	Americanos Blvd. to Grant Line Road	17,250	0.48	A
4	White Rock Road	Sunrise Blvd. to Rancho Cordova Pkwy.	32,080	0.59	A
5	White Rock Road	Americanos Blvd. to Grant Line Road	27,500	0.51	A
6	White Rock Road	Grant Line Road to Prairie City Road	52,540	0.73	C
7	Sunrise Blvd.	White Rock Road to Douglas Road	47,760	0.88	C
8	Grant Line Road	White Rock Road to Douglas Road	51,600	0.72	C
9	Rancho Cordova Pkwy.	White Rock Road to Rio Del Oro Pkwy.	33,170	0.61	B
10	Rancho Cordova Pkwy.	Rio Del Oro Pkwy. To Douglas Road	17,790	0.49	A
11	Americanos Blvd.	International Road to Centennial Drive	8,330	0.46	A
12	Americanos Blvd.	Centennial Drive to Douglas Road	10,240	0.57	A

Source: Kimley-Horn. Memorandum: The Preserve Centennial Drive Considerations. August 16, 2021.

Table 4.10-4
LOS of Rio del Oro Specific Plan EIR Roadways Without Modification to Centennial Drive

ID	Roadway	From	To	Lanes	Daily Volume	LOS Standard	V/C Ratio	LOS	LOS Standard
1	SR 16	Excelsior Rd.	Eagles Nest Road	2	12,900	18,000	0.72	C	D
2	SR 16	Sunrise Blvd.	Grant Line Road	2	17,500	18,000	0.97	E	E
3	Kiefer Blvd.	Grant Line Rd.	SR 16	2	2,100	17,000	0.12	B	E
4	Mather Blvd.	Femoyer St.	Douglas Road	2	20,500	18,000	1.14	F	D
5	Douglas Rd.	Mather Blvd.	Sunrise Blvd.	2	25,400	18,000	1.41	F	D
7	International Dr.	White Rock Rd.	Zinfandel Dr.	4	17,800	36,000	0.49	A	D
8	International Dr.	Zinfandel Dr.	Kilgore Road	4	14,200	36,000	0.39	A	D
9	White Rock Rd.	Zinfandel Dr.	Sunrise Blvd.	6	45,100	54,000	0.84	D	D
10	White Rock Rd.	Sunrise Blvd.	Grant Line Road	2	20,900	18,000	1.16	F	D
11	Zinfandel Dr.	White Rock Rd.	International Dr.	6	23,200	54,000	0.43	A	D
12	Sunrise Blvd.	Gold Country Blvd.	Coloma Rd.	6	92,500	54,000	1.71	F	D
13	Sunrise Blvd.	Coloma Rd.	US 50	6	102,500	54,000	1.90	F	D
14	Sunrise Blvd.	US 50	Folsom Blvd.	6	82,900	54,000	1.54	F	D
15	Sunrise Blvd.	Folsom Blvd.	White Rock Rd.	6	77,300	54,000	1.43	F	D
16	Sunrise Blvd.	White Rock Rd.	Douglas Road	4	65,600	36,000	1.82	F	D
18	Sunrise Blvd.	SR 16	Grant Line Road	2	22,400	18,000	1.24	F	E
19	Grant Line Road	White Rock Rd.	Douglas Road	2	10,500	18,000	0.58	A	D
20	Grant Line Road	Douglas Rd.	SR 16	2	7,800	18,000	0.43	A	D
21	Grant Line Road	SR 16	Sunrise Blvd.	2	6,200	18,000	0.34	A	E
22	Douglas Rd.	Sunrise Blvd.	Jaeger Rd.	4	29,700	36,000	0.83	D	D
23	Douglas Rd.	Americanos Blvd.	Grant Line Road	2	6,500	18,000	0.36	A	D
24	Sunrise Blvd.	Douglas Rd.	Keifer Blvd.	4	39,900	36,000	1.11	F	D
25	Sunrise Blvd.	Keifer Blvd.	SR 16	4	33,800	36,000	0.94	E	D

Source: Kimley-Horn. Memorandum: The Preserve Centennial Drive Considerations. August 16, 2021.

Table 4.10-5
LOS of Rio del Oro Specific Plan EIR Roadways with Modification to Centennial Drive

ID	Roadway	From	To	Lanes	Daily Volume	Volume Difference	V/C Ratio	LOS	LOS Standard
1	SR 16	Excelsior Rd.	Eagles Nest Road	2	12,950	50	0.72	C	D
2	SR 16	Sunrise Blvd.	Grant Line Road	2	17,550	50	0.98	E	E
3	Kiefer Blvd.	Grant Line Rd.	SR 16	2	2,100	0	0.12	B	E
4	Mather Blvd.	Femoyer St.	Douglas Road	2	20,590	90	1.14	F	D
5	Douglas Rd.	Mather Blvd.	Sunrise Blvd.	2	25,350	-50	1.41	F	D
7	International Dr.	White Rock Rd.	Zinfandel Dr.	4	14,800	-3,000	0.41	A	D
8	International Dr.	Zinfandel Dr.	Kilgore Road	4	13,700	-500	0.38	A	D
9	White Rock Rd.	Zinfandel Dr.	Sunrise Blvd.	6	45,500	400	0.84	D	D
10	White Rock Rd.	Sunrise Blvd.	Grant Line Road	2	27,370	6,470	1.52	F	D
11	Zinfandel Dr.	White Rock Rd.	International Dr.	6	22,700	-500	0.42	A	D
12	Sunrise Blvd.	Gold Country Blvd.	Coloma Rd.	6	92,440	-60	1.71	F	D
13	Sunrise Blvd.	Coloma Rd.	US 50	6	102,470	-30	1.90	F	D
14	Sunrise Blvd.	US 50	Folsom Blvd.	6	82,960	60	1.54	F	D
15	Sunrise Blvd.	Folsom Blvd.	White Rock Rd.	6	77,450	150	1.43	F	D
16	Sunrise Blvd.	White Rock Rd.	Douglas Road	4	65,540	-60	1.82	F	D
18	Sunrise Blvd.	SR 16	Grant Line Road	2	22,450	50	1.25	F	E
19	Grant Line Road	White Rock Rd.	Douglas Road	2	15,290	4,790	0.85	D	D
20	Grant Line Road	Douglas Rd.	SR 16	2	8,100	300	0.45	A	D
21	Grant Line Road	SR 16	Sunrise Blvd.	2	6,210	10	0.35	A	E
22	Douglas Rd.	Sunrise Blvd.	Jaeger Rd.	4	30,500	800	0.85	D	D
23	Douglas Rd.	Americanos Blvd.	Grant Line Road	2	9,020	2,520	0.50	A	D
24	Sunrise Blvd.	Douglas Rd.	Keifer Blvd.	4	40,020	120	1.11	F	D
25	Sunrise Blvd.	Keifer Blvd.	SR 16	4	33,870	70	0.94	E	D

Source: Kimley-Horn. Memorandum: The Preserve Centennial Drive Considerations. August, 2021.

Based on the above information, the modification of Centennial Drive as depicted in the General Plan's Circulation Element would not significantly impact the roadway network. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, and the project would result in a less-than-significant impact.

Pedestrian, Bicycle, and Transit Facilities

Due to the rural nature of the project site, existing bicycle and pedestrian facilities are minimal in the immediate vicinity of the project site. Raymer Way does not include bike lanes or sidewalks. The small stretch of Americanos Boulevard that connects to Edington Drive south of the project site includes bike lanes along both sides of the roadway and also features a sidewalk on the northbound side. Nevertheless, the proposed project includes bicycle and pedestrian facilities, consistent with policies contained in the General Plan's Circulation Element. The proposed project would also implement the Morrison Creek Trail, which was identified in the City's Bicycle Master Plan as a future improvement in the project vicinity and would generally be located to the north of the project site, where the Bicycle Master Plan previously planned for a Class I Bike Path to be located. The Morrison Creek Trail would start at Grant Line Road and generally proceed in an east-to-west direction along Raymer Way before connecting to the north of the project site's neighborhood parks, where the trail would then shift in a southern direction and end at the project site's southwestern corner. As previously discussed, the project site's internal street would also include sidewalks, consistent with applicable standards.

Transit services would not be available within the project site; however, from the proposed project's extension of the Edington Drive stub street, the nearest SRT bus stop would be only 1.5 miles to the southeast, near the Borderlands Drive/Canyonlands Drive intersection, providing residents of the proposed project access to SRT Route 175.

Based on the above information, the proposed project would not conflict with any programs, plans, ordinances, or policies addressing transit, bicycle, or pedestrian facilities, and a less-than-significant impact would occur.

Conclusion

Based on the above information, the aforementioned conditions of approval would ensure the proposed project is consistent with applicable LOS standards; the modification of Centennial Drive as depicted in the General Plan's Circulation Element would not create inconsistencies with the roadway network LOS standards; and the proposed project's bicycle and pedestrian facilities would be consistent with policies contained in the General Plan's Circulation Element and the long-range vision depicted in the City's Bicycle Master Plan. Additionally, the proposed project would be located only 1.5 miles from the nearest SRT bus stop. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

4.10-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Existing Plus Project conditions. Based on the analysis below, even with implementation of mitigation, the impact is *significant and unavoidable*.

Section 15064.3 of the CEQA Guidelines states that generally, VMT is the most appropriate measure for evaluating the transportation impacts of a project. Per Section 15064.3(b), VMT exceeding an applicable threshold of significance may indicate a significant impact. As mentioned above, for residential development projects requiring a detailed evaluation of the VMT produced by the project, consistent with OPR guidance, this study established the threshold for determination of a significant VMT impact as 15 percent below the regional average VMT per capita, which is 19.7 VMT per capita for the project region. Residential development projects exceeding the threshold would be considered to result in a significant impact. According to the VMT Evaluation prepared for the proposed project, implementation of the project's 440 residential units would result in a VMT per capita of 23.3 (see Table 4.10-6). Thus, the proposed project would exceed the applicable threshold of 19.7.

Table 4.10-6
Project VMT Per Capita

Trip Type	Internal VMT	External VMT	Total VMT
Origin	15,157	610	15,767
Destination	14,677	604	15,281
Total	29,834	1,214	31,048
Total Population			1,333
VMT Per Capita			**23.3**
Threshold			**19.7**
Exceeds Threshold?			**Yes**

Source: Kimley-Horn. The Preserve, Vehicle Miles Traveled (VMT) Evaluation. August 16, 2021.

As detailed in the VMT Evaluation, mitigation strategies were considered to reduce the project's VMT per capita below the applicable threshold. However, as the project site is located in a developing area with only vacant land and other residential communities, the area offers only limited alternatives to driving for work or shopping needs and restrictions are not placed on parking. In addition, the area's limited access to transit and the inability to implement strategies related to employment and commuting further restricts the proposed project's ability to reduce VMT per capita. Without sufficient mitigation, the impact would be considered ***significant***.

Mitigation Measure(s)

Implementation of the following mitigation measures would reduce the above impact but not to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.

4.10-2(a) *Prior to approval of Improvement Plans, the project applicant shall include in the Improvement Plan submittal a Trail System Plan detailing the applicant's construction of a portion of the regional trail system in the vicinity of the project site. The Trail System Plan shall be subject to*

review and approval by the City of Rancho Cordova Community Development Department.

4.10-2(b) *Prior to the recording of a Final Map, the project applicant shall pay a fair share contribution to provide monetary support for the City's transportation services, as determined by the City of Rancho Cordova Community Development Department. The charges for residential and non-residential development will fund these transportation services as determined appropriate by the City Council. Supplemental transportation services may include, but are not limited to, the following:*

- *Transit Shuttle – shuttle for residents and/or employees between residential areas, employment centers, shopping and service centers and light rail stations and/or other public transit options;*
- *Guaranteed Ride Home – free taxi rides and rental cars for ride sharers in case of an emergency;*
- *Transit Subsidies – financial assistance to encourage residents and employees to use transit or other alternative transportation measures;*
- *Transportation Plans for employers and/or resident groups – plans which guide employers and resident groups on the implementation of trip reduction programs, such as ride share matching or other similar programs;*
- *Education Programs – various programs such as education of transit options, home office set up, alternative commute opportunities;*
- *Infrastructure Support – additional bike racks and lockers, transportation alternative and ride share informational boards/kiosks, and transit facilities;*
- *Transportation Coordinator Training and Support – instruction in mobility (transportation alternatives) for residential groups and work site coordinators; and*
- *Bicycle and Alternative Fuel Vehicle Incentives – incentives for purchasing new bicycles or alternative fuel vehicles.*

4.10-3 Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment). Based on the analysis below, the impact is *less than significant*.

The proposed project would include new entry points along Raymer Way, connection to the existing Camden at Somerset Ranch subdivision through an extension of Edington Drive, a new connection to Thornburg Way, and associated improvements. The proposed project's internal circulation system would consist of several drive aisles with circulation to all residences within the subdivision. The project would include construction of sidewalks and gutters per applicable standards along the internal streets. Six-foot margins along the sides of each street would allow for street parking. Additionally, 0.45-acre of the project site would be designated green infrastructure

which would include enhanced landscaped areas and trails with connection to surrounding parks.

The proposed project's street frontage, roadways, and access points would be designed in accordance with all applicable standards established in the City's Municipal Code. Such standards would include, but not be limited to, Section 12.03.020, which includes requirements related to street improvements; Section 12.12.010 and Section 12.12.020, which pertain to prohibited obstructions at private driveways, public streets, and public street intersections; Section 22.25.050, which establishes provisions for filing a complete application for a tentative map; Section 22.110.040 and Section 22.110.045, which include design standards for primary and minor residential streets; and Section 23.141.020, which pertains to major design review requirements for single-family subdivisions. As such, all designs of the proposed project related to transportation would be required to meet City regulations, which would ensure the proposed project does not substantially increase danger from hazardous roadway design features.

Additionally, the proposed project, through the City's approval of a General Plan Amendment and Rezone, would be compatible with land uses surrounding the site. As such, the project would not be anticipated to increase hazards through incompatible uses. While equipment and vehicles related to construction activities would be present during the construction period of the project, such vehicles and equipment would only be temporarily on-site and would be clearly marked by warning signs and barriers to prevent hazardous interactions with members of the public.

Based on the above information, the proposed project would not conflict with any design standards protecting against transportation-related hazards, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)
None required.

4.10-4 Result in inadequate emergency access. Based on the analysis below, the impact is *less than significant*.

As mentioned above, the proposed project's street frontage, roadways, and access points would be required to be designed in accordance with all applicable standards established in the City's Municipal Code. Such standards would include, but not be limited to, Section 22.110.040 and Section 22.110.045, which include standards related to street design of primary and minor residential streets such that emergency vehicles and police patrol would not be compromised from adequately accessing a residential subdivision. As such, all designs of the proposed project related to transportation and emergency access would be required to meet City standards and regulations.

The proposed project would include two entry points from Raymer Way, as well as connection to the existing Camden at Somerset Ranch subdivision by way of an extension of Edington Drive and a new connection to Thornburg Way. The streets would be between 32 and 50 feet wide (curb to curb), which would allow for emergency

vehicle access within the minimum 20-foot street width requirement. The internal circulation system would consist of several drive aisles with circulation to all residences within the subdivision.

Concerns brought forth in the comment letters and verbal comments on the scope of the EIR during the Notice of Preparation (NOP) public review period included concerns related to an increase in emergency response times due to increased traffic delays and congestion as a result of implementation of the proposed project. As discussed under Impact 4.10-1 and Impact 4.10-5, the project applicant, through City-required conditions of approval, would be required to construct improvements to various intersections in the project vicinity as part of the proposed project that would ensure all intersections identified in the TIA operate in accordance with General Plan Policy C.1.2. Furthermore, as discussed in Chapter 4.9, Public Services and Utilities, of this EIR, under Impact 4.9-1, the Sacramento Metropolitan Fire District (SMFD) has a response time goal of five minutes or less for 80 percent of calls in the City. The SMFD currently meets this goal, and the response time goal is anticipated to be feasible for servicing the proposed project given the proximity of the project site to Station 68, located 2.8 miles southwest of the project site. Additionally, as discussed under Impact 4.9-2 of this EIR, the project applicant would be required to pay the City's applicable Community Facility Fees, which are used to fund new and expanded public service facilities, including police facilities, within the City's Planning Area. Payment of the Community Facility Fees would ensure that adequate police protection facilities are available to serve the project. Staff at the Rancho Cordova Police Department have confirmed that, given payment of applicable development impact fees, impacts related to police protection are not anticipated. Finally, as previously mentioned, the project applicant would be required to comply with the City's Municipal Code to ensure that emergency vehicles and police patrol would not be compromised from adequately accessing a residential subdivision. Altogether, the proposed project would not result in inadequate emergency access or an increase in emergency response times due to increased traffic delays and congestion.

Based on the above information, the proposed project would not hinder emergency access to the site to the extent that access would be deemed inadequate, and a ***less-than-significant*** impact would occur.

Mitigation Measure(s)

None required.

Cumulative Impacts and Mitigation Measures

As defined in Section 15355 of the CEQA Guidelines, "cumulative impacts" refers to two or more individual effects which, when considered together, are considerable, compound, or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects.

For further detail related to the cumulative setting of the proposed project, refer to Chapter 5, Statutorily Required Sections, of this EIR.

4.10-5 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Cumulative Plus Project conditions. Based on the analysis below, the cumulative impact is *less than significant*.

As cumulative development occurs within the City of Rancho Cordova in accordance with the City's General Plan, traffic volumes along local roadways would increase relative to existing conditions, potentially resulting in impacts to roadway facilities along US 50 and City intersections. However, as the proximity of complementary land uses improves through increased density, shortened trips typically result as a byproduct. The VMT Evaluation prepared for the proposed project included a VMT per capita analysis of Cumulative Plus Project conditions. As shown in Table 4.10-7, the proposed project would result in a VMT per capita of 17.1 under such conditions, which is below the applicable threshold of 19.7 VMT per capita. Thus, the proposed project would not exceed the applicable threshold under Cumulative Plus Project conditions.

Table 4.10-7
Cumulative Project VMT Per Capita

Trip Type	Internal VMT	External VMT	Total VMT
Origin	10,943	532	11,475
Destination	10,816	528	11,343
Total	21,759	1,059	22,828
Total Population			1,333
VMT Per Capita			**17.1**
Threshold			**19.7**
Exceeds Threshold?			**No**

Source: Kimley-Horn. The Preserve, Vehicle Miles Traveled (VMT) Evaluation. November 4, 2020.

Based on the above information, the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Cumulative Plus Project conditions, and the proposed project's cumulative impact would be ***less-than-significant***.

Mitigation Measure(s)

None required.

5. Statutorily Required Sections

5. STATUTORILY REQUIRED SECTIONS

5.1 INTRODUCTION

The Statutorily Required Sections chapter of the EIR includes discussions regarding those topics that are required to be included in an EIR, pursuant to CEQA Guidelines, Section 15126.2. The chapter includes a discussion of the proposed project's potential to result in growth-inducing impacts; the cumulative setting analyzed in this EIR; significant irreversible environmental changes; and significant and unavoidable impacts caused by the proposed project.

5.2 GROWTH-INDUCING IMPACTS

State CEQA Guidelines section 15126.2(d) requires an EIR to evaluate the potential growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that could induce growth. Examples of projects likely to have growth-inducing impacts include extensions or expansions of infrastructure systems beyond what is needed to serve project-specific demand, and development of new residential subdivisions or office complexes in areas that are currently only sparsely developed or are undeveloped.

The CEQA Guidelines are clear that while an analysis of growth-inducing effects is required, it should not be assumed that induced growth is necessarily significant or adverse. This analysis examines the following potential growth-inducing impacts related to implementation of the proposed project and assesses whether these effects are significant and adverse (see CEQA Guidelines, Section 15126.2[d]):

1. Foster population and economic growth and construction of housing.
2. Eliminate obstacles to population growth.
3. Affect service levels, facility capacity, or infrastructure demand.
4. Encourage or facilitate other activities that could significantly affect the environment.

Foster Population and Economic Growth and Construction of Housing

As discussed in Chapter 4.7, Land Use and Planning/Population and Housing, of this EIR, development of the site with 440 single-family residential units would increase the available housing within the Rancho Cordova area, which would be expected to increase population in the area. Based on socioeconomic characteristics of developments in the immediate vicinity of the project site, the proposed project is projected to result in a potential population increase of 1,333 residents. The City has anticipated buildout of the Grant Line West Planning Area with a total of 3,393 dwelling units, 9,043 residents, 502,893 square feet (sf) of commercial uses, and 143,684 sf of office uses. Given that the Grant Line West Planning Area is primarily vacant, the population growth resulting from the proposed project would be within the Grant Line West Planning Area population estimates. As noted on page 4.7-15 of Chapter 4.7, the proposed project would be included within the growth projections of the City of Rancho Cordova conducted by the Sacramento Area Council of Governments (SACOG) for the 2020 Metropolitan Transportation

Plan/Sustainable Communities Strategy (MTP/SCS). Because buildout of the City, including the proposed project, has been anticipated in regional development forecasts, implementation of the proposed project would not result in unplanned population growth within the project area. Furthermore, the infrastructure included in the proposed project would be sized to accommodate buildout of the proposed project.

While construction of the proposed project would result in increased construction employment opportunities, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site, employment patterns of construction workers is such that construction workers would not likely, to any significant degree, relocate their households as a result of the construction-related employment opportunities associated with the proposed project.

Although the proposed project would provide short-term employment opportunities, which would likely be filled from the local employee base, with the possible exception of a few household and landscape maintenance jobs, permanent jobs would not be created by the proposed project. Therefore, the proposed project would not result in long-term employment growth in the area.

Appendix G of CEQA Guidelines has been recently amended to clarify that unplanned population growth would be considered a potentially significant impact. However, growth that is planned, and the environmental effects of which have been analyzed in connection with a land use plan or a regional plan, should not by itself be considered an impact. Consequently, the proposed project would result in population growth of the Grant Line West Planning Area, but such growth would be within the buildout projections for the Grant Line West Planning Area, and within growth projections for unincorporated areas within the City of Rancho Cordova. Thus, while the project would foster population and economic growth, such growth would be similar to what has been previously anticipated for the project region, and a less-than-significant impact related to population and economic growth would occur.

Eliminate Obstacles to Population Growth

The elimination of either physical or regulatory obstacles to growth is considered to be a growth-inducing effect. A physical obstacle to growth typically involves the lack of public service infrastructure. The extension of public service infrastructure, including roadways, water mains, and sewer lines, into areas that are not currently provided with these services, would be expected to support new development. Similarly, the elimination or change to a regulatory obstacle, including existing growth and development policies, could result in new growth.

As discussed in Chapter 4.9, Public Services and Utilities, of this EIR, the proposed project would include connection of new eight-inch water mains to an existing 10-inch water main located within Edington Drive, and new or expanded regional infrastructure would not be required. Water conveyance systems needed for the proposed project would be constructed on-site, and would be financed by the project applicant. Consequently, the construction of on-site water infrastructure would not be anticipated to result in elimination of obstacles to population growth.

As also discussed in Chapter 4.9 of this EIR, the proposed project would include two new on-site sewer connections to the existing eight-inch sewer lines within Edington Drive and Thornberg Way. The existing sewer lines connect to the Sacramento Regional County Sanitation District (SRCSD) interceptor system, which carries wastewater directly to the Sacramento Regional Wastewater Treatment Plant (SRWTP). Per the Sewer Study prepared for the proposed project, wastewater generated from the proposed project (0.136 million gallons per day) would constitute

only 0.3 percent of the wastewater treatment demand at buildout of the City's planning area. The wastewater treatment projections used in the General Plan were determined based on population growth estimates, and land use designations were not considered. As such, even though the proposed project includes a change in land use designation, the project would be included as part of the City's planned regional growth estimated. Because City wastewater conveyance facilities currently exist in the project area and would not require the construction of new or expanded infrastructure due to development of the proposed project, the proposed project would not eliminate obstacles to growth that were not previously anticipated for the area.

In regard to roadway improvements, the proposed project would eliminate the possibility of an east-west extension of Centennial Drive through the project site, which is depicted in the Circulation Element of the City's Circulation Plan. The removal of this planned roadway improvement could constitute an obstacle to population growth; however, the proposed project would also include several roadway improvements, including the development of new entry points along Raymer Way, an extension of Edington Drive, a new connection to Thornburg Way, and several new drive aisles which would provide internal circulation with access to all residences within the proposed subdivision. While the proposed roadway extensions would eliminate physical obstacles to undeveloped areas, the areas are already planned for development. As discussed in Chapter 4.7, Land Use and Planning/Population and Housing, of this EIR, the City has anticipated buildout of the Grant Line West Planning Area with a total of 3,393 dwelling units, 9,043 residents, 502,893 sf of commercial uses, and 143,684 sf of office uses. In addition, the SACOG 2020 MTP/SCS has anticipated the addition of 13,421 residential units to the City's housing stock by 2035. Because the surrounding area would result in population growth with or without the proposed project, the extension and construction of the roadways proposed as part of the project would not be considered the elimination of an obstacle to population growth.

Based on the above, the roadway and utility improvements included as part of the proposed project have been generally anticipated by the City and planned for based on regional growth estimates provided by SACOG. Thus, the proposed project would result in a less-than-significant impact in regard to eliminating obstacles to population growth.

Affect Service Levels, Facility Capacity, or Infrastructure Demand

Increases in population that would occur as a result of a proposed project may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental impacts. As discussed in Chapter 4.9, Public Services and Utilities, of this EIR, increased demands for fire and police protection services attributable to the proposed project would necessitate the need for additional resources for the Sacramento Metropolitan Fire District and the Rancho Cordova Police Department. However, the project applicant would be subject to payment of development fees and contribution to tax revenue funds, including the Capital Fire Facilities Fee and the City's applicable Community Facilities Fee. As such, impacts to fire and law enforcement services would be considered fully mitigated with payment of such fees. In addition, wastewater generated by the proposed project could be accommodated by existing wastewater treatment facilities and infrastructure, and existing water supply infrastructure exists to accommodate the domestic and fire flow demands associated with the proposed project.

The landfill that would serve the proposed project has adequate capacity to manage the solid waste generated as a result of the project. Furthermore, mitigation measures set forth in Chapter 4.6, Hydrology and Water Quality, of this EIR would ensure that the proposed project would not create or contribute runoff water that would exceed the capacity of the City's stormwater drainage

systems. Therefore, the proposed project would not increase population such that service levels, facility capacity, or infrastructure demand would require construction of new facilities that could cause significant environmental impacts.

Encourage or Facilitate other Activities That Could Significantly Affect the Environment

This EIR provides a comprehensive assessment of the potential for environmental impacts associated with implementation of the proposed project. Please refer to Chapters 4.1 through 4.10, of this EIR, as well as the attached Initial Study (see Appendix A), which evaluate the potential for impacts from urban development on the project site.

5.3 CUMULATIVE IMPACTS

CEQA Guidelines, Section 15130 requires that an EIR discuss the cumulative and long-term effects of the proposed project that adversely affect the environment. “Cumulative impacts” are defined as “two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts” (CEQA Guidelines, Section 15355). “[I]ndividual effects may be changes resulting from a single project or a number of separate projects” (CEQA Guidelines, Section 15355, subd. [a]). “The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time” (CEQA Guidelines, Section 15355, subd. [b]).

The need for cumulative impact assessment reflects the fact that, although a project may cause an “individually limited” or “individually minor” incremental impact that, by itself, is not significant, the increment may be “cumulatively considerable,” and, thus, significant, when viewed together with environmental changes anticipated from past, present, and probable future projects (CEQA Guidelines, Section 15064, subd. [h(1)], Section 15065, subd. [c], and Section 15355, subd. [b]). Accordingly, particular impacts may be less than significant on a project-specific basis but significant on a cumulative basis if their small incremental contribution, viewed against the larger backdrop, is cumulatively considerable. However, it should be noted that CEQA Guidelines, Section 15064, Subdivision (h)(5) states, “[…]the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project’s incremental effects are cumulatively considerable.” Therefore, even where cumulative impacts are significant, any level of incremental contribution is not necessarily deemed cumulatively considerable.

Section 15130(b) of CEQA Guidelines indicates that the level of detail of the cumulative analysis need not be as great as for the project impact analyses, but that analysis should reflect the severity of the impacts and their likelihood of occurrence, and that the analysis should be focused, practical, and reasonable. To be adequate, a discussion of cumulative effects must include the following elements:

> (1) Either (a) a list of past, present and probable future projects, including, if necessary, those outside the agency’s control, or (b) a summary of projections contained in an adopted general plan or related planning document, or in a prior certified EIR, which described or evaluated regional or area-wide conditions contributing to the cumulative impact, provide that such documents are reference and made available for public inspection at a specified location;

(2) A summary of the individual projects' environmental effects, with specific reference to additional information and stating where such information is available; and

(3) A reasonable analysis of all of the relevant projects' cumulative impacts, with an examination of reasonable, feasible options for mitigating or avoiding the project's contribution to such effects (Section 15130[b]).

For some projects, the only feasible mitigation measures will involve the adoption of ordinances or regulations, rather than the imposition of conditions on a project-by-project basis (Section 15130[c]). Section 15130(a)(3) states that an EIR may determine that a project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable, and thus not significant, if a project is required to implement or fund the project's fair share of a mitigation measure or measures designed to alleviate the cumulative impact. A discussion of cumulative impacts is provided within in each of the technical chapters of this EIR pursuant to CEQA Guidelines Section 15130.

Cumulative Setting

The lead agency should define the relevant geographic area of inquiry for each impact category (id., Section 15130, subd. [b][3]), and should then identify the universe of "past, present, and probable future projects producing related or cumulative impacts" relevant to the various categories, either through the preparation of a "list" of such projects or through the use of "a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact" (id., subd. [b][1]).

As discussed above, two approaches to identifying cumulative projects and their associated impacts can be used. The "list" approach identifies individual projects known to be occurring or proposed in the surrounding area in order to identify potential cumulative impacts. The "projection" approach uses a summary of projections in adopted General Plans or related planning documents to identify potential cumulative impacts. This EIR uses the projection approach for the cumulative analysis and considers the development anticipated to occur upon buildout of the City of Rancho Cordova General Plan. Buildout of the General Plan would include development of several long-range projects, including, but not limited to, the following: the Rio Del Oro Specific Plan, the Sunridge Specific Plan, the Arboretum Specific Plan, the Suncreek Specific Plan, and the Westborough Specific Plan.

Limited situations exist where the geographic setting differs for the analysis of various resource areas. For example, the cumulative geographic setting for the air quality analysis is the Sacramento Valley Air Basin, which is the air basin that the proposed project is located within. Global climate change is, by nature, a cumulative impact. Emissions of greenhouse gases (GHGs) contribute, on a cumulative basis, to the significant adverse environmental impacts of global climate change (e.g., sea level rise, impacts to water supply and water quality, public health impacts, impacts to ecosystems, impacts to agriculture, and other environmental impacts). A single project could not generate enough GHG emissions to contribute noticeably to a change in the global average temperature. However, the combination of GHG emissions from a project in combination with other past, present, and future projects could contribute substantially to the world-wide phenomenon of global climate change and the associated environmental impacts. Although the geographical context for global climate change is the Earth, for analysis purposes under CEQA, and due to the regulatory context pertaining to GHG emissions and global climate

change applicable to the proposed project, the geographical context for global climate change in this EIR is limited to the State of California.

In addition, as discussed in Chapter 4.10, Transportation, of this EIR, the cumulative traffic analysis relied on the County of Sacramento's traffic study guidelines and standards established by the Circulation Element of the City of Rancho Cordova's General Plan. Based on the County's requirements, the growth assumptions used in the traffic analysis include cumulative buildout of land uses identified in the Rancho Cordova General Plan, with and without the proposed project. The cumulative setting for the transportation and circulation analysis also includes the anticipated roadway geometry and traffic control anticipated to be present in 2035.

Cumulative impacts are analyzed in each of the technical chapters of this EIR (Chapters 4.1 through 4.10). For those e environmental resource areas that have a different cumulative setting from the general cumulative setting described above, the specific cumulative sitting for that resource area is presented along with the cumulative impact discussion in the relevant resource area chapter of the EIR.

5.4 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Per CEQA Guidelines Section 15126.2(c), this EIR is required to include consideration of significant irreversible environmental changes that would be caused by the proposed project, should the project be implemented. An impact would be determined to be a significant and irreversible change in the environment if:

- Buildout of the project area could involve a large commitment of nonrenewable resources;
- The primary and secondary impacts of development could generally commit future generations to similar uses (e.g., a highway provides access to a previously remote area);
- Development of the proposed project could involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The phasing and eventual development of the project could result in an unjustified consumption of resources (e.g., the wasteful use of energy).

The proposed project would likely result in, or contribute to, the following significant irreversible environmental changes:

- Conversion of vacant land to a fully built-out residential community, thus precluding alternative land uses in the future; and
- Irreversible consumption of goods and services, such as fire, police, and school services, associated with the future population; and
- Irreversible consumption of energy and natural resources, such as water, electricity, and natural gas, associated with the future residents.

Therefore, the proposed project would likely result in significant irreversible environmental changes, as noted above.

5.5 SIGNIFICANT AND UNAVOIDABLE IMPACTS

According to CEQA Guidelines, an EIR must include a description of those impacts identified as significant and unavoidable should the proposed action be implemented (CEQA Guidelines Section 15126.2[b]). Such impacts would be considered unavoidable when the determination is

made that either mitigation is not feasible or only partial mitigation is feasible such that the impact is not reduced to a level that is less-than-significant.

Based on the analysis provided in Chapters 4.1 through 4.10 of this EIR, the below listed impact was determined to be significant and unavoidable. All other impacts identified in this EIR could be eliminated or reduced to a less-than-significant level by mitigations imposed by the City. The final determination of the significance of impacts and the feasibility of mitigation measures would be made by the City as part of the City's certification action.

4.10-2 Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b) under Existing Plus Project conditions.

As noted on page 4.10-26 of Chapter 4.10, Transportation, of this EIR, according to the VMT Evaluation prepared for the proposed project, implementation of the proposed project would result in a VMT per capita of 23.3, which would exceed the applicable threshold of 19.7. Considering the project site is located in a developing area surrounded by only vacant land and other residential communities, the project area offers limited alternatives to driving for work or shopping needs and restrictions are not placed on parking. In addition, the area's limited access to transit and the inability to implement strategies related to employment and commuting further restricts the proposed project's ability to reduce VMT per capita. Implementation of Mitigation Measures 4.10-2(a) and (b) would reduce the impact, but not to a less-than-significant level. Therefore, the impact would remain *significant and unavoidable*.

6. Alternatives Analysis

6. ALTERNATIVES ANALYSIS

6.1 INTRODUCTION

The Alternatives Analysis chapter of the EIR includes consideration and discussion of a range of reasonable alternatives to the proposed project, as required per CEQA Guidelines Section 15126.6. Generally, the chapter includes discussions of the following: the purpose of an alternatives analysis; a reasonable range of project alternatives and their associated impacts in comparison to the proposed project's impacts; and the environmentally superior alternative.

6.2 CEQA REQUIREMENTS FOR ALTERNATIVE ANALYSIS

The primary intent of the alternatives evaluation in an EIR, as stated in Section 15126.6(a) of the CEQA Guidelines, is to "[…] describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Section 15126.6(f) of CEQA Guidelines states, "The range of alternatives required in an EIR is governed by a "rule of reason" that requires the EIR to set forth only those alternatives necessary to permit a reasoned choice." Section 15126.6(f) of CEQA Guidelines further states:

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

In addition, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

The CEQA Guidelines provide the following guidance for discussing alternatives to a proposed project:

- An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).
- Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these

alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6[b]).

- The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination […] Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts (CEQA Guidelines Section 15126.6[c]).
- The EIR shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. A matrix displaying the major characteristics and significant environmental effects of each alternative may be used to summarize the comparison (CEQA Guidelines Section 15126.6[d]).
- If an alternative would cause one or more significant effects in addition to those that would be caused by the project as proposed, the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed (CEQA Guidelines Section 15126.6[d]).
- The specific alternative of "no project" shall also be evaluated along with its impact. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. The no project alternative analysis is not the baseline for determining whether the proposed project's environmental impacts may be significant, unless it is identical to the existing environmental setting analysis which does establish that baseline (CEQA Guidelines Section 15126.6[e][1]).
- If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives (CEQA Guidelines Section 15126.6[e][2]).

Project Objectives

Based on the above, reasonable alternatives to the project must be capable of feasibly attaining most of the basic objectives of the project. The following objectives have been submitted by the project applicant:

1. Consolidate the remaining parcels in the Grant Line West Planning Area of the City of Rancho Cordova General Plan in a manner that concentrates development south of Morrison Creek to avoid and minimize potential conflicts with the South Sacramento Habitat Conservation Plan.
2. Develop a residential mixed-density community that is consistent with the General Plan conceptual land use designation for the Grant Line West Planning Area.
3. Develop a residential community that is contiguous to and compatible with adjacent existing development and that provides a range of housing choices.
4. Utilize existing utility capacity for maximum efficiency.
5. Develop a residential community that can provide timely housing to help meet current demand.
6. Contribute to the overall bicycle and pedestrian connectivity of the City by building key components of the regional trail system and providing strong connections for both existing and future residents.
7. Enhance the City's network of parks, trails, and open spaces for the enjoyment of all residents.

6.3 SELECTION OF ALTERNATIVES

The requirement that an EIR evaluate alternatives to the proposed project or alternatives to the location of the proposed project is a broad one; the primary intent of the alternatives analysis is to disclose other ways that the objectives of the project could be attained, while reducing the magnitude of, or avoiding, one or more of the significant environmental impacts of the proposed project. Alternatives that are included and evaluated in the EIR must be feasible alternatives. However, the CEQA Guidelines require the EIR to "set forth only those alternatives necessary to permit a reasoned choice." As stated in Section 15126.6(a), an EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. The CEQA Guidelines provide a definition for "a range of reasonable alternatives" and thus limit the number and type of alternatives that may need to be evaluated in a given EIR. According to the CEQA Guidelines Section 15126.6(f):

> The alternatives shall be limited to ones that would avoid or substantially lessen any of the significant effects of the project. Of those alternatives, the EIR need examine in detail only the ones that the lead agency determined could feasibly attain most of the basic objectives of the project.

First and foremost, alternatives in an EIR must be feasible. In the context of CEQA Guidelines Section 21061.1, "feasible" is defined as:

> ...capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Finally, an EIR is not required to analyze alternatives when the effects of the alternative "cannot be reasonably ascertained and whose implementation is remote and speculative."

Alternatives Evaluated in this EIR

The following alternatives are evaluated in this section:

1. No Project Alternative;
2. Reduced VMT Alternative; and
3. Reduced Footprint Alternative.

Each of the project alternatives is described in detail below, with a corresponding analysis of each alternative's consistency with the project objectives and evaluation of impacts to the existing environment in comparison to the proposed project's identified impacts. While an effort has been made to include quantitative data for certain analytical topics, where possible, qualitative comparisons of the various alternatives to the project are primarily provided. Such an approach to the analysis is appropriate as evidenced by CEQA Guidelines Section 15126.6(d), which states that the significant effects of the alternative shall be discussed, but in less detail than the significant effects of the project as proposed. The analysis evaluates impacts that would occur with the alternatives relative to the significant impacts identified for the proposed project. When comparing the potential impacts resulting from implementation of the foregoing alternatives, the following terminology is used:

- "Fewer" = Less than Proposed Project;
- "Similar" = Similar to Proposed Project; and
- "Greater" = Greater than Proposed Project.

When the term “fewer” is used, the reader should not necessarily equate this to elimination of significant impacts identified for the proposed project. For example, in many cases, an alternative would reduce the relative intensity of a significant impact identified for the proposed project, but the impact would still be expected to remain significant under the alternative, thereby requiring mitigation. In other cases, the use of the term “fewer” may mean the actual elimination of an impact identified for the proposed project altogether. Similarly, use of the term “greater” does not necessarily imply that an alternative would require additional mitigation beyond what has been required for the proposed project. To the extent possible, this analysis will distinguish between the two implications of the comparative words “fewer” and “greater”.

See Table 6-1 at the end of this chapter for a comparison of the environmental impacts resulting from the considered alternatives and the proposed project.

1. No Project Alternative

The following section includes an overview providing background related to this alternative, a description of this alternative, an evaluation of the alternative’s consistency with project objectives, and an impact comparison analysis.

Overview

CEQA requires the evaluation of the comparative impacts of the “No Project” alternative (CEQA Guidelines Section 15126.6[e]). Analysis of the no project alternative shall:

> “… discuss […] existing conditions […] as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.” (*Id.*, subd. [e][2]) “If the project is other than a land use or regulatory plan, for example a development project on identifiable property, the ‘no project’ alternative is the circumstance under which the project does not proceed. Here the discussion would compare the environmental effects of the property remaining in the property’s existing state versus environmental effects that would occur if the project were approved. If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this ‘no project’ consequence should be discussed. In certain instances, the no project alternative means ‘no build,’ wherein the existing environmental setting is maintained. However, where failure to proceed with the project would not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project's non-approval and not create and analyze a set of artificial assumptions that would be required to preserve the existing physical environment.” (*Id.*, subd. [e][3][B]).

Description of Alternative

For the purposes of this analysis, the No Project Alternative assumes the project site would remain in its current condition. Currently, the southern portion of the site contains two single-family residences and associated outbuildings. An orchard is located within the northeastern portion of the site. A third single-family residence and associated outbuildings exist within the northwestern portion of the site. The remainder of the site consists primarily of non-native grasses, scattered trees, and associated access roads. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal drainage corridors and wetlands. Morrison Creek runs northeast to southwest through the project site.

Because the No Project Alternative would result in the continuance of current on-site conditions, it is reasonable to assume that, for the time being, the site would remain generally undeveloped. However, the alternative’s nullification of the proposed project would eventually impact the future

construction of Centennial Drive. As depicted in Figure C-1, Circulation Plan with Roadway System and Sizing, of the Circulation Element of the General Plan, the City has planned for the future construction of Centennial Drive, which would include a roadway portion that runs through the project site. Under the proposed project, the General Plan Amendment (GPA) would amend the General Plan to no longer include the construction of this portion of Centennial Drive. However, without the proposed project, the General Plan would not need to be amended to accommodate the project. Therefore, without the GPA, Centennial Drive would be constructed as depicted in the Circulation Element. Centennial Drive would be expected to accommodate vehicles from land uses in the project site's vicinity, including the Camden at Somerset Ranch residential subdivision to the south, a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, and the eventual Rio Del Oro residential community to the west.

Consistency with Project Objectives

The No Project Alternative would not meet any of the objectives because the alternative would not consolidate the remaining parcels in the Grant Line West Planning Area in a manner that concentrates development south of Morrison Creek to avoid and minimize potential conflicts with the South Sacramento Habitat Conservation Plan; develop a residential mixed-density community that is consistent with the General Plan conceptual land use designation for the Grant Line West Planning Area; develop a residential community that is contiguous to and compatible with adjacent existing development and that provides a range of housing choices; utilize existing utility capacity for maximum efficiency; develop a residential community that can provide timely housing to help meet current demand; contribute to the overall bicycle and pedestrian connectivity of the City by building key components of the regional trail system and providing strong connections for both existing and future residents; or enhance the City's network of parks, trails, and open spaces for the enjoyment of all residents.

Impacts of Alternative

The following provides a discussion evaluating the impacts of this alternative on baseline conditions as compared to the impacts of the proposed project on baseline conditions for each impact area addressed within this EIR.

Air Quality and Greenhouse Gas Emissions

Under the No Project Alternative, the project site would remain relatively free of development and would be consistent with the predominantly rural nature currently exhibited by the site. The subdivision of the site into 440 single-family residential lots, construction of neighborhood roadways, implementation of two park areas, and associated improvements would not occur. As a result, Mitigation Measure 4.1-7, which requires the purchase of carbon offsets to address impacts related to GHG emissions associated with the proposed project, would not be required.

However, without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element and would be expected to accommodate vehicles from land uses in the project vicinity, including the Camden at Somerset Ranch residential subdivision to the south, a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, and the eventual Rio Del Oro residential community to the west. While construction of the roadway would result in GHG emissions from construction, the alternative would generate fewer total GHG emissions as compared to the proposed project, as the GHG emissions associated with the proposed project would include emissions from construction and operation of the residences as well as emissions from the new vehicle trips

associated with operation of the residences. Conversely, GHG emissions associated with operation of Centennial Drive would not result in net new emissions, as the roadway would largely accommodate existing traffic and traffic already planned for the area. In fact, the operation of Centennial Drive through the project site has to potential to reduce regional VMT and associated GHG emissions. Therefore, the alternative's impacts related to air quality and GHG emissions would be fewer as compared to the proposed project.

Biological Resources

Under the No Project Alternative, the project site would remain generally undeveloped and would be consistent with the predominantly rural nature currently exhibited by the site, as the currently proposed project's components would not be implemented. Therefore, Mitigation Measures 4.2-1 through 4.2-10 and 4.2-12, which address impacts to on-site biological resources associated with the proposed project, would not be required. However, without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element, and would accommodate existing traffic and traffic already planned for the area in the General Plan. While construction of the roadway could potentially result in impacts to biological resources, the alternative would result in a smaller area of ground disturbance as compared to the proposed project. Therefore, the alternative's impacts related to biological resources would be fewer as compared to the proposed project.

Cultural and Tribal Cultural Resources

Under the No Project Alternative, the project site would remain generally undeveloped Therefore, Mitigation Measures 4.3-2 and 4.3-3(a) through (d) would not be required. However, without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element, and would accommodate existing traffic and traffic planned for the area in the General Plan. While construction of the roadway could potentially result in impacts to unknown buried cultural and tribal cultural resources, should such resources exist, the alternative would result in a smaller area of ground disturbance as compared to the proposed project. Therefore, the alternative's impacts related to cultural and tribal cultural resources would be fewer as compared to the proposed project.

Geology and Soils/Mineral Resources

Under the No Project Alternative, the project site would remain generally undeveloped. Therefore, Mitigation Measures 4.4-3 and 4.4-5, which ensure preparation and compliance with a final geotechnical engineering report and address potential impacts to paleontological resources, would not be required. However, without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element, and would accommodate existing traffic and traffic planned for the area in the General Plan. While construction of the roadway could potentially result in soil erosion or the loss of topsoil due to ground disturbance and grading activities, the alternative would result in a smaller area of ground disturbance as compared to the proposed project. Therefore, the alternative's impacts related to geology, soils, and mineral resources would be fewer as compared to the proposed project.

Hazards and Hazardous Materials

Under the No Project Alternative, the project site would remain generally undeveloped. Therefore, Mitigation Measures 4.5-2(a) through (f) would not be required. However, without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element. Construction of the roadway could potentially result in impacts related to the disturbance of various on-site Recognized Environmental Conditions, as the project site has the

potential to contain an underground storage tank, an unknown underground storage system, and other fuel storage vessels in the northern portions of the project site. The southern portion of the project site contains existing structures built prior to 1980 and 1970 that are likely to contain asbestos-containing building materials and lead-based paints. Additionally, soils in the vicinity of the existing on-site structures have the potential to be contaminated with termiticides. As such, the ground-disturbing activities and potential demolition of on-site structures associated with construction of Centennial Drive could expose the public or environment to a significant hazard through reasonably foreseeable upset and accident conditions involving the release of on-site hazardous materials into the environment. However, the alternative would result in a smaller area of ground disturbance as compared to the proposed project. Therefore, the alternative's impacts related to hazards and hazardous materials would be fewer as compared to the proposed project.

Hydrology and Water Quality

Under the No Project Alternative, the project site would remain generally undeveloped. Therefore, Mitigation Measures 4.6-1(a) and (b), 4.6-2, and 4.6-3 which address potential impacts related to short-term construction-related water quality and ensure compliance with best management practices (BMPs) during construction, would not be required. However, without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element, which could require similar mitigation measures as those to which the proposed project would be subject. While construction of the roadway could potentially result in impacts related to water quality by introducing new impervious surfaces, the alternative would result in a smaller area of ground disturbance as compared to the proposed project. Construction of Centennial Drive would also be required to adhere to all applicable federal, State, and local regulations regarding water quality. Therefore, the alternative's impacts related to hydrology and water quality would be fewer as compared to the proposed project.

Land Use and Planning/Population and Housing

Under the No Project Alternative, the project site would remain generally undeveloped and would be consistent with the predominantly rural nature currently exhibited by the site, as the currently proposed project's components would not be implemented. Considering the existing conditions are consistent with the land use and zoning designation for the site, the GPA and Rezone to accommodate the land uses planned by the proposed project would not be required.

Without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element, accommodating existing traffic and traffic already planned for the area in the General Plan. As construction and operation of the roadway would be consistent with the General Plan, implementation of Centennial Drive would not conflict with a land use plan or induce substantial unplanned population growth in an area, as the roadway would be implemented to accommodate planned population growth. Additionally, Centennial Drive would not physically divide an established community or displace substantial numbers of existing people or housing, as the site is predominantly rural. Therefore, the alternative's impacts related to land use and planning and population and housing would be fewer as compared to the proposed project.

Noise

Under the No Project Alternative, the project site would remain generally undeveloped. Therefore, Mitigation Measure 4.8-1, which serves to reduce construction noise, would not be required. However, without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element, which could require similar mitigation

measures as those to which the proposed project would be subject. While construction of the roadway could potentially result in noise impacts related to noise generated by construction vehicles and equipment, the alternative's construction activities would be shorter as compared to the proposed project, given the smaller area of ground disturbance. Additionally, implementation of Centennial Drive would occur in a greater distance from the Camden at Somerset Ranch residential subdivision to the south than would implementation of the proposed project. As such, construction of Centennial Drive would be expected to generate less noise than the proposed project, as Centennial Drive would require less construction activities and less time to implement. Construction of Centennial Drive would also adhere to Section 6.68.090 of the City's Municipal Code, which establishes time periods in which construction is restricted, as well as General Plan Policies N.1.4, N.1.5, and N.1.7, which apply to roadway construction. Therefore, the alternative's impacts related to noise would be fewer as compared to the proposed project.

Public Services and Utilities

Under the No Project Alternative, the project site would remain generally undeveloped. Therefore, under the alternative, no impact would occur related to public services or utilities. Without implementation of the proposed project, Centennial Drive would eventually be constructed as depicted in the Circulation Element. Construction of Centennial Drive would not result in impacts to public services and utilities, as the roadway would not introduce, either directly or indirectly, unplanned growth that would result in the provision of new or physically altered governmental services and/or facilities. As the construction of Centennial Drive has been planned for in the Circulation Element, the roadway would primarily serve to accommodate the City's existing population and growth anticipated for the City in the General Plan. Given that Centennial Drive would serve to accommodate the City's existing and future population already planned for in the General Plan, the roadway would not be expected to result in significant impacts related to utilities services. Therefore, the alternative's impacts related to public services and utilities would be fewer as compared to the proposed project.

Transportation

Under the No Project Alternative, the project site would remain generally undeveloped. Therefore, Mitigation Measures 4.10-2(a) and (b), which address impacts related to VMT, would not be required. The alternative would not result in the introduction of a significant number of new residences and associated improvements to the project site, which would, in turn, preclude new VMT associated with the residences. In addition, the construction of Centennial Drive through the project site would provide new roadway connections which, in general, tends to reduce regional VMT. Therefore, the alternative's impacts related to transportation would be fewer as compared to the proposed project.

2. Reduced VMT Alternative

The following section includes a description of the Reduced VMT Alternative, an evaluation of the alternative's consistency with project objectives, and an impact comparison analysis.

Description of Alternative

The Reduced VMT Alternative was designed to reduce project-generated total VMT to 26,260 VMT per day, which would represent the total project-generated VMT if the proposed project were to satisfy the City's proposed VMT threshold of 19.7 per capita (1,333 residents * 19.7 VMT per capita threshold = 26,260 VMT). In order for the alternative to not exceed a total per-day VMT of 26,260, the number of residential units constructed as part of the proposed project would need to be reduced from 440 to 376 units.

The Reduced VMT Alterative would therefore consist of 376 single-family residential lots on the same 98.9-acre development footprint. Lot sizes would be larger in size than those of the currently proposed project, and the reduction in units would result in a density of 3.8 dwelling units per acre (du/ac). Under the Reduced VMT Alternative, the project would require a rezone of the 98.9 acres to the RD-4 zoning district.

Because the Reduced VMT Alternative would result in a similar development footprint to the proposed project, access to the site under the alternative would continue to be provided by two entry points along Raymer Way. Edington Drive would still be extended to provide access from the site to the existing Camden at Somerset Ranch subdivision. However, with the reduction in units, the site would require fewer interior streets.

The alternative's utility connections would also be similar to the proposed project. Units would connect to the existing 10-inch water main in Edington Drive by way of a new eight-inch water main; however, given the reduced number of units, fewer interior water lines would be required. The same would hold true for the site's new sewer lines. The units would connect to existing eight-inch sewer lines in Edington Drive and Thornberg Way, but the alternative would require fewer sewer line connections to as compared to the proposed project. The alternative would still implement two bio-retention basins in the northwest portion of the site, and new drain inlets and underground storm drains would also be installed. The GPA would still be required to amend the General Plan's Circulation Element, which calls for extending Centennial Drive through the site.

Consistency with Project Objectives

Because the Reduced VMT Alternative would consist of 376 units, resulting in a density of 3.8 du/ac, the alternative would be inconsistent with the General Plan land use designation for the Grant Line West Planning Area, which includes a mix of Medium-Density Residential, with a density of 6.1 to 18 du/ac, and High-Density Residential, with a density of 18 to 40 du/ac. As a result, the Reduced VMT Alternative would be inconsistent with Objective #2. The alternative would meet Objectives #1, #3, #4, #5, #6, and #7, as the reduction of units would not affect the ability for the alternative to consolidate the remaining parcels in the Grant Line West Planning Area in a manner that concentrates development south of Morrison Creek; develop a residential community that is contiguous to and compatible with adjacent existing development; utilize existing utility capacity for maximum efficiency; develop a residential community that can provide timely housing; contribute to the overall bicycle and pedestrian connectivity of the City; or enhance the City's network of parks, trails, and open spaces.

Impacts of Alternative

The following provides a discussion evaluating the impacts of this alternative on baseline conditions as compared to the impacts of the proposed project on baseline conditions for each impact area addressed within this EIR.

Air Quality and Greenhouse Gas Emissions

Due to the Reduced VMT Alternative's reduction in the number of residential units, fewer internal roadways and less connections to water and sewer service would be required. However, site access, stormwater treatment and diversion, and the elimination of Centennial Drive within the project site would remain largely similar under the alternative as compared to the proposed project.

Although the alternative would include less units, the same area of disturbance would still be required to implement the alternative's components. Therefore, Mitigation Measure 4.1-7, which address impacts related to GHG emissions or climate change, may still be required. However, factoring in the alternative's reduced number of lots, which would result in a reduction of air pollutants and GHG emissions generated through construction and operation of the residences, as well as associated total VMT, the alternative's impacts related to air quality and GHGs would be fewer than the proposed project.

Biological Resources

With the increased lot sizes under the Reduced VMT Alternative, the area of impact to implement the alternative would be equivalent to the proposed project. Therefore, Mitigation Measures 4.2-1 through 4.2-10 and 4.2-12 would still be required. Given the similar area of disturbance, the alternative's impacts to biological resources would be similar to the proposed project.

Cultural and Tribal Cultural Resources

The area of impact to implement the alternative would be equivalent to the proposed project. Therefore, Mitigation Measures 4.3-2 and 4.3-3(a) through (d), which address impacts to cultural and tribal cultural resources, would still be required. Given the similar area of disturbance, the alternative's impacts to cultural and tribal cultural resources would be similar to the proposed project.

Geology and Soils/Mineral Resources

Because the alternative would still require compliance with recommendations of a final geotechnical engineering report and mitigation to address potential impacts to buried paleontological resources, Mitigation Measures 4.4-3 and 4.4-5 would still be required. Additionally, because the area of disturbance would be equivalent to the proposed project, the alternative's impacts to geology, soils, and mineral resources would be similar to the proposed project.

Hazards and Hazardous Materials

The area of disturbance to implement the alternative would be equivalent to the proposed project. Therefore, Mitigation Measures 4.5-2(a) through (f), which address potential release of on-site hazardous materials, would still be required. Given the similar area of disturbance, the alternative's impacts to hazards and hazardous materials would be similar to the proposed project.

Hydrology and Water Quality

Because the alternative would involve the same area of disturbance, the alternative would still require mitigation to address potential impacts related to short-term construction-related water quality and compliance with BMPs during construction, Mitigation Measures 4.6-1(a) and (b), 4.6-2, and 4.6-3 would still be required. As a result, the alternative's impacts to hydrology and water quality would be similar to the proposed project.

Land Use and Planning/Population and Housing

The alternative would implement the same components as the proposed project, just to a less intense degree. Consequently, the alternative would still require the elimination of a portion of Centennial Drive, and the alternative's impacts related to land use and planning and population and housing would be similar to the proposed project.

Noise

Mitigation Measure 4.8-1, which requires construction noise reductions, would still be required because the alternative would entail the construction of several residences. However, given that the alternative would include less units, the construction period for the alternative would be shorter. In addition, the development of less units would result in less traffic noise during operations. As a result, alternative's impacts related to noise would be fewer compared to the proposed project.

Public Services and Utilities

While the alternative would implement many of the same components as the proposed project, many of the components, such as the number of lots, internal neighborhood roadways, and utilities connections, would be implemented to a less intense degree. In addition, operations of fewer residential units would result in reduced demand for public services and utilities. As a result, the alternative's impacts related to public services and utilities would be fewer compared to the proposed project.

Transportation

Considering the City's VMT threshold is a function of VMT per capita, a reduction in the number of residents would correspond with a reduction in total VMT and, thus, result in an equivalent rate of VMT per capita. However, total project-generated VMT would be reduced by reducing the number of proposed units. Because the City's VMT threshold is a per capita rate, the alternative's reduced intensity of units would not avoid the project's potential to exceed the City's VMT threshold. The alternative would still require Mitigation Measures 4.10-2(a) and (b). However, total project-generated VMT would be reduced and, consequently, the alternative's impacts related to transportation would be fewer as compared to the proposed project. Nonetheless, although impacts related to transportation would be fewer, the Reduced VMT Alternative would not eliminate the significant and unavoidable impact related to the City's VMT threshold.

3. Reduced Footprint Alternative

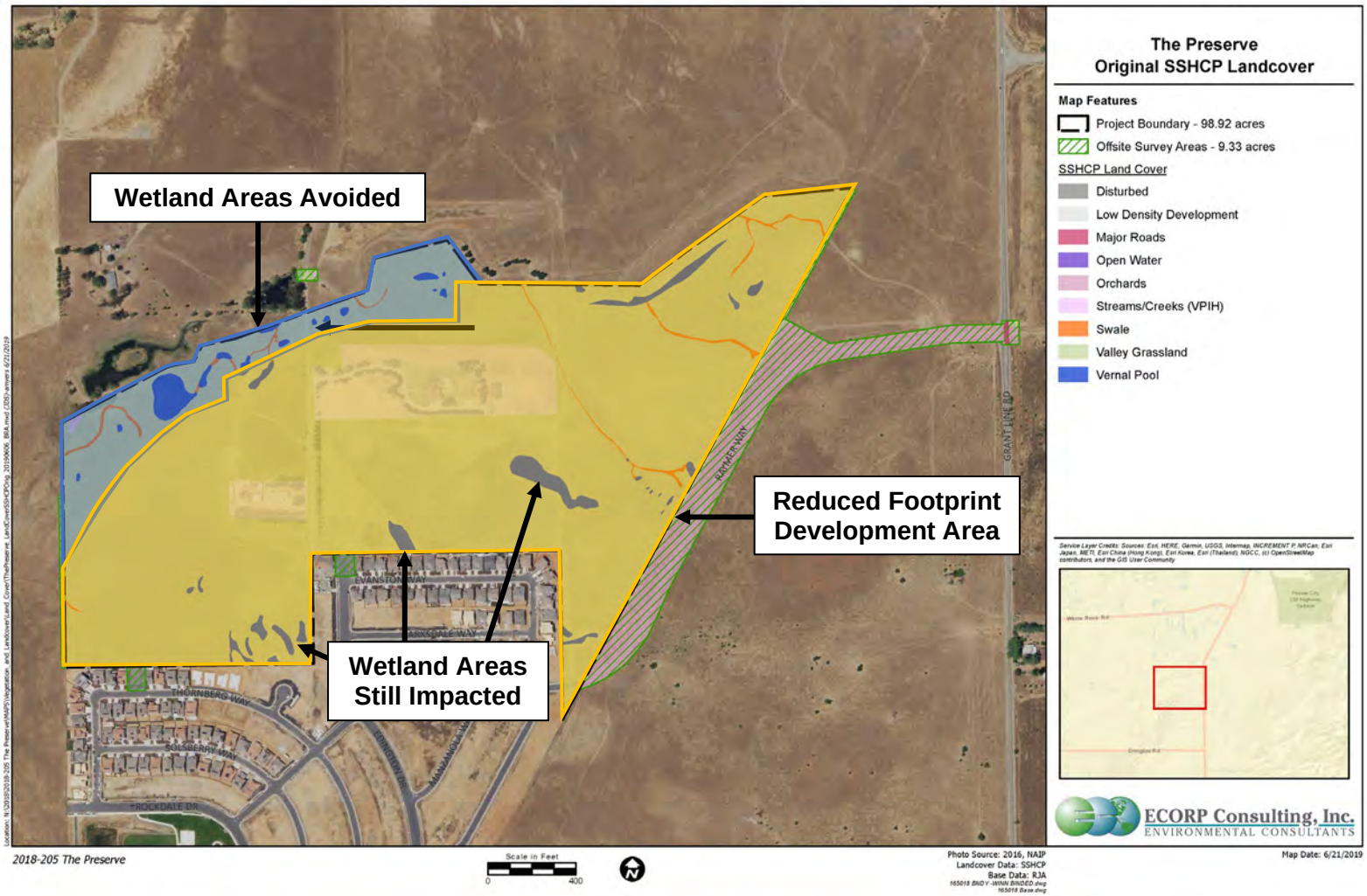
The following section includes a description of the Reduced Footprint Alternative, an evaluation of the alternative's consistency with project objectives, and an impact comparison analysis.

Description of Alternative

Under this alternative, the project site would be reduced to avoid wetland areas in the northwest section of the development area (see Figure 6-1). Wetlands in the southern section of the development area would still be impacted. The reduction in footprint would reduce the project's development area from 98.9 acres to 92.57 acres, which would preserve 6.33 acres of wetlands. The alternative would still implement the 9.77 acres designated for community space to allow for the inclusion of the bio-retention and hydromodification areas in the northwest portion of the site. Retaining the community space would necessitate a reduction in the number of units developed in the western portion of the project site, from 172 units to 47 units. The total units to be developed would be reduced from 440 units to 315 units. The reduction in units and footprint would result in a density of 3.4 du/ac. As such, the alternative would require a Rezone to the RD-4 Zoning District.

Because the Reduced Footprint Alternative would maintain a similar layout to the proposed project, access to the site under the alternative would continue to be provided by two entry points along Raymer Way. Edington Drive would still be extended to provide access from the site to the existing Camden at Somerset Ranch subdivision.

Figure 6-1
Reduced Footprint Alternative Development Area



The alternative's connections to utilities would also be similar to the proposed project. Units would connect to the existing 10-inch water main in Edington Drive by way of a new eight-inch water main; however, with fewer units, the alternative would require fewer new interior water lines. Similarly, the units would connect to existing eight-inch sewer lines in Edington Drive and Thornberg Way, but the alternative would require fewer sewer line connections.

New drain inlets and underground storm drains would also be installed. However, the amount of stormwater infrastructure within the site would also be reduced, due to the reduced area of ground disturbance. The GPA would still be required to amend the General Plan's Circulation Element, which calls for extending Centennial Drive through the site.

Consistency with Project Objectives

Because the Reduced Footprint Alternative would consist of 315 units, resulting in a density of 3.4 du/ac, the alternative would be inconsistent with the General Plan land use designation for the Grant Line West Planning Area, which includes a mix of Medium-Density Residential, with a density of 6.1 to 18 du/ac, and High-Density Residential, with a density of 18 to 40 du/ac. As a result, the Reduced Footprint Alternative would be inconsistent with Objective #2. The alternative would meet Objectives #1, #3, #4, #5, #6, and #7, as the reduction of units would not affect the ability for the alternative to consolidate the remaining parcels in the Grant Line West Planning Area in a manner that concentrates development south of Morrison Creek; develop a residential community that is contiguous to and compatible with adjacent existing development; utilize existing utility capacity for maximum efficiency; develop a residential community that can provide timely housing; contribute to the overall bicycle and pedestrian connectivity of the City; or enhance the City's network of parks, trails, and open spaces.

Impacts of Alternative

The following provides a discussion evaluating the impacts of this alternative on baseline conditions as compared to the impacts of the proposed project on baseline conditions for each impact area addressed within this EIR.

Air Quality and Greenhouse Gas Emissions

The Reduced Footprint Alternative would reduce the area of impact from 98.9 acres to 92.57 acres in order to avoid wetland areas in the northwest section of the project footprint. As the alternative would still implement the 9.77 acres designated for community space, the number of units developed in the western portion of the project site would be reduced from 172 units to 47 units and the total units developed would drop from 440 units to 315 units.

The alternative would include less units and the area of ground disturbance would be slightly decreased as compared to the proposed project. Therefore, Mitigation Measure 4.1-7 to address impacts related to GHG emissions or climate change may still be required. However, factoring in the alternative's reduced footprint and number of lots, which would result in a reduction of air pollutants and GHG emissions generated through construction and operation of the residences, as well as from associated VMT, the alternative's impacts related to air quality and GHGs would be fewer than the proposed project.

Biological Resources

While the area of disturbance to implement the alternative would be smaller in comparison to the proposed project, the alternative would still impact 92.57 acres, including wetland areas in the southern areas of the project site. Therefore, Mitigation Measures 4.2-1 through 4.2-10 and 4.2-

12 would still be required. However, because fewer wetlands would be impacted, the alternative's impacts to biological resources would be fewer as compared to the proposed project.

Cultural and Tribal Cultural Resources

While the area of disturbance to implement the alternative would be smaller in comparison to the proposed project, the alternative would still impact 92.57 acres. Therefore, Mitigation Measures 4.3-2 and 4.3-3(a) through (d), which address potential impacts to cultural and tribal cultural resources, would still be required. However, due to the alternative's smaller area of disturbance, the alternative's impacts to cultural and tribal cultural resources would be fewer as compared to the proposed project.

Geology and Soils/Mineral Resources

Given that the alternative would only shrink the area of disturbance within the project site from 98.9 acres to 92.57 acres, the alternative would still involve ground disturbance of several acres with the same soil conditions as compared to the proposed project. As such, the alternative would still require compliance with recommendations of a final geotechnical engineering report and mitigation to address potential impacts to buried paleontological resources. Therefore, Mitigation Measures 4.4-3 and 4.4-5 would still be required. However, considering the alternative's smaller footprint, the alternative's impacts to geology and soils and mineral resources would be fewer as compared to the proposed project.

Hazards and Hazardous Materials

While the area of disturbance to implement the alternative would be smaller in comparison to the proposed project, the alternative would still impact 92.57 acres. Therefore, Mitigation Measures 4.5-2(a) through (f), which address potential release of on-site hazardous materials, would still be required. However, considering the alternative's smaller footprint, the alternative's impacts to hazards and hazardous materials would be fewer as compared to the proposed project.

Hydrology and Water Quality

While the area of disturbance to implement the alternative would be smaller in comparison to the proposed project, the alternative would still include impervious surfaces and 315 units, which could result in soil erosion or the loss of topsoil during construction activities. As a result, the alternative would require mitigation to address potential impacts related to short-term construction-related water quality and compliance with BMPs during construction, and Mitigation Measures 4.6-1(a) and (b), 4.6-2, and 4.6-3 would still be required. However, considering the alternative's smaller footprint, the alternative's impacts to hydrology and water quality would be fewer as compared to the proposed project.

Land Use and Planning/Population and Housing

Because the alternative would implement many of the same components as the proposed project and would still prevent the construction of Centennial Drive within the boundaries of the project site, the alternative's impacts related to land use and planning and population and housing would be similar to the proposed project.

Noise

Because the alternative would implement many of the same components as the proposed project, just to a less intense degree, Mitigation Measure 4.8-1, which relates to short-term noise from construction activities, would still be required. However, given that the alternative would include less units, the construction period for the alternative would be shorter. In addition, the

development of less units would result in less traffic noise during operations. As a result, alternative's impacts related to noise would be fewer compared to the proposed project.

Public Services and Utilities

Many of the components, such as the number of lots and utilities connections, would be implemented to a less intense degree under the alternative as compared to the proposed project. In addition, operations of fewer residential units would result in reduced demand for public services and utilities. As a result, the alternative's impacts related to public services and utilities would be fewer compared to the proposed project.

Transportation

As described above for the Reduced VMT Alternative, while a reduction in the number of units and, thus, residents would correspond with a reduction in the total VMT, an equivalent rate of VMT per capita would still occur. Because the City's VMT threshold is a per capita rate, the alternative's reduced number of units would not avoid the project's potential to exceed the City's VMT threshold and, as a result, the alternative would still require implementation of Mitigation Measures 4.10-2(a) and (b). However, considering the alternative's reduced number of units, the alternative would generate fewer new vehicle trips and less total VMT as compared to the proposed project. As such, the alternative's impacts related to transportation would be fewer in comparison to the proposed project. However, the Reduced Footprint Alternative would not eliminate the significant and unavoidable impact related to the City's VMT threshold.

6.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6(e)(2) requires consideration of an environmentally superior alternative from the range of reasonable alternatives evaluated. The environmentally superior alternative is the alternative that would result in the fewest or least significant environmental impacts. If the environmental superior alternative is the No Project Alternative, the EIR must identify the environmental superior alternative among the other alternatives. Table 6-1 provides a summary comparison of significance levels for identified impacts under each alternative, and is summarized below.

The No Project Alternative would reduce impacts to all issue areas. However, the No Project Alternative would not meet any of the project objectives.

The Reduced VMT Alternative would result in fewer impacts to Air Quality and GHG Emissions, Noise, Public Services and Utilities, and Transportation as compared to the proposed project. However, the Alternative would not avoid the significant and unavoidable impact related to VMT. The Reduced VMT Alternative would not meet Objective #2, but would meet Objectives #1, #3, #4, #5, and #7.

The Reduced Footprint Alternative would result in fewer impacts to almost all issue areas, except for Land Use and Planning/Population and Housing, which would be similar as compared to the proposed project. However, the Alternative would not avoid the significant and unavoidable impact related to VMT. The Reduced Footprint Alternative would not meet Objective #2, but would meet Objectives #1, #3, #4, #5, and #7.

Based on the analysis presented in this chapter, both the Reduced VMT Alternative and the Reduced Footprint Alternative would meet most of the project objective. However, the Reduced Footprint Alternative would result in fewer impacts than the Reduced VMT Alternative and the

proposed project. Therefore, the Reduced Footprint Alternative would be the environmentally superior alternative.

Table 6-1
Comparison of Environmental Impacts for Project Alternatives

Resource Area	Proposed Project level of significance after mitigation	1. No Project Alternative	2. Reduced VMT Alternative	3. Reduced Footprint Alternative
Air Quality and Greenhouse Gas Emissions	Less than Significant	<	<	<
Biological Resources	Less than Significant	<	=	<
Cultural and Tribal Resources	Less than Significant	<	=	<
Geology and Soils/Mineral Resources	Less than Significant	<	=	<
Hazards and Hazardous Materials	Less than Significant	<	=	<
Hydrology and Water Quality	Less than Significant	<	=	<
Land Use and Planning/Population and Housing	Less than Significant	<	=	=
Noise	Less than Significant	<	<	<
Public Services and Utilities	Less than Significant	<	<	<
Transportation	Significant and Unavoidable	<	<*	<*

Note: Less than Proposed Project = "<"; Similar to Proposed Project = "="; Greater than Proposed Project = ">".

* Significant and Unavoidable impact(s) determined for the proposed project would still be expected to occur under the Alternative.

7. EIR Authors and Persons Consulted

7. EIR AUTHORS AND PERSONS CONSULTED

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Appendix A

NOTICE OF PREPARATION

DATE:	**October 25, 2019**
TO:	**State Clearinghouse** **1400 Tenth Street** **Sacramento CA, 95814**
TO:	**Responsible Agencies, Organizations, and Interested Parties**
LEAD AGENCY:	**City of Rancho Cordova** **Contact: Darcy Goulart** **2729 Prospect Park Drive** **Rancho Cordova, CA 95760**
SUBJECT:	**Environmental Impact Report for The Preserve Project**

In discharging its duties under Section 15125 of the California Environmental Quality Act (CEQA) Guidelines, the City of Rancho Cordova (as Lead Agency) intends to prepare an Environmental Impact Report (EIR) for The Preserve Project. The City will be the lead agency for compliance with the California Environmental Quality Act ("CEQA").

In accordance with Section 15125 of the CEQA Guidelines, the City of Rancho Cordova has prepared this Notice of Preparation to provide Responsible Agencies and other interested parties with sufficient information describing the proposal and its potential environmental effects.

The determination to prepare an EIR was made by the City of Rancho Cordova. An Initial Study, attached hereto, has been prepared pursuant to CEQA Guidelines Section 15125, which identifies the anticipated environmental effects of the project. The Initial Study satisfies the City's obligation under CEQA Guidelines Section 15125 to identify the probable environmental effects of the project.

As specified by the CEQA Guidelines, the Notice of Preparation (NOP) will be circulated for a 30-day review period. The City of Rancho Cordova welcomes public input during this review. In the event that no response or request for additional time is received by any Responsible Agency by the end of the review period, the Lead Agency may presume that the Responsible Agency has no response.

PUBLIC MEETING
A Public Scope Meeting will be held on Wednesday, November 13, 2019 at 6:00 p.m.
in the Rancho Cordova City Hall, American River South Room
2729 Prospect Park Drive, Rancho Cordova

Comments may be submitted during the review period and addressed to

Darcy Goulart, Planning Manager
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 96670

The comment period closes on November 25, 2019

A. Project Location, Current Use, and Surrounding Use

The project site consists of approximately 283 acres located within the City of Rancho Cordova (see Figure 1). The site is located northwest of Raymer Way and Grant Line Road, north of the Sunridge Specific Plan and east of the Rio Del Oro Specific Plan (see Figure 2). The General Plan designates the project site Planning Area. Specifically, the site is located within the Grant Line West Planning Area and is designated Natural Resources and Residential-Mixed Density by the Draft Land Use Concept Map. The site is zoned Agricultural (AG-80) and Industrial Reserve (IR) and is identified by Assessor's Parcel Numbers (APNs) 072-0300-001, -002, -005, -008, and 073-0010-010, and -011.

Currently, the 283-acre project consists of two single-family residences on the southern portion of the property, and vacant, non-native grasslands throughout the remaining area. The site has moderately rolling hills and flatlands throughout the parcel with seasonal drainage channels and wetlands. Additionally, Morrison Creek flows northeast to southwest through the project site. Several ornamental trees are located along the existing entrance road near the structures on the property. The elevation of the site ranges from 210 to 250 feet above mean sea level. The project site is also traversed by the 275 feet wide utility easement occupied by PG&E and SMUD facilities.

Surrounding land uses include the Camden at Somerset Ranch Residential subdivision to the south, a Teichert Aggregates Aggregate/Asphaltic Concrete site across Grant Line Road to the east, industrial/open space to the north, and vacant land for the development of the Rio Del Oro residential community to the west.

B. Project Characteristics

The proposed project would include subdivision of the site to develop a total of 434 single-family lots and various associated improvements including, but not limited to, parks, a preserve area, landscaping, circulation improvements, and utility installation. The proposed project would include 22.84 acres of public parks north of the proposed residences. Additionally, the project would preserve 185 acres of natural land to the north in order to protect wetlands.

General Plan Amendment/Rezone

Per the City of Rancho Cordova General Plan, the project site is currently designated Planning Area. The Draft Land Use Concept Map for the Grant Line West Planning Area designates the site Natural Resources and Residential-Mixed Density. The proposed project would require a General Plan Amendment to change the site's land use designation to Low-Density Residential. An additional General Plan Amendment would be required to remove from the Circulation Element Centennial Drive in the project vicinity. In addition, the project would require a rezone of approximately 70 acres of AG-80 and approximately 25-acres of IR to Residential District (RD-6). The Residential District designation sets a maximum of six dwelling units per acre (See Figure 3).

Tentative Subdivision Map

The proposed project would subdivide 434-single family residential lots. Lots in the western portion of the site would be a minimum of 4,050 sf (45 feet x 90 feet), with the larger lots located at the corners of each block. Lots located in the central area of the site would be a minimum of 5,775 sf (55 feet x 105 feet). Lots located in the eastern portion of the site would be approximately 4,725 sf (45 feet x 105 feet). The range of lot sizes for the proposed project would be between 4,050 sf and 9,416 sf (see Figure 4). In addition, the project would include an 18 to 20-foot setback from the front of each residence to the street. The proposed would also provide a 100-foot setback from Morrison Creek.

Figure 1
Project Location

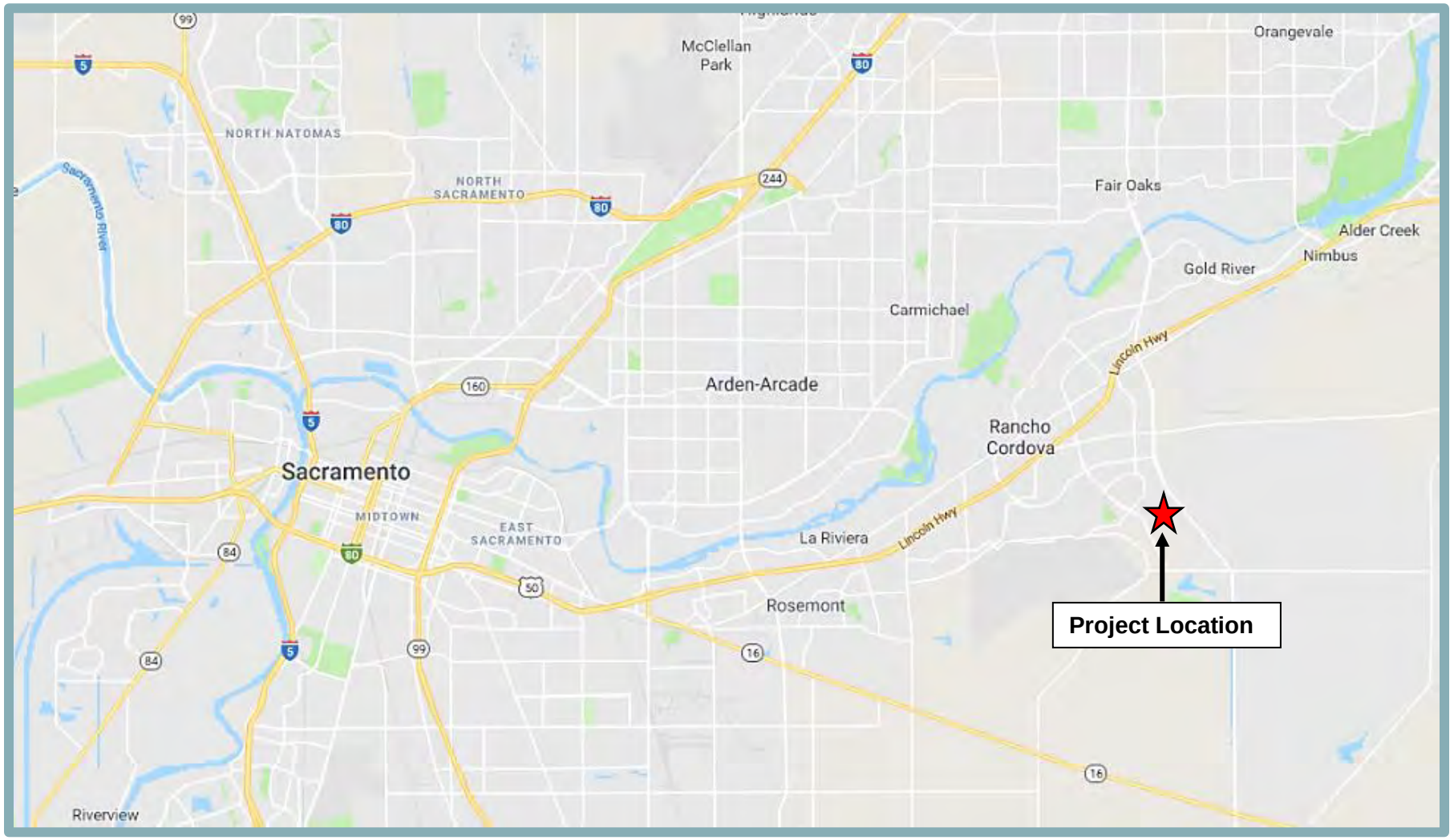


Figure 2
Project Site and Existing Planning Boundaries

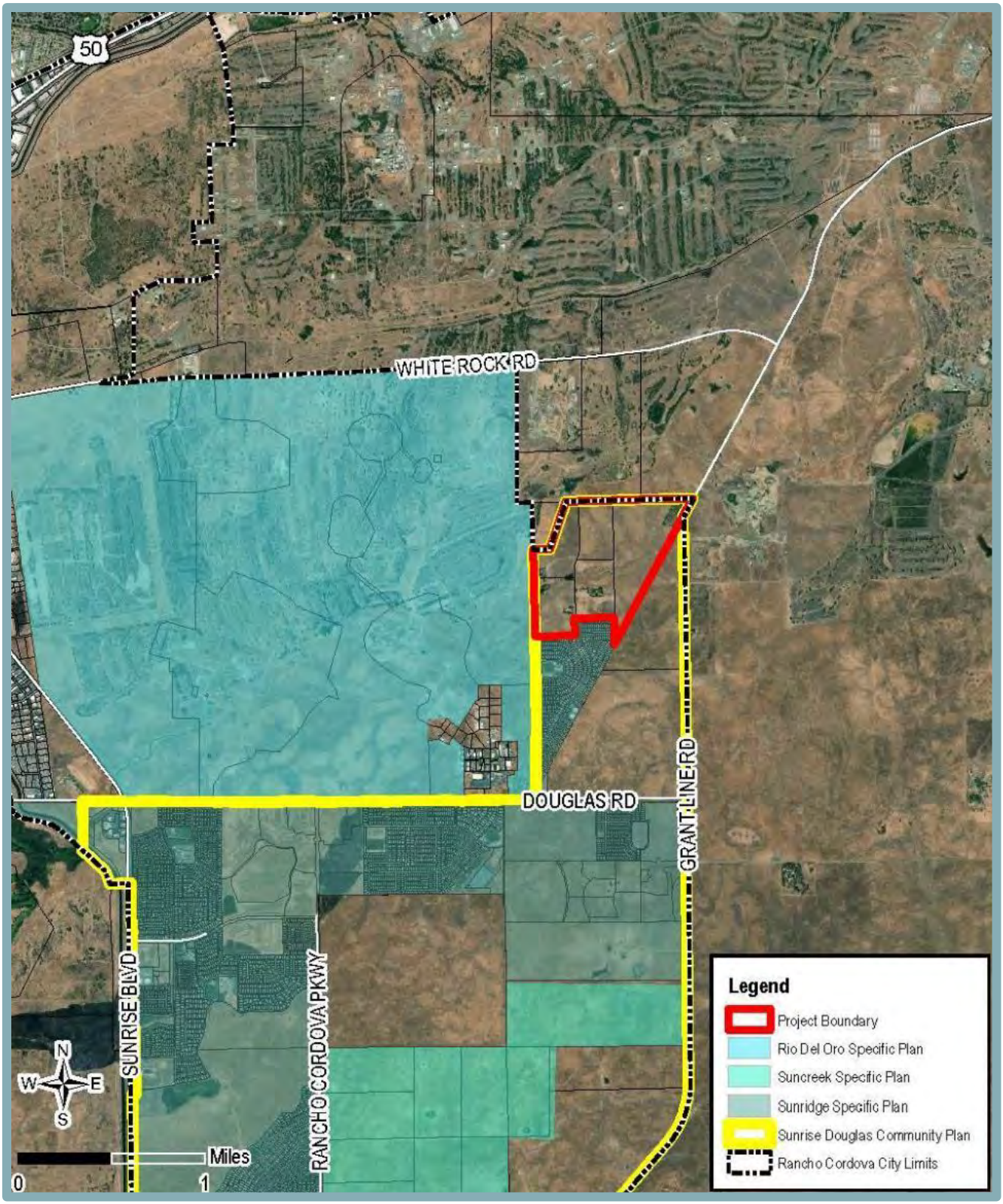


Figure 3
Existing and Proposed Zoning

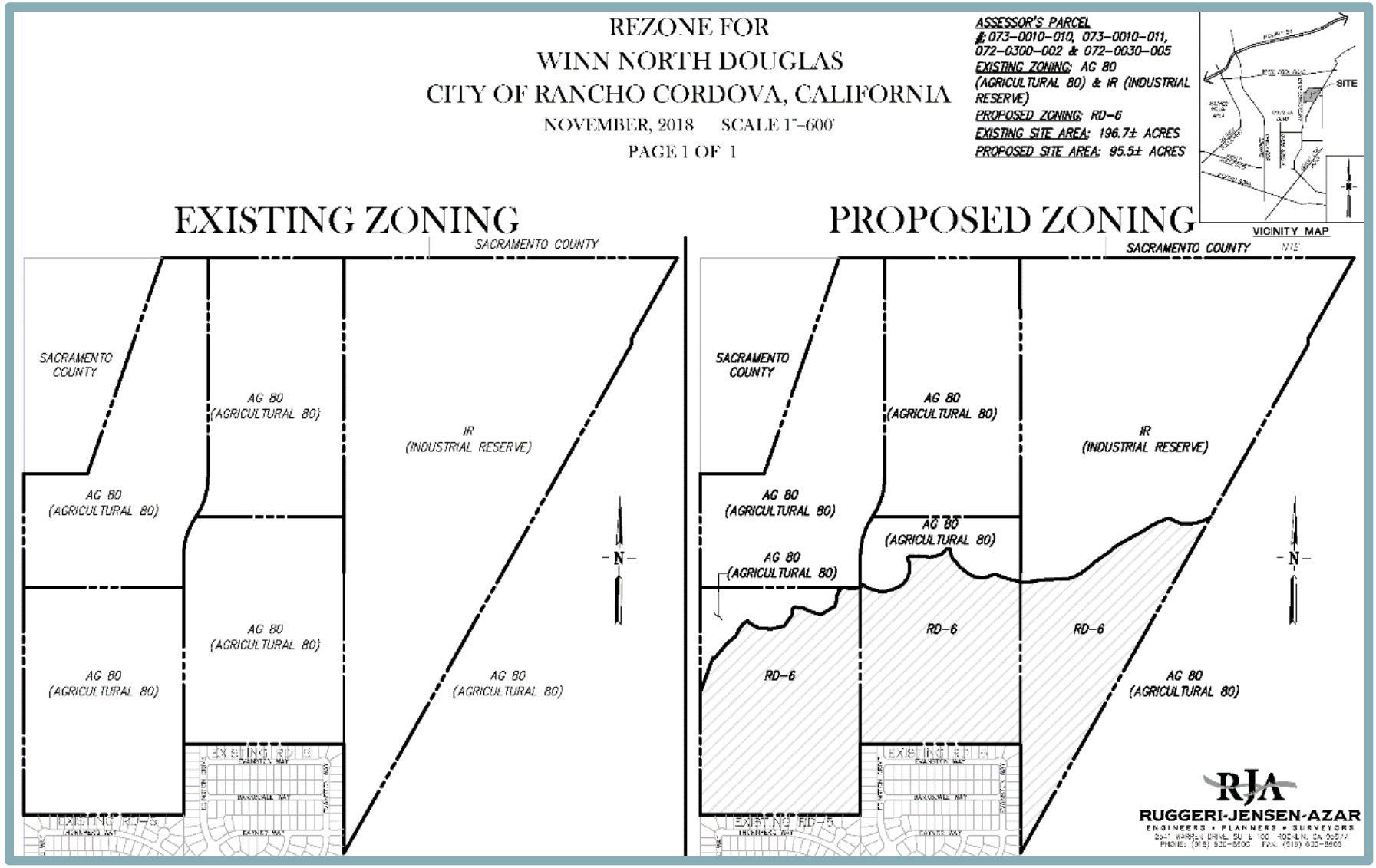
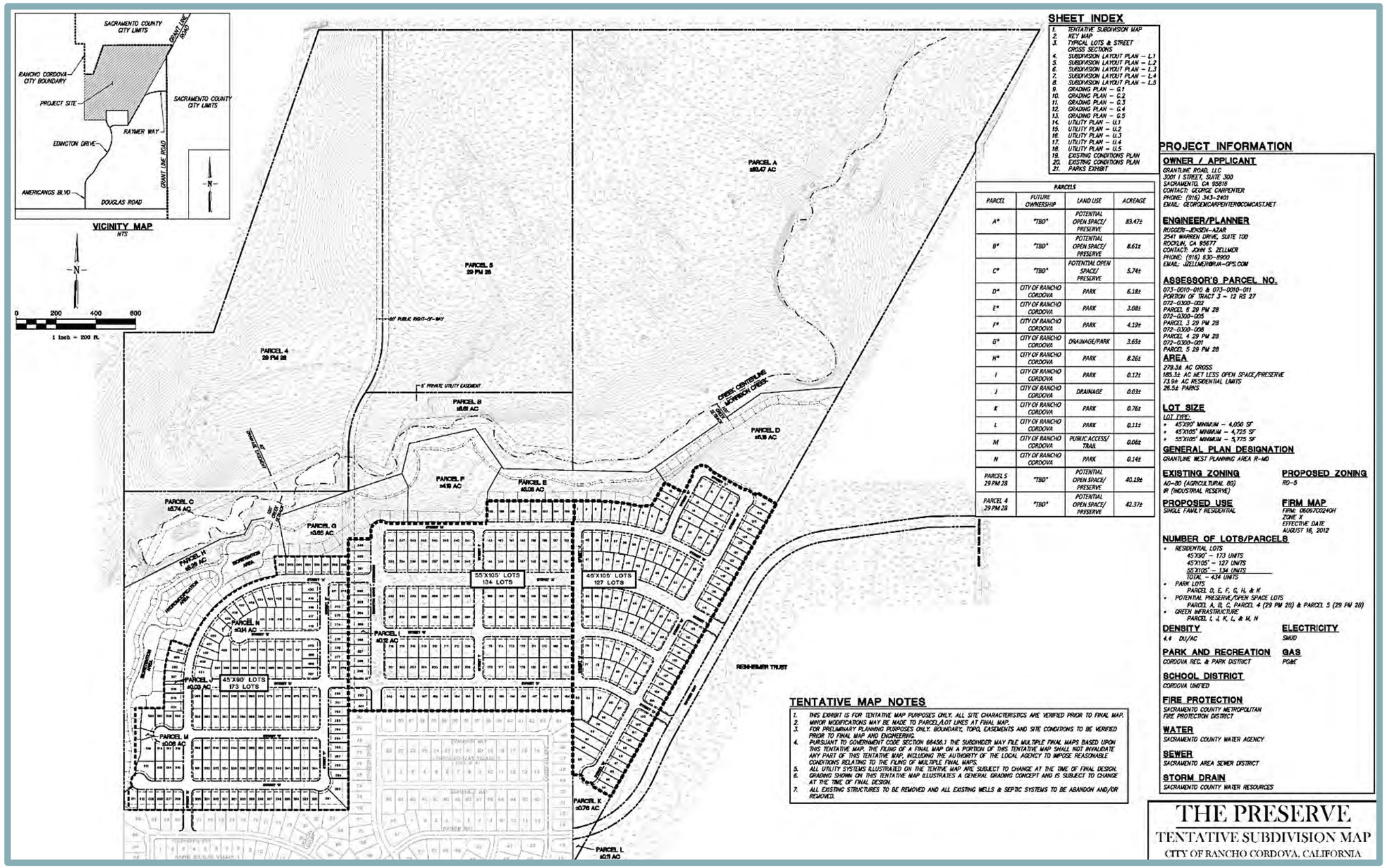


Figure 4
Tentative Subdivision Map



Access and Circulation
The proposed project includes four access points, including two connections to Raymer Way and two connections to the existing Camden at Somerset Ranch subdivision to the south. Street sections would range from 42-feet for the internal residential streets to 69-feet for the residential collector street. The internal residential streets would include a five-foot sidewalk on each side. The other streets would include a combination of parkways with 10-foot sidewalks on one side and either a connected five-foot sidewalk on the other or a six-foot parkway and six-foot sidewalk on the other side.

Open Space/Recreation
As part of the proposed project, 185.3 acres of undeveloped land to the north would be maintained as open space/preserve. The project would designate 8.9 acres for parks, 11.6 acres of Community Space, and 1.6 acres of green infrastructure (see Figure 5). The Community Space would be presented in the form of two bioretention areas that feed into a hydromodification area. The area designated for open space would remain within the IR or AG-80 zoning designation.

The 8.9 acres designated for parks would include two parks managed by the Cordova Parks and Recreation District. The 1.6 acres of green infrastructure would be composed of trail connections to surrounding parks and landscaped areas.

Utilities
Treated water service for the project would be provided by the Sacramento County Water Agency. The proposed project would include construction of new eight-inch water lines connecting to an existing 10-inch water main located within Edington Drive.

Sanitary sewer service is provided to the City by the County Sanitation District 1 (CSD-1). CSD-1 maintains the sewer system collecting waste water flows from individual developments throughout the district and conveys them to the Sacramento Regional County Sanitation District Inceptor system. Wastewater would be routed and delivered to the Sacramento Regional Wastewater Treatment Plant north of Elk Grove (see Figure 6). The project would include connection to the existing eight-inch sewer lines or within Edington Drive and Thornberg Way.

Stormwater throughout the site would be directed through 12- and 30-inch drainage pipes. From the drainage pipes, the stormwater would be routed to the bioretention basins located at the northwestern portion of the parcel. The stormwater would then travel to the hydromodification basin which would deliver the remaining stormwater to the pond north of the project site. In addition, connection to existing natural gas and telecommunications infrastructure would be required for the proposed development.

Figure 5
Parks and Open Space/Preserve Area

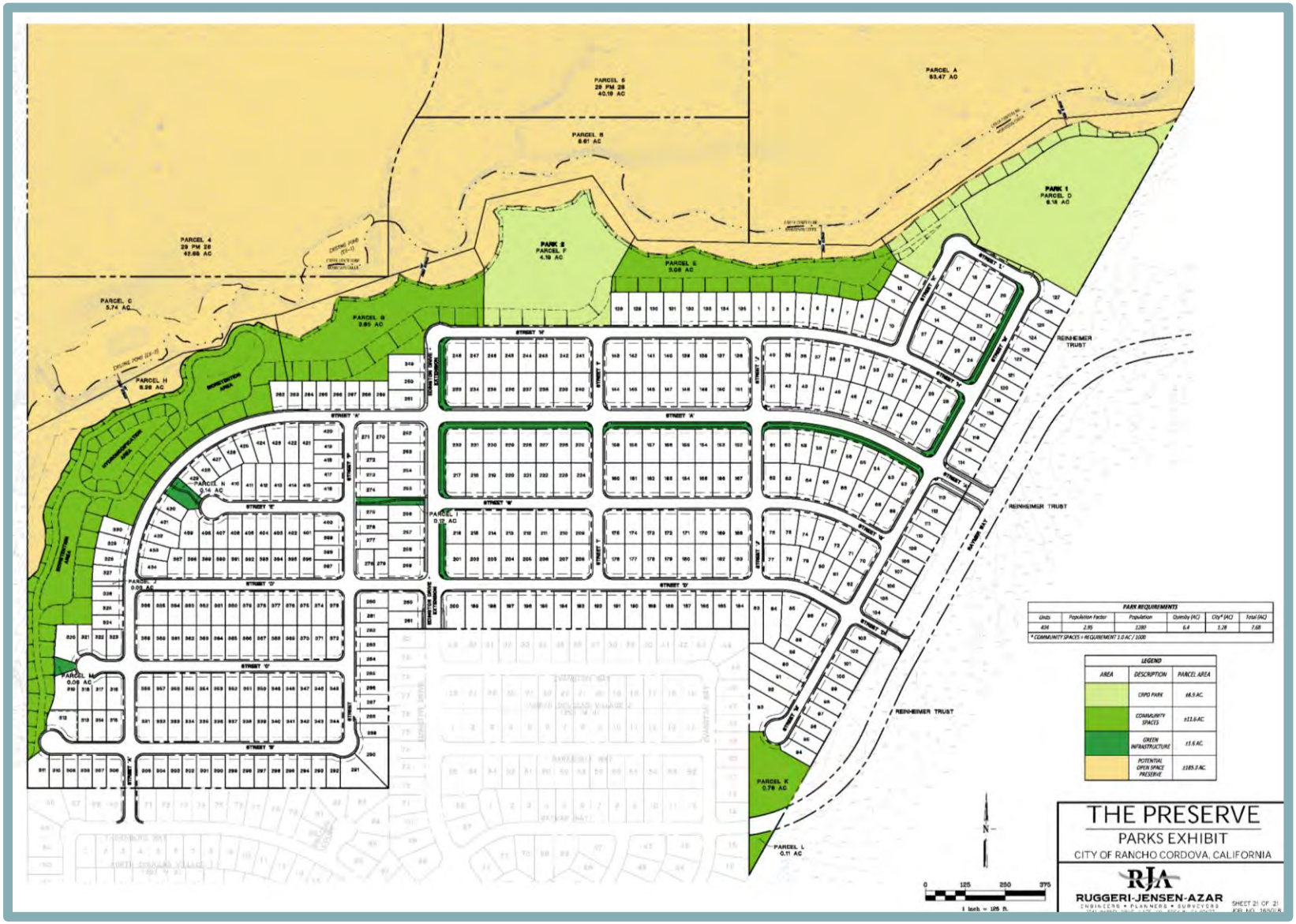
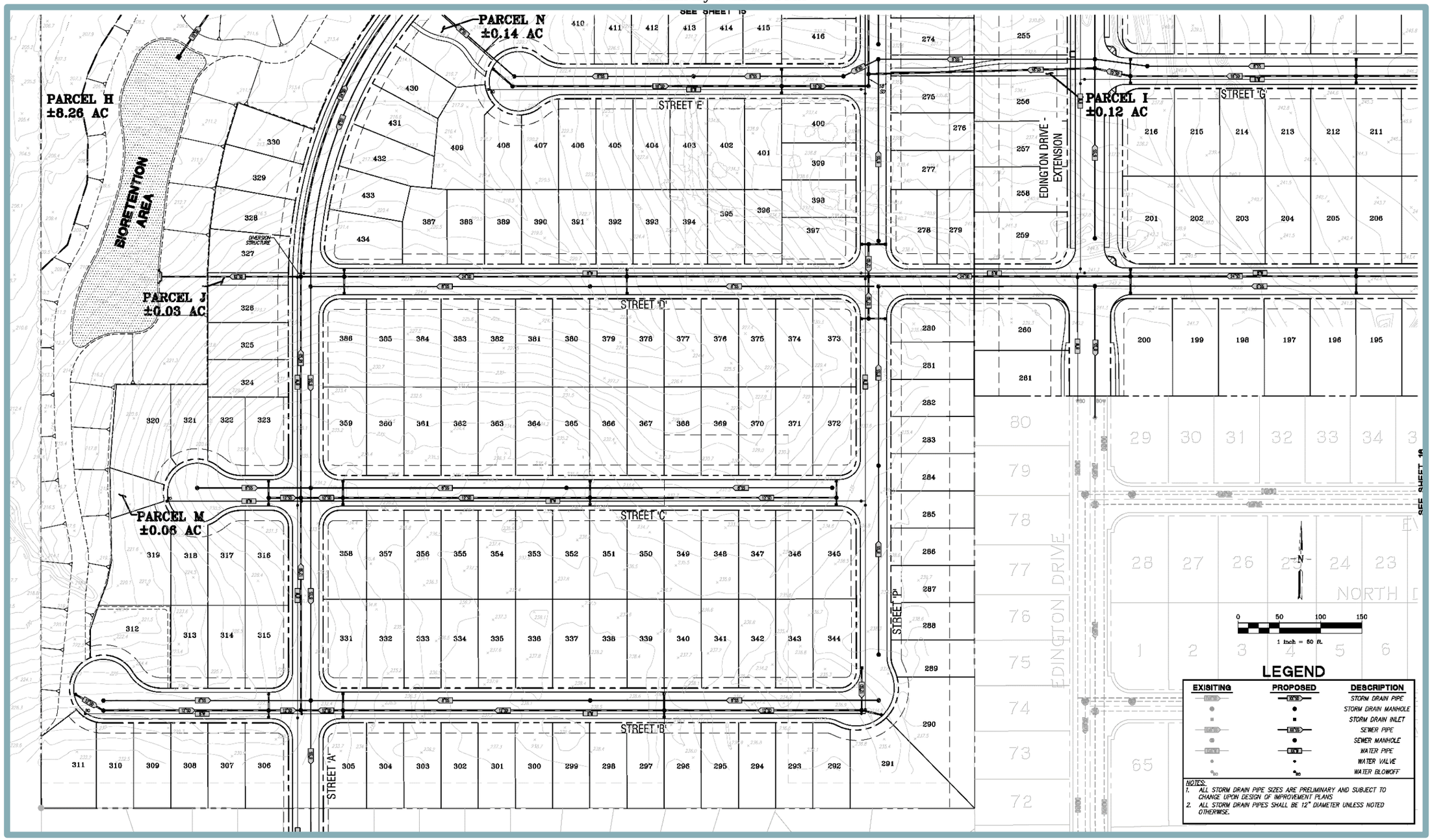


Figure 6
Preliminary Utilities Plan



C. Required Approvals

The proposed project requires approval of the following discretionary entitlements.

The proposed project would require City approval of the following:

- Certification of the EIR;
- Adoption of the Mitigation Monitoring and Reporting Program;
- General Plan Amendment from Grant Line West Planning Area to Low-Density Residential;
- General Plan Amendment to remove from the Circulation Element Centennial Drive in the vicinity of the project;
- Rezone from AG-80 (approximately 70 acres) and IR (approximately 25 acres) to MDR (25.9 acres), O (4.3 acres), and RLDR 1-2.3 ac min (1.8 acres).;
- Tentative Subdivision Map; and
- Development Agreement.

Other discretionary approvals that may be required by other governmental agencies may include, but are not limited to, the following:

- California Department of Fish and Wildlife (CDFW);
- Central Valley Regional Water Quality Control Board (CVRWQCB);
- Sacramento Metropolitan Air Quality Management District (SMAQMD); and
- United States Army Corps of Engineers (ACOE) – Nationwide Permit (404).

D. Project Background

The purpose of the EIR is to provide information about potential significant physical environmental impacts of the Preserve Project, to identify possible ways to minimize those significant impacts, and to describe and analyze possible alternatives to the proposed project if potential significant impacts are identified. Preparation of an NOP and EIR does not indicate a decision by the City to approve or disapprove the project. However, prior to making any such decision, the City Council must review and consider the information contained in the EIR.

E. Potential Environmental Effects

The environmental analysis for the proposed project will focus on the following areas: Air Quality and Greenhouse Gas Emissions (including Energy), Biological Resources, Cultural and Tribal Resources, Geology & Soils/Mineral Resources, Hazards and Hazardous Materials, Hydrology & Water Quality (Drainage), Land Use & Planning/Population & Housing, Noise, Public Services and Utilities, and Transportation. In addition, statutorily required sections and discussion of project alternatives will be included. Some refinement to the aforementioned issues may be required based on comments received during the NOP scoping process. The following section describes each of the technical Chapters of the EIR in further detail.

Air Quality and Greenhouse Gas Emissions (including Energy)

The Air Quality and Greenhouse Gas (GHG) Emissions chapter of the EIR will summarize the regional air quality setting, including climate and topography, existing ambient air quality, regulatory setting, and presence of any sensitive receptors near the project site. The air quality impact analysis will be determined through coordination with SMAQMD. A quantitative assessment of short-term and long-term increases of criteria air pollutant emissions of primary concern (i.e., ROG NO_x, and PM_{10}) resulting from the proposed

project will be included. The Traffic Impact Study (TIS) will be based upon modeling using California Emission Estimator Model (CalEEMod). CALINE 4 modeling will be conducted if warranted based on the results of the TIS.

Throughout the GHG section, CalEEMod will be used to produce an estimate of carbon dioxide emissions, including indirect emissions of GHG (e.g., electricity, natural gas). Analysis will include a discussion of Assembly Bill (AB) 32 and Senate Bill (SB) 32 in compliance with the California 2017 Climate Change Scoping Plan and SMAQMD to determine appropriate thresholds. This chapter will also discuss potential energy impacts as a result of the proposed project. In accordance with Appendix G Checklist of the CEQA Guidelines, the analysis will discuss the projects energy efficiency, conservation measures, and applicable mitigation measures, if needed, for reducing air quality, GHG, and energy impacts.

Biological Resources

The Biological Resources analysis will discuss potential impacts to plant communities, wetlands, and wildlife. The analysis will take an in-depth look at potential effects on rare, endangered, candidate sensitive, and special-status species from the buildout of the proposed project. The analysis will reference an Aquatic Resources Delineation, Arborist Survey Report, Special Status Plant Surveys, and Biological Resources Report (BRA) prepared for the project. In addition, the biological resources analysis will discuss the effects of the proposed project on Morrison Creek riparian vegetation and the effects of the proposed project. Recommended mitigation measures will be incorporated, if necessary, to reduce significant impacts to biological resources and ensure compliance with South Sacramento Habitat Conservation Plan.

Cultural and Tribal Resources

The Cultural and Tribal Resources chapter of the EIR will discuss the potential impacts to historical, archaeological, and tribal resources, including human remains and historical buildings, from implementation of the proposed project. Typical historical resources often include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. The chapter will include analysis of a record search of the Native American Heritage Commission Sacred Lands File and the California Historical Resources Information System database results for the proposed project. The chapter will also discuss compliance with AB 52 regarding notification of relevant tribes. Recommended mitigation measures will be incorporated, if necessary, to reduce significant cultural and tribal resource impacts.

Geology & Soils/Mineral Resources

The Geology & Soils/Mineral Resources chapter of the EIR will summarize the setting and describe the potential effects from soil erosion, earthquakes, liquefaction, and expansive soils, as well as identify any unique geologic features within the project vicinity. This chapter will utilize a Geotechnical Report prepared for the project site and discuss the present conditions. The Geology & Soils/Mineral Resources chapter will reflect the results of the Geotechnical Report and will provide analysis of the project in the context of the various features in the area. Recommended mitigation measures will be incorporated, if necessary, to reduce significant geologic and mineral resource impacts.

Hydrology & Water Quality (Drainage)

The Hydrology and Water Quality chapter will summarize the setting of the project site and identify potential effects on drainage, flooding, groundwater, and water quality. This chapter will include analysis of drainage from impervious surfaces associated with the proposed project and analyze impacts to groundwater and surface water. The analysis will use the Drainage Study, Sewer Study, and Water Study prepared for the project. The City of Rancho Cordova General Plan, General Plan EIR, and additional

ordinances will be referenced in the analysis. Recommended mitigation measures will be incorporated, if necessary, to reduce significant hydrology and water quality impacts.

Land Use & Planning/Population & Housing

The Land Use & Planning/Population & Housing chapter of the EIR will evaluate the consistency of the proposed project with the City of Rancho Cordova's adopted land use plans and policies, as well as the projects compatibility with surrounding land uses both, existing and proposed. The analysis will discuss amendments needed to the General Plan and the required changes to the zoning designations. The Rancho Cordova General Plan, Zoning Ordinances, and other documents will be examined to determine the potential effects of the proposed project. Population and housing will be addressed in the chapter to discuss population growth and the effects of the increase in residents. Recommended mitigation measures will be incorporated, if necessary, to reduce significant land use and planning, as well as population and housing impacts.

Noise

The Noise chapter of the EIR will be based on a project specific noise analysis. The noise analysis will include evaluation of the existing noise environment, prediction of project-generated noise, and development of noise control mitigation measures, as appropriate. Analysis of the proposed projects potential impact on surrounding sensitive receptors due to construction noise and vibration will be included. Potential noise associated with traffic effects will be evaluated in relation to the Noise Element of the City's General Plan and relevant ordinances. Recommended mitigation measures will be incorporated, if necessary, to reduce significant noise impacts.

Public Services and Utilities

The Public Services and Utilities chapter will describe the current setting and potential demands the proposed project may have on services, including fire, police, schools, parks, and recreation. The Rancho Cordova General Plan and General Plan EIR will be used to evaluate the potential impacts on public services. The Utilities portion of this chapter will focus on the potential effects on water supply, wastewater treatment, and solid waste disposal. The analysis will reference information from the Rancho Cordova Urban Water Management Plan (UWMP) to evaluate the potential new demand on water supply as a result of the proposed project. In addition, wastewater and solid waste issues will be analyzed using the Rancho Cordova General Plan and General Plan EIR and through consultation with the appropriate service provider. Recommended mitigation measures will be incorporated, if necessary, to reduce public services and utilities impacts.

Transportation

The Transportation chapter of the EIR will incorporate a TIS provided to evaluate impacts of the proposed project on existing and future transportation systems. The TIS will be used to examine the surrounding intersections in the area and the potential impacts the proposed project may have on the roadways. The chapter will evaluate the adequacy of site access, emergency access, possible design hazards, and on-site circulation. The chapter will also include additional analysis of Vehicle Miles Traveled induced by the proposed project. Recommended mitigation measures will be incorporated, if necessary, to reduce significant transportation impacts.

Attachment – Initial Study

City of Rancho Cordova
Community Development Department

The Preserve Project

Initial Study

October 2019

Prepared by

RANEY PLANNING & MANAGEMENT, INC. 20 years
1501 Sports Drive, Suite A, • Sacramento • CA • 95834
Office 916.372.6100 • Fax 916.419.6108

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INITIAL STUDY

October 2019

A. BACKGROUND

1.	Project Title:	The Preserve Project
2.	Lead Agency Name and Address:	City of Rancho Cordova Community Development Department 2729 Prospect Park Drive Rancho Cordova, CA 95760
3.	Contact Person and Phone Number:	Darcy Goulart Principal Planner (916) 851-8784
4.	Project Location:	Northwest of Raymer Way and Grant Line Road Rancho Cordova, CA APNs 072-0300-001, -002, -005, -008, 073-0010-010, and -011
5.	Project Sponsor's Name and Address:	Winn Communities, Inc. 3001 I Street, Suite 300 Sacramento, CA 95816 (916) 930-0925
6.	Existing General Plan Designation:	Grant Line West Planning Area Natural Resources Residential Mixed Density
7.	Existing Zoning Designation:	Agricultural (AG-80) Industrial Reserve (IR)
8.	Proposed Land Use Designation:	Low-Density Residential
9.	Proposed Zoning Designation:	Residential District (RD-6) Agricultural (AG-80) Industrial Reserve (IR)
10.	Required Approvals from Other Public Agencies:	California Department of Fish and Wildlife Central Valley Regional Water Quality Control Board Sacramento Metropolitan Air Quality Management District United States Army Corps of Engineers

11. Surrounding Land Uses and Setting:

The project site consists of approximately 283 acres located within the City of Rancho Cordova, California. Currently, the project site contains two single-family residences on the southern portion of the site, and the remainder of the site is vacant, primarily composed of non-native grasses and forbs. The City of Rancho Cordova General Plan designates the project site as Grant Line West Planning Area and the site is zoned Agricultural (AG-80) and Industrial Reserve (IR). Surrounding land uses include Camden at Somerset Ranch residential subdivision to the south; vacant agricultural lands under a Williamson Act contact to the east, vacant land approved for the development of the Rio Del Oro residential community to the west and industrial/open space to the north.

12. Project Description Summary:

The proposed project would include developing a 434-unit, single-family residential subdivision including parks, preserve areas, and additional infrastructure to support the community. Of the 283 acres within the project site, 185.3 acres of undeveloped land on the northern parcels would be remain as open space/preserve. The project would include 26.12 acres of public parks and community spaces north of the proposed residences. Additionally, the proposed project would include landscaping, circulation improvements, and utility installation. The project would require approval of a General Plan Amendment to change the land use designation of the site, a General Plan Amendment to remove from the Circulation Element Centennial Drive in the project vicinity, a Rezone, Development Agreement, and a Tentative Subdivision Map.

13. Status of Native American Consultation Pursuant to Public Resources Code Section 21080.3.1:

In compliance with Assembly Bill (AB) 52 (Public Resources Code Section 21080.3.1), project notification letters were distributed to the necessary tribes in the project area. To date, requests to consult have not been received by the City of Rancho Cordova.

B. SOURCES

The following documents are referenced information sources used for the purposes of this Initial Study:

1. California Building Standards Commission. *California Green Building Standards Code*. 2019.
2. California Department of Conservation. *Sacramento County Important Farmland 2016.* July 2017.
3. California Department of Forestry and Fire Protection. *Sacramento County, Fire Hazard Severity Zones in SRA*. November 7, 2007.
4. California Department of Transportation. *California Scenic Highway Mapping System*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed June 2019.
5. City of Rancho Cordova. *City of Rancho Cordova General Plan.* Adopted June 26, 2006.
6. City of Rancho Cordova. *City of Rancho Cordova General Plan Draft Environmental Impact Report, SCH# 2005022137.* March 13, 2006.
7. City of Rancho Cordova. *City of Rancho General Plan Land Use Policy Map*. June 26, 2006.

8. City of Rancho Cordova. *Design Guidelines*. September 6, 2005.
9. City of Rancho Cordova. *Rancho Cordova Police Department*. Available at: http://www.ranchocordovapd.com/about.php. Accessed: July 11, 2019.
10. Department of Toxic Substances Control. *EnviroStor.* Available at: https://www.envirostor.dtsc.ca.gov/public/. Accessed June 2019.
11. ECORP Consulting Inc. *Arborist Survey Report, The Preserve, Rancho Cordova, California.* October 23, 2018.
12. ECORP Consulting, Inc. *Biological Resources Assessment, The Preserve Development, Rancho Cordova, California.* December 17, 2018.
13. Federal Emergency Management Agency. *Sacramento County Flood Insurance Rate Map.* August 16, 2012.
14. Sacramento Metropolitan Air Quality Management District. *CEQA Guide to Air Quality Assessment* [pg. 7-3]. December, 2007. Available at: http://www.airquality.org/LandUseTransportation/Documents/Ch7Odors%20FINAL6-2016.pdf. Accessed June 24, 2019.
15. Sacramento County Water Agency. *Urban Water Management Plan.* May, 2016.

C. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or as indicated by the checklist on the following pages.

☐ **Aesthetics**	☐ **Agriculture and Forest Resources**	✖ **Air Quality**
✖ **Biological Resources**	✖ **Cultural Resources**	✖ **Energy**
✖ **Geology and Soils**	✖ **Greenhouse Gas Emissions**	✖ **Hazards and Hazardous Materials**
✖ **Hydrology and Water Quality**	✖ **Land Use and Planning**	✖ **Mineral Resources**
✖ **Noise**	✖ **Population and Housing**	✖ **Public Services**
☐ **Recreation**	✖ **Transportation**	✖ **Tribal Cultural Resources**
✖ **Utilities and Service Systems**	☐ **Wildfire**	✖ **Mandatory Findings of Significance**

D. DETERMINATION

On the basis of this initial study:

☐ I find that the Proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the Proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the Proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature	Date
Darcy Goulart, Principal Planner	City of Rancho Cordova
Printed Name	For

E. BACKGROUND AND INTRODUCTION

This Initial Study (IS) identifies and analyzes the potential environmental impacts of The Preserve Project (proposed project). The information and analysis presented in this document is organized in accordance with the order of the California Environmental Quality Act (CEQA) checklist in Appendix G of the CEQA Guidelines.

On June 26, 2006, the City of Rancho Cordova adopted a comprehensive update to the City's General Plan[1] and certified an associated Environmental Impact Report (EIR).[2] Per Section 15168 of the CEQA Guidelines, a project that is consistent with the General Plan and zoning designations of the City may tier from the analysis contained in the General Plan EIR, incorporating by reference the general discussions from the broader EIR. The proposed project would not be consistent with General Plan designation and requires a General Plan Amendment to change the land use designation of the site, a General Plan Amendment to remove from the Circulation Element Centennial Drive in the project vicinity, and a Rezone. As a result, the environmental analysis contained in this IS cannot be tiered from the General Plan EIR in accordance with CEQA Guidelines Section 15152, but rather, the analysis herein is primarily based upon project-specific technical studies and information. However, where applicable, supplemental information in this IS has been drawn from the Rancho Cordova General Plan and the Rancho Cordova General Plan EIR, and both documents are incorporated by reference in this IS.

The mitigation measures prescribed for environmental effects described in this IS would be implemented in conjunction with the project, as required by CEQA, and the mitigation measures would be incorporated into the project. In addition, findings and a project Mitigation Monitoring and Reporting Program (MMRP) would be adopted in conjunction with approval of the project.

F. PROJECT DESCRIPTION

The following section provides a comprehensive description of the proposed project in accordance with CEQA Guidelines.

Project Location and Setting

The project site consists of approximately 283 acres located within the City of Rancho Cordova, California (see Figure 1). The site is located northwest of Raymer Way and Grant Line Road, within the Grant Line West Planning Area of the City (see Figure 2). The project site is directly east of the Rio Del Oro Specific Plan and north of the Sunridge Specific Plan. The site is identified by Assessor's Parcel Numbers (APNs) 072-0300-001, -002, -005, -008, and 073-0010-010, and -011.

Currently, the 283-acre project site contains two single-family residences on the southern portion of the site, and the remainder of the site is vacant, primarily composed of non-native grasses. The site is characterized by moderate rolling hills and flatlands interspersed with seasonal drainage corridors and wetlands. Additionally, Morrison Creek runs northeast to southwest through the project site. The site contains at least two wells and septic systems associated with the existing residences.

[1] City of Rancho Cordova. *City of Rancho Cordova General Plan.* Adopted June 26, 2006.

[2] City of Rancho Cordova. *City of Rancho Cordova General Plan Draft Environmental Impact Report, SCH# 2005022137.* March 13, 2006.

Figure 1
Project Location

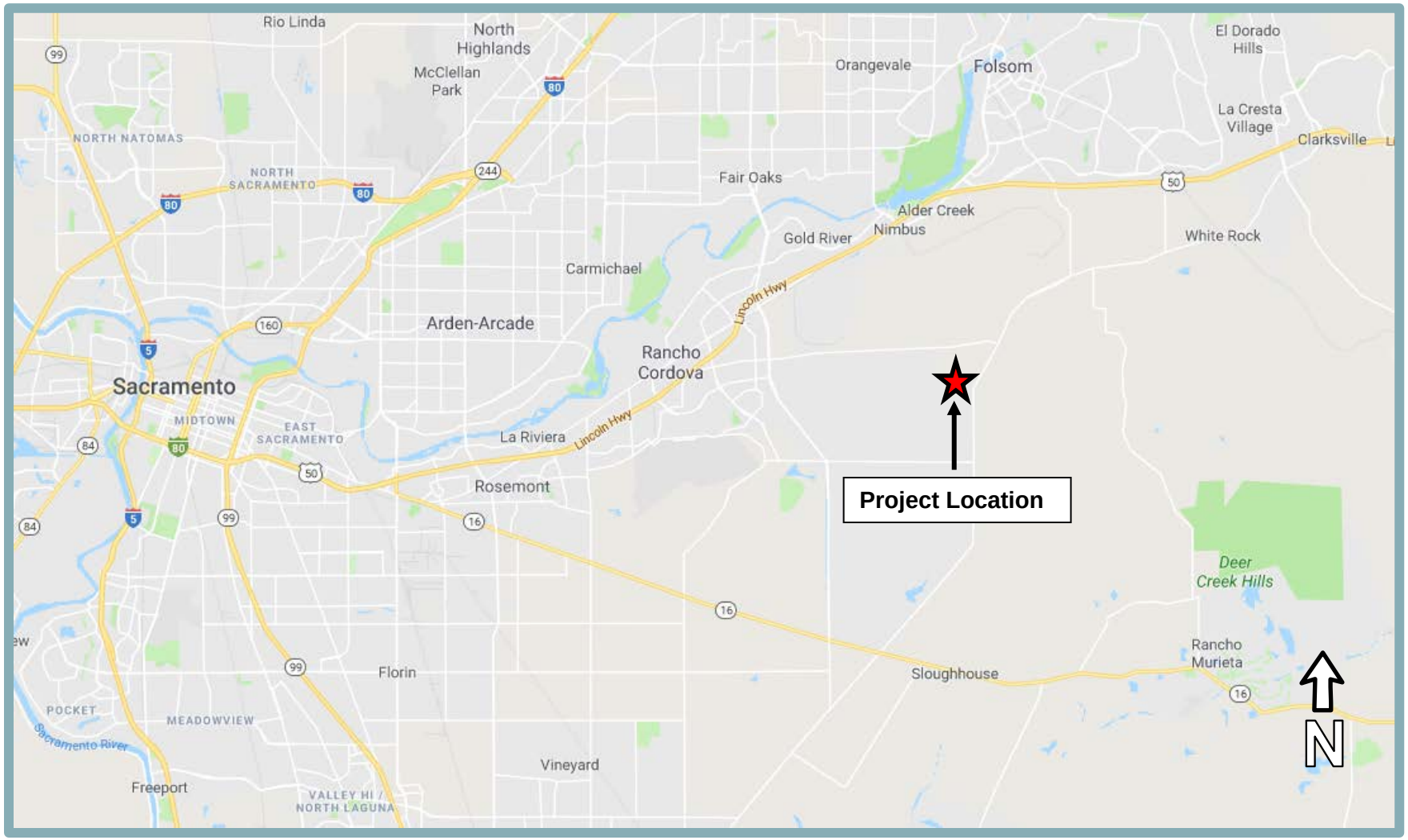


Figure 2
Project Site and Existing Boundaries



The General plan designates the project site Planning Area. Specifically, the site is located within the Grant Line West Planning Area and is designated Natural Resources and Residential-Mixed Density by the Draft Land Use Concept Map. The site is zoned Agricultural (AG-80) and Industrial Reserve (IR).

The elevation of the site ranges from 210 to 250 feet above mean sea level. The project site is predominantly covered in grassland, primarily composed of non-native annual grasses and forbs, with limited patchy riparian vegetation along Morrison Creek. In addition, the project site contains approximately 7.9 acres of jurisdictional wetlands, including seasonal wetlands and vernal pools. Several ornamental trees are located along the existing entrance road and around the existing residential buildings. In all, an arborist report prepared for the project site documented 249 trees within the site, including coast redwood, eucalyptus, and other trees not native to the region.

Project Components

The proposed project would include subdivision of the project site to develop a total of 434 single-family lots and various associated improvements including, but not limited to, parks, a preserve area, landscaping, circulation improvements, and utility installation. The project would require City approval of the following: General Plan Amendment; Rezone; Development Agreement; and Tentative Subdivision Map. The details of the proposed project, including required approvals, are described in further detail below.

General Plan Amendment/Rezone

Per the City of Rancho Cordova General Plan, the project site is currently designated Planning Area. The Draft Land Use Concept Map for the Grant Line West Planning Area designates the site Natural Resources and Residential-Mixed Density. The proposed project would require a General Plan Amendment to change the site's land use designation in the Grant Line West Planning Area to Low-Density Residential. An additional General Plan Amendment would be required to remove from the Circulation Element Centennial Drive in the project vicinity. In addition, the project would require a rezone to change approximately 70 acres of the AG-80 and approximately 25 acres of the IR zoning designations to Residential District (RD-6), six dwelling units per acre maximum (see Figure 3).

Tentative Subdivision Map

The proposed project would include a Tentative Subdivision Map to subdivide the project site into 434 single-family residential lots (see Figure 4). Lots on the western portion of the project site would generally be a minimum of 4,050 sf (45 feet x 90 feet), with larger lots at the corners of each block. Lots in the central portion of the site would generally be a minimum of 5,775 sf (55 feet x 105 feet) with corner lots and others being larger, and lots in the eastern portion of the site would generally be a minimum of 4,725 sf (45 feet x 105 feet). Overall, the proposed lots would range from a minimum of 4,050 sf to a maximum of 9,416 sf (see Figure 5 and Figure 6). The units would include either an 18- or 20-foot setback from the front of the residence to the street. In addition, the proposed project would establish a 100-foot setback from Morrison Creek.

In addition, subdivision of the site would include 26.12 acres of park area and community spaces, 1.22 acres of green infrastructure, and 185.3 acres of open space/preserve area. Within the community space, the proposed project would also include three hydromodification basins for treatment of wastewater.

Figure 3
Existing and Proposed Zoning

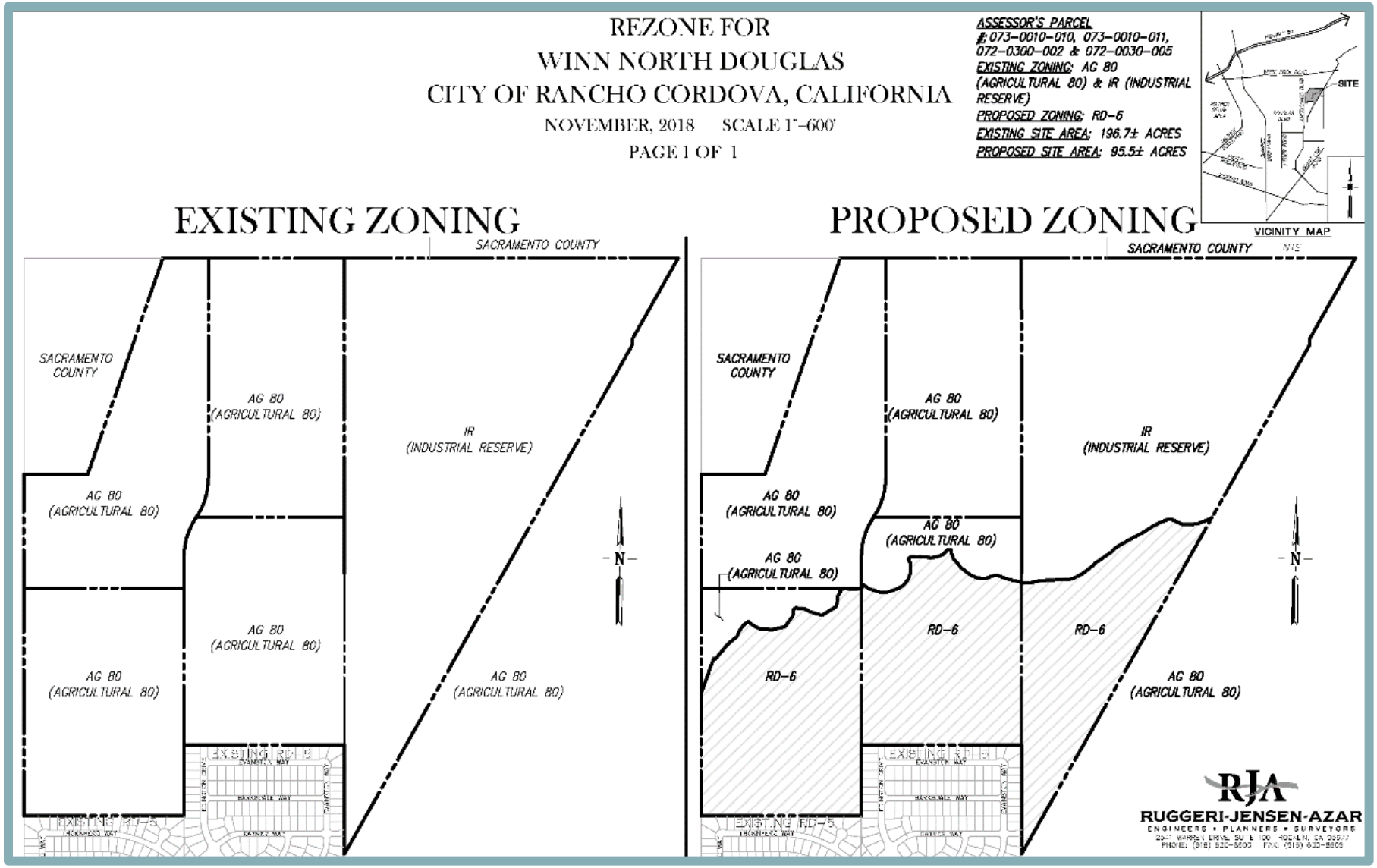


Figure 4
Tentative Subdivision Map

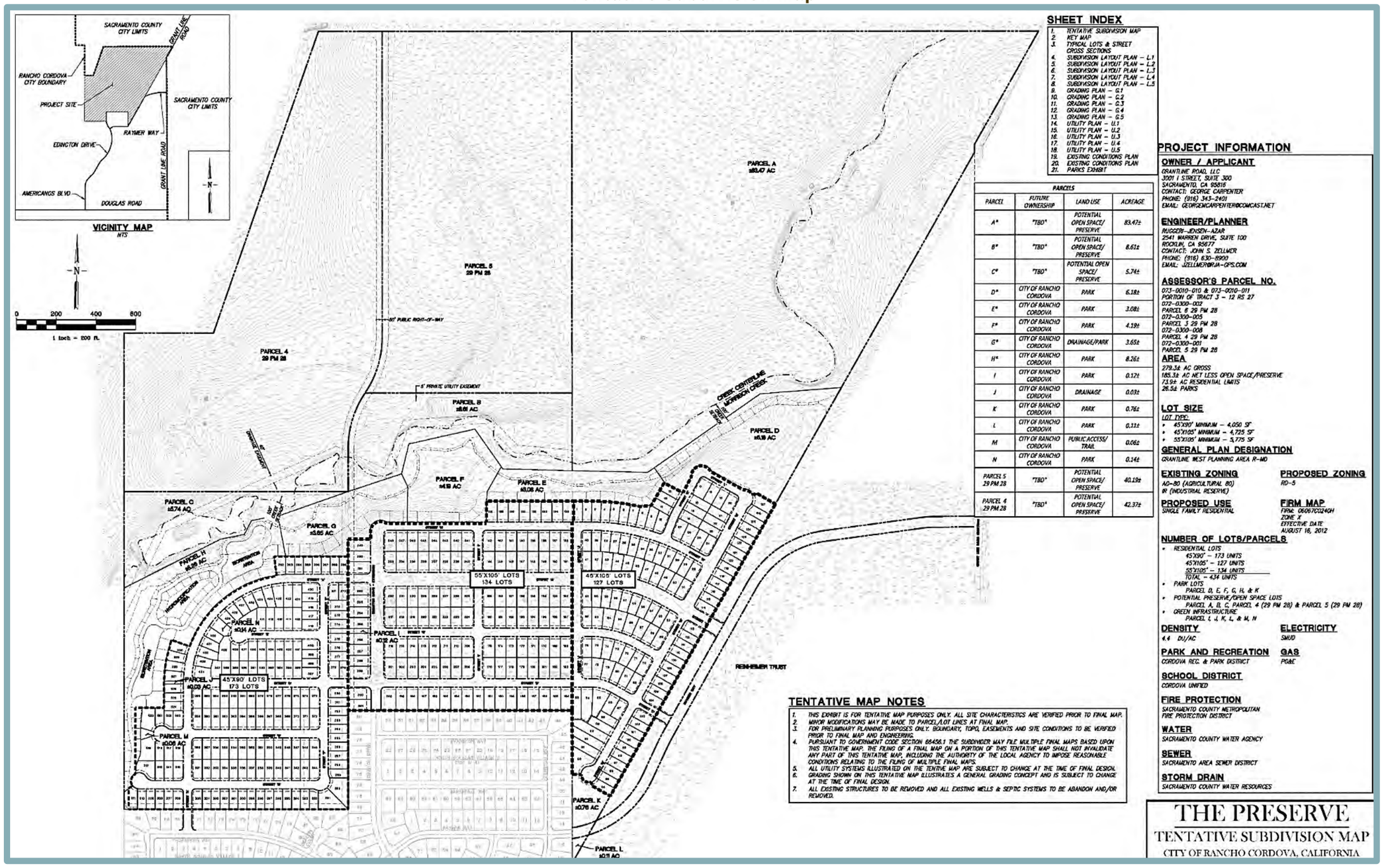


Figure 5
Western Site Map Plan

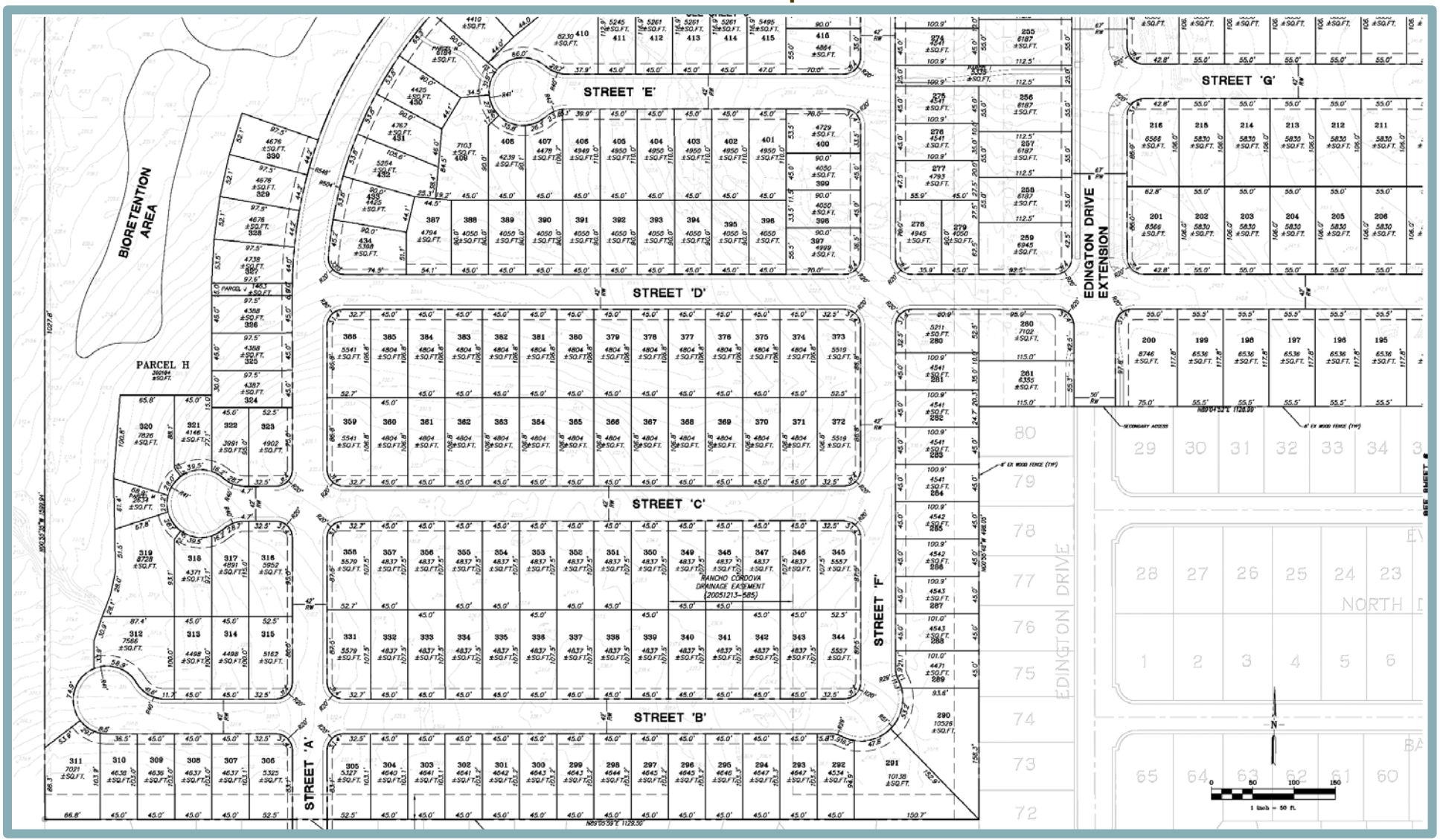
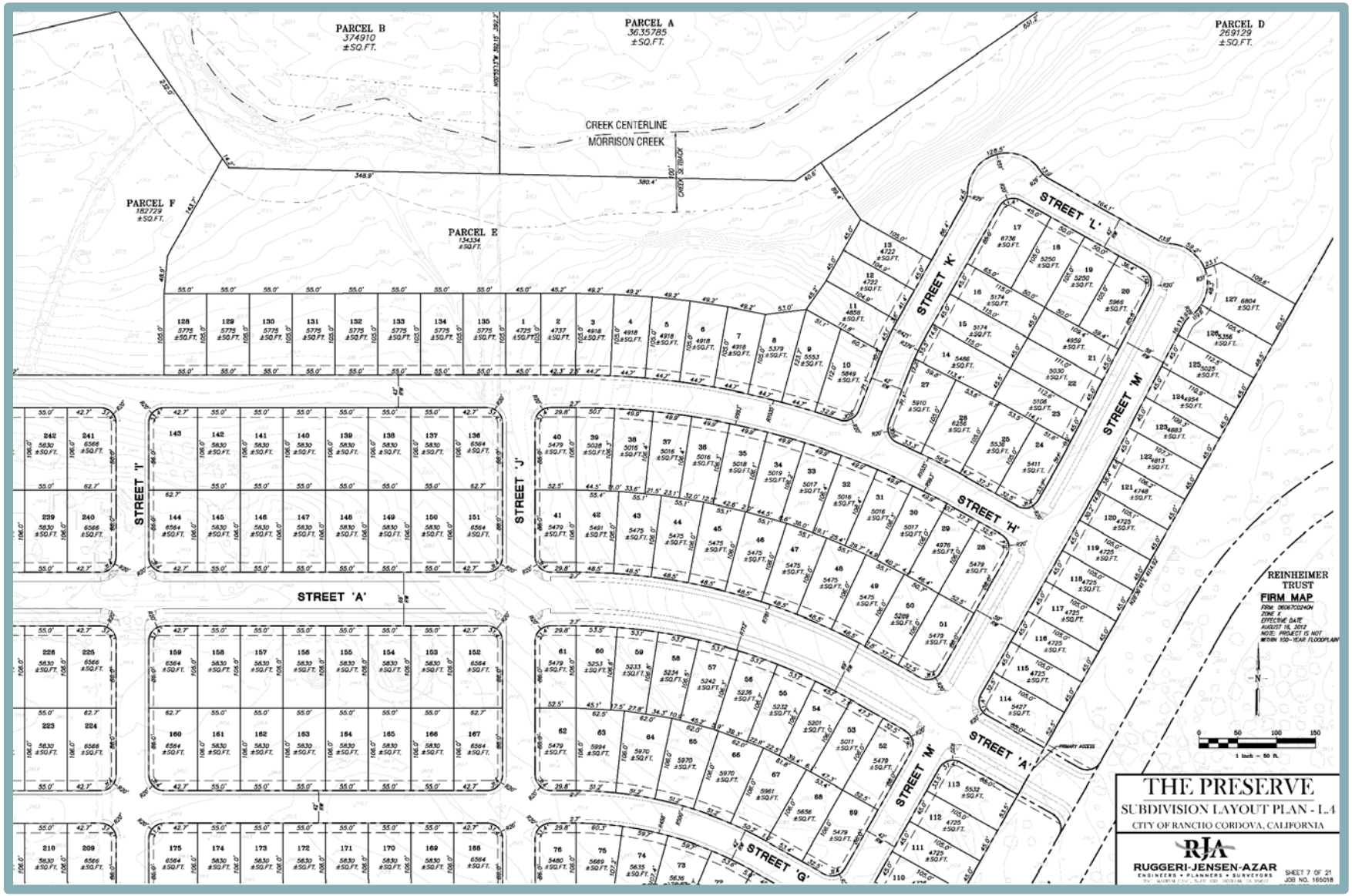


Figure 6
Eastern Site Map Plan



Development Agreement

The proposed project would include a Development Agreement to assure the City that the proposed project would be constructed and developed in compliance with the plans submitted by the applicant. The agreement would also give certainty to various City fees associated with development of the proposed project. Development Agreements increase the certainty in the approval of development projects, thereby preventing the waste of resources, reducing the cost of development, and encouraging investment in comprehensive planning.

Access and Circulation

The proposed project would include two entry points and potential widening of Raymer Way, as well as connection to the existing Camden at Somerset Ranch subdivision by way of an extension of Edington Drive and a new connection to Thornburg Way. The streets would be between 42 and 69-feet wide, which would allow for emergency vehicle access within the minimum 20-foot street width requirement. The internal circulation system would consist of several streets with circulation to all residences within the subdivision. The proposed project would include construction of 10-foot sidewalks and gutters per City standards along the internal streets. Six-foot margins along the sides of each street would allow for street parking. Construction of the two entry points from Raymer Way as well as the new connection with Thornburg Way would require construction activity outside of, but adjacent to, the project site. These roadway improvements would be considered off-site.

Parks, Open Space, and Landscaping

As part of the proposed project, 185.3 acres of undeveloped land on the northern parcels would be retained as open space/preserve (see Figure 7). Morrison Creek would be undisturbed within the open space area. The proposed project would include measures to protect the vegetation and habitats within the 185.3 acres of open space/preserve, including but not limited to, preserve fencing and long-term funding for management of the preserve. Portions of an easement for the future extension of Centennial Drive would be located within the 185.3-acre open space/preserve area. The areas designated for open space would maintain the IR or AG-80 zoning designation and would not require an amendment.

A total of 26.12 acres are planned for two park areas located at the northern end of the development area and community spaces. The parks would be managed by the Cordova Recreation and Park District. The Community Space area would include bioretention and hydromodification areas. Finally, 1.22 acres of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to the surrounding parks.

Utilities

Potable water service for the project would be provided by the Sacramento County Water Agency. The proposed project would include connection of new eight-inch water mains to an existing 10-inch water main located within Edington Drive. The new water lines would run throughout the streets of the project site and would service all units (see Figure 8).

Sanitary sewer service is provided to the City by the County Sanitation District 1. The County Sanitation District 1 operates and maintains the sewer system, which collects wastewater flows from individual developments within the City and conveys them to the Sacramento Regional County Sanitation District Inceptor system. Wastewater is ultimately delivered to the Sacramento Regional Wastewater Treatment Plant north of Elk Grove.

Figure 7
Parks and Open Space / Preserve Land

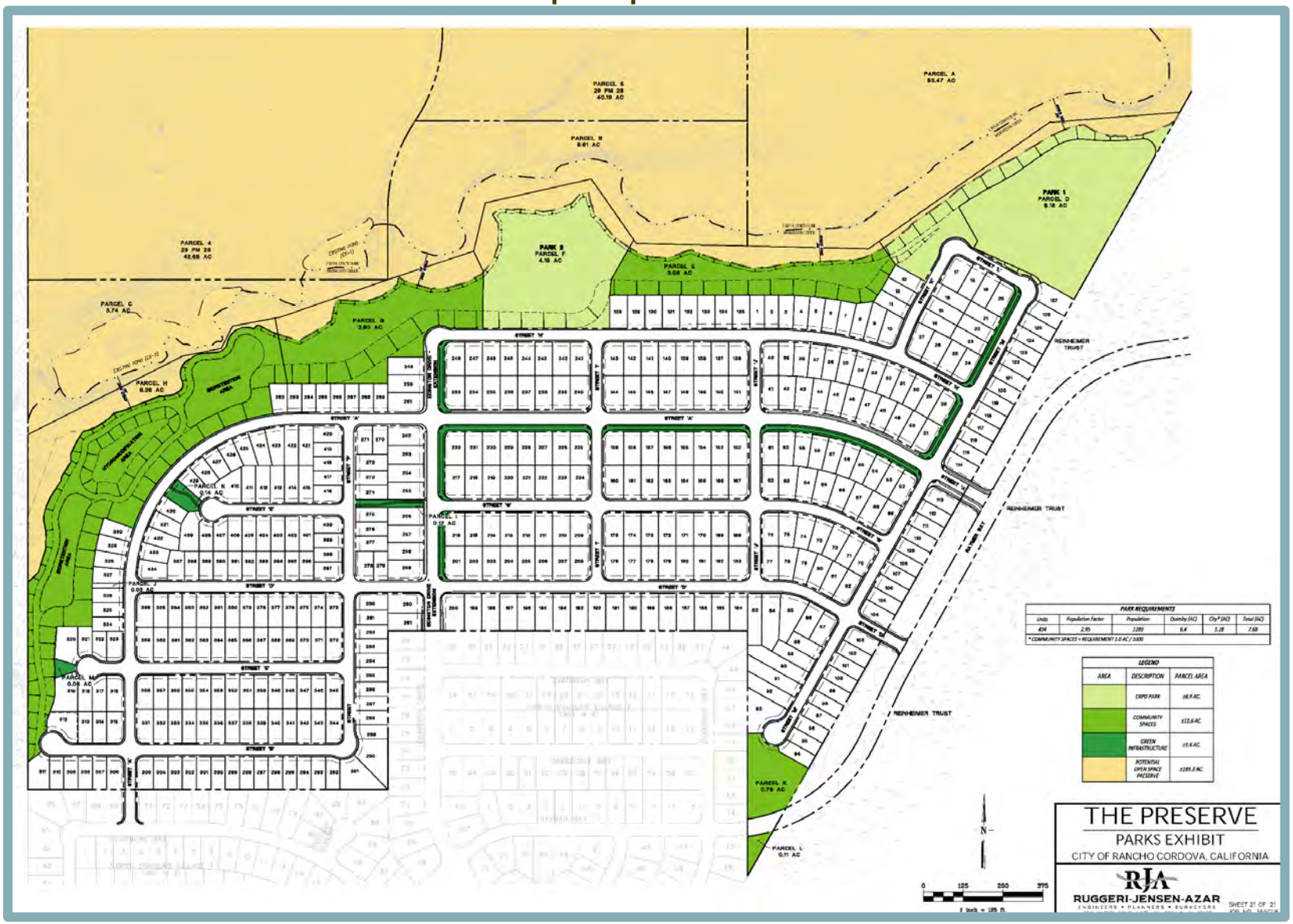
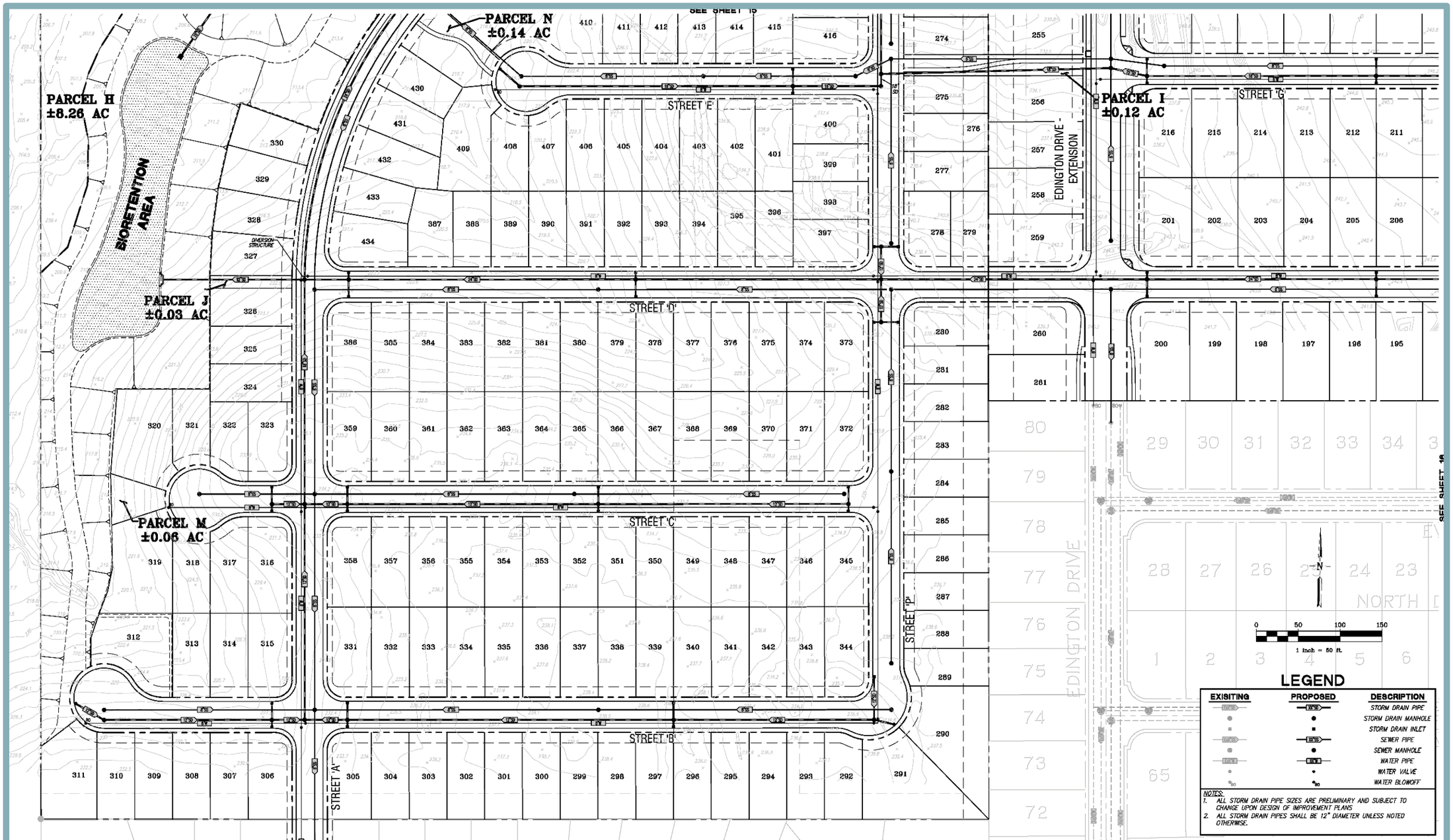


Figure 8
Preliminary Utilities Plan



The proposed project would include installation of eight-inch sanitary sewer pipelines throughout the project site which would divert wastewater to the County Sanitation District. The project would include connection of the eight-inch sanitary sewer lines to existing eight-inch sewer lines within Edington Drive and Thornberg Way.

Stormwater generated by impervious areas within the project site would be directed to a series of new drain inlets, by way of drainage pipes sized between 12 and 30 inches. Runoff from the inlets would then be directed to three bioretention and hydromodification basins along the northwest corner of the project site. Each area would be constructed and sized to properly treat stormwater falling on the project site prior to discharge to the City system.

G. ENVIRONMENTAL CHECKLIST

The following checklist contains the environmental checklist form presented in Appendix G of the CEQA Guidelines. The checklist form is used to describe the impacts of the proposed project. A discussion follows each environmental issue identified in the checklist. For this checklist, the following designations are used:

Potentially Significant Impact: An impact that could be significant, and for which no mitigation has been identified. If any potentially significant impacts are identified, an EIR must be prepared.

Less Than Significant with Mitigation Incorporated: An impact that requires mitigation to reduce the impact to a less-than-significant level.

Less-Than-Significant Impact: Any impact that would not be considered significant under CEQA relative to existing standards.

No Impact: The project would not have any impact.

I. AESTHETICS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	✖	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?	☐	☐	✖	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	✖	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	✖	☐	☐

Discussion

a,b. Examples of typical scenic vistas include mountain ranges, ridgelines, or bodies of water as viewed from a highway, public space, or other area designated for the express purpose of viewing and sightseeing. In general, a project's impact to a scenic vista would occur if development of the project would substantially change or remove a scenic vista. A scenic vista includes any such areas designated by a federal, state, or local agency. The City of Rancho Cordova's General Plan does not officially designate scenic vistas within the planning area. However, the City of Rancho Cordova General Plan EIR does designate the American River and the Sierra Nevada Mountain range as scenic resources. Additionally, the City lists areas which include views of scenic resources. Examples include Mt. Diablo (Grant Line Road), Pine Hill, Flagstaff Hill, Pyramid Peak, Carson Spur, Jackson Butte, Mt. Vaca, and Goat Mountain/Snow Mountain.[3] In addition, the General Plan EIR designates the American River as an important scenic resource; however, the project site is approximately 5.5 miles away and does not offer scenic views of the river from the site. Therefore, the project would not obstruct this scenic resource. Despite the Sierra Nevada Mountain range being designated as a scenic resource, the General Plan states that the views are scattered, and partially obstructed by distance and existing structures. Public views of the Sierra Nevada Mountain range to the east of the project site may be available from portions of Grant Line Road in proximity to the project site; however, public views of the Sierra Nevada Mountain range are not currently available from the west of the project site. Development of the proposed project would not alter existing views looking east from Grant Line Road (i.e. views looking from Grant Line Road towards the Sierra Nevada). Thus, the proposed project would not substantially affect views of the Sierra Nevada Mountain range or the American River.

The City's General Plan notes that scenic views of Mount Diablo are available from portions of Grant Line Road. However, the areas proposed for residential development are located approximately 1,000 feet from Grant Line Road. Separation of the proposed residences from Grant Line Road would diminish the perceived height of the proposed structures, allowing for views over proposed residences. In addition, the proposed

[3] City of Ranch Cordova. *Rancho Cordova General Plan – III Urban Design Element* [pg. 8]. June 2006.

residential structures would be subject to the design requirements within the City of Rancho Cordova's Municipal Code, including the maximum building height restrictions. Adherence to the zoning code maximum height restrictions would ensure that development of the proposed project would not include construction of excessively tall structures that could substantially interfere with distant views of scenic resources. Considering the lack of significant or designated public views of the American River or the Sierra Nevada foothills across the project site, the setback of proposed structures from Grant Line Road, and the existing maximum height requirements, the proposed project would not result in a substantial adverse effect on a scenic vista.

According to the California Scenic Highway Mapping System, the project site is not located within the vicinity of an officially designated State Scenic Highway.[4] The nearest designated State Scenic Highways are State Route (SR) 50 and SR 160; however, the project is located approximately 3.75 miles away from SR 50 and 12 miles away from SR 160. Because the project site is not visible from either highway, the project would not have an adverse-effect on the foregoing scenic highways.

The proposed project is not located within the vicinity of a designated scenic vista or state scenic highway. Therefore, development of the proposed project would not have a substantial adverse effect on a scenic vista and would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway. Thus, a ***less-than-significant*** impact would occur.

c. Views of the project site currently consist of rural agricultural landscapes, dominated by weedy ruderal vegetation where agricultural operations have ceased, and two on-site structures. The site is bordered by the Camden at Somerset Ranch residential subdivision to the south and Grant Line Road is located to the east of the site. The proposed project would result in a portion of the project being developed with a single-family residential subdivision.

Although a portion of the land within the project site would be converted to residential uses, the area to the north of the proposed residential development would remain as undeveloped open/agricultural space. Because the northern portion of the project site would remain undeveloped, public views of the site from Grant Line Road, of the northern portion of the site, would remain unchanged.

The proposed residential structures would be adjacent to the existing residential development to the south of the project site, and would be visually consistent with the existing subdivision. Therefore, although the proposed project would result in a change in the visual character of the southern portion of the project site, such a change would be consistent with the existing development to the south of the project site. The proposed development would be subject to all relevant standards within the Rancho Cordova Municipal Code and the City's *Design Guidelines*.[5] The City's *Design Guidelines* provide a framework to evaluate new development projects and ensure that development within the City meet the City's aesthetic and design standards and vision. In addition, the *Design Guidelines* include a checklist that should be used in the design of projects to ensure that all proposed residential developments meet the City's design standards.

[4] California Department of Transportation. *California Scenic Highway Mapping System*. Available at: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed June 2019.

[5] City of Rancho Cordova. *Design Guidelines*. September 6, 2005.

Considering the above, implementation of the proposed project would include retention of the northern portion of the site as undeveloped agricultural/grassland areas, while the southern portion of the site would be developed in a manner consistent with existing development adjacent to the site, and in compliance with all relevant guidelines related to project design. Therefore, the proposed project would not result in a degradation of the existing visual character of the site or quality of the public views of the site and its surroundings, resulting in a ***less-than-significant*** impact.

d. The project site is located in a rural agricultural area. As such, relatively few sources of light and glare occur in the project vicinity. Existing sources of light and glare are primarily limited to headlights from vehicles travelling on Grant Line Road and Raymer Way. Sources of light and glare are also produced by the Camden at Somerset Ranch residential subdivision to the south of the project site and the two existing on-site residences. Implementation of the proposed project would develop the site with 434 residential buildings, and, thus, would introduce new sources of light and glare where little currently exists.

Development of the project would add new sources of light and glare to the site in the form of street lights, homes, windows, and increased vehicle traffic. Per Section 23.725.060 of the Ranch Cordova Municipal Code, the project would be subject to compliance with the applicable sections of the lighting code, including, but not limited to, shielding of fixtures to limit light pollution and the restriction of direct lighting from crossing property lines.

Given that the exact location and type of lighting fixtures required on-site is not currently known, the potential exists for the project to create a new source of substantial light or glare which could adversely affecting nighttime views in the area and potentially violating Section 23.725.060 of the Ranch Cordova Municipal Code. Thus, a ***potentially significant*** impact could occur.

Mitigation Measure(s)

Implementation of the following mitigation measure would reduce the above impact to a *less-than-significant* level.

I-1 *Prior to the approval of Improvement Plans and issuance of Building Permits for any development on the project site, the project applicant shall submit a lighting plan for the project to the City of Rancho Cordova Planning Division for review and approval. The lighting plan shall include, but not necessarily be limited to, the following provisions:*

- *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;*
- *Place and shield or screen flood and area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas and passing motorists;*
- *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash;*
- *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, colored paint and roofing materials), shielded or screened lighting, and appropriate signage*

to prevent light and glare from adversely affecting motorists on nearby roadways; and

- *The proposed location, mounting height, and aiming point of all outdoor lighting used during project operations and/or construction.*

II. AGRICULTURE AND FOREST RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	✖	☐
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	✖	☐
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	✖
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	✖
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	✖	☐

Discussion

a,e. The project site is currently zoned AG-80 and IR, and the parcel contains two-single family residences with vacant land containing non-native grasses throughout the site. Per the Department of Conservation Farmland Mapping and Monitoring Program (FMMP), the project site is currently classified as Grazing Land, Farmland of Local Importance, and Unique Farmland.[6] Grazing Land is defined as land where existing vegetation is suited for the grazing of livestock. Farmland of Local Importance is land that is currently irrigated for crops or pasture or non-irrigated crops. Grazing Land and Farmland of Local Importance do not qualify as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Furthermore, the project site is not currently used for grazing purposes or for crops or pasture.

A small area in the northeast portion of the project site is designated Unique Farmland. However, the portion of the site designated Unique Farmland is located within the 185.3-acre open space/ preserve area, which would be retained and would not be developed as part of the proposed project. It should be noted that the 185.3-acre open space/preserve area includes portions of an easement for the future extension of Centennial Drive; however, development within this easement is not proposed as part of the proposed project. Further, the easement area is not located within the portion of the site designated as Unique Farmland. The 185.3-acre area would maintain the AG-80 and IR zoning designations. Under the existing AG-80 zoning, agriculture activities could occur. The portions of nature preserve and bio-retention areas at the northern portion of the proposed residential area would provide a buffer between the proposed residential uses and the potential future agricultural activities within the AG-80 zone and the area designated as

[6] California Department of Conservation. *Sacramento County Important Farmland 2016*. July 2017.

Unique Farmland . As such, development of the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use or involve any other changes in the existing environment which could result in conversion of Farmland to non-agricultural use. Therefore, a ***less-than-significant*** impact would occur.

b. The proposed project includes a request for a rezone of a portion of the site from the existing AG-80 and IR designation to RD-6. The remaining 185.3-acres of the site would continue to hold the existing AG-80 and IR zoning designations. The project site is not currently being used for agricultural purposes, and, thus, the project would not result in development of land being used for agriculture. Furthermore, the City has already considered impacts associated with development of the site with non-agricultural uses as part of the General Plan EIR analysis. The proposed project would not result in any impacts in excess of what has already been considered by the City. Given the City's General Plan EIR has already anticipated impacts related to conversion of agricultural land,, and the project site is not under a Williamson Act contract, a ***less-than-significant*** impact would occur.

c,d. The project area is not considered forest land (as defined in Public Resources Code section 12220[g]), timberland (as defined by Public Resources Code section 4526), and is not zoned Timberland Production (as defined by Government Code section 51104[g]). Therefore, the proposed project would have ***no impact*** with regard to conversion of forest land or any potential conflict with forest land, timberland, or Timberland Production zoning.

III. AIR QUALITY. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	✖	☐	☐	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	✖	☐	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	✖	☐	☐	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	✖	☐

Discussion

a,b. Rancho Cordova is located within the Sacramento Valley Air Basin (SVAB) and under the jurisdiction of the Sacramento Metropolitan Air Quality Management District (SMAQMD). The federal Clean Air Act (CAA) and the California Clean Air Act (CCAA) require that federal and State ambient air quality standards (AAQS) be established, respectively, for six common air pollutants, known as criteria pollutants. The criteria pollutants include particulate matter (PM), ground-level ozone, carbon monoxide (CO), sulfur oxides, nitrogen oxides (NO_X), and lead. At the federal level, Sacramento County is designated as severe nonattainment for the 8-hour ozone AAQS, nonattainment for the 24-hour $PM_{2.5}$ AAQS, and attainment or unclassified for all other criteria pollutant AAQS. At the State level, the area is designated as a serious nonattainment area for the 1-hour ozone AAQS, nonattainment for the 8-hour ozone AAQS, nonattainment for the PM_{10} and $PM_{2.5}$ AAQS, and attainment or unclassified for all other State AAQS.

Due to the nonattainment designations, SMAQMD, along with the other air districts in the SVAB region, is required to develop plans to attain the federal and State AAQS for ozone and particulate matter. The attainment plans currently in effect for the SVAB are the 2013 Revisions to the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 Ozone Attainment Plan), $PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area ($PM_{2.5}$ Implementation/Maintenance Plan), and the 1991 Air Quality Attainment Plan (AQAP), including triennial reports. The air quality plans include emissions inventories to measure the sources of air pollutants, to evaluate how well different control measures have worked, and show how air pollution would be reduced. In addition, the plans include the estimated future levels of pollution to ensure that the area would meet air quality goals.

General conformity requirements of the State Implementation Plan (SIP) include whether a project would cause or contribute to new violations of any federal AAQS, increase the frequency or severity of an existing violation of any federal AAQS, or delay timely attainment of any federal AAQS. In addition, a project would be considered to conflict with, or obstruct implementation of, an applicable air quality plan if the project would be inconsistent with the emissions inventories contained in the air quality plan. Emission inventories are developed based on projected increases in population, employment, regional vehicle miles traveled (VMT), and associated area sources within the region, which are based on regional projections that are, in turn, based on General Plans and zoning designations for the region.

Due to the nonattainment designations of the area, SMAQMD has developed plans to attain the State and federal standards for ozone and particulate matter. The plans include the 2013 Ozone Attainment Plan, the $PM_{2.5}$ Implementation/Maintenance Plan, and the 2012 Triennial Assessment and Plan Update. Adopted SMAQMD rules and regulations, as well as the thresholds of significance, have been developed with the intent to ensure continued attainment of AAQS, or to work towards attainment of AAQS for which the area is currently designated nonattainment, consistent with applicable air quality plans. Thus, by exceeding the SMAQMD's mass emission thresholds for operational or construction emissions of ROG, NO_X, or PM_{10}, a project would be considered to conflict with or obstruct implementation of the SMAQMD's air quality planning efforts.

During construction of the proposed project heavy-duty equipment would operate on the project site. Exhaust emissions would be generated by construction equipment, as well as equipment used for vegetation clearing and earth movement activities. Additional criteria pollutant emissions would be generated from workers and residents commuting to and from the project site. In addition, operational emissions associated with the proposed development would primarily consist of an increase in vehicle trips. Increased vehicle trips in the City of Rancho Cordova would generate increased amounts of NO_X, ROG, and PM_{10}. Therefore, the aforementioned activities could result in increased emissions in the project vicinity above thresholds established by the SMAQMD.

Construction and operational emissions associated with the proposed project, in combination with other past, present, and reasonably foreseeable projects within the project region could either delay attainment of the standards or require the adoption of additional controls on existing and future air pollution sources to offset emission increases. The increase in emissions as a result of the project would require further study to determine the significance of related impacts. Thus, the project could cumulatively contribute to regional air quality health effects through emissions of criteria and mobile source air pollutants. Based on the above, the proposed project could result in a ***potentially significant*** impact with regard to air quality.

Further analysis of the above impact will be included in the Air Quality and Greenhouse Gas Emissions (including Energy) chapter of The Preserve Project EIR.

c. Some land uses are considered more sensitive to air pollution than others, due to the types of population groups or activities involved. Heightened sensitivity may be caused by health problems, proximity to the emissions source, and/or duration of exposure to air pollutants. Children, pregnant women, the elderly, and those with existing health problems are especially vulnerable to the effects of air pollution. Sensitive receptors are typically defined as facilities where sensitive receptor population groups (i.e., children, the elderly, the acutely ill, and the chronically ill) are likely to be located. Accordingly, land uses that are typically considered to be sensitive receptors include residences, schools, playgrounds, childcare centers, retirement homes, convalescent homes, hospitals, and medical clinics. The nearest existing sensitive receptors would be the residential development located south of the project site.

The major pollutants of concern are localized carbon monoxide (CO) emissions and toxic air contaminant (TAC) emissions. Implementation of the proposed project would involve operation of heavy-duty construction equipment on the project site throughout the duration of the construction activities. Furthermore, project operations may include sources of TACs or contribute substantially to localized CO emissions. Given that construction and

operation of the proposed project could result in localized CO and TAC emissions, further analysis of such emission sources is required.

Because the proposed project could involve pollutant emissions associated with construction and operations of the proposed project, the project could expose existing sensitive receptors to substantial pollutant concentrations. Accordingly, impacts related to exposure of sensitive receptors to substantial pollutant concentrations could be ***potentially significant***.

Further analysis of the above impact will be included in the Air Quality and Greenhouse Gas Emissions (including Energy) chapter of The Preserve Project EIR.

d. Emissions such as those leading to odors have the potential to adversely affect sensitive receptors within the project area. Pollutants of principal concern include emissions leading to odors, emission of dust, or emissions considered to constitute air pollutants. Air pollutants and emissions of dust have been discussed in section "a" through "c" above and will be further addressed in the Air Quality and Greenhouse Gas Emissions chapter of the Preserve Project EIR. Therefore, the following discussion focuses on emissions of odors.

According to the SMAQMD, common types of facilities that are known to produce odors include, but are not limited to, wastewater treatment facilities, chemical or fiberglass manufacturing, landfills, composting facilities, food processing facilities, refineries, dairies, and rendering plants.[7] Manifestations of a person's reaction to odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). The presence of an odor impact is dependent on a number of variables including: the nature of the odor source; the frequency of odor generation; the intensity of odor; the distance of odor source to sensitive receptors; wind direction; and sensitivity of the receptor. Residential land uses, such as the proposed project, are not typically associated with creation of substantial objectionable odors. As a result, the proposed project operations would not create any objectionable odors that would affect a substantial number of people.

In addition, SMAQMD regulates objectionable odors through Rule 402 (Nuisance), which prohibits any person or source from emitting air contaminants that cause detriment, nuisance, or annoyance to a considerable number of persons or the public. Rule 402 is enforced based on complaints. If complaints are received, the SMAQMD is required to investigate the complaint, as well as determine and ensure a solution for the source of the complaint, which could include operational modifications. Thus, although not anticipated, if odor complaints are submitted after the proposed project is approved, the SMAQMD would ensure that such odors are addressed and any potential odor effects reduced to less than significant.

For the aforementioned reasons, implementation of the proposed project would not result in emissions (such as those leading to odors) adversely affecting a substantial number of people, and a ***less-than-significant*** impact would result.

[7] Sacramento Metropolitan Air Quality Management District. *CEQA Guide to Air Quality Assessment* [pg. 7-3]. December, 2007. Available at: http://www.airquality.org/LandUseTransportation/Documents/Ch7Odors%20FINAL6-2016.pdf. Accessed June 24, 2019.

IV. BIOLOGICAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	✖	☐	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?	✖	☐	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	✖	☐	☐	☐
d. Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?	✖	☐	☐	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	✖	☐	☐	☐
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan?	✖	☐	☐	☐

Discussion

a. A search of special-status species in the area was conducted for the Buffalo Creek 7.5-minute quadrangle through the California Natural Diversity Database (CNDDB) for the project area.[8] According to the CNDDB, various species of special-status plants and animals occur within the vicinity of the project site. Special-status plants with the potential to occur at the project site include legenere, slender Orcutt grass, Sacramento Orcutt grass, and Sanford's arrowhead. In addition, the potential exists for the following special-status wildlife species to occur on-site: conservancy fairy shrimp, mid-valley fairy shrimp, ricksecker's water scavenger beetle, vernal pool tadpole shrimp, western spadefoot, American badger, burrowing owl, ferruginous hawk, golden eagle, grasshopper sparrow, loggerhead shrike, merlin, northern harrier, western pond turtle, white-tailed kite, Swainson's hawk, tricolored blackbird, special-status bats, and other migratory birds and nesting raptors protected by the Migratory Bird Treaty Act. Therefore, the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife, or U.S. Fish & Wildlife Service. Thus, a ***potentially significant*** impact could occur.

[8] California Natural Diversity Database. *Buffalo Creek, California*. 2018

Further analysis of the above impact will be included in the Biological Resources chapter of The Preserve Project EIR.

b,c. A Wetland Delineation prepared for the project site in accordance with the Army Corps of Engineers Wetland Delineation Manual noted that the project site contains potential wetlands and waters of the U.S., including vernal pools, wetland swales, and streams/creeks. The various on-site wetlands are seasonal; however, the wetlands may serve as potential habitats for various species found on the project site. Although a portion of the project site would remain open space, the potential exists that development of the proposed residences would disturb the wetlands and vernal pools located on-site. Furthermore, while the project would include a 100-foot setback from Morrison Creek, the potential to disrupt wildlife in the area still exists. Therefore, the project could have a substantial adverse effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service, and could have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Biological Resources chapter of The Preserve Project EIR.

d. Wildlife movement corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or by areas of human disturbance or urban development. Topography and other natural factors in combination with urbanization can fragment or separate large open-space areas. The fragmentation of natural habitat can create isolated “islands” of vegetation and habitat that may not provide sufficient area to accommodate sustainable populations and can adversely impact genetic and species diversity.

The proposed project site contains Morrison Creek which is located within the northern portion of the site and various riparian habitats are present throughout project site. The riparian vegetation could represent a wildlife movement corridor which could be disturbed with implementation of the project. Moreover, the use of the project site as a wildlife nursery site, although unlikely, is currently unknown. Due to the potential presence of the wildlife movement corridors the project could interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Biological Resources chapter of The Preserve Project EIR.

e. The project site contains a total of 249 trees greater than six inches in diameter at standard height (dsh) for trees measured at 4.5-feet above natural grade. All of the trees on the project site are nonnative to the region. Of the 249 total trees on the project site, 146 trees are 12-inches or more in dsh and meet the definition of a Protected Tree per the City of Rancho Cordova’s Municipal Code (Chapter 19.12). With implementation of the proposed project, a portion of the existing trees would require removal to accommodate the proposed development. Removal of a substantial number of trees, including protected trees could result in a ***potentially significant*** impact related to conflicting with local

policies or ordinances protecting biological resources, including local tree preservation policies.

Further analysis of the above impact will be included in the Biological Resources chapter of The Preserve Project EIR.

f. The South Sacramento Habitat Conservation Plan (SSHCP) was recently adopted in February of 2018, by the cities of Rancho Cordova and Galt; Sacramento County; the Sacramento County Water Agency; the Sacramento County Regional Sanitation District; and the Capital Southeast Connector Joint Powers Authority. The project site is located within the boundaries of the SSHCP and is subject to the SSHCP requirements. The proposed project would be subject to compliance monitoring to track the status of the SSHCP implementation and provide protection and mitigation for covered species. As such, the potential exists for the proposed project to conflict with applicable standards within the SSHCP, and a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Biological Resources chapter of The Preserve Project EIR.

V. CULTURAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	✖	☐	☐	☐
b. Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to Section 15064.5?	✖	☐	☐	☐
c. Disturb any human remains, including those interred outside of dedicated cemeteries.	✖	☐	☐	☐

Discussion

a,b,c. Historical resources are features that are associated with the lives of historically important persons and/or historically significant events, that embody the distinctive characteristics of a type, period, region or method of construction, or that have yielded, or may be likely to yield, information important to the pre-history or history of the local area, California, or the nation. Examples of typical historical resources include, but are not limited to, buildings, farmsteads, rail lines, bridges, and trash scatters containing objects such as colored glass and ceramics. According to the City's General Plan EIR, the Rancho Cordova Planning Area contains twenty-three historic resources, eight prehistoric sites, and one prehistoric/historic site.[9] The project site has not been formally evaluated for the presence/absence of historic or archaeological resources, nor has the site been evaluated for the presence/absence of human remains. Consequently, the presence or absence of such resources at the project site is currently unknown, and the possibility exists that such resources could occur on-site.

Considering that unknown historical/archaeological resources, including human remains, have the potential to exist on-site, ground-disturbing activity related to the proposed construction activities could encounter such resources. Therefore, the project could cause a substantial adverse change in the significance of historical or archaeological resources, including human remains, and a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Cultural and Tribal Resources chapter of The Preserve Project EIR.

[9] City of Ranch Cordova. *City of Rancho Cordova General Plan Draft Environmental Impact Report*. [Page 4.11-3] March 13, 2006.

VI. ENERGY. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	✖	☐	☐	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	✖	☐	☐	☐

Discussion

a,b. The main forms of available energy supply are electricity, natural gas, and oil. A description of the 2019 California Green Building Standards Code (CBSC), with which the proposed project would be required to comply, as well as discussions regarding the proposed project's potential effects related to energy demand during construction and operations is provided below.

The 2019 CBSC, otherwise known as the CAL Green Code (CCR Title 24, Part 11), which will become effective on January 1, 2020.[10] The purpose of the CAL Green Code is to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts having a reduced negative impact or positive environmental impact and encouraging sustainable construction practices. The CBSC standards regulate the method of use, properties, performance, types of materials used in construction, alteration repair, improvement and rehabilitation of a structure or improvement to property. Construction of the proposed project would involve an increase in energy demand and consumption. Construction related work would require the use of oil in the form of gasoline or diesel fuel or construction trips. Hauling and materials truck delivery and operation of off-road construction equipment would be required in the development of the project.

The project is anticipated to receive electricity from SMUD and natural gas from PG&E. Energy use associated with operation of the proposed project would be typical of residential uses requiring electricity and natural gas for interior and exterior building lighting, heating, ventilation, and air condition (HVAC), electronic equipment, machinery, appliances, security systems, and more.

Based on the increased use of energy during project construction and operations, the project could result in a significant impact due to wasteful or inefficient energy as well as conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Air Quality and Greenhouse Gas Emissions (including Energy) chapter of The Preserve Project EIR.

[10] California Building Standards Commission. *California Green Building Standards Code*. 2019.

VII. GEOLOGY AND SOILS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	✖
ii. Strong seismic ground shaking?	✖	☐	☐	☐
iii. Seismic-related ground failure, including liquefaction?	✖	☐	☐	☐
iv. Landslides?	✖	☐	☐	☐
b. Result in substantial soil erosion or the loss of topsoil?	✖	☐	☐	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	✖	☐	☐	☐
d. Be located on expansive soil, as defined in Table 18-1B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	✖	☐	☐	☐
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	✖
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	✖	☐	☐	☐

Discussion

ai. According to the City's General Plan EIR, the closest fault zone to the project site is the Bear Mountain fault zone. The Bear Mountain fault zone is the primary fault concern in Sacramento County; however, the fault zone is located approximately 24 miles northeast of Rancho Cordova's Planning Area. Given that known surface expressions of fault traces do not exist within the City's Planning Area, including the site, fault rupture hazard is not a significant geologic hazard at the site. In addition, Alquist-Priolo Earthquake Fault Zones are not known to exist near the project site. Therefore, ***no impact*** would occur related to substantial adverse effects, including risk, injury, or death, associated with the rupture of a known fault zone.

aii. Ground shaking is the motion that occurs as energy is released during fault related activity and occurs as a result of seismic activity. According to the General Plan EIR, the greatest geologic potential for injury or property damage in the Planning Area is the result of ground shaking from a nearby earthquake. The Planning Area is located within Seismic Zone 3,

which is a characteristic of the intensity of an earthquake in a given area. Seismic Zone 3 is considered an area of relatively low ground shaking potential. The California Building Code requirements would mitigate the shaking effects of nearby seismic activity. Structures built in compliance with the California Building Code should be able to resist moderate earthquakes although some nonstructural damage may occur, and resist major earthquakes without collapse; however, some structural and nonstructural damage is common.

The project would be built in compliance with the California Building Code requirements. Although the project would adhere to the California Building Code requirements, the proposed project could expose people or structures to substantial adverse effects including the risk of loss, injury, or death involving seismic ground shaking and a ***potentially significant*** impact would occur.

Further analysis of the above impact will be included in the Geology and Soils/Mineral Resources chapter of The Preserve Project EIR.

aiii, aiv,
c. The proposed project's potential effects related to liquefaction, landslides, lateral spreading, and subsidence/settlement are discussed in detail below.

Liquefaction

Liquefaction is the temporary transformation of loose, saturated granular sediments from a solid state to a liquefied state as a result of seismic ground shaking. In the process, the soil undergoes transient loss of strength, which commonly causes ground displacement or ground failure to occur. Because saturated soils are a necessary condition for liquefaction, soil layers in areas where the groundwater table is near the surface have higher liquefaction potential than those in which the water table is located at greater depths. As noted in the General Plan EIR, the depth to the groundwater table and aquifer system is generally greater than 50 feet. While it is not likely that unstable soil is located at the project site, further investigation is necessary to determine the presence/absence of liquefiable soils at the project site.

Landslides

Seismically-induced landslides are triggered by earthquake ground shaking. The risk of landslide hazard is greatest in areas with steep, unstable slopes. Although on-site slopes are relatively minor, the potential for landslides to occur at or affect the site is currently unknown. Therefore, further investigation is necessary to ensure the proposed project would not result in adverse effects.

Lateral Spreading

Lateral spreading is horizontal/lateral ground movement of relatively flat-lying soil deposits towards a free face such as an excavation, channel, or open body of water; typically, lateral spreading is associated with liquefaction of one or more subsurface layers near the bottom of the exposed slope. Because the potential for liquefaction to occur at the site is unknown, the potential for lateral spreading to occur is unknown. Further analysis of the geologic conditions is required to avoid adverse effects.

Subsidence/Settlement

Loose unsaturated sandy soils can settle during strong seismic shaking. The potential for subsidence/settlement at the site is currently unknown, thus, further study is required to ensure that the proposed project would not result in substantial adverse effects related to subsidence or settlement of on-site soils.

Conclusion

Based on the above discussion, further analysis of on-site soil conditions is necessary to ensure that the proposed project would not result in adverse effects related to liquefaction, landslides, lateral spreading, or subsidence/settlement. Thus, a ***potentially significant*** impact could occur related to directly or indirectly causing substantial adverse effects, including the risk of loss, injury, or death, involving liquefaction, due to the sites location on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, potentially resulting in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

Further analysis of the above impact will be included in the Geology and Soils/Mineral Resources chapter of The Preserve Project EIR.

b. Issues related to erosion and degradation of water quality during construction are further discussed in Section X, Hydrology and Water Quality, of this IS, under question 'a'. During grading activities associated with development of the proposed project, soil may be temporarily exposed. Thus, the potential exists for wind and water to erode portions of the soil on-site, resulting in the loss of topsoil. Impacts related to substantial soil erosion or the loss of topsoil during construction of the proposed project could be ***potentially significant***.

Further analysis of the above impact will be included in the Hydrology and Water Quality (Drainage) chapter of The Preserve Project EIR.

d. Expansive soils can undergo significant volume changes with changes in moisture content. Specifically, such soils shrink and harden when dried and expand and soften when wetted. If structures are underlain by expansive soils, foundation systems must be capable of withstanding the potential damaging movements of the soil. The proposed project would include construction of foundations or development of residential structures that could be subject to potential risks related to expansive soils. Further study of the geologic conditions would be necessary. Therefore, the proposed project would result in a ***potentially significant*** impact related to being located on expansive soil, as defined in Table 18-1B of the Uniform Building Code, thereby creating substantial direct or indirect risks to life or property.

Further analysis of the above impact will be included in the Geology and Soils/Mineral Resources chapter of The Preserve Project EIR.

e. The proposed project would include connection to the County Sanitation District 1 system. Therefore, because the proposed project would use a sewer system, ***no impact*** regarding the capability of soil to adequately support the use of septic tanks or alternative wastewater disposal systems would occur.

f. The potential for paleontological resources/unique geologic features to exist at the site is unknown. Should previously unknown paleontological resources exist within the project

site, ground-disturbing activity such as grading and excavating associated with development of the proposed project would have the potential to disturb or destroy such resources. Therefore, the proposed project could result in the direct or indirect destruction of a unique paleontological resource, and a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Geology and Soils/Mineral Resources chapter of The Preserve Project EIR.

VIII. GREENHOUSE GAS EMISSIONS. *Would the project:*	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	✖	☐	☐	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gasses?	✖	☐	☐	☐

Discussion

a,b. Emissions of greenhouse gases (GHGs) contributing to global climate change are attributable in large part to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. Therefore, the cumulative global emissions of GHGs contributing to global climate change can be attributed to every nation, region, and city, and virtually every individual on Earth. An individual project's GHG emissions are at a micro-scale level relative to global emissions and effects to global climate change; however, an individual project could result in a cumulatively considerable incremental contribution to a significant cumulative macro-scale impact. As such, impacts related to emissions of GHG are inherently considered cumulative impacts.

Implementation of the proposed project would cumulatively contribute to increases of GHG emissions. Estimated GHG emissions attributable to the project would be primarily associated with increases of carbon dioxide (CO_2) and, to a lesser extent, other GHG pollutants, such as methane (CH_4) and nitrous oxide (N_2O) associated with area sources, mobile sources or vehicles, and electricity use. As such, the proposed project would generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment, or conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. Therefore, impacts related to GHG emissions and global climate change could be cumulatively considerable and considered ***potentially significant***.

Further analysis of the above impact will be included in the Air Quality and Greenhouse Gas Emissions (including Energy) chapter of The Preserve Project EIR.

IX. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	✖	☐	☐	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?	✖	☐	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	✖
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	✖	☐
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	✖
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
g. Expose people or structures, either directly or indirectly, to the risk of loss, injury or death involving wildland fires?	☐	☐	✖	☐

Discussion

a,b. A significant hazard to the public or the environment could result from the routine transport, use, or disposal of hazardous materials. While the proposed project would not be used for industrial purposes, previous uses of the project site may have involved past uses of hazardous materials. Given that the project site is designated for agricultural production uses, the potential exists for on-site soils to be contaminated with herbicides and/or pesticides from past agricultural activities on-site. If present in sufficient concentrations, such chemicals could pose a risk to workers involved in earth-moving activities at the project site.

In addition, the project site contains two single-family residences on the property which may require removal as part of the proposed project. For buildings constructed prior to 1980, the Code of Federal Regulations (29 CFR 1926.1101) states that all thermal system insulation must be designated as “presumed asbestos containing material.” Asbestos is the name for a group of natural occurring silicate materials that are considered “fibrous” and can cause serious illness if inhaled. In addition, lead-based paint is common in structures built prior to 1978. Lead is considered a highly toxic material and caution should be used when removing similar structures. Because the age of the structures on-site is

unknown, the presence or absence of asbestos and lead-based paint cannot be determined at this time.

The project site currently contains septic systems to support the existing residences. The proposed project would include connection to the County Sanitation District 1 system; thus, abandonment of the existing septic systems would be necessary. If not properly abandoned, the on-site septic systems could pose a hazard to construction workers or future residents. Thus, further analysis is needed to determine the potential impacts of the previous septic systems.

Given that the previous uses of the site and current conditions of the on-site structures are unknown, and the need to properly abandon the existing septic system, a ***potentially significant*** impact could occur involving the release of hazardous materials into the public environment.

Further analysis of the above impact will be included in the Hazards and Hazardous Materials chapter of The Preserve Project EIR.

c. The nearest schools relative to the project site are Sunrise Elementary School, located approximately 2.3 miles west of the site, and Robert J. McGarvey Elementary School, located approximately 2.5 miles southwest of the site. Therefore, schools are not located within a quarter mile of the site and the proposed project would result in ***no impact*** related to hazardous emissions or the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

d. A list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 was accessed through the Envirostor database.[11] Based on Envirostor data, the project site has not been listed as a past or present hazardous materials site. The nearest hazardous materials site is a McDonnell Douglas test site which is located approximately 0.80-mile from the project site. Therefore, the project would have a ***less-than-significant*** impact with respect to the location of the project on a hazardous materials site or creating a significant hazard to the public.

e. The proposed project is not located within an airport land use plan. The closest airport to the project site is Mather Airport, located approximately five miles to the west of the project site. Therefore, the proposed project site is not located within two miles of any public airports and does not fall within an airport land use plan area and ***no impact*** would result related to a safety hazard for people living or working in the area.

f. Sufficient emergency access is determined by a number of factors including site circulation and access points. The project would include two off-site entry points and improvements to Raymer Way, as well as an extension to the existing Camden at Somerset Ranch Subdivision by way of an extension of Edington Drive and a new connection to Thornburg Way. The streets would be between 42 and 69-feet wide which would provide adequate emergency vehicle access meeting a minimum 20-feet street width requirement. The proposed project would not include substantial modifications to the existing roadway system in the project area. The proposed project would not include any changes to the surrounding roadway networks that would impair circulation. Therefore, the proposed

[11] Department of Toxic Substances Control. *Envirostor Database Map*. Available at: https://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Sacramento&tour=True. Accessed July 12, 2019.

project would not impair or physically interfere with any emergency evacuation or response plan, and a ***less-than-significant*** impact would occur.

g. Issues related to wildfire hazards are discussed in Section XX, Wildfire, of this IS. As noted therein, the project site is not located within a Very High or High Fire Hazard Severity Zone (FHSZ).[12] In addition, the site is bordered by an existing residential development to the south which limits the risk of wildland fire to the project site. The area located east of the project site, across Grant Line Road, is designated as a moderate fire hazard zone; the project site is separated from the moderate fire hazard zone by Grant Line Road, and fire protection services are provided to the site by the Sacramento Metropolitan Fire District. Therefore, the nearby moderate fire hazard zone is not considered to pose a substantial hazard to the proposed residences.

The proposed project would not expose people or structures to the risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands, and a ***less-than-significant*** impact would occur.

[12] California Department of Forestry and Fire Protection. *Sacramento County, Fire Hazard Severity Zones in SRA*. November 7, 2007.

X. HYDROLOGY AND WATER QUALITY. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	✖	☐	☐	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	✖	☐	☐	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site;	✖	☐	☐	☐
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	✖	☐	☐	☐
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	✖	☐	☐	☐
iv. Impede or redirect flood flows?	✖	☐	☐	☐
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	✖
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	✖	☐	☐	☐

Discussion

a. During the early stages of construction, topsoil would be exposed due to grading and leveling of the site. Therefore, after grading and leveling and prior to overlaying the ground with imperious surfaces, the potential exists for wind and water erosion to discharge sediment and/or urban pollutants into stormwater runoff, which would adversely affect water quality. In addition, the proposed project would result in the generation of increased urban runoff from the creation of substantial impervious areas, which could contribute urban runoff constituents to downstream surface waters. The proposed project would be subject to regulation by the Central Valley Regional Water Quality Control Board (CVRWQCB) to prevent degradation of water quality.

Based on the above, the proposed project could result in the violation of water quality standards and degradation of water quality, and a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Hydrology and Water Quality (Drainage) chapter of The Preserve Project EIR.

b,e. According to the Sacramento County Water Agency's Urban Water Management Plan (UWMP), the Sacramento Central Groundwater Authority (SCGA) adopted a Groundwater Management Plan in 2006.[13] The SCGA was formed to maintain the long-term sustainable yield of the Sacramento Valley Groundwater Basin groundwater supply. Implementation of the proposed project could potentially deplete groundwater supply from this basin. In addition, the proposed project would require a National Pollutant Discharge Elimination System (NPDES) permit and a Storm Water Control Plan (SWCP) as the project would create over 10,000 sf of impervious surfaces. Thus, the proposed project could result in a ***potentially significant*** impact related to substantially decreasing groundwater supplies or interfering substantially with groundwater recharge such that the project could impede a sustainable groundwater management plan of the basin.

Further analysis of the above impact will be included in the Hydrology and Water Quality (Drainage) chapter of The Preserve Project EIR.

ci-civ. Stormwater runoff from impervious surfaces on the site would be directed toward the proposed bioretention and hydromodification areas in the northwest of corner of the parcel. Water from the bioretention basins would drain into the hydromodification basin through a 12-inch storm drain. An outlet structure would be connected to the hydromodification basin which would then direct the water to an existing pond off site.

Given the substantial drainage modifications that would occur with the proposed project, further study is required to ensure that such modifications would not result in substantial erosion, siltation, or flooding on- or off-site, create or contribute runoff water which would provide substantial additional sources of polluted runoff. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Hydrology and Water Quality (Drainage) chapter of The Preserve Project EIR.

d. The project site is not located near the ocean and, thus, would not be subject to tsunami hazards. The site is not located within the vicinity of a large closed body of water such as a lake or reservoir that could be subject to risks from seiches. In addition, according to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, the project site is not located within a Special Flood Hazard Area subject to a 100-year flooding.[14] Therefore, the proposed project would result in ***no impact*** related to impeding or redirecting flood flows, or pose a risk related to the release of pollutants due to project inundation due to flooding.

[13] Sacramento County Water Agency. *Urban Water Management Plan.* May, 2016.
[14] Federal Emergency Management Agency. *Sacramento County Flood Insurance Rate Map.* August 16, 2012.

XI. LAND USE AND PLANNING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	✖	☐
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	✖	☐	☐	☐

Discussion

a. A project risks dividing an established community if the project would introduce infrastructure or alter land use so as to change the land use conditions in the surrounding community, or isolate an existing land use. Currently, two existing single-family homes are located on the project site. Given that the existing single-family residences do not belong to an established community and would be demolished as part of the proposed project, the project would not have the potential to physically divide an established community. Accordingly, a **less-than-significant** impact would occur.

b. Per the Rancho Cordova General Plan, the project site is currently designated Planning Area. The site is located within the Grant Line West Planning Area and is designated Natural Resources and Residential-Mixed Density. Implementation of the project would require a General Plan Amendment to change the sites land use designation to Low-Density Residential. An additional General Plan Amendment would be required to remove from the Circulation Element Centennial Drive in the project vicinity. In addition, the project would require a rezone of the AG-80 and IR zoning designations to RD-6.

Given that the proposed project would require a General Plan Amendment and rezone, further analysis of the project's consistency with applicable land use policies, plans, and regulations is required to ensure that the project would not cause a significant environmental impact due to conflicts with such standards. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Land Use and Planning/Population and Housing chapter of The Preserve Project EIR.

XII. MINERAL RESOURCES. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	✖	☐	☐	☐
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	✖	☐	☐	☐

Discussion

a,b. Per the City's General Plan EIR, mineral extraction in the Planning Area primarily consists of fine sand and course gravel, as well as clay. Currently, two mining operations exist near the project site. Teichert aggregates is located northeast of the project site and Union Mine Iron is located southwest of the project site. The proximity of the project site to existing mining operations could signify that the site contains both known significant mineral resources and known mineral deposits that could qualify as mineral resources.[15] Given that the proposed project is located close to an existing mining operation, the proposed project could result in the loss of availability of known mineral resources. Thus, a ***potentially significant*** impact would occur.

Further analysis of the above impact will be included in the Geology and Soils/Mineral Resources chapter of The Preserve Project EIR.

[15] City of Rancho Cordova. *Rancho Cordova General Plan Draft EIR* [pg. 4.8-11]. March 2006.

XIII. NOISE. *Would the project result in:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	✖	☐	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	✖	☐	☐	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	✖

Discussion

a. The existing noise environment in the project vicinity is defined primarily by vehicle noise from surrounding streets including Grant Line Road and Raymer Way. The proposed project would increase traffic noise levels on surrounding streets with the introduction of new residential development. In addition, project operations would also result in an increase in stationary noise associated with outdoor and recreational activities in the area. Temporary noise sources would also be produced during construction activities. Construction activities could include earth moving activities, stationary equipment, and construction vehicles would generate noise during demolition, site preparation, excavation, and grading. Noise levels generated by the project may exceed established thresholds in the City's General Plan Noise Element and Noise Ordinance. The project could cause a substantial permanent, temporary, or periodic increase in ambient noise levels in the project vicinity above thresholds. Therefore, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Noise chapter of The Preserve Project EIR.

b. Groundborne vibration generated would be generated during construction of the proposed project. Construction activities would produce groundborne vibrations include drilling, the use of jackhammers, and other high-power or vibratory tools, and heavy-duty equipment. In addition, construction activities may expose the nearby residential development to the south of the project site to groundborne vibrations. In the event that such groundborne vibration occurs within the vicinity of the existing sensitive receptors to the south of the project site, the project could expose people to or generate excessive groundborne vibration or groundborne noise levels, and a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in The Noise chapter of the Preserve Project EIR.

c. The nearest airport to the project site is Mather Airport, located approximately five miles to the west of the project site. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels related to air traffic, and ***no impact*** would occur.

XIV. POPULATION AND HOUSING. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through projects in an undeveloped area or extension of major infrastructure)?	✖	☐	☐	☐
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	✖	☐

Discussion

a. The proposed project would include the development of a 434-unit, single-family residential subdivision. The proposed project requests a General Plan Amendment to remove the Natural Reserve and Residential-Mixed Density designation and introduce Low-Density Residential to the project site. Additionally, the project includes a request to rezone a portion of the site from AG-80 and IR zoning to RD-6. The proposed project would not be consistent with City's current General Plan designations for the project site and would result in direct population growth in the area. Thus, the project would result in a ***potentially significant*** impact related to population and housing.

Further analysis of the above impact will be included in the Land Use & Planning/Population and Housing chapter of The Preserve Project EIR.

b. The project site is currently developed with two single-family residences on the southern portion of the project site. The proposed project would require demolition of the on-site structures. While the project would displace inhabitants of the two single-family residences, considering the small number of current residents that would be displaced, replacement housing would be available from the existing housing stock in Rancho Cordova. Furthermore, the project would add 434 residential units to the site, resulting in a net increase of 432 units to the City's housing stock. Thus, a ***less-than-significant*** impact would occur.

XV. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Fire protection?	✖	☐	☐	☐
b. Police protection?	✖	☐	☐	☐
c. Schools?	✖	☐	☐	☐
d. Parks?	☐	☐	✖	☐
e. Other Public Facilities?	☐	☐	✖	☐

Discussion

a. Fire protection services within the project area are provided by the Sacramento Metropolitan Fire District. The project site is located close to two fire stations in the City of Rancho Cordova. Station 68 is located approximately four miles south west of the project site and Station 66 is located approximately six miles west of the project site. Station 68 is located at 4381 Anatolia Drive in Rancho Cordova while Station 66 is located at 3180 Kilgore Road in Rancho Cordova. The proposed project would include development of new residential units and parks, which could result in the potential for fire incidents, EMT calls, and create an increase in demand for fire protection services. Therefore, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Public Services and Utilities chapter of The Preserve Project EIR.

b. Police protection services for the project site are currently provided by the Rancho Cordova Police Department, which maintains a staff of 55 sworn police officers and 7 nonsworn staff members.[16] The Police Station is located at 2897 Kilgore Road in the City of Rancho Cordova. The proposed project would increase the number of residents and houses in the area, which could result in an increase in demand for police protection services. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Public Services and Utilities chapter of The Preserve Project EIR.

c. The project site is located with the Folsom Cordova Unified School District, which includes 33 public and private schools. The project site would be served by Navigator Elementary School located at 10679 Bear Hollow Drive, W.E. Mitchell Middle School located at 2100 Zinfandel Drive, and Cordova High School located at 2239 Chase Drive.

The proposed project would include residential development, and, thus, would increase the number of students attending local school facilities. The student generation estimates presented in Table 1 uses the rates provided in the City's General Plan EIR for single-

[16] City of Rancho Cordova. Rancho Cordova Police Department. Available at: http://www.ranchocordovapd.com/about.php. Accessed: July 11, 2019.

family dwelling units.[17] As shown in Table 1, the proposed project could generate approximately 221 students. Therefore, the proposed project would result in an increased number of students in the area, and, thus may result in a ***potentially significant*** impact to school services.

Table 1
Student Generation Estimates

Housing Type	# of Units	Elementary Students		Junior High Students		High School Students	
		Rate	New Students	Rate	New Students	Rate	New Students
Low Density	434	0.299	130	0.104	45	0.107	46
						Total New Students	**221**

Source:
- City of Rancho Cordova. *Rancho Cordova General Plan Draft EIR.* [pg. 4.12-77]. March, 2006.

Further analysis of the above impact will be included in the Public Services chapter of The Preserve Project EIR.

d,e. The proposed project would include the construction of new homes and, thus, would introduce new residents to the project area. As such, the project would result in increased demand for schools, parks, and other public facilities. The Rancho Cordova Recreation and Park District maintains 18 neighborhood parks and six community parks. Hagan Community Park includes approximately 75 acres including the Cordova Community Center, three swimming pools, and additional recreation areas. A section of the American River Parkway is also in Rancho Cordova which includes a 23-mile open space area.

In addition, the City has collected Quimby Act fees since its incorporation in July 2003. The Quimby Act standard for dedication of parkland is 5 acres per 1,000 residents. Per section 22.40 of the City's Municipal Code, the project would be required to dedicate at least 6.4 acres of parkland based on the inclusion of 434 units within the proposed project.[18] The proposed project would satisfy the Municipal Code requirement, as the project would include dedication of a total of 26.12 acres, included in two park areas located at the northern end of the development and community spaces. The parks would be managed by the Cordova Recreation and Park District. The designated community space areas would include bioretention and hydromodification basins. In addition, the project site would include 1.22 acres of green infrastructure to enhance landscape areas and trails connected to surrounding parks.

Currently, other public facilities located in Rancho Cordova include four community swimming pools, the Cordova Senior Center, Mather Sports Complex, the Cordova Shooting Center, and the Cordova Golf Course. The Mather Sports Complex allows residents to participate in a large variety of activities including aerobics, racquetball, and a gym where residents can exercise. Due to the proposed implementation of open space and parks, the project would satisfy the City's parkland dedication requirements and allow access to public facilities throughout the City. Thus, a ***less-than-significant*** impact related to impacts on parks or the need for additional parks would occur.

[17] City of Rancho Cordova. *Rancho Cordova General Plan Draft EIR.* [pg. 4.12-77]. March, 2006.
[18] City of Rancho Cordova. *Rancho Cordova Municipal Code*. [Section 22.40.035]. June 2019

XVI. RECREATION. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	✖	☐
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	✖	☐

Discussion

a,b. Given that the proposed project would include residential development and would generate population growth within the project area, the project would result in increased demand for park and recreation facilities. However, the proposed project would include two on-site parks and open space at the northern end of the site. As stated in Section XV Public Services, the project would designate 26.12 acres and Community Space, and 1.22 acres of green infrastructure which would exceed the City's parkland dedication requirement of 6.4 acres. Per Section 22.40 of the City's Municipal Code, the parks would be managed by the Cordova Parks and Recreation District and subject to park improvement development fees. Therefore, substantial deterioration of any parks or recreational facilities would not occur as a result of the proposed project.

In addition to the development of the proposed parks, the American River Parkway includes C.M. Geothe Park which consists of 444 acres, and has hiking, bicycling, and horseback riding trails as well as picnic areas for residents. Construction of recreation facilities will not be included as part of the proposed project; however, Rancho Cordova offers numerous recreation facilities including the Mills Station Arts and Culture Center and an exhibit of fine art at Rancho Cordova City Hall.[19] The Neil Orchard Senior Activities Center also offers a place for intimate family gatherings and large community meetings. The project would not be required to construct new recreation facilities, as the current facilities, combined with the proposed on-site park areas, would accommodate residents of the proposed project.

With payment of improvement development fees and designated land for parks, the project would not result in substantial physical deterioration of any existing neighborhood or regional parks or other recreational facilities, and would not result in adverse physical effects related to the construction or expansion of new facilities. Consequently, a ***less-than-significant*** impact would occur.

[19] City of Rancho Cordova. *Rancho Cordova General Plan Draft EIR*. [pg. 4.12-84]. March 2006.

XVII. TRANSPORTATION. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	✖	☐	☐	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	✖	☐	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	✖	☐	☐	☐
d. Result in inadequate emergency access?	✖	☐	☐	☐

Discussion

a. The proposed project would include construction of two entry points and improvements on Raymer Way, as well as connection to the existing Camden at Somerset Ranch subdivision through an extension of Edington Drive and a new connection to Thornburg Way. Increased vehicle trips in the area related to project construction and operations could impact roadway systems by increasing vehicle volumes and congestion at intersections. Thus, further study is required to determine whether implementation of the proposed project would result in substantial impacts related to traffic load and capacity of the roadway system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections). In addition, the project could exceed, either individually or cumulatively, a level of service standard established by the City General Plan for roads affected by project traffic. Therefore, the project could result in a ***potentially significant*** impact related to conflicting with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

Further analysis of the above impact will be included in the Transportation chapter of The Preserve Project EIR.

b. Section 15064.3 of the CEQA Guidelines provides specific considerations for evaluating a project's transportation impacts. Per Section 15064.3, analysis of vehicle miles travelled (VMT) attributable to a project is the most appropriate measure of transportation impacts. Other relevant considerations may include the effects of the project on transit and non-motorized travel. Except as provided in Section 15064.3(b)(2) regarding roadway capacity, a project's effect on automobile delay does not constitute a significant environmental impact under CEQA. It should be noted that currently, the provisions of Section 15064.3 apply only prospectively; determination of impacts based on VMT is not required Statewide until July 1, 2020. It should also be noted that the City does not currently have standards for VMT and relies on level of service standards.

Given that the proposed project would result in increased vehicle trip generation on local roadways, further analysis of VMT attributable to the project is required to ensure that the project would not conflict with Section 15064.3(b) of the CEQA Guidelines. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impact will be included in the Transportation chapter of The Preserve Project EIR.

c,d. An existing residential subdivision is currently located directly south of the project site and agricultural land to the north. The proposed project includes a request for a General Plan amendment and rezone to allow for the proposed 434 single family residences. The proposed project would include construction of two entry points from Raymer Way, as well as connection to the existing Camden at Somerset Ranch subdivision through an extension of Edington Drive and a new connection to Thornburg Way. Raymer Way may also be improved by widening of the roadway. The internal circulation system would consist of multiple roads to all the residences within the subdivision. The proposed increase in development intensity of the site through development of the proposed residences could cause an increase in traffic-related hazards or affect emergency access in the project area. Without further evaluation, the proposed project could result in a ***potentially significant*** impact related to an increase in hazards from design features or incompatible uses, or inadequate emergency access to the project.

Further analysis of the above impact will be included in the Transportation chapter of The Preserve Project EIR.

XVIII. TRIBAL CULTURAL RESOURCES. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k).	✖	☐	☐	☐
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	✖	☐	☐	☐

Discussion

a,b. The proposed project site would include grading and excavation during construction which could lead to encountering previously unknown tribal cultural resources. Tribal resources may exist within the project site due to the site's proximity to Morrison Creek. To aid in the determination of the presence or absence of tribal cultural resources, the City is in the process of conducting tribal outreach per AB 52. Thus, until tribal consultation is complete and further study is completed related to the presence or absence of tribal cultural resources, impact of the proposed project cannot be known. Therefore, further study is required and a ***potentially significant*** impact to tribal cultural resources could occur.

Further analysis of the above impact will be included in the Cultural and Tribal Resources chapter of The Preserve Project EIR.

XIX. UTILITIES AND SERVICE SYSTEMS. *Would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	✖	☐	☐	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	✖	☐	☐	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	✖	☐	☐	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	✖	☐	☐	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	✖	☐	☐	☐

Discussion

a,c. Potable water service for the project would be provided by the Sacramento County Water Agency (SCWA). The proposed project would include installation of new eight-inch water mains, which would connect to an existing 10-inch water main located within Edington Drive. Sanitary sewer service is provided to the City by the County Sanitation District 1. The County Sanitation District 1 collects the wastewater flows from individual developments and directs them to the Sacramento Sanitation District Inceptor System. Wastewater would be routed through the eight-inch sanitary sewer pipelines which would ultimately be delivered to the Sacramento Regional Wastewater Treatment Plant north of Elk Grove. Given the size of the proposed residential development, the total quantity of wastewater generated could be substantial.

The proposed project would increase the amount of impervious surfaces at the project site, thus, increasing stormwater runoff at the site. Stormwater would be directed through 12 and 30-inch drainage pipes to the bioretention basins located in the northwest corner of the project site. The stormwater would then be directed to the hydromodification basin and then directed to the pond north of the project site.

The project would require the relocation or construction of new water infrastructure, as new waterlines would be included in the development. In addition, connection to existing natural gas or telecommunications infrastructure would be required for the proposed residential development.

Per the SCWA's 2015 Urban Water Management Plan, water demands within the SCWA Zone 40 North Service Area are approximately 24,403 acre-feet per year (afy). By the year 2030, the Zone 40 North Service Area water demands are expected to reach 56,816 afy. As stated above, water demand projections were based on buildout of the SCWA's UWMP.. Because the proposed project would include a General Plan Amendment, implementation of the proposed project could result in an increase in demand for water that was not previously foreseen. Therefore, further study is necessary to determine the potential effect.

Based on the above, the proposed project would require the relocation or construction of new wastewater treatment, natural gas, or telecommunications facilities. Therefore, the project could result in a ***potentially significant*** impact related to requiring or resulting in the relocation or construction of new or expanded water, storm water drainage, or electric power facilities, the construction or relocation of which could cause significant environmental effects.

Further analysis of the above impact will be included in the Public Services and Utilities chapter of The Preserve Project EIR.

b. As discussed in Section X, Hydrology and Water Quality, of this Initial Study, the proposed project would rely on groundwater supplies. Groundwater would be supplied by the SCWA. The proposed project could potentially deplete supply from the Sacramento Valley Groundwater Basin and have an adverse effect.

According to the 2015 Urban Water Management Plan, the SCWA's ground water is Rancho Cordova's main water supply. While the City uses surface water as a source of water supply, groundwater supplies are more reliable and consistent.[20] The UWMP predicts that the SCWA will be able to meet water demands in normal years, single dry years, and multiple dry years through the year 2040. If multiple dry years were to occur between 2020 and 2040, the first-year supply totals would range from 77,900 afy in 2020 to 90,900 afy in 2040. The water supply would meet demand totals of 48,121 afy to 79,278 afy. In second year, supply and demand totals would remain the same. In the third dry year, supply totals would range from 70,200 afy in 2020 to 83,800 afy in 2040. Again, the water supply would meet demand totals of 48,121 afy to 79,278 afy. While the SCWA could supply the SCWA's service area during drought years, demand projections for the service area were based on land use designations for the SCWA's service area. The proposed project includes a request for a General Plan Amendment to allow for development of a portion of the site with residential uses. Because the proposed project would include a General Plan Amendment, implementation of the proposed project could result in an increase in demand for water that was not previously foreseen.

Further analysis is necessary to ensure that adequate groundwater supplies would be available to serve the project following the General Plan Amendment altering the land use designation to Low-Density Residential. Therefore, the proposed project could result in a ***potentially significant*** impact related to having sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years.

[20] Sacramento County Water Agency. *Urban Water Management Plan.* May 2016.

Further analysis of the above impact will be included in the Public Services and Utilities chapter of The Preserve Project EIR.

d,e. The Sacramento County Department of Waste Management and Recycling (DWMR) is responsible for maintain waste management for residents. The Sacramento County DWMR also oversees the Sacramento Regional Solid Waste Authority (SWA). Solid waste generated from the proposed project would be disposed of at the Kiefer Road Landfill. The landfill is located at 12701 Kiefer Boulevard, near the intersection of Kiefer Boulevard and Grant Line Road. According to the City's General Plan EIR, the Kiefer Road Landfill has a total capacity of 117 million cubic yards. The Kiefer Road Landfill is operating below permitted capacity and will have the capacity for about 20 additional years. While the landfill has remaining capacity, the proposed project has not been anticipated by the General Plan and could generate solid waste in excess of the capacity of the landfill.

Based on the above, the proposed project could generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Further study is necessary to determine if the project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste. Therefore, a ***potentially significant*** impact related to solid waste would occur as a result of the proposed project.

Further analysis of the above impact will be included in the Public Services and Utilities chapter of The Preserve Project EIR.

XX. WILDFIRE. *If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:*	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	✖	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	✖	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	✖	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	✖	☐

Discussion

a-d. According to the California Department of Forestry and Fire Protection (CAL FIRE) Fire and Resource Assessment Program, the project site is not located within a Very High or High FHSZ.[21] The land located to the east of Grant Line Road is designated as Moderate FHSZ in a State Responsibility Area (SRA). Compared to High and Very High FHSZ, the Moderate FHSZ classification defines areas that present a relatively low risk of wildfires.

The area directly south of the proposed project site is occupied with residential development, which would act as a fire break, reducing the potential for fire to spread to the project site from the south. In addition, the currently vacant land to the west of the site is approved for the development of the Rio Del Oro residential community, which, upon completion, would similarly limit the potential for wildfire risk from the west. However, the areas to the north and east of the project site are currently undeveloped and interspersed with ruderal vegetation. The proposed project would preserve 185.3 acres of undeveloped land on the northern parcels. The undeveloped preserve area would be separated from the proposed residences by 26.12 acres of public parks and community spaces north of the proposed residences. The park and community spaces area would be regularly maintained and would provide a buffer between the open space lands and the proposed residential development, providing a fire break and reducing the potential for the spread of wildfire to the proposed residences.

In addition, implementation of the proposed project would include site clearing activities, which would remove much of the on-site vegetation within the developable area and would further create a buffer between lands designated for open space and residential development. Development of the site for residential uses would reduce the risk of wildland fire because site improvements, such as roadways, driveways, and irrigated

[21] California Department of Forestry and Fire Protection. *Sacramento County, Fire Hazard Severity Zones in SRA*. November 7, 2007.

landscaping, would reduce readily combustible vegetation. Furthermore, development of the proposed project would include the installation of fire suppression systems (e.g., fire hydrants, fire sprinklers, smoke detectors) and would be designed in accordance with the latest requirements of the California Fire Code. In accordance with State standards, the project would be required to maintain defensible space to provide a fire break that would prevent the spread of ground fires and protect on-site structures. The proposed project would also be subject to fire safety requirements of the Sacramento Metropolitan Fire District, which would review all plans as part of the City's Building Permit review process. Fire sprinklers, vegetative buffer zones, and other fire-safe measures may be required as part of their review. Compliance with such would ensure that the potential hazards associated with wildand fires to the proposed buildings and structures would be reduced.

Therefore, based on the above, although an SRA is located in proximity to the project site, implementation of the proposed project would not be expected to result in the following wildfire hazards identified in CEQA Guidelines Appendix G: emergency response or evacuation; exacerbation of wildfire or other fire risks; or wildfire related flooding or landslides, slope instability, or drainage changes.Thus, a ***less-than-significant*** impact would occur.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE.	Potentially Significant Impact	Less-Than-Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	✖	☐	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	✖	☐	☐	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	✖	☐	☐	☐

Discussion

a. As discussed in Section IV, Biological Resources, of this IS, the proposed project could potentially result in impacts to special-status plant and wildlife species and other biological resources. Thus, implementation of the proposed project could have the potential to degrade the quality of the environment by potentially reducing the habitat for special-status plant and animal species. In addition, the project could have a substantial adverse effect on riparian habitat or other sensitive natural communities, including the various wetlands on-site. Furthermore, as noted in Section V, the project site has not been formally evaluated for the presence of historical resources, and possibility exists for such resources to be found on-site. As such, and in the absence of further study, the project could eliminate important examples of the major periods of California history or prehistory. Thus, a ***potentially significant*** impact could occur.

Further analysis of the above impacts will be included in The Preserve Project EIR.

b. The proposed project, in conjunction with other development within the City of Rancho Cordova, could incrementally contribute to cumulative impacts in the project area. In particular, the chapters that will discuss project related impacts include Air Quality and Greenhouse Gas Emissions (including Energy), Biological Resources, Cultural and Tribal Resources, Geology and Soils/Mineral Resources, Hazards and Hazardous Materials, Hydrology and Water Quality (Drainage), Land Use and Planning/Population and Housing, Noise, Public Services and Utilities, and Transportation. Thus, a ***potentially significant*** impact could occur with regard to cumulative impacts in the project area.

Further analysis of the above impacts will be included in The Preserve Project EIR.

c. As described in this IS, implementation of the proposed project could result in impacts related to air quality, hazardous materials, and excess noise levels. As such, in the absence of further study, the project could cause substantial adverse effects on human beings, and a ***potentially significant*** impact could occur.

Further analysis of the above impacts will be included in The Preserve Project EIR.

Appendix B

Department of Transportation
Ron E. Vicari, Director

Divisions
Administration
Maintenance & Operations
Engineering & Planning

County of Sacramento

October 31, 2019

Kelly Whitman
Planning Department
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

SUBJECT: COMMENTS ON THE NOTICE OF PREPARATION (NOP) FOR THE PRESERVE ENVIRONMENTAL IMPACT REPORT (EIR)

Ms. Whitman:

The County of Sacramento, Department of Transportation has reviewed the NOP for the subject project. We appreciate the opportunity to review these documents.

Our comments are simply that we would expect that if this project has any impacts on the transportation facilities in the County of Sacramento that mitigation measures be included in the EIR that address these impacts. To that end we would request that any county roadways that would experience increased traffic volumes from the development be studied in the EIR. In looking at the plan there appears to be the potential for traffic to come from the proposed project through Raymer Road at Grant Line Road and White Rock Road. We have the following comments to offer at this time.

1. The traffic study for the EIR should evaluate the traffic impacts on the following roadway segments:
   - White Rock Road West of Grant Line Road
   - White Rock Road North of Grant Line Road
   - Grant Line Road North of Raymer Road
   - Grant Line Road South of Raymer Road

2. The following intersections should also be evaluated in the study during the weekday AM and PM peak hour:
   - Grant Line Road and White Rock Road
   - Grant Line Road and Raymer Road
   - Grant Line Road and Douglas Road

Should you have any questions, please feel free to contact me at (916) 874-7052.

Sincerely,

Matthew G. Darrow, PE, TE, PTOE.
Principal Civil Engineer
Department of Transportation

MGD/mp

November 18, 2019

Darcy Goulart
City of Rancho Cordova Planning Department
2729 Prospect Park Dr.
Rancho Cordova, CA 95670

Regarding: **Notice of Preparation regarding an Environmental Impact Report**
The Preserve Tentative Subdivision Map (June 10, 2019)
Comment Period: October 25 – November 25
Grant Line West Planning Area
Rancho Cordova, CA

Reviewed by: Cordova Recreation and Park District
Laura Taylor, CRPD Park Planning and Development Manager
Lisbet Gullone, CRPD Contract Planner

As a part of the entitlement process for The Preserve Tentative Subdivision Map, the City of Rancho Cordova circulated a Notice of Preparation regarding an Environmental Impact Report on October 25, 2019. The Cordova Recreation and Park District (CRPD or 'the District') has previously prepared project review comments in a letter dated March 15, 2019 and met with the project team on February 21 and October 17, 2019.

BACKGROUND
After CRPD reviewed the project for Quimby Parkland requirements in May of this year, the application was on hold until the City could determine if the previously planned extension of Centennial Drive (through the northeast corner of the Parkway development) would remain an option. This issue has now been resolved. The City will no longer pursue a road extension through the future open space preserve north of the subdivision.

The Preserve Project Initial Study dated October 2019 contains outdated statistics about the Cordova Recreation and Park District (CRPD) on page 47. The name of the District needs to be corrected in paragraph one. The District currently has 39 parks (10 community parks and 29 neighborhood parks). CRPD also has a golf course, two swimming pools (one is currently being replaced), a senior center and the Mather Sports Complex that includes a gymnasium. CRPD no longer has a shooting center.

TENTATIVE SUBDIVISION MAP
The Preserve subdivision includes 434 single family units and will have a future population of 1,280 individuals (434 x 2.95). The community is required to provide 6.4 acres of Quimby Parkland (5 acres per 1,000 residents), but as shown in the Park Exhibit, the two parks that are designated to CRPD have a combined area of 10.37 acres. CRPD has also noted that the park area is specified as 8.9 acres on page 8 of the NOP.

The current project proposal exceeds the Quimby parkland dedication requirement. The District's acceptance of additional acreage requires an increase to existing funding models for the development and maintenance of the additional park acreage.

The District has met with the applicant to discuss the latest Tentative Map and Park Exhibit (dated June 10, 2019), but written review comments have not yet been prepared. While the proposed Quimby parks are not consistent with CRPD's regular standards regarding size and location, the District is open to some deviations to be approved by the District's General Manager and ultimately the Board of Directors through the mechanism of a Park Development Agreement.

At this time, several options are under consideration. CRPD may consider the larger park in the northeast corner of the subdivision (Park 1) a Community Park and the smaller park at the center of the open space/park corridor (Park 2) a Neighborhood Park. The City of Rancho Cordova staff and CRPD staff have begun discussions about the concept of a trailhead at Park 1 Community Park site to access the proposed trail system. The jurisdictional issues related to City trails and CRPD Quimby parkland have not been detailed should the two agencies pursue a trailhead facility.

ACCESS AND CIRCULATION

District standards state that neighborhood parks should have street frontage on three sides and community parks should have street frontage on two sides. The proposed park layout does not conform to this standard and causes some concern for access, visibility and potential security issues. The District has considered mitigation measures for the access issues created by the non-conformance, suggested below.

The two proposed parks are incorporated with the park/open space corridor close to Morrison Creek, CRPD would like to improve public access to and increase the visibility of the park sites by locating the main loop road (from the North Douglas Neighborhood to Raymer Way) next to Park 2. As a part of this change, Street H would become the main entrance from Raymer Way (in lieu of Street A). In order to further increase the visibility of the two parks, CRPD would also like to place park signs along the assigned loop road.

The proposed trail along Morrison Creek will need to provide access for large maintenance and emergency vehicles. The trail corridor and associated cable fencing along the creek will need to be located in an easement that is separate from the Quimby park sites.

The trail system within The Preserve was presented as connecting to the City of Rancho Cordova trail system. However, adjustments will need to be made to this project proposal and to approved plans for offsite properties to connect the trail system in this project to the City trail system. Because a creek trail was originally envisioned to extend from the west boundary of the Preserve to Americanos Boulevard (along the north side of Morrison Creek), CRPD recommends that the trail within the Preserve (along the south side of Morrison Creek) should extend up to the west subdivision boundary. From this location, a future trail could be extended west through a portion of Rio Del Oro Specific Plan area to Americanos Boulevard. By moving the trail from the north side of the creek, the main part of the wetlands preserve can also remain undisturbed.

Demonstrated ability to connect The Preserve trail system to the larger City system is needed to justify the concept of a trailhead at Park 1 Community Park site.

OPEN SPACE/RECREATION

It is the goal of CRPD to provide an average of 5 acres of improved parkland per 1,000 residents. In addition, the District strives to provide 52% Community Parks and 48% of Neighborhood Parks. It will not be possible to apply these standards to The Preserve. However, CRPD can direct the applicant towards closer compliance. A community asset trailhead area and a parking lot and restroom to service trailhead use (possibly under the jurisdiction of the City of Rancho Cordova) could be set aside in or adjacent to Park 1. This will steer the project towards closer compliance. The location of Park 1 at the end of the subdivision roadway system complicate vehicular access to Park 1 from the broader community. These complications could impact the use of Park 1 as a community park.

The grading plan for Park 2 has significant slopes within the parcel boundary. The slopes reduce the programmable space available and excludes the possibility of off-street parking for this park. Therefore, it can only be considered for neighborhood park use. The grading plan for the Park 1 parcel has significant slopes on the northern portion of the project. These will be difficult to monitor and maintain. CRPD would prefer not to accept maintenance of the slopes off the back side of the park that do not provide a public park use benefit.

CRPD does not consider slopes that exceed 25% (4:1) as Quimby Parkland. The current park sizes shown on the maps should distinguish between that creditable as Quimby parkland (4:1 or less) and portions exceeding 4:1 slope.

Because each park site has a limited amount of street frontage, CRPD recommends that parking should be permitted on each side of streets that front park land, especially for Park 2. As a part of the District's standards, vertical curbs and attached sidewalks are also required for street frontages along park sites.

UTILITIES

Both park sites will need to be provided with standard utility stubs required for park development. CRPD requested the applicant investigate if a gravity-flow sewer line can serve Park 2.

POTENTIAL ENVIRONMENTAL EFFECTS

CRPD recommends that sport field lighting, pedestrian and parking lot lighting, noise, and increased traffic associated with public parks should be considered in the future environmental study. The impacts of Park 1 should consider potential impacts of actively-programmed community parks with the potential for community park amenities.

The environmental study shall also identify soil types, wetlands and biological resources on land designated for parks. If unsuitable soils, wetlands or protected plants and animals are impacting park land, the EIR shall identify appropriate mitigation measures for the removal.

PARK DEVELOPMENT AGREEMENT

As a part of the process to identify a final park system for the Preserve, a Park Development Agreement between the developer and CRPD will be required. If the park system and trail system plan have jurisdictional issues related to trail easements, maintenance, ownership related to a trailhead, parking lot and restroom those issues will be described in a Park Development Agreement and further detailed in an agreement between the City and the Park District.

RECOMMENDATIONS REGARDING THE ENVIRONMENTAL IMPACT REPORT

The Environmental Impact Report for the Preserve should address the following issues:

1. Consider vehicular access to the proposed Park 1 site from the broader community. Improve vehicular access to the Park 1. Consider the option that the main east entrance to the subdivision could be moved from Street A to Street H and Street H could be designated as the wider loop road through the neighborhood. Ideally, the higher volume traffic road should front the proposed community park.

2. Specify that the trail along the south side of Morrison Creek will be designed to accommodate emergency vehicles.

3. Extend the proposed trail to the west subdivision boundary and demonstrate connection to the City-wide Trail System.

4. Suggest erosion control measures for new slopes that are steeper than 4:1 (0.25%).

5. Address lighting, noise, and increased traffic associated with public parks.

6. Identify soil types, wetlands and biological resources on land designated for parks and develop mitigation measures for the removal of unsuitable soils, wetlands or protected plants and animals.

Please contact the District if you have any questions or comments regarding these recommendations.

Respectfully,

Laura L Taylor ASLA
Park Planning and Development Manager
Cordova Recreation and Park District

Copy: Patrick Larkin, General Manager for Cordova Recreation and Park District
Bob Shattuck, Shattuck Community Planning
Cristina James, CPRD Landscape Architect

Department of Waste Management and Recycling
Doug Sloan, Director

County of Sacramento

Date: November 19, 2019

To: Darcy Goulart, City of Rancho Cordova Planning Department

From: Dave Ghirardelli, County of Sacramento Department of Waste Management & Recycling (DWMR)

SUBJECT: DWMR Comments on The Preserve Environmental Impact Report (EIR) Notice of Preparation (NOP)

Please find below DWMR's comments regarding The Preserve EIR NOP.

Sacramento County's Kiefer Landfill serves the waste disposal needs of residents and businesses throughout Sacramento County and the cities within it. Kiefer Landfill is located approximately three miles from The Preserve. The proximity and pre-existence of Kiefer Landfill and the important role it plays in the Sacramento region should be considered during development of the EIR. DWMR can provide detailed and current information for relevant Sections of the EIR and the City of Rancho Cordova is invited to inquire, specifically when authoring the Land Use chapter, Public Services and Utilities chapter, and the Transportation chapter, among others.

In order to maintain service for citizens and businesses throughout the County, parcels created within The Preserve should be accompanied by Disclosures recorded on deeds acknowledging the pre-existence and proximity of Kiefer Landfill and the waste disposal activities that occur there. Sample disclosures can be provided by DWMR upon request.

Please do not hesitate to contact me if you have any questions or need additional clarification on any points made above. Also, please keep me updated regarding The Preserve as the application process for the project entitlements proceeds.

My contact information is below:

Dave Ghirardelli
Solid Waste Planner II
County of Sacramento
Department of Waste Management & Recycling
(916) 875-4557
ghirardellid@saccounty.net

Department of Waste Management and Recycling
Doug Sloan, Director

County of Sacramento

Sent Via E-Mail

November 20, 2019

Darcy Goulart, Planning Manager
City of Rancho Cordova
Community Development Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670
dgoulart@cityofranchocordova.org

Subject: **The Preserve Project / NOP / 2019100515**

Dear Ms. Goulart:

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Notice of Preparation (NOP) for The Preserve Project (Project, SCH 2019100515). SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

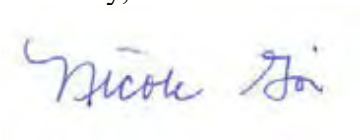
It is our desire that the Project NOP will acknowledge any Project impacts related to the following:

- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
  - https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services
  - https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery
- The potential need to relocate and or remove any SMUD infrastructure that may be affected in or around the project area

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this NOP. If you have any questions regarding this letter, please contact SMUD's Environmental Management Specialist, Jerry Park, at jerry.park@smud.org or 916.732.7406.

Sincerely,



Nicole Goi
Regional & Local Government Affairs
Sacramento Municipal Utility District
6301 S Street, Mail Stop A313
Sacramento, CA 95817
nicole.goi@smud.org

Cc: Jerry Park

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL
East Sacramento Area
11336 Trade Center Drive
Rancho Cordova, CA 95742
(916) 464-1450
(800) 735-2929 (TT/TDD)
(800) 735-2922 (Voice)

RECEIVED
NOV 2 5 2019
BY:

November 21, 2019

File No.: 260.15702

Darcy Goulart
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

The East Sacramento Area Office of the California Highway Patrol recently received a "Notice of Preparation," Environmental Impact Report for the proposed Preserve Project in the City of Rancho Cordova, State Clearing House (SCH) #2019100515. After our review, we have concerns with the potential impact this project could have on traffic congestion, and an increase in calls for service within our jurisdiction.

The actual proposed community is within the Rancho Cordova City limits, but the ingress and egress routes our within the jurisdiction of the California Highway Patrol, East Sacramento Area's jurisdiction. Our concerns relate to the proposed construction of a master planned community to include 434 residential units on 71.58 acres, and public parks on 26.12 acres. This project is located north of Grantline Road, south of Sunrise Boulevard between Prairie City Road and Jackson Road. There are several major roadways that will be impacted by the increased traffic congestion. Jackson Road, State Route 16 (SR-16), is a two-lane undivided highway with minimal shoulders, surrounded by agricultural fields. SR-16 already experiences significant traffic delays/congestion during commute hours and heavy commercial vehicle traffic due to the commercial businesses within the area and the County Landfill. These roads are also used as a major commuter thoroughfare for Amador County, and numerous communities within Sacramento, San Joaquin, and El Dorado Counties. SR-16, Sunrise Boulevard, White Rock Road, Prairie City Road and Grantline Road are roadways within our jurisdiction that are significant ingress and egress routes that will be used to access the proposed community from both US Highway 50 and State Route 99 (SR-99). There are numerous cross streets within the vicinity of the planned project that will also see an increase in traffic congestion.

The aforementioned roadways currently experience traffic congestion and significant delays during commute hours, and without proper traffic management engineering prior to the development of the proposed community, traffic congestion will continue to increase. All of the roadways mentioned are two lane roadways that were originally developed for a rural community and were not designed to accommodate the rapid increase in population. This

project will negatively impact our operations due to the increased traffic congestion, which will lead to an increase in traffic collisions, calls for service, and ultimately will significantly increase our response time. The mission of the California Highway Patrol is to provide the highest level of Safety, Service and Security. The delays in service due to the traffic congestion will impact our ability to provide the service the citizens deserve.

If you have any questions regarding these concerns, please contact Lieutenant Johnson at (916) 464-1450.

Sincerely,

R. M. JOHNSON, Lieutenant
Commander

cc: State Clearing House
Valley Division
Special Projects Section

CALIFORNIA Water Boards

GAVIN NEWSOM GOVERNOR

JARED BLUMENFELD SECRETARY FOR ENVIRONMENTAL PROTECTION

Central Valley Regional Water Quality Control Board

22 November 2019

Darcy Goulart
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

CERTIFIED MAIL
7019 0700 0002 0111 5886

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, THE PRESERVE PROJECT, SCH#2019100515, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 25 October 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Preserve Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

The project is located within the South Sacramento Habitat Conservation Plan (SSHCP) boundary. The project must implement all applicable SSHCP Avoidance and Minimization Measures.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically

as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Total Maximum Daily Load

Morrison Creek is currently 303(d) listed for Diazinon, Pentachlorophenol (PCP), Pyrethroids, and Toxicity. Since the project contains tributaries to Morrison Creek, Central Valley Water Board staff recommends noting the current 303(d) listings for Morrison Creek within the draft Environmental Impact Report and discussing any potential any effects of these pollutants from project activities.

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities

(Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]

The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at: http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers

seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at:
https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Original Signed By

Jordan Hensley
Environmental Scientist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento (via email)

November 25, 2019

SENT VIA E-MAIL

Darcy Goulart
Principal Planner, City of Rancho Cordova
2729 Prospect Park Drive, Rancho Cordova, California 95670

Subject: The Preserve Initial Study and Notice of Preparation for a Draft Environmental Impact Report

Dear Ms. Goulart,

Thank you for providing the opportunity for the Sacramento Metropolitan Air Quality Management District (SMAQMD) to review and comment on the Initial Study (IS) and Notice of Preparation (NOP) for a Draft Environmental Impact Report (DEIR) for The Preserve. We have reviewed the project in a manner consistent with the California Health and Safety Code Section 40961 requirement that SMAQMD "represent all the citizens of the Sacramento District in influencing the decisions of other public and private agencies whose actions may have an adverse impact on air quality." We offer the following comments.

Thresholds & Analysis
This project's size exceeds SMAQMD's screening threshold for construction analysis for both greenhouse gas (GHG) and criteria pollutant (pollutants covered by state and federal clean air acts) emissions. It exceeds SMAQMD's screening threshold for operational analysis of GHG emissions. SMAQMD's Guide to Air Quality Assessment in Sacramento County (CEQA Guide), available on our website, provides methods to analyze project air quality and climate change impacts, including screening criteria, thresholds of significance, and more, to assist lead agencies in complying with CEQA.

If the construction emissions of criteria pollutants and / or GHGs are determined to be significant, the City should require SMAQMD's standard construction mitigation, available in the CEQA Guide. If operational GHG emissions are determined to be significant, the City should apply all feasible mitigation, as described in the CEQA Guide. Further, as the City of Rancho Cordova does not have a Climate Action Plan (CAP), please note that SMAQMD's CEQA Guide contains guidance for addressing greenhouse gas emissions associated with individual development projects.

Grant Line West Planning Area
The planning area identified in the NOP does not include the entire Grant Line West planning area, and the DEIR should include context for the project within the Grant Line West planning area. This would include projected plans for land use in the rest of the Grant Line West planning area.

Conclusion
We look forward to receiving more project information through the environmental review process, so we can more fully evaluate this project for its effects on air quality. Thank you for

your consideration. All projects are subject to SMAQMD rules and regulations at the time of construction. A list of the most common rules that apply at the construction phase of projects is available on our website. If you have questions about these comments, please contact me at mwright@airquality.org or 916-874-4207

Sincerely,



Molly Wright, AICP
Air Quality Planner / Analyst

c: Paul Philley, AICP, Program Coordinator, SMAQMD

DEPARTMENT OF TRANSPORTATION
DISTRICT 3
PLANNING DIVISION
703 B Street, MS-4130
Marysville CA 95901
PHONE (530) 634-7616
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TTY 711
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Making Conservation a California Way of Life.

November 25, 2019

GTS# 03-SAC-2018-00566

Darcy Goulart
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

The Preserve – Notice of Preparation (NOP) of an Environmental Impact Report

Dear Darcy Goulart,

Thank you for including the California Department of Transportation (Caltrans) in the review process for the project referenced above. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system. We review this local development for impacts to the State Highway System (SHS) in keeping with our mission, vision, and goals for sustainability/livability/economy, and safety/health. We provide these comments consistent with the State's smart mobility goals that support a vibrant economy, and build communities, not sprawl.

The applicant is proposing to rezone the property from Agriculture 80 and Industrial to Residential 5 (RD-5). The development includes 434 single family lots, parks, preserve area and all necessary infrastructure to support the project. The project applicant has submitted an arborist report, drainage study, sewer report, water study and aquatic resources delineation. Additional studies that are being prepared area biological resources assessment, traffic study, special-status plant surveys, raptor/bat survey and a geotechnical report. The site is located northwest of Raymer Way and Grant Line Road, north of the Sunridge Specific Plan and east of the Rio Del Oro Specific Plan. Based on the information received, Caltrans provides the following comments:

Traffic Forecasting/Operations

This project will have a significant impact to the US 50 interchanges, mainly to Sunrise, Prairie City, Zinfandel and Mather Road. We look forward to the opportunity to review the Traffic Impact Analysis (TIA) as referenced on page 13 of the NOP. Please incorporate the following points in the TIA:

- Trip generation table for each land use for the project including the land use code used and the units for those land uses.
- Trip distribution map
- Existing Traffic Volume
- Project Only Traffic Volume

- Existing Traffic Volume on Opening Day (Construction Completion Year)
- Existing Traffic Volume on Opening Day (Construction Completion Year) + Project Volume
- Cumulative 20-year traffic volume without project
- Cumulative 20-year traffic volume with project
- Analysis at the following interchanges:
    - US 50/Mather Field Road
    - US 50/Zinfandel Drive
    - US 50/Sunrise Blvd
    - US 50/Prairie City Road
- VMT Analysis for the project
- Suggested mitigation measures

Please provide our office with copies of any further actions regarding the Project. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any questions regarding these comments or require additional information, please contact David Smith at (530) 634-7799 or by email at: david.j.smith@dot.ca.gov.

Sincerely,

DAVID SMITH
Acting Branch Chief, Transportation Planning – South
Planning, Local Assistance, and Sustainability

Appendix C

The Preserve Project

Sacramento Metropolitan AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	440.00	Dwelling Unit	73.50	792,000.00	1175

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	387.09	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor updated per SMUD's RPS reductions

Land Use - Acreage updated per applicant-provided questionnaire

Construction Phase - Timing updated per estimates provided on applicant's construction questionnaire

Demolition -

Grading - Based on applicant-provided questionnaire

Vehicle Trips - Trip rates and trip lengths updated to match project-specific data from Kimley Horn Traffic Study

Mobile Land Use Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect compliance with the 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWELO.

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	75.00	391.00
tblConstructionPhase	NumDays	1,110.00	391.00
tblConstructionPhase	NumDays	70.00	23.00
tblConstructionPhase	NumDays	110.00	44.00
tblConstructionPhase	NumDays	75.00	24.00
tblConstructionPhase	NumDays	40.00	11.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LotAcreage	142.86	73.50
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.09
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TL	8.50	6.65
tblVehicleTrips	HS_TL	7.50	5.87
tblVehicleTrips	HW_TL	15.00	11.74
tblVehicleTrips	ST_TR	9.91	9.12
tblVehicleTrips	SU_TR	8.62	9.12
tblVehicleTrips	WD_TR	9.52	9.12

2.0 Emissions Summary

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.0875	2.8391	2.2530	5.2100e-003	0.4113	0.1206	0.5319	0.1655	0.1121	0.2776	0.0000	466.7041	466.7041	0.0917	0.0000	468.9973
2022	3.6727	2.9478	3.3452	8.1900e-003	0.3187	0.1195	0.4381	0.0858	0.1130	0.1988	0.0000	733.6739	733.6739	0.0885	0.0000	735.8866
2023	0.9409	0.5992	0.7376	1.8300e-003	0.0728	0.0233	0.0961	0.0196	0.0221	0.0417	0.0000	163.7641	163.7641	0.0194	0.0000	164.2488
Maximum	**3.6727**	**2.9478**	**3.3452**	**8.1900e-003**	**0.4113**	**0.1206**	**0.5319**	**0.1655**	**0.1130**	**0.2776**	**0.0000**	**733.6739**	**733.6739**	**0.0917**	**0.0000**	**735.8866**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	1.0875	2.8391	2.2530	5.2100e-003	0.4113	0.1206	0.5319	0.1655	0.1121	0.2776	0.0000	466.7037	466.7037	0.0917	0.0000	468.9969
2022	3.6727	2.9478	3.3452	8.1900e-003	0.3187	0.1195	0.4381	0.0858	0.1130	0.1988	0.0000	733.6735	733.6735	0.0885	0.0000	735.8862
2023	0.9409	0.5992	0.7376	1.8300e-003	0.0728	0.0233	0.0961	0.0196	0.0221	0.0417	0.0000	163.7640	163.7640	0.0194	0.0000	164.2487
Maximum	**3.6727**	**2.9478**	**3.3452**	**8.1900e-003**	**0.4113**	**0.1206**	**0.5319**	**0.1655**	**0.1130**	**0.2776**	**0.0000**	**733.6735**	**733.6735**	**0.0917**	**0.0000**	**735.8862**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-1-2021**	**7-31-2021**	1.5699	1.5699
2	**8-1-2021**	**10-31-2021**	1.1783	1.1783
3	**11-1-2021**	**1-31-2022**	1.7346	1.7346
4	**2-1-2022**	**4-30-2022**	1.6211	1.6211
5	**5-1-2022**	**7-31-2022**	1.6711	1.6711
6	**8-1-2022**	**10-31-2022**	1.6735	1.6735
7	**11-1-2022**	**1-31-2023**	1.6505	1.6505
8	**2-1-2023**	**4-30-2023**	1.0027	1.0027
		Highest	1.7346	1.7346

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.7255	0.0523	4.5386	2.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	7.4120	7.4120	7.1300e-003	0.0000	7.5902
Energy	0.0613	0.5238	0.2229	3.3400e-003		0.0424	0.0424		0.0424	0.0424	0.0000	1,258.9304	1,258.9304	0.0605	0.0212	1,266.7700
Mobile	1.1263	4.7232	13.9603	0.0476	4.3122	0.0369	4.3491	1.1559	0.0344	1.1903	0.0000	4,376.8398	4,376.8398	0.1936	0.0000	4,381.6791
Waste						0.0000	0.0000		0.0000	0.0000	85.8652	0.0000	85.8652	5.0745	0.0000	212.7273
Water						0.0000	0.0000		0.0000	0.0000	10.1427	36.1866	46.3293	0.0376	0.0226	54.0100
Total	**4.9131**	**5.2993**	**18.7218**	**0.0511**	**4.3122**	**0.1044**	**4.4165**	**1.1559**	**0.1019**	**1.2577**	**96.0079**	**5,679.3687**	**5,775.3766**	**5.3733**	**0.0439**	**5,922.7766**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	3.7255	0.0523	4.5386	2.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	7.4120	7.4120	7.1300e-003	0.0000	7.5902
Energy	0.0575	0.4909	0.2089	3.1300e-003		0.0397	0.0397		0.0397	0.0397	0.0000	568.5548	568.5548	0.0109	0.0104	571.9335
Mobile	1.1178	4.6708	13.7405	0.0467	4.2259	0.0363	4.2622	1.1328	0.0338	1.1665	0.0000	4,294.1341	4,294.1341	0.1904	0.0000	4,298.8948
Waste						0.0000	0.0000		0.0000	0.0000	85.8652	0.0000	85.8652	5.0745	0.0000	212.7273
Water						0.0000	0.0000		0.0000	0.0000	8.1142	28.9493	37.0634	0.0301	0.0181	43.2080
Total	**4.9007**	**5.2141**	**18.4880**	**0.0500**	**4.2259**	**0.1011**	**4.3270**	**1.1328**	**0.0986**	**1.2314**	**93.9793**	**4,899.0503**	**4,993.0296**	**5.3131**	**0.0285**	**5,134.3538**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.25**	**1.61**	**1.25**	**2.17**	**2.00**	**3.16**	**2.03**	**2.00**	**3.20**	**2.10**	**2.11**	**13.74**	**13.55**	**1.12**	**34.98**	**13.31**

3.0 Construction Detail

Construction Phase

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2021	6/2/2021	5	23	
2	Site Preparation	Site Preparation	6/3/2021	6/17/2021	5	11	
3	Grading	Grading	6/18/2021	8/18/2021	5	44	
4	Paving	Paving	8/19/2021	9/21/2021	5	24	
5	Building Construction	Building Construction	9/22/2021	3/22/2023	5	391	
6	Architectural Coating	Architectural Coating	10/6/2021	4/5/2023	5	391	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 110

Acres of Paving: 0

Residential Indoor: 1,603,800; Residential Outdoor: 534,600; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	55.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	158.00	47.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.1600e-003	0.0000	6.1600e-003	9.3000e-004	0.0000	9.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0364	0.3616	0.2480	4.5000e-004		0.0178	0.0178		0.0166	0.0166	0.0000	39.1009	39.1009	0.0110	0.0000	39.3760
Total	**0.0364**	**0.3616**	**0.2480**	**4.5000e-004**	**6.1600e-003**	**0.0178**	**0.0240**	**9.3000e-004**	**0.0166**	**0.0175**	**0.0000**	**39.1009**	**39.1009**	**0.0110**	**0.0000**	**39.3760**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	7.2600e-003	1.6600e-003	2.0000e-005	4.6000e-004	2.0000e-005	4.9000e-004	1.3000e-004	2.0000e-005	1.5000e-004	0.0000	2.0797	2.0797	1.2000e-004	0.0000	2.0827
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.6000e-004	6.1300e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9100e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.6093	1.6093	4.0000e-005	0.0000	1.6103
Total	**1.0100e-003**	**7.8200e-003**	**7.7900e-003**	**4.0000e-005**	**2.3600e-003**	**3.0000e-005**	**2.4000e-003**	**6.4000e-004**	**3.0000e-005**	**6.7000e-004**	**0.0000**	**3.6889**	**3.6889**	**1.6000e-004**	**0.0000**	**3.6929**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.1600e-003	0.0000	6.1600e-003	9.3000e-004	0.0000	9.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0364	0.3616	0.2480	4.5000e-004		0.0178	0.0178		0.0166	0.0166	0.0000	39.1009	39.1009	0.0110	0.0000	39.3760
Total	**0.0364**	**0.3616**	**0.2480**	**4.5000e-004**	**6.1600e-003**	**0.0178**	**0.0240**	**9.3000e-004**	**0.0166**	**0.0175**	**0.0000**	**39.1009**	**39.1009**	**0.0110**	**0.0000**	**39.3760**

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-004	7.2600e-003	1.6600e-003	2.0000e-005	4.6000e-004	2.0000e-005	4.9000e-004	1.3000e-004	2.0000e-005	1.5000e-004	0.0000	2.0797	2.0797	1.2000e-004	0.0000	2.0827
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.6000e-004	6.1300e-003	2.0000e-005	1.9000e-003	1.0000e-005	1.9100e-003	5.1000e-004	1.0000e-005	5.2000e-004	0.0000	1.6093	1.6093	4.0000e-005	0.0000	1.6103
Total	**1.0100e-003**	**7.8200e-003**	**7.7900e-003**	**4.0000e-005**	**2.3600e-003**	**3.0000e-005**	**2.4000e-003**	**6.4000e-004**	**3.0000e-005**	**6.7000e-004**	**0.0000**	**3.6889**	**3.6889**	**1.6000e-004**	**0.0000**	**3.6929**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.2227	0.1164	2.1000e-004		0.0112	0.0112		0.0103	0.0103	0.0000	18.3896	18.3896	5.9500e-003	0.0000	18.5383
Total	**0.0214**	**0.2227**	**0.1164**	**2.1000e-004**	**0.0994**	**0.0112**	**0.1106**	**0.0546**	**0.0103**	**0.0650**	**0.0000**	**18.3896**	**18.3896**	**5.9500e-003**	**0.0000**	**18.5383**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.2000e-004	3.5200e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9236	0.9236	2.0000e-005	0.0000	0.9242
Total	**4.6000e-004**	**3.2000e-004**	**3.5200e-003**	**1.0000e-005**	**1.0900e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9236**	**0.9236**	**2.0000e-005**	**0.0000**	**0.9242**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0994	0.0000	0.0994	0.0546	0.0000	0.0546	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0214	0.2227	0.1164	2.1000e-004		0.0112	0.0112		0.0103	0.0103	0.0000	18.3896	18.3896	5.9500e-003	0.0000	18.5383
Total	**0.0214**	**0.2227**	**0.1164**	**2.1000e-004**	**0.0994**	**0.0112**	**0.1106**	**0.0546**	**0.0103**	**0.0650**	**0.0000**	**18.3896**	**18.3896**	**5.9500e-003**	**0.0000**	**18.5383**

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.2000e-004	3.5200e-003	1.0000e-005	1.0900e-003	1.0000e-005	1.1000e-003	2.9000e-004	1.0000e-005	3.0000e-004	0.0000	0.9236	0.9236	2.0000e-005	0.0000	0.9242
Total	**4.6000e-004**	**3.2000e-004**	**3.5200e-003**	**1.0000e-005**	**1.0900e-003**	**1.0000e-005**	**1.1000e-003**	**2.9000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**0.9236**	**0.9236**	**2.0000e-005**	**0.0000**	**0.9242**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1919	0.0000	0.1919	0.0793	0.0000	0.0793	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0922	1.0208	0.6793	1.3600e-003		0.0437	0.0437		0.0402	0.0402	0.0000	119.8890	119.8890	0.0388	0.0000	120.8583
Total	**0.0922**	**1.0208**	**0.6793**	**1.3600e-003**	**0.1919**	**0.0437**	**0.2355**	**0.0793**	**0.0402**	**0.1195**	**0.0000**	**119.8890**	**119.8890**	**0.0388**	**0.0000**	**120.8583**

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4500e-003	0.1649	0.0377	4.9000e-004	0.0105	5.7000e-004	0.0111	2.8900e-003	5.4000e-004	3.4300e-003	0.0000	47.2647	47.2647	2.7300e-003	0.0000	47.3329
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0600e-003	1.4200e-003	0.0156	5.0000e-005	4.8500e-003	3.0000e-005	4.8800e-003	1.2900e-003	3.0000e-005	1.3200e-003	0.0000	4.1048	4.1048	1.0000e-004	0.0000	4.1074
Total	**6.5100e-003**	**0.1663**	**0.0533**	**5.4000e-004**	**0.0154**	**6.0000e-004**	**0.0160**	**4.1800e-003**	**5.7000e-004**	**4.7500e-003**	**0.0000**	**51.3695**	**51.3695**	**2.8300e-003**	**0.0000**	**51.4402**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1919	0.0000	0.1919	0.0793	0.0000	0.0793	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0922	1.0208	0.6793	1.3600e-003		0.0437	0.0437		0.0402	0.0402	0.0000	119.8888	119.8888	0.0388	0.0000	120.8582
Total	**0.0922**	**1.0208**	**0.6793**	**1.3600e-003**	**0.1919**	**0.0437**	**0.2355**	**0.0793**	**0.0402**	**0.1195**	**0.0000**	**119.8888**	**119.8888**	**0.0388**	**0.0000**	**120.8582**

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.4500e-003	0.1649	0.0377	4.9000e-004	0.0105	5.7000e-004	0.0111	2.8900e-003	5.4000e-004	3.4300e-003	0.0000	47.2647	47.2647	2.7300e-003	0.0000	47.3329
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0600e-003	1.4200e-003	0.0156	5.0000e-005	4.8500e-003	3.0000e-005	4.8800e-003	1.2900e-003	3.0000e-005	1.3200e-003	0.0000	4.1048	4.1048	1.0000e-004	0.0000	4.1074
Total	**6.5100e-003**	**0.1663**	**0.0533**	**5.4000e-004**	**0.0154**	**6.0000e-004**	**0.0160**	**4.1800e-003**	**5.7000e-004**	**4.7500e-003**	**0.0000**	**51.3695**	**51.3695**	**2.8300e-003**	**0.0000**	**51.4402**

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0151	0.1550	0.1758	2.7000e-004		8.1300e-003	8.1300e-003		7.4800e-003	7.4800e-003	0.0000	24.0282	24.0282	7.7700e-003	0.0000	24.2225
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0151**	**0.1550**	**0.1758**	**2.7000e-004**		**8.1300e-003**	**8.1300e-003**		**7.4800e-003**	**7.4800e-003**	**0.0000**	**24.0282**	**24.0282**	**7.7700e-003**	**0.0000**	**24.2225**

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3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6800e-003	1.1600e-003	0.0128	4.0000e-005	7.3900e-003	3.0000e-005	7.4200e-003	1.9000e-003	2.0000e-005	1.9200e-003	0.0000	3.3585	3.3585	9.0000e-005	0.0000	3.3606
Total	**1.6800e-003**	**1.1600e-003**	**0.0128**	**4.0000e-005**	**7.3900e-003**	**3.0000e-005**	**7.4200e-003**	**1.9000e-003**	**2.0000e-005**	**1.9200e-003**	**0.0000**	**3.3585**	**3.3585**	**9.0000e-005**	**0.0000**	**3.3606**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0151	0.1550	0.1758	2.7000e-004		8.1300e-003	8.1300e-003		7.4800e-003	7.4800e-003	0.0000	24.0282	24.0282	7.7700e-003	0.0000	24.2224
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0151**	**0.1550**	**0.1758**	**2.7000e-004**		**8.1300e-003**	**8.1300e-003**		**7.4800e-003**	**7.4800e-003**	**0.0000**	**24.0282**	**24.0282**	**7.7700e-003**	**0.0000**	**24.2224**

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3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6800e-003	1.1600e-003	0.0128	4.0000e-005	7.3900e-003	3.0000e-005	7.4200e-003	1.9000e-003	2.0000e-005	1.9200e-003	0.0000	3.3585	3.3585	9.0000e-005	0.0000	3.3606
Total	**1.6800e-003**	**1.1600e-003**	**0.0128**	**4.0000e-005**	**7.3900e-003**	**3.0000e-005**	**7.4200e-003**	**1.9000e-003**	**2.0000e-005**	**1.9200e-003**	**0.0000**	**3.3585**	**3.3585**	**9.0000e-005**	**0.0000**	**3.3606**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0694	0.6363	0.6050	9.8000e-004		0.0350	0.0350		0.0329	0.0329	0.0000	84.5476	84.5476	0.0204	0.0000	85.0576
Total	**0.0694**	**0.6363**	**0.6050**	**9.8000e-004**		**0.0350**	**0.0350**		**0.0329**	**0.0329**	**0.0000**	**84.5476**	**84.5476**	**0.0204**	**0.0000**	**85.0576**

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3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2700e-003	0.1970	0.0531	5.2000e-004	0.0131	6.1000e-004	0.0137	3.7800e-003	5.8000e-004	4.3600e-003	0.0000	50.1614	50.1614	2.5800e-003	0.0000	50.2259
Worker	0.0270	0.0186	0.2049	6.0000e-004	0.0635	4.3000e-004	0.0639	0.0169	3.9000e-004	0.0173	0.0000	53.8006	53.8006	1.3600e-003	0.0000	53.8346
Total	**0.0333**	**0.2157**	**0.2580**	**1.1200e-003**	**0.0766**	**1.0400e-003**	**0.0776**	**0.0207**	**9.7000e-004**	**0.0216**	**0.0000**	**103.9619**	**103.9619**	**3.9400e-003**	**0.0000**	**104.0605**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0694	0.6363	0.6050	9.8000e-004		0.0350	0.0350		0.0329	0.0329	0.0000	84.5475	84.5475	0.0204	0.0000	85.0575
Total	**0.0694**	**0.6363**	**0.6050**	**9.8000e-004**		**0.0350**	**0.0350**		**0.0329**	**0.0329**	**0.0000**	**84.5475**	**84.5475**	**0.0204**	**0.0000**	**85.0575**

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3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.2700e-003	0.1970	0.0531	5.2000e-004	0.0131	6.1000e-004	0.0137	3.7800e-003	5.8000e-004	4.3600e-003	0.0000	50.1614	50.1614	2.5800e-003	0.0000	50.2259
Worker	0.0270	0.0186	0.2049	6.0000e-004	0.0635	4.3000e-004	0.0639	0.0169	3.9000e-004	0.0173	0.0000	53.8006	53.8006	1.3600e-003	0.0000	53.8346
Total	**0.0333**	**0.2157**	**0.2580**	**1.1200e-003**	**0.0766**	**1.0400e-003**	**0.0776**	**0.0207**	**9.7000e-004**	**0.0216**	**0.0000**	**103.9619**	**103.9619**	**3.9400e-003**	**0.0000**	**104.0605**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2428	301.2428	0.0722	0.0000	303.0471
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**	**0.0000**	**301.2428**	**301.2428**	**0.0722**	**0.0000**	**303.0471**

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3.6 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.6629	0.1748	1.8400e-003	0.0467	1.8900e-003	0.0486	0.0135	1.8100e-003	0.0153	0.0000	177.0732	177.0732	8.9300e-003	0.0000	177.2964
Worker	0.0900	0.0597	0.6714	2.0400e-003	0.2262	1.4800e-003	0.2277	0.0601	1.3600e-003	0.0615	0.0000	184.7483	184.7483	4.3600e-003	0.0000	184.8574
Total	**0.1107**	**0.7226**	**0.8462**	**3.8800e-003**	**0.2728**	**3.3700e-003**	**0.2762**	**0.0736**	**3.1700e-003**	**0.0768**	**0.0000**	**361.8214**	**361.8214**	**0.0133**	**0.0000**	**362.1538**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2218	2.0300	2.1272	3.5000e-003		0.1052	0.1052		0.0990	0.0990	0.0000	301.2425	301.2425	0.0722	0.0000	303.0467
Total	**0.2218**	**2.0300**	**2.1272**	**3.5000e-003**		**0.1052**	**0.1052**		**0.0990**	**0.0990**	**0.0000**	**301.2425**	**301.2425**	**0.0722**	**0.0000**	**303.0467**

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3.6 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0208	0.6629	0.1748	1.8400e-003	0.0467	1.8900e-003	0.0486	0.0135	1.8100e-003	0.0153	0.0000	177.0732	177.0732	8.9300e-003	0.0000	177.2964
Worker	0.0900	0.0597	0.6714	2.0400e-003	0.2262	1.4800e-003	0.2277	0.0601	1.3600e-003	0.0615	0.0000	184.7483	184.7483	4.3600e-003	0.0000	184.8574
Total	**0.1107**	**0.7226**	**0.8462**	**3.8800e-003**	**0.2728**	**3.3700e-003**	**0.2762**	**0.0736**	**3.1700e-003**	**0.0768**	**0.0000**	**361.8214**	**361.8214**	**0.0133**	**0.0000**	**362.1538**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0456	0.4172	0.4711	7.8000e-004		0.0203	0.0203		0.0191	0.0191	0.0000	67.2234	67.2234	0.0160	0.0000	67.6232
Total	**0.0456**	**0.4172**	**0.4711**	**7.8000e-004**		**0.0203**	**0.0203**		**0.0191**	**0.0191**	**0.0000**	**67.2234**	**67.2234**	**0.0160**	**0.0000**	**67.6232**

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3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6400e-003	0.1229	0.0345	4.0000e-004	0.0104	2.0000e-004	0.0106	3.0100e-003	1.9000e-004	3.2000e-003	0.0000	38.7772	38.7772	1.8000e-003	0.0000	38.8222
Worker	0.0188	0.0120	0.1377	4.4000e-004	0.0505	3.2000e-004	0.0508	0.0134	3.0000e-004	0.0137	0.0000	39.6641	39.6641	8.7000e-004	0.0000	39.6860
Total	**0.0225**	**0.1349**	**0.1722**	**8.4000e-004**	**0.0609**	**5.2000e-004**	**0.0614**	**0.0164**	**4.9000e-004**	**0.0169**	**0.0000**	**78.4414**	**78.4414**	**2.6700e-003**	**0.0000**	**78.5082**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0456	0.4172	0.4711	7.8000e-004		0.0203	0.0203		0.0191	0.0191	0.0000	67.2233	67.2233	0.0160	0.0000	67.6231
Total	**0.0456**	**0.4172**	**0.4711**	**7.8000e-004**		**0.0203**	**0.0203**		**0.0191**	**0.0191**	**0.0000**	**67.2233**	**67.2233**	**0.0160**	**0.0000**	**67.6231**

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3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	3.6400e-003	0.1229	0.0345	4.0000e-004	0.0104	2.0000e-004	0.0106	3.0100e-003	1.9000e-004	3.2000e-003	0.0000	38.7772	38.7772	1.8000e-003	0.0000	38.8222
Worker	0.0188	0.0120	0.1377	4.4000e-004	0.0505	3.2000e-004	0.0508	0.0134	3.0000e-004	0.0137	0.0000	39.6641	39.6641	8.7000e-004	0.0000	39.6860
Total	**0.0225**	**0.1349**	**0.1722**	**8.4000e-004**	**0.0609**	**5.2000e-004**	**0.0614**	**0.0164**	**4.9000e-004**	**0.0169**	**0.0000**	**78.4414**	**78.4414**	**2.6700e-003**	**0.0000**	**78.5082**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7985					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9000e-003	0.0481	0.0573	9.0000e-005		2.9600e-003	2.9600e-003		2.9600e-003	2.9600e-003	0.0000	8.0428	8.0428	5.5000e-004	0.0000	8.0566
Total	**0.8054**	**0.0481**	**0.0573**	**9.0000e-005**		**2.9600e-003**	**2.9600e-003**		**2.9600e-003**	**2.9600e-003**	**0.0000**	**8.0428**	**8.0428**	**5.5000e-004**	**0.0000**	**8.0566**

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3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7200e-003	3.2600e-003	0.0358	1.0000e-004	0.0111	7.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.4037	9.4037	2.4000e-004	0.0000	9.4096
Total	**4.7200e-003**	**3.2600e-003**	**0.0358**	**1.0000e-004**	**0.0111**	**7.0000e-005**	**0.0112**	**2.9500e-003**	**7.0000e-005**	**3.0200e-003**	**0.0000**	**9.4037**	**9.4037**	**2.4000e-004**	**0.0000**	**9.4096**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7985					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9000e-003	0.0481	0.0573	9.0000e-005		2.9600e-003	2.9600e-003		2.9600e-003	2.9600e-003	0.0000	8.0427	8.0427	5.5000e-004	0.0000	8.0565
Total	**0.8054**	**0.0481**	**0.0573**	**9.0000e-005**		**2.9600e-003**	**2.9600e-003**		**2.9600e-003**	**2.9600e-003**	**0.0000**	**8.0427**	**8.0427**	**5.5000e-004**	**0.0000**	**8.0565**

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3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7200e-003	3.2600e-003	0.0358	1.0000e-004	0.0111	7.0000e-005	0.0112	2.9500e-003	7.0000e-005	3.0200e-003	0.0000	9.4037	9.4037	2.4000e-004	0.0000	9.4096
Total	**4.7200e-003**	**3.2600e-003**	**0.0358**	**1.0000e-004**	**0.0111**	**7.0000e-005**	**0.0112**	**2.9500e-003**	**7.0000e-005**	**3.0200e-003**	**0.0000**	**9.4037**	**9.4037**	**2.4000e-004**	**0.0000**	**9.4096**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.2954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2463
Total	**3.3220**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2463**

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3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0182	0.0121	0.1360	4.1000e-004	0.0458	3.0000e-004	0.0461	0.0122	2.8000e-004	0.0125	0.0000	37.4174	37.4174	8.8000e-004	0.0000	37.4395
Total	**0.0182**	**0.0121**	**0.1360**	**4.1000e-004**	**0.0458**	**3.0000e-004**	**0.0461**	**0.0122**	**2.8000e-004**	**0.0125**	**0.0000**	**37.4174**	**37.4174**	**8.8000e-004**	**0.0000**	**37.4395**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	3.2954					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.1831	0.2358	3.9000e-004		0.0106	0.0106		0.0106	0.0106	0.0000	33.1923	33.1923	2.1600e-003	0.0000	33.2463
Total	**3.3220**	**0.1831**	**0.2358**	**3.9000e-004**		**0.0106**	**0.0106**		**0.0106**	**0.0106**	**0.0000**	**33.1923**	**33.1923**	**2.1600e-003**	**0.0000**	**33.2463**

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3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0182	0.0121	0.1360	4.1000e-004	0.0458	3.0000e-004	0.0461	0.0122	2.8000e-004	0.0125	0.0000	37.4174	37.4174	8.8000e-004	0.0000	37.4395
Total	**0.0182**	**0.0121**	**0.1360**	**4.1000e-004**	**0.0458**	**3.0000e-004**	**0.0461**	**0.0122**	**2.8000e-004**	**0.0125**	**0.0000**	**37.4174**	**37.4174**	**8.8000e-004**	**0.0000**	**37.4395**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8619					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5200e-003	0.0443	0.0616	1.0000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	8.6811	8.6811	5.2000e-004	0.0000	8.6941
Total	**0.8684**	**0.0443**	**0.0616**	**1.0000e-004**		**2.4100e-003**	**2.4100e-003**		**2.4100e-003**	**2.4100e-003**	**0.0000**	**8.6811**	**8.6811**	**5.2000e-004**	**0.0000**	**8.6941**

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3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4700e-003	2.8500e-003	0.0327	1.0000e-004	0.0120	8.0000e-005	0.0121	3.1900e-003	7.0000e-005	3.2600e-003	0.0000	9.4183	9.4183	2.1000e-004	0.0000	9.4235
Total	**4.4700e-003**	**2.8500e-003**	**0.0327**	**1.0000e-004**	**0.0120**	**8.0000e-005**	**0.0121**	**3.1900e-003**	**7.0000e-005**	**3.2600e-003**	**0.0000**	**9.4183**	**9.4183**	**2.1000e-004**	**0.0000**	**9.4235**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8619					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.5200e-003	0.0443	0.0616	1.0000e-004		2.4100e-003	2.4100e-003		2.4100e-003	2.4100e-003	0.0000	8.6811	8.6811	5.2000e-004	0.0000	8.6940
Total	**0.8684**	**0.0443**	**0.0616**	**1.0000e-004**		**2.4100e-003**	**2.4100e-003**		**2.4100e-003**	**2.4100e-003**	**0.0000**	**8.6811**	**8.6811**	**5.2000e-004**	**0.0000**	**8.6940**

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3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4700e-003	2.8500e-003	0.0327	1.0000e-004	0.0120	8.0000e-005	0.0121	3.1900e-003	7.0000e-005	3.2600e-003	0.0000	9.4183	9.4183	2.1000e-004	0.0000	9.4235
Total	**4.4700e-003**	**2.8500e-003**	**0.0327**	**1.0000e-004**	**0.0120**	**8.0000e-005**	**0.0121**	**3.1900e-003**	**7.0000e-005**	**3.2600e-003**	**0.0000**	**9.4183**	**9.4183**	**2.1000e-004**	**0.0000**	**9.4235**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1178	4.6708	13.7405	0.0467	4.2259	0.0363	4.2622	1.1328	0.0338	1.1665	0.0000	4,294.1341	4,294.1341	0.1904	0.0000	4,298.8948
Unmitigated	1.1263	4.7232	13.9603	0.0476	4.3122	0.0369	4.3491	1.1559	0.0344	1.1903	0.0000	4,376.8398	4,376.8398	0.1936	0.0000	4,381.6791

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	4,012.80	4,012.80	4012.80	11,566,848	11,335,511
Total	4,012.80	4,012.80	4,012.80	11,566,848	11,335,511

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	11.74	5.87	6.65	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

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5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	652.3299	652.3299	0.0489	0.0101	656.5648
NaturalGas Mitigated	0.0575	0.4909	0.2089	3.1300e-003		0.0397	0.0397		0.0397	0.0397	0.0000	568.5548	568.5548	0.0109	0.0104	571.9335
NaturalGas Unmitigated	0.0613	0.5238	0.2229	3.3400e-003		0.0424	0.0424		0.0424	0.0424	0.0000	606.6005	606.6005	0.0116	0.0111	610.2052

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.13673e+007	0.0613	0.5238	0.2229	3.3400e-003		0.0424	0.0424		0.0424	0.0424	0.0000	606.6005	606.6005	0.0116	0.0111	610.2052
Total		**0.0613**	**0.5238**	**0.2229**	**3.3400e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**	**0.0000**	**606.6005**	**606.6005**	**0.0116**	**0.0111**	**610.2052**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Single Family Housing	1.06543e+007	0.0575	0.4909	0.2089	3.1300e-003		0.0397	0.0397		0.0397	0.0397	0.0000	568.5548	568.5548	0.0109	0.0104	571.9335
Total		**0.0575**	**0.4909**	**0.2089**	**3.1300e-003**		**0.0397**	**0.0397**		**0.0397**	**0.0397**	**0.0000**	**568.5548**	**568.5548**	**0.0109**	**0.0104**	**571.9335**

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	3.71526e+006	652.3299	0.0489	0.0101	656.5648
Total		**652.3299**	**0.0489**	**0.0101**	**656.5648**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Single Family Housing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.7255	0.0523	4.5386	2.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	7.4120	7.4120	7.1300e-003	0.0000	7.5902
Unmitigated	3.7255	0.0523	4.5386	2.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	7.4120	7.4120	7.1300e-003	0.0000	7.5902

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4956					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1367	0.0523	4.5386	2.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	7.4120	7.4120	7.1300e-003	0.0000	7.5902
Total	**3.7255**	**0.0523**	**4.5386**	**2.4000e-004**		**0.0251**	**0.0251**		**0.0251**	**0.0251**	**0.0000**	**7.4120**	**7.4120**	**7.1300e-003**	**0.0000**	**7.5902**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4956					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	3.0932					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.1367	0.0523	4.5386	2.4000e-004		0.0251	0.0251		0.0251	0.0251	0.0000	7.4120	7.4120	7.1300e-003	0.0000	7.5902
Total	**3.7255**	**0.0523**	**4.5386**	**2.4000e-004**		**0.0251**	**0.0251**		**0.0251**	**0.0251**	**0.0000**	**7.4120**	**7.4120**	**7.1300e-003**	**0.0000**	**7.5902**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

The Preserve Project - Sacramento Metropolitan AQMD Air District, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	37.0634	0.0301	0.0181	43.2080
Unmitigated	46.3293	0.0376	0.0226	54.0100

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	28.6678 / 18.0732	46.3293	0.0376	0.0226	54.0100
Total		**46.3293**	**0.0376**	**0.0226**	**54.0100**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Single Family Housing	22.9342 / 14.4585	37.0634	0.0301	0.0181	43.2080
Total		**37.0634**	**0.0301**	**0.0181**	**43.2080**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	85.8652	5.0745	0.0000	212.7273
Unmitigated	85.8652	5.0745	0.0000	212.7273

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	423	85.8652	5.0745	0.0000	212.7273
Total		**85.8652**	**5.0745**	**0.0000**	**212.7273**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Single Family Housing	423	85.8652	5.0745	0.0000	212.7273
Total		**85.8652**	**5.0745**	**0.0000**	**212.7273**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

The Preserve Project

Sacramento Metropolitan AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	440.00	Dwelling Unit	73.50	792,000.00	1175

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	387.09	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor updated per SMUD's RPS reductions

Land Use - Acreage updated per applicant-provided questionnaire

Construction Phase - Timing updated per estimates provided on applicant's construction questionnaire

Demolition -

Grading - Based on applicant-provided questionnaire

Vehicle Trips - Trip rates and trip lengths updated to match project-specific data from Kimley Horn Traffic Study

Mobile Land Use Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect compliance with the 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWELO.

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	75.00	391.00
tblConstructionPhase	NumDays	1,110.00	391.00
tblConstructionPhase	NumDays	70.00	23.00
tblConstructionPhase	NumDays	110.00	44.00
tblConstructionPhase	NumDays	75.00	24.00
tblConstructionPhase	NumDays	40.00	11.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LotAcreage	142.86	73.50
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.09
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TL	8.50	6.65
tblVehicleTrips	HS_TL	7.50	5.87
tblVehicleTrips	HW_TL	15.00	11.74
tblVehicleTrips	ST_TR	9.91	9.12
tblVehicleTrips	SU_TR	8.62	9.12
tblVehicleTrips	WD_TR	9.52	9.12

2.0 Emissions Summary

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	28.6329	53.7083	33.4031	0.0865	18.2716	2.0458	20.3174	9.9851	1.8821	11.8673	0.0000	8,618.4329	8,618.4329	2.0828	0.0000	8,670.5031
2022	28.3469	22.5128	26.9515	0.0651	2.5365	0.9186	3.4551	0.6810	0.8691	1.5501	0.0000	6,435.7585	6,435.7585	0.7542	0.0000	6,454.6140
2023	28.1073	20.2996	26.0952	0.0641	2.5364	0.7905	3.3269	0.6810	0.7479	1.4288	0.0000	6,330.3880	6,330.3880	0.7364	0.0000	6,348.7975
Maximum	**28.6329**	**53.7083**	**33.4031**	**0.0865**	**18.2716**	**2.0458**	**20.3174**	**9.9851**	**1.8821**	**11.8673**	**0.0000**	**8,618.4329**	**8,618.4329**	**2.0828**	**0.0000**	**8,670.5031**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	28.6329	53.7083	33.4031	0.0865	18.2716	2.0458	20.3174	9.9851	1.8821	11.8673	0.0000	8,618.4328	8,618.4328	2.0828	0.0000	8,670.5030
2022	28.3469	22.5128	26.9515	0.0651	2.5365	0.9186	3.4551	0.6810	0.8691	1.5501	0.0000	6,435.7585	6,435.7585	0.7542	0.0000	6,454.6140
2023	28.1073	20.2996	26.0952	0.0641	2.5364	0.7905	3.3269	0.6810	0.7479	1.4288	0.0000	6,330.3880	6,330.3880	0.7364	0.0000	6,348.7975
Maximum	**28.6329**	**53.7083**	**33.4031**	**0.0865**	**18.2716**	**2.0458**	**20.3174**	**9.9851**	**1.8821**	**11.8673**	**0.0000**	**8,618.4328**	**8,618.4328**	**2.0828**	**0.0000**	**8,670.5030**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344
Energy	0.3359	2.8701	1.2213	0.0183		0.2321	0.2321		0.2321	0.2321		3,663.9045	3,663.9045	0.0702	0.0672	3,685.6772
Mobile	7.7883	24.9023	87.1323	0.2830	24.5278	0.2022	24.7299	6.5558	0.1884	6.7442		28,665.4343	28,665.4343	1.2077		28,695.6274
Total	**28.8823**	**28.1909**	**124.6623**	**0.3032**	**24.5278**	**0.6352**	**25.1629**	**6.5558**	**0.6215**	**7.1772**	**0.0000**	**32,394.7017**	**32,394.7017**	**1.3408**	**0.0672**	**32,448.2390**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344
Energy	0.3148	2.6901	1.1447	0.0172		0.2175	0.2175		0.2175	0.2175		3,434.1063	3,434.1063	0.0658	0.0630	3,454.5135
Mobile	7.7391	24.6368	85.6620	0.2776	24.0372	0.1986	24.2358	6.4247	0.1851	6.6098		28,122.4736	28,122.4736	1.1876		28,152.1624
Total	**28.8120**	**27.7453**	**123.1153**	**0.2967**	**24.0372**	**0.6171**	**24.6543**	**6.4247**	**0.6036**	**7.0282**	**0.0000**	**31,621.9429**	**31,621.9429**	**1.3162**	**0.0630**	**31,673.6102**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.24**	**1.58**	**1.24**	**2.15**	**2.00**	**2.85**	**2.02**	**2.00**	**2.88**	**2.08**	**0.00**	**2.39**	**2.39**	**1.83**	**6.27**	**2.39**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2021	6/2/2021	5	23	
2	Site Preparation	Site Preparation	6/3/2021	6/17/2021	5	11	
3	Grading	Grading	6/18/2021	8/18/2021	5	44	
4	Paving	Paving	8/19/2021	9/21/2021	5	24	
5	Building Construction	Building Construction	9/22/2021	3/22/2023	5	391	
6	Architectural Coating	Architectural Coating	10/6/2021	4/5/2023	5	391	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 110

Acres of Paving: 0

Residential Indoor: 1,603,800; Residential Outdoor: 534,600; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	55.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	158.00	47.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5354	0.0000	0.5354	0.0811	0.0000	0.0811			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.5354**	**1.5513**	**2.0868**	**0.0811**	**1.4411**	**1.5222**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0168	0.6103	0.1404	1.8700e-003	0.0416	2.1300e-003	0.0437	0.0114	2.0400e-003	0.0134		200.6467	200.6467	0.0113		200.9288
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0439	0.6425	1.7100e-003	0.1711	1.1100e-003	0.1722	0.0454	1.0200e-003	0.0464		170.7555	170.7555	4.4300e-003		170.8664
Total	**0.0954**	**0.6542**	**0.7829**	**3.5800e-003**	**0.2127**	**3.2400e-003**	**0.2159**	**0.0568**	**3.0600e-003**	**0.0598**		**371.4022**	**371.4022**	**0.0157**		**371.7952**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5354	0.0000	0.5354	0.0811	0.0000	0.0811			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.5354**	**1.5513**	**2.0868**	**0.0811**	**1.4411**	**1.5222**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0168	0.6103	0.1404	1.8700e-003	0.0416	2.1300e-003	0.0437	0.0114	2.0400e-003	0.0134		200.6467	200.6467	0.0113		200.9288
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0785	0.0439	0.6425	1.7100e-003	0.1711	1.1100e-003	0.1722	0.0454	1.0200e-003	0.0464		170.7555	170.7555	4.4300e-003		170.8664
Total	**0.0954**	**0.6542**	**0.7829**	**3.5800e-003**	**0.2127**	**3.2400e-003**	**0.2159**	**0.0568**	**3.0600e-003**	**0.0598**		**371.4022**	**371.4022**	**0.0157**		**371.7952**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0942	0.0527	0.7710	2.0600e-003	0.2053	1.3300e-003	0.2066	0.0545	1.2300e-003	0.0557		204.9066	204.9066	5.3200e-003		205.0396
Total	**0.0942**	**0.0527**	**0.7710**	**2.0600e-003**	**0.2053**	**1.3300e-003**	**0.2066**	**0.0545**	**1.2300e-003**	**0.0557**		**204.9066**	**204.9066**	**5.3200e-003**		**205.0396**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0942	0.0527	0.7710	2.0600e-003	0.2053	1.3300e-003	0.2066	0.0545	1.2300e-003	0.0557		204.9066	204.9066	5.3200e-003		205.0396
Total	**0.0942**	**0.0527**	**0.7710**	**2.0600e-003**	**0.2053**	**1.3300e-003**	**0.2066**	**0.0545**	**1.2300e-003**	**0.0557**		**204.9066**	**204.9066**	**5.3200e-003**		**205.0396**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7203	0.0000	8.7203	3.6036	0.0000	3.6036			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.7203**	**1.9853**	**10.7057**	**3.6036**	**1.8265**	**5.4301**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1999	7.2499	1.6680	0.0222	0.4941	0.0253	0.5194	0.1352	0.0242	0.1594		2,383.7154	2,383.7154	0.1341		2,387.0678
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1047	0.0585	0.8567	2.2900e-003	0.2281	1.4800e-003	0.2296	0.0605	1.3600e-003	0.0619		227.6740	227.6740	5.9100e-003		227.8218
Total	**0.3046**	**7.3084**	**2.5246**	**0.0245**	**0.7222**	**0.0268**	**0.7490**	**0.1957**	**0.0256**	**0.2213**		**2,611.3894**	**2,611.3894**	**0.1400**		**2,614.8896**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7203	0.0000	8.7203	3.6036	0.0000	3.6036			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.7203**	**1.9853**	**10.7057**	**3.6036**	**1.8265**	**5.4301**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1999	7.2499	1.6680	0.0222	0.4941	0.0253	0.5194	0.1352	0.0242	0.1594		2,383.7154	2,383.7154	0.1341		2,387.0678
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1047	0.0585	0.8567	2.2900e-003	0.2281	1.4800e-003	0.2296	0.0605	1.3600e-003	0.0619		227.6740	227.6740	5.9100e-003		227.8218
Total	**0.3046**	**7.3084**	**2.5246**	**0.0245**	**0.7222**	**0.0268**	**0.7490**	**0.1957**	**0.0256**	**0.2213**		**2,611.3894**	**2,611.3894**	**0.1400**		**2,614.8896**

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2556**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1570	0.0878	1.2850	3.4300e-003	0.6396	2.2200e-003	0.6419	0.1638	2.0400e-003	0.1658		341.5110	341.5110	8.8700e-003		341.7327
Total	**0.1570**	**0.0878**	**1.2850**	**3.4300e-003**	**0.6396**	**2.2200e-003**	**0.6419**	**0.1638**	**2.0400e-003**	**0.1658**		**341.5110**	**341.5110**	**8.8700e-003**		**341.7327**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2556**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1570	0.0878	1.2850	3.4300e-003	0.6396	2.2200e-003	0.6419	0.1638	2.0400e-003	0.1658		341.5110	341.5110	8.8700e-003		341.7327
Total	**0.1570**	**0.0878**	**1.2850**	**3.4300e-003**	**0.6396**	**2.2200e-003**	**0.6419**	**0.1638**	**2.0400e-003**	**0.1658**		**341.5110**	**341.5110**	**8.8700e-003**		**341.7327**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1695	5.2736	1.3786	0.0144	0.3695	0.0163	0.3857	0.1063	0.0156	0.1218		1,528.1735	1,528.1735	0.0756		1,530.0644
Worker	0.8271	0.4625	6.7676	0.0181	1.8021	0.0117	1.8138	0.4779	0.0108	0.4887		1,798.6248	1,798.6248	0.0467		1,799.7923
Total	**0.9966**	**5.7361**	**8.1463**	**0.0325**	**2.1715**	**0.0279**	**2.1995**	**0.5842**	**0.0263**	**0.6105**		**3,326.7983**	**3,326.7983**	**0.1223**		**3,329.8567**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1695	5.2736	1.3786	0.0144	0.3695	0.0163	0.3857	0.1063	0.0156	0.1218		1,528.1735	1,528.1735	0.0756		1,530.0644
Worker	0.8271	0.4625	6.7676	0.0181	1.8021	0.0117	1.8138	0.4779	0.0108	0.4887		1,798.6248	1,798.6248	0.0467		1,799.7923
Total	**0.9966**	**5.7361**	**8.1463**	**0.0325**	**2.1715**	**0.0279**	**2.1995**	**0.5842**	**0.0263**	**0.6105**		**3,326.7983**	**3,326.7983**	**0.1223**		**3,329.8567**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.6 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1574	4.9881	1.2727	0.0143	0.3694	0.0142	0.3837	0.1063	0.0136	0.1199		1,514.7098	1,514.7098	0.0734		1,516.5459
Worker	0.7731	0.4163	6.2384	0.0174	1.8021	0.0114	1.8134	0.4779	0.0105	0.4884		1,734.0642	1,734.0642	0.0420		1,735.1142
Total	**0.9304**	**5.4044**	**7.5110**	**0.0317**	**2.1715**	**0.0256**	**2.1971**	**0.5842**	**0.0241**	**0.6083**		**3,248.7740**	**3,248.7740**	**0.1154**		**3,251.6601**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.6 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1574	4.9881	1.2727	0.0143	0.3694	0.0142	0.3837	0.1063	0.0136	0.1199		1,514.7098	1,514.7098	0.0734		1,516.5459
Worker	0.7731	0.4163	6.2384	0.0174	1.8021	0.0114	1.8134	0.4779	0.0105	0.4884		1,734.0642	1,734.0642	0.0420		1,735.1142
Total	**0.9304**	**5.4044**	**7.5110**	**0.0317**	**2.1715**	**0.0256**	**2.1971**	**0.5842**	**0.0241**	**0.6083**		**3,248.7740**	**3,248.7740**	**0.1154**		**3,251.6601**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1236	4.1608	1.1289	0.0140	0.3694	6.6400e-003	0.3760	0.1062	6.3500e-003	0.1126		1,486.9223	1,486.9223	0.0664		1,488.5823
Worker	0.7236	0.3750	5.7472	0.0168	1.8021	0.0111	1.8132	0.4779	0.0102	0.4881		1,668.8191	1,668.8191	0.0377		1,669.7608
Total	**0.8472**	**4.5358**	**6.8761**	**0.0308**	**2.1715**	**0.0177**	**2.1892**	**0.5842**	**0.0166**	**0.6007**		**3,155.7414**	**3,155.7414**	**0.1041**		**3,158.3431**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1236	4.1608	1.1289	0.0140	0.3694	6.6400e-003	0.3760	0.1062	6.3500e-003	0.1126		1,486.9223	1,486.9223	0.0664		1,488.5823
Worker	0.7236	0.3750	5.7472	0.0168	1.8021	0.0111	1.8132	0.4779	0.0102	0.4881		1,668.8191	1,668.8191	0.0377		1,669.7608
Total	**0.8472**	**4.5358**	**6.8761**	**0.0308**	**2.1715**	**0.0177**	**2.1892**	**0.5842**	**0.0166**	**0.6007**		**3,155.7414**	**3,155.7414**	**0.1041**		**3,158.3431**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**25.5680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1675	0.0937	1.3707	3.6600e-003	0.3650	2.3600e-003	0.3673	0.0968	2.1800e-003	0.0990		364.2784	364.2784	9.4600e-003		364.5149
Total	**0.1675**	**0.0937**	**1.3707**	**3.6600e-003**	**0.3650**	**2.3600e-003**	**0.3673**	**0.0968**	**2.1800e-003**	**0.0990**		**364.2784**	**364.2784**	**9.4600e-003**		**364.5149**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**25.5680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1675	0.0937	1.3707	3.6600e-003	0.3650	2.3600e-003	0.3673	0.0968	2.1800e-003	0.0990		364.2784	364.2784	9.4600e-003		364.5149
Total	**0.1675**	**0.0937**	**1.3707**	**3.6600e-003**	**0.3650**	**2.3600e-003**	**0.3673**	**0.0968**	**2.1800e-003**	**0.0990**		**364.2784**	**364.2784**	**9.4600e-003**		**364.5149**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**25.5536**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1566	0.0843	1.2635	3.5300e-003	0.3650	2.3000e-003	0.3673	0.0968	2.1200e-003	0.0989		351.2029	351.2029	8.5100e-003		351.4155
Total	**0.1566**	**0.0843**	**1.2635**	**3.5300e-003**	**0.3650**	**2.3000e-003**	**0.3673**	**0.0968**	**2.1200e-003**	**0.0989**		**351.2029**	**351.2029**	**8.5100e-003**		**351.4155**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**25.5536**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1566	0.0843	1.2635	3.5300e-003	0.3650	2.3000e-003	0.3673	0.0968	2.1200e-003	0.0989		351.2029	351.2029	8.5100e-003		351.4155
Total	**0.1566**	**0.0843**	**1.2635**	**3.5300e-003**	**0.3650**	**2.3000e-003**	**0.3673**	**0.0968**	**2.1200e-003**	**0.0989**		**351.2029**	**351.2029**	**8.5100e-003**		**351.4155**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**25.5407**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1466	0.0760	1.1640	3.3900e-003	0.3650	2.2500e-003	0.3672	0.0968	2.0700e-003	0.0989		337.9887	337.9887	7.6300e-003		338.1794
Total	**0.1466**	**0.0760**	**1.1640**	**3.3900e-003**	**0.3650**	**2.2500e-003**	**0.3672**	**0.0968**	**2.0700e-003**	**0.0989**		**337.9887**	**337.9887**	**7.6300e-003**		**338.1794**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**25.5407**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1466	0.0760	1.1640	3.3900e-003	0.3650	2.2500e-003	0.3672	0.0968	2.0700e-003	0.0989		337.9887	337.9887	7.6300e-003		338.1794
Total	**0.1466**	**0.0760**	**1.1640**	**3.3900e-003**	**0.3650**	**2.2500e-003**	**0.3672**	**0.0968**	**2.0700e-003**	**0.0989**		**337.9887**	**337.9887**	**7.6300e-003**		**338.1794**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	7.7391	24.6368	85.6620	0.2776	24.0372	0.1986	24.2358	6.4247	0.1851	6.6098		28,122.4736	28,122.4736	1.1876		28,152.1624
Unmitigated	7.7883	24.9023	87.1323	0.2830	24.5278	0.2022	24.7299	6.5558	0.1884	6.7442		28,665.4343	28,665.4343	1.2077		28,695.6274

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	4,012.80	4,012.80	4012.80	11,566,848	11,335,511
Total	4,012.80	4,012.80	4,012.80	11,566,848	11,335,511

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	11.74	5.87	6.65	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3148	2.6901	1.1447	0.0172		0.2175	0.2175		0.2175	0.2175		3,434.1063	3,434.1063	0.0658	0.0630	3,454.5135
NaturalGas Unmitigated	0.3359	2.8701	1.2213	0.0183		0.2321	0.2321		0.2321	0.2321		3,663.9045	3,663.9045	0.0702	0.0672	3,685.6772

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	31143.2	0.3359	2.8701	1.2213	0.0183		0.2321	0.2321		0.2321	0.2321		3,663.9045	3,663.9045	0.0702	0.0672	3,685.6772
Total		**0.3359**	**2.8701**	**1.2213**	**0.0183**		**0.2321**	**0.2321**		**0.2321**	**0.2321**		**3,663.9045**	**3,663.9045**	**0.0702**	**0.0672**	**3,685.6772**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	29.1899	0.3148	2.6901	1.1447	0.0172		0.2175	0.2175		0.2175	0.2175		3,434.1063	3,434.1063	0.0658	0.0630	3,454.5135
Total		**0.3148**	**2.6901**	**1.1447**	**0.0172**		**0.2175**	**0.2175**		**0.2175**	**0.2175**		**3,434.1063**	**3,434.1063**	**0.0658**	**0.0630**	**3,454.5135**

6.0 Area Detail

6.1 Mitigation Measures Area

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344
Unmitigated	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.9488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0939	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010		65.3630	65.3630	0.0629		66.9344
Total	**20.7581**	**0.4185**	**36.3087**	**1.9200e-003**		**0.2010**	**0.2010**		**0.2010**	**0.2010**	**0.0000**	**65.3630**	**65.3630**	**0.0629**	**0.0000**	**66.9344**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.9488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0939	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010		65.3630	65.3630	0.0629		66.9344
Total	**20.7581**	**0.4185**	**36.3087**	**1.9200e-003**		**0.2010**	**0.2010**		**0.2010**	**0.2010**	**0.0000**	**65.3630**	**65.3630**	**0.0629**	**0.0000**	**66.9344**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

The Preserve Project - Sacramento Metropolitan AQMD Air District, Summer

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

The Preserve Project

Sacramento Metropolitan AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Single Family Housing	440.00	Dwelling Unit	73.50	792,000.00	1175

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.5	**Precipitation Freq (Days)**	58
Climate Zone	6			**Operational Year**	2023
Utility Company	Sacramento Municipal Utility District				
CO2 Intensity (lb/MWhr)	387.09	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - CO2 Intensity Factor updated per SMUD's RPS reductions

Land Use - Acreage updated per applicant-provided questionnaire

Construction Phase - Timing updated per estimates provided on applicant's construction questionnaire

Demolition -

Grading - Based on applicant-provided questionnaire

Vehicle Trips - Trip rates and trip lengths updated to match project-specific data from Kimley Horn Traffic Study

Mobile Land Use Mitigation -

Energy Mitigation - Title 24 exceedance applied to reflect compliance with the 2019 CBSC.

Water Mitigation - Water conservation strategy applied to reflect compliance with 2019 CalGreen Code and MWELO.

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	75.00	391.00
tblConstructionPhase	NumDays	1,110.00	391.00
tblConstructionPhase	NumDays	70.00	23.00
tblConstructionPhase	NumDays	110.00	44.00
tblConstructionPhase	NumDays	75.00	24.00
tblConstructionPhase	NumDays	40.00	11.00
tblGrading	MaterialImported	0.00	10,000.00
tblLandUse	LotAcreage	142.86	73.50
tblProjectCharacteristics	CO2IntensityFactor	590.31	387.09
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleTrips	HO_TL	8.50	6.65
tblVehicleTrips	HS_TL	7.50	5.87
tblVehicleTrips	HW_TL	15.00	11.74
tblVehicleTrips	ST_TR	9.91	9.12
tblVehicleTrips	SU_TR	8.62	9.12
tblVehicleTrips	WD_TR	9.52	9.12

2.0 Emissions Summary

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	28.6158	54.0019	33.3665	0.0859	18.2716	2.0458	20.3174	9.9851	1.8821	11.8673	0.0000	8,553.5898	8,553.5898	2.0881	0.0000	8,605.7914
2022	28.3331	22.7415	25.7748	0.0623	2.5365	0.9194	3.4558	0.6810	0.8698	1.5508	0.0000	6,148.7748	6,148.7748	0.7525	0.0000	6,167.5869
2023	28.0962	20.4760	24.9746	0.0613	2.5364	0.7910	3.3274	0.6810	0.7483	1.4293	0.0000	6,053.7797	6,053.7797	0.7346	0.0000	6,072.1436
Maximum	**28.6158**	**54.0019**	**33.3665**	**0.0859**	**18.2716**	**2.0458**	**20.3174**	**9.9851**	**1.8821**	**11.8673**	**0.0000**	**8,553.5898**	**8,553.5898**	**2.0881**	**0.0000**	**8,605.7914**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	28.6158	54.0019	33.3665	0.0859	18.2716	2.0458	20.3174	9.9851	1.8821	11.8673	0.0000	8,553.5898	8,553.5898	2.0881	0.0000	8,605.7914
2022	28.3331	22.7415	25.7748	0.0623	2.5365	0.9194	3.4558	0.6810	0.8698	1.5508	0.0000	6,148.7748	6,148.7748	0.7525	0.0000	6,167.5869
2023	28.0962	20.4760	24.9746	0.0613	2.5364	0.7910	3.3274	0.6810	0.7483	1.4293	0.0000	6,053.7797	6,053.7797	0.7346	0.0000	6,072.1436
Maximum	**28.6158**	**54.0019**	**33.3665**	**0.0859**	**18.2716**	**2.0458**	**20.3174**	**9.9851**	**1.8821**	**11.8673**	**0.0000**	**8,553.5898**	**8,553.5898**	**2.0881**	**0.0000**	**8,605.7914**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344
Energy	0.3359	2.8701	1.2213	0.0183		0.2321	0.2321		0.2321	0.2321		3,663.9045	3,663.9045	0.0702	0.0672	3,685.6772
Mobile	5.8490	26.7337	78.8765	0.2554	24.5278	0.2041	24.7318	6.5558	0.1903	6.7460		25,912.5115	25,912.5115	1.1899		25,942.2592
Total	**26.9430**	**30.0223**	**116.4065**	**0.2757**	**24.5278**	**0.6371**	**25.1649**	**6.5558**	**0.6233**	**7.1791**	**0.0000**	**29,641.7790**	**29,641.7790**	**1.3230**	**0.0672**	**29,694.8707**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344
Energy	0.3148	2.6901	1.1447	0.0172		0.2175	0.2175		0.2175	0.2175		3,434.1063	3,434.1063	0.0658	0.0630	3,454.5135
Mobile	5.8020	26.4302	77.7010	0.2506	24.0372	0.2005	24.2377	6.4247	0.1869	6.6116		25,422.1045	25,422.1045	1.1710		25,451.3806
Total	**26.8750**	**29.5388**	**115.1544**	**0.2697**	**24.0372**	**0.6190**	**24.6562**	**6.4247**	**0.6054**	**7.0301**	**0.0000**	**28,921.5738**	**28,921.5738**	**1.2997**	**0.0630**	**28,972.8284**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.25**	**1.61**	**1.08**	**2.17**	**2.00**	**2.84**	**2.02**	**2.00**	**2.87**	**2.08**	**0.00**	**2.43**	**2.43**	**1.76**	**6.27**	**2.43**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2021	6/2/2021	5	23	
2	Site Preparation	Site Preparation	6/3/2021	6/17/2021	5	11	
3	Grading	Grading	6/18/2021	8/18/2021	5	44	
4	Paving	Paving	8/19/2021	9/21/2021	5	24	
5	Building Construction	Building Construction	9/22/2021	3/22/2023	5	391	
6	Architectural Coating	Architectural Coating	10/6/2021	4/5/2023	5	391	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 110

Acres of Paving: 0

Residential Indoor: 1,603,800; Residential Outdoor: 534,600; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	55.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	1,250.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	158.00	47.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	32.00	0.00	0.00	15.00	8.50	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5354	0.0000	0.5354	0.0811	0.0000	0.0811			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.5354**	**1.5513**	**2.0868**	**0.0811**	**1.4411**	**1.5222**		**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0173	0.6338	0.1501	1.8400e-003	0.0416	2.2100e-003	0.0438	0.0114	2.1100e-003	0.0135		197.5372	197.5372	0.0118		197.8322
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.0543	0.5288	1.5000e-003	0.1711	1.1100e-003	0.1722	0.0454	1.0200e-003	0.0464		149.8290	149.8290	3.8200e-003		149.9244
Total	**0.0938**	**0.6881**	**0.6789**	**3.3400e-003**	**0.2127**	**3.3200e-003**	**0.2160**	**0.0568**	**3.1300e-003**	**0.0599**		**347.3662**	**347.3662**	**0.0156**		**347.7565**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5354	0.0000	0.5354	0.0811	0.0000	0.0811			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	**3.1651**	**31.4407**	**21.5650**	**0.0388**	**0.5354**	**1.5513**	**2.0868**	**0.0811**	**1.4411**	**1.5222**	**0.0000**	**3,747.9449**	**3,747.9449**	**1.0549**		**3,774.3174**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0173	0.6338	0.1501	1.8400e-003	0.0416	2.2100e-003	0.0438	0.0114	2.1100e-003	0.0135		197.5372	197.5372	0.0118		197.8322
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0765	0.0543	0.5288	1.5000e-003	0.1711	1.1100e-003	0.1722	0.0454	1.0200e-003	0.0464		149.8290	149.8290	3.8200e-003		149.9244
Total	**0.0938**	**0.6881**	**0.6789**	**3.3400e-003**	**0.2127**	**3.3200e-003**	**0.2160**	**0.0568**	**3.1300e-003**	**0.0599**		**347.3662**	**347.3662**	**0.0156**		**347.7565**

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**		**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0918	0.0651	0.6345	1.8000e-003	0.2053	1.3300e-003	0.2066	0.0545	1.2300e-003	0.0557		179.7948	179.7948	4.5800e-003		179.9092
Total	**0.0918**	**0.0651**	**0.6345**	**1.8000e-003**	**0.2053**	**1.3300e-003**	**0.2066**	**0.0545**	**1.2300e-003**	**0.0557**		**179.7948**	**179.7948**	**4.5800e-003**		**179.9092**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	**3.8882**	**40.4971**	**21.1543**	**0.0380**	**18.0663**	**2.0445**	**20.1107**	**9.9307**	**1.8809**	**11.8116**	**0.0000**	**3,685.6569**	**3,685.6569**	**1.1920**		**3,715.4573**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0918	0.0651	0.6345	1.8000e-003	0.2053	1.3300e-003	0.2066	0.0545	1.2300e-003	0.0557		179.7948	179.7948	4.5800e-003		179.9092
Total	**0.0918**	**0.0651**	**0.6345**	**1.8000e-003**	**0.2053**	**1.3300e-003**	**0.2066**	**0.0545**	**1.2300e-003**	**0.0557**		**179.7948**	**179.7948**	**4.5800e-003**		**179.9092**

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7203	0.0000	8.7203	3.6036	0.0000	3.6036			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.7203**	**1.9853**	**10.7057**	**3.6036**	**1.8265**	**5.4301**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2060	7.5297	1.7830	0.0219	0.4941	0.0262	0.5203	0.1352	0.0251	0.1603		2,346.7743	2,346.7743	0.1402		2,350.2788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0724	0.7051	2.0100e-003	0.2281	1.4800e-003	0.2296	0.0605	1.3600e-003	0.0619		199.7720	199.7720	5.0900e-003		199.8992
Total	**0.3080**	**7.6021**	**2.4881**	**0.0239**	**0.7222**	**0.0277**	**0.7499**	**0.1957**	**0.0264**	**0.2221**		**2,546.5463**	**2,546.5463**	**0.1453**		**2,550.1780**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.7203	0.0000	8.7203	3.6036	0.0000	3.6036			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.7203**	**1.9853**	**10.7057**	**3.6036**	**1.8265**	**5.4301**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.2060	7.5297	1.7830	0.0219	0.4941	0.0262	0.5203	0.1352	0.0251	0.1603		2,346.7743	2,346.7743	0.1402		2,350.2788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1020	0.0724	0.7051	2.0100e-003	0.2281	1.4800e-003	0.2296	0.0605	1.3600e-003	0.0619		199.7720	199.7720	5.0900e-003		199.8992
Total	**0.3080**	**7.6021**	**2.4881**	**0.0239**	**0.7222**	**0.0277**	**0.7499**	**0.1957**	**0.0264**	**0.2221**		**2,546.5463**	**2,546.5463**	**0.1453**		**2,550.1780**

3.5 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235		2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2556**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**		**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.5 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1529	0.1086	1.0576	3.0100e-003	0.6396	2.2200e-003	0.6419	0.1638	2.0400e-003	0.1658		299.6580	299.6580	7.6300e-003		299.8487
Total	**0.1529**	**0.1086**	**1.0576**	**3.0100e-003**	**0.6396**	**2.2200e-003**	**0.6419**	**0.1638**	**2.0400e-003**	**0.1658**		**299.6580**	**299.6580**	**7.6300e-003**		**299.8487**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.2556	12.9191	14.6532	0.0228		0.6777	0.6777		0.6235	0.6235	0.0000	2,207.2109	2,207.2109	0.7139		2,225.0573
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2556**	**12.9191**	**14.6532**	**0.0228**		**0.6777**	**0.6777**		**0.6235**	**0.6235**	**0.0000**	**2,207.2109**	**2,207.2109**	**0.7139**		**2,225.0573**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.5 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1529	0.1086	1.0576	3.0100e-003	0.6396	2.2200e-003	0.6419	0.1638	2.0400e-003	0.1658		299.6580	299.6580	7.6300e-003		299.8487
Total	**0.1529**	**0.1086**	**1.0576**	**3.0100e-003**	**0.6396**	**2.2200e-003**	**0.6419**	**0.1638**	**2.0400e-003**	**0.1658**		**299.6580**	**299.6580**	**7.6300e-003**		**299.8487**

3.6 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.6 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1783	5.4010	1.5658	0.0141	0.3695	0.0171	0.3865	0.1063	0.0163	0.1226		1,496.5621	1,496.5621	0.0811		1,498.5906
Worker	0.8055	0.5717	5.5699	0.0158	1.8021	0.0117	1.8138	0.4779	0.0108	0.4887		1,578.1986	1,578.1986	0.0402		1,579.2033
Total	**0.9838**	**5.9727**	**7.1357**	**0.0300**	**2.1715**	**0.0288**	**2.2003**	**0.5842**	**0.0271**	**0.6113**		**3,074.7607**	**3,074.7607**	**0.1213**		**3,077.7939**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.6 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1783	5.4010	1.5658	0.0141	0.3695	0.0171	0.3865	0.1063	0.0163	0.1226		1,496.5621	1,496.5621	0.0811		1,498.5906
Worker	0.8055	0.5717	5.5699	0.0158	1.8021	0.0117	1.8138	0.4779	0.0108	0.4887		1,578.1986	1,578.1986	0.0402		1,579.2033
Total	**0.9838**	**5.9727**	**7.1357**	**0.0300**	**2.1715**	**0.0288**	**2.2003**	**0.5842**	**0.0271**	**0.6113**		**3,074.7607**	**3,074.7607**	**0.1213**		**3,077.7939**

3.6 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.6 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1656	5.0988	1.4467	0.0140	0.3694	0.0150	0.3844	0.1063	0.0143	0.1206		1,483.1798	1,483.1798	0.0788		1,485.1506
Worker	0.7548	0.5144	5.1151	0.0153	1.8021	0.0114	1.8134	0.4779	0.0105	0.4884		1,521.6343	1,521.6343	0.0361		1,522.5362
Total	**0.9204**	**5.6132**	**6.5618**	**0.0293**	**2.1715**	**0.0263**	**2.1978**	**0.5842**	**0.0248**	**0.6090**		**3,004.8141**	**3,004.8141**	**0.1149**		**3,007.6868**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.6 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1656	5.0988	1.4467	0.0140	0.3694	0.0150	0.3844	0.1063	0.0143	0.1206		1,483.1798	1,483.1798	0.0788		1,485.1506
Worker	0.7548	0.5144	5.1151	0.0153	1.8021	0.0114	1.8134	0.4779	0.0105	0.4884		1,521.6343	1,521.6343	0.0361		1,522.5362
Total	**0.9204**	**5.6132**	**6.5618**	**0.0293**	**2.1715**	**0.0263**	**2.1978**	**0.5842**	**0.0248**	**0.6090**		**3,004.8141**	**3,004.8141**	**0.1149**		**3,007.6868**

3.6 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**		**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.6 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1305	4.2312	1.2759	0.0137	0.3694	7.1100e-003	0.3765	0.1062	6.7900e-003	0.1130		1,456.0569	1,456.0569	0.0711		1,457.8332
Worker	0.7087	0.4631	4.6931	0.0147	1.8021	0.0111	1.8132	0.4779	0.0102	0.4881		1,464.4644	1,464.4644	0.0323		1,465.2715
Total	**0.8392**	**4.6943**	**5.9690**	**0.0284**	**2.1715**	**0.0182**	**2.1896**	**0.5842**	**0.0170**	**0.6012**		**2,920.5213**	**2,920.5213**	**0.1033**		**2,923.1047**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	**1.5728**	**14.3849**	**16.2440**	**0.0269**		**0.6997**	**0.6997**		**0.6584**	**0.6584**	**0.0000**	**2,555.2099**	**2,555.2099**	**0.6079**		**2,570.4061**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.6 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1305	4.2312	1.2759	0.0137	0.3694	7.1100e-003	0.3765	0.1062	6.7900e-003	0.1130		1,456.0569	1,456.0569	0.0711		1,457.8332
Worker	0.7087	0.4631	4.6931	0.0147	1.8021	0.0111	1.8132	0.4779	0.0102	0.4881		1,464.4644	1,464.4644	0.0323		1,465.2715
Total	**0.8392**	**4.6943**	**5.9690**	**0.0284**	**2.1715**	**0.0182**	**2.1896**	**0.5842**	**0.0170**	**0.6012**		**2,920.5213**	**2,920.5213**	**0.1033**		**2,923.1047**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**25.5680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1631	0.1158	1.1281	3.2100e-003	0.3650	2.3600e-003	0.3673	0.0968	2.1800e-003	0.0990		319.6352	319.6352	8.1400e-003		319.8387
Total	**0.1631**	**0.1158**	**1.1281**	**3.2100e-003**	**0.3650**	**2.3600e-003**	**0.3673**	**0.0968**	**2.1800e-003**	**0.0990**		**319.6352**	**319.6352**	**8.1400e-003**		**319.8387**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**25.5680**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1631	0.1158	1.1281	3.2100e-003	0.3650	2.3600e-003	0.3673	0.0968	2.1800e-003	0.0990		319.6352	319.6352	8.1400e-003		319.8387
Total	**0.1631**	**0.1158**	**1.1281**	**3.2100e-003**	**0.3650**	**2.3600e-003**	**0.3673**	**0.0968**	**2.1800e-003**	**0.0990**		**319.6352**	**319.6352**	**8.1400e-003**		**319.8387**

3.7 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**25.5536**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.7 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1529	0.1042	1.0360	3.0900e-003	0.3650	2.3000e-003	0.3673	0.0968	2.1200e-003	0.0989		308.1791	308.1791	7.3100e-003		308.3618
Total	**0.1529**	**0.1042**	**1.0360**	**3.0900e-003**	**0.3650**	**2.3000e-003**	**0.3673**	**0.0968**	**2.1200e-003**	**0.0989**		**308.1791**	**308.1791**	**7.3100e-003**		**308.3618**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**25.5536**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.7 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1529	0.1042	1.0360	3.0900e-003	0.3650	2.3000e-003	0.3673	0.0968	2.1200e-003	0.0989		308.1791	308.1791	7.3100e-003		308.3618
Total	**0.1529**	**0.1042**	**1.0360**	**3.0900e-003**	**0.3650**	**2.3000e-003**	**0.3673**	**0.0968**	**2.1200e-003**	**0.0989**		**308.1791**	**308.1791**	**7.3100e-003**		**308.3618**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**25.5407**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1435	0.0938	0.9505	2.9800e-003	0.3650	2.2500e-003	0.3672	0.0968	2.0700e-003	0.0989		296.6004	296.6004	6.5400e-003		296.7639
Total	**0.1435**	**0.0938**	**0.9505**	**2.9800e-003**	**0.3650**	**2.2500e-003**	**0.3672**	**0.0968**	**2.0700e-003**	**0.0989**		**296.6004**	**296.6004**	**6.5400e-003**		**296.7639**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	25.3491					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**25.5407**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1435	0.0938	0.9505	2.9800e-003	0.3650	2.2500e-003	0.3672	0.0968	2.0700e-003	0.0989		296.6004	296.6004	6.5400e-003		296.7639
Total	**0.1435**	**0.0938**	**0.9505**	**2.9800e-003**	**0.3650**	**2.2500e-003**	**0.3672**	**0.0968**	**2.0700e-003**	**0.0989**		**296.6004**	**296.6004**	**6.5400e-003**		**296.7639**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Improve Pedestrian Network

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.8020	26.4302	77.7010	0.2506	24.0372	0.2005	24.2377	6.4247	0.1869	6.6116		25,422.1045	25,422.1045	1.1710		25,451.3806
Unmitigated	5.8490	26.7337	78.8765	0.2554	24.5278	0.2041	24.7318	6.5558	0.1903	6.7460		25,912.5115	25,912.5115	1.1899		25,942.2592

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Single Family Housing	4,012.80	4,012.80	4012.80	11,566,848	11,335,511
Total	4,012.80	4,012.80	4,012.80	11,566,848	11,335,511

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Single Family Housing	11.74	5.87	6.65	46.50	12.50	41.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Single Family Housing	0.562895	0.037862	0.207220	0.115570	0.017815	0.005092	0.018559	0.023754	0.002009	0.001969	0.005819	0.000618	0.000817

5.0 Energy Detail

Historical Energy Use: N

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

5.1 Mitigation Measures Energy

Exceed Title 24

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.3148	2.6901	1.1447	0.0172		0.2175	0.2175		0.2175	0.2175		3,434.1063	3,434.1063	0.0658	0.0630	3,454.5135
NaturalGas Unmitigated	0.3359	2.8701	1.2213	0.0183		0.2321	0.2321		0.2321	0.2321		3,663.9045	3,663.9045	0.0702	0.0672	3,685.6772

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	31143.2	0.3359	2.8701	1.2213	0.0183		0.2321	0.2321		0.2321	0.2321		3,663.9045	3,663.9045	0.0702	0.0672	3,685.6772
Total		**0.3359**	**2.8701**	**1.2213**	**0.0183**		**0.2321**	**0.2321**		**0.2321**	**0.2321**		**3,663.9045**	**3,663.9045**	**0.0702**	**0.0672**	**3,685.6772**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Single Family Housing	29.1899	0.3148	2.6901	1.1447	0.0172		0.2175	0.2175		0.2175	0.2175		3,434.1063	3,434.1063	0.0658	0.0630	3,454.5135
Total		**0.3148**	**2.6901**	**1.1447**	**0.0172**		**0.2175**	**0.2175**		**0.2175**	**0.2175**		**3,434.1063**	**3,434.1063**	**0.0658**	**0.0630**	**3,454.5135**

6.0 Area Detail

6.1 Mitigation Measures Area

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344
Unmitigated	20.7581	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010	0.0000	65.3630	65.3630	0.0629	0.0000	66.9344

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.9488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0939	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010		65.3630	65.3630	0.0629		66.9344
Total	**20.7581**	**0.4185**	**36.3087**	**1.9200e-003**		**0.2010**	**0.2010**		**0.2010**	**0.2010**	**0.0000**	**65.3630**	**65.3630**	**0.0629**	**0.0000**	**66.9344**

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.7155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	16.9488					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0939	0.4185	36.3087	1.9200e-003		0.2010	0.2010		0.2010	0.2010		65.3630	65.3630	0.0629		66.9344
Total	**20.7581**	**0.4185**	**36.3087**	**1.9200e-003**		**0.2010**	**0.2010**		**0.2010**	**0.2010**	**0.0000**	**65.3630**	**65.3630**	**0.0629**	**0.0000**	**66.9344**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

The Preserve Project - Sacramento Metropolitan AQMD Air District, Winter

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

The Preserve Project

Sacramento Metropolitan AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demolition	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Concrete/Industrial Saws	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	5	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	6	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Unmitigated tons/yr						Unmitigated mt/yr					
Air Compressors	4.00000E-002	2.75500E-001	3.54600E-001	5.80000E-004	1.59900E-002	1.59900E-002	0.00000E+000	4.99161E+001	4.99161E+001	3.23000E-003	0.00000E+000	4.99969E+001
Concrete/Industrial Saws	4.43000E-003	3.49400E-002	4.22500E-002	7.00000E-005	1.99000E-003	1.99000E-003	0.00000E+000	6.18305E+000	6.18305E+000	3.60000E-004	0.00000E+000	6.19202E+000
Cranes	6.45300E-002	7.27660E-001	3.25130E-001	9.90000E-004	3.00900E-002	2.76900E-002	0.00000E+000	8.67193E+001	8.67193E+001	2.80500E-002	0.00000E+000	8.74205E+001
Excavators	1.79900E-002	1.69040E-001	2.56840E-001	4.10000E-004	8.20000E-003	7.54000E-003	0.00000E+000	3.56207E+001	3.56207E+001	1.15200E-002	0.00000E+000	3.59087E+001
Forklifts	6.73900E-002	6.24020E-001	6.77440E-001	9.00000E-004	4.15800E-002	3.82500E-002	0.00000E+000	7.87619E+001	7.87619E+001	2.54700E-002	0.00000E+000	7.93987E+001
Generator Sets	6.48100E-002	5.74990E-001	7.18780E-001	1.29000E-003	2.89400E-002	2.89400E-002	0.00000E+000	1.10498E+002	1.10498E+002	5.26000E-003	0.00000E+000	1.10630E+002
Graders	9.97000E-003	1.30340E-001	3.88800E-002	1.50000E-004	4.13000E-003	3.80000E-003	0.00000E+000	1.28068E+001	1.28068E+001	4.14000E-003	0.00000E+000	1.29103E+001
Pavers	5.91000E-003	6.22800E-002	6.97200E-002	1.10000E-004	3.01000E-003	2.77000E-003	0.00000E+000	9.90778E+000	9.90778E+000	3.20000E-003	0.00000E+000	9.98789E+000
Paving Equipment	4.61000E-003	4.65700E-002	6.09900E-002	1.00000E-004	2.30000E-003	2.12000E-003	0.00000E+000	8.58826E+000	8.58826E+000	2.78000E-003	0.00000E+000	8.65770E+000
Rollers	4.55000E-003	4.61800E-002	4.51300E-002	6.00000E-005	2.82000E-003	2.60000E-003	0.00000E+000	5.53213E+000	5.53213E+000	1.79000E-003	0.00000E+000	5.57686E+000
Rubber Tired Dozers	6.43500E-002	6.74730E-001	2.48320E-001	5.20000E-004	3.27500E-002	3.01300E-002	0.00000E+000	4.61595E+001	4.61595E+001	1.49300E-002	0.00000E+000	4.65327E+001
Scrapers	4.09000E-002	4.70920E-001	3.08210E-001	6.70000E-004	1.83200E-002	1.68600E-002	0.00000E+000	5.85933E+001	5.85933E+001	1.89500E-002	0.00000E+000	5.90671E+001
Tractors/Loaders/Backhoes	9.80300E-002	9.95480E-001	1.29929E+000	1.80000E-003	5.46100E-002	5.02400E-002	0.00000E+000	1.58254E+002	1.58254E+002	5.11800E-002	0.00000E+000	1.59533E+002
Welders	5.44000E-002	2.86450E-001	3.31850E-001	5.00000E-004	1.26100E-002	1.26100E-002	0.00000E+000	3.67971E+001	3.67971E+001	4.42000E-003	0.00000E+000	3.69076E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	Mitigated tons/yr						Mitigated mt/yr					
Air Compressors	4.00000E-002	2.75500E-001	3.54600E-001	5.80000E-004	1.59900E-002	1.59900E-002	0.00000E+000	4.99161E+001	4.99161E+001	3.23000E-003	0.00000E+000	4.99969E+001
Concrete/Industrial Saws	4.43000E-003	3.49400E-002	4.22500E-002	7.00000E-005	1.99000E-003	1.99000E-003	0.00000E+000	6.18304E+000	6.18304E+000	3.60000E-004	0.00000E+000	6.19202E+000
Cranes	6.45300E-002	7.27650E-001	3.25130E-001	9.90000E-004	3.00900E-002	2.76900E-002	0.00000E+000	8.67192E+001	8.67192E+001	2.80500E-002	0.00000E+000	8.74204E+001
Excavators	1.79900E-002	1.69040E-001	2.56840E-001	4.10000E-004	8.20000E-003	7.54000E-003	0.00000E+000	3.56206E+001	3.56206E+001	1.15200E-002	0.00000E+000	3.59086E+001
Forklifts	6.73900E-002	6.24020E-001	6.77440E-001	9.00000E-004	4.15800E-002	3.82500E-002	0.00000E+000	7.87618E+001	7.87618E+001	2.54700E-002	0.00000E+000	7.93986E+001
Generator Sets	6.48100E-002	5.74990E-001	7.18780E-001	1.29000E-003	2.89400E-002	2.89400E-002	0.00000E+000	1.10498E+002	1.10498E+002	5.26000E-003	0.00000E+000	1.10630E+002
Graders	9.97000E-003	1.30340E-001	3.88800E-002	1.50000E-004	4.13000E-003	3.80000E-003	0.00000E+000	1.28068E+001	1.28068E+001	4.14000E-003	0.00000E+000	1.29103E+001
Pavers	5.91000E-003	6.22800E-002	6.97200E-002	1.10000E-004	3.01000E-003	2.77000E-003	0.00000E+000	9.90777E+000	9.90777E+000	3.20000E-003	0.00000E+000	9.98788E+000
Paving Equipment	4.61000E-003	4.65700E-002	6.09900E-002	1.00000E-004	2.30000E-003	2.12000E-003	0.00000E+000	8.58825E+000	8.58825E+000	2.78000E-003	0.00000E+000	8.65769E+000
Rollers	4.55000E-003	4.61800E-002	4.51300E-002	6.00000E-005	2.82000E-003	2.60000E-003	0.00000E+000	5.53213E+000	5.53213E+000	1.79000E-003	0.00000E+000	5.57686E+000
Rubber Tired Dozers	6.43500E-002	6.74730E-001	2.48320E-001	5.20000E-004	3.27500E-002	3.01300E-002	0.00000E+000	4.61595E+001	4.61595E+001	1.49300E-002	0.00000E+000	4.65327E+001
Scrapers	4.09000E-002	4.70920E-001	3.08210E-001	6.70000E-004	1.83200E-002	1.68600E-002	0.00000E+000	5.85933E+001	5.85933E+001	1.89500E-002	0.00000E+000	5.90670E+001
Tractors/Loaders/Backhoes	9.80300E-002	9.95480E-001	1.29929E+000	1.80000E-003	5.46100E-002	5.02400E-002	0.00000E+000	1.58253E+002	1.58253E+002	5.11800E-002	0.00000E+000	1.59533E+002
Welders	5.44000E-002	2.86450E-001	3.31850E-001	5.00000E-004	1.26100E-002	1.26100E-002	0.00000E+000	3.67971E+001	3.67971E+001	4.42000E-003	0.00000E+000	3.69075E+001

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20202E-006	1.20202E-006	0.00000E+000	0.00000E+000	1.20007E-006
Concrete/Industrial Saws	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.61732E-006	1.61732E-006	0.00000E+000	0.00000E+000	0.00000E+000
Cranes	0.00000E+000	1.37427E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15315E-006	1.15315E-006	0.00000E+000	0.00000E+000	1.14390E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.12294E-006	1.12294E-006	0.00000E+000	0.00000E+000	1.11394E-006
Forklifts	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.14269E-006	1.14269E-006	0.00000E+000	0.00000E+000	1.13352E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.17649E-006	1.17649E-006	0.00000E+000	0.00000E+000	1.17509E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	7.80837E-007	7.80837E-007	0.00000E+000	0.00000E+000	7.74574E-007
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.00931E-006	1.00931E-006	0.00000E+000	0.00000E+000	1.00121E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.16438E-006	1.16438E-006	0.00000E+000	0.00000E+000	1.15504E-006
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.29984E-006	1.29984E-006	0.00000E+000	0.00000E+000	1.07451E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.02401E-006	1.02401E-006	0.00000E+000	0.00000E+000	1.18509E-006
Tractors/Loaders/Backhoes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.13742E-006	1.13742E-006	0.00000E+000	0.00000E+000	1.19098E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.08704E-006	1.08704E-006	0.00000E+000	0.00000E+000	1.08379E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input		Mitigation Input		Mitigation Input	
No	Soil Stabilizer for unpaved Roads	PM10 Reduction		PM2.5 Reduction			
No	Replace Ground Cover of Area Disturbed	PM10 Reduction		PM2.5 Reduction			
No	Water Exposed Area	PM10 Reduction		PM2.5 Reduction		Frequency (per day)	

No	Unpaved Road Mitigation	Moisture Content %		Vehicle Speed (mph)	0.00		
No	Clean Paved Road	% PM Reduction	0.00				

		Unmitigated		Mitigated		Percent Reduction	
Phase	Source	PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.07	0.02	0.07	0.02	0.00	0.00
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.41	0.11	0.41	0.11	0.00	0.00
Demolition	Fugitive Dust	0.01	0.00	0.01	0.00	0.00	0.00
Demolition	Roads	0.00	0.00	0.00	0.00	0.00	0.00
Grading	Fugitive Dust	0.19	0.08	0.19	0.08	0.00	0.00
Grading	Roads	0.02	0.00	0.02	0.00	0.00	0.00
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.01	0.00	0.01	0.00	0.00	0.00
Site Preparation	Fugitive Dust	0.10	0.05	0.10	0.05	0.00	0.00
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.00	0.00

Operational Percent Reduction Summary

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	100.00	100.00	100.00	100.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.76	1.11	1.57	1.89	1.73	1.74	0.00	1.89	1.89	1.62	0.00	1.89
Natural Gas	6.27	6.27	6.27	6.29	6.28	6.28	0.00	6.27	6.27	6.28	6.29	6.27
Water Indoor	0.00	0.00	0.00	0.00	0.00	0.00	20.00	20.00	20.00	19.99	20.03	20.00
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting: Low Density Suburban

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	-0.01	0.13		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Yes	Neighborhood Enhancements	Improve Pedestrian Network	2.00	Project Site and Connecting Off-Site		
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.02			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.02			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"	3.00			
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00		2.00	
No	Commute	Provide Ride Sharing Program	5.00			
	Commute	Commute Subtotal	0.00			

No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.02			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
No	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	100.00
No	Use Low VOC Paint (Residential Exterior)	100.00
No	Use Low VOC Paint (Non-residential Interior)	100.00
No	Use Low VOC Paint (Non-residential Exterior)	100.00
No	Use Low VOC Paint (Parking)	100.00
No	% Electric Lawnmower	
No	% Electric Leafblower	
No	% Electric Chainsaw	

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Exceed Title 24	7.00	
No	Install High Efficiency Lighting	0.00	
Yes	On-site Renewable	0.00	100.00

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
Yes	Apply Water Conservation on Strategy	20.00	20.00
No	Use Reclaimed Water	0.00	0.00
No	Use Grey Water	0.00	
No	Install low-flow bathroom faucet	32.00	
No	Install low-flow Kitchen faucet	18.00	
No	Install low-flow Toilet	20.00	
No	Install low-flow Shower	20.00	
No	Turf Reduction	0.00	
No	Use Water Efficient Irrigation Systems	6.10	
No	Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Mitigation Measures	Input Value

Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

Minor Project Health Effects Tool

Latitude	38.576556	**<-- Step 1: Input latitude (Please chose a value between 38.0 and 39.7)**
Longitude	-121.195628	**<-- Step 2: Input longitude (Please chose a value between -122.5 and -120.0)**

PM2.5 Health Endpoint	Age Range[1]	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year)[2,5] (Mean)	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2] (Mean)	Percent of Background Health Incidences Across the 5-Air-District Region[3]	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
Respiratory					
Emergency Room Visits, Asthma	0 - 99	0.74	0.67	0.0037%	18419
Hospital Admissions, Asthma	0 - 64	0.047	0.043	0.0024%	1846
Hospital Admissions, All Respiratory	65 - 99	0.29	0.26	0.0013%	19644
Cardiovascular					
Hospital Admissions, All Cardiovascular (less Myocardial Infarctions)	65 - 99	0.16	0.14	0.00060%	24037
Acute Myocardial Infarction, Nonfatal	18 - 24	0.000060	0.000054	0.0014%	4
Acute Myocardial Infarction, Nonfatal	25 - 44	0.0054	0.0050	0.0016%	308
Acute Myocardial Infarction, Nonfatal	45 - 54	0.014	0.013	0.0018%	741
Acute Myocardial Infarction, Nonfatal	55 - 64	0.023	0.022	0.0018%	1239
Acute Myocardial Infarction, Nonfatal	65 - 99	0.098	0.091	0.0018%	5052
Mortality					
Mortality, All Cause	30 - 99	1.9	1.7	0.0039%	44766

Ozone Health Endpoint	Age Range[1]	Incidences Across the Reduced Sacramento 4-km Modeling Domain Resulting from Project Emissions (per year)[2,5] (Mean)	Incidences Across the 5-Air-District Region Resulting from Project Emissions (per year)[2] (Mean)	Percent of Background Health Incidences Across the 5-Air-District Region[3]	Total Number of Health Incidences Across the 5-Air-District Region (per year)[4]
Respiratory					
Hospital Admissions, All Respiratory	65 - 99	0.069	0.055	0.00028%	19644
Emergency Room Visits, Asthma	0 - 17	0.25	0.20	0.0034%	5859
Emergency Room Visits, Asthma	18 - 99	0.44	0.36	0.0028%	12560
Mortality					
Mortality, Non-Accidental	0 - 99	0.044	0.037	0.00012%	30386

1. Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

2. Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects are shown for the Reduced Sacramento 4-km Modeling Domain and the 5-Air-District Region.

3. The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, the background incidence rates cover the 5-Air-District Region (estimated 2035 population of 3,271,451 persons). Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP.

4. The total number of health incidences across the 5-Air-District Region is calculated based on the modeling data. The information is presented to assist in providing overall health context.

5. The technical specifications and map for the Reduced Sacramento 4-km Modeling Domain are included in Appendix A, Table A-1 and Appendix B, Figure B-2 of the *Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.*

Sac Metro Air District Minor Project Health Effects Tool, version 2, published June 2020

Appendix D

Biological Resources Assessment

The Preserve Development

Rancho Cordova, California

Prepared For:

Winn Communities, Inc.

July 27, 2021

SUPERSEDED
December 13, 2019

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

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Attachment B – SSHCP Modeled Species Habitat Maps

Attachment C – Results of SSHCP Habitat Surveys

Attachment D – Special-Status Plant Survey Report

Attachment E – Special-Status Species Evaluated for the Study Area

Attachment F – Aquatic Resources Delineation

Attachment G – Wildlife Observed Onsite

Attachment H – Arborist Report

Attachment I – SSHCP Avoidance and Minimization Measures

LIST OF ACRONYMS AND ABBREVIATIONS

AMM	SSHCP Avoidance and Minimization Measure
ARP	SSHCP Aquatic Resources Program
BA	Biological assessment
BCC	Birds of conservation concern
BO	Biological opinion
BRA	Biological resources assessment
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
CWR	Clean Water Rule
dsh	Diameter at standard height
EPA	Environmental Protection Agency
ESA	Endangered Species Act
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
MSL	Mean sea level
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
OHWM	Ordinary high-water mark
Project	The Preserve Development
RWQCB	Regional Water Quality Control Board
SSC	Species of special concern
SSHCP	South Sacramento Habitat Conservation Plan

LIST OF ACRONYMS AND ABBREVIATIONS

Study Area	±112-acre area including The Preserve Development and offsites
TNW	Traditionally Navigable Water
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group

1.0 INTRODUCTION

On behalf of Winn Communities, Inc., ECORP Consulting, Inc. conducted a biological resources assessment (BRA) for a ±112-acre Study Area for The Preserve Development (Project), a proposed project located in Rancho Cordova, Sacramento County, California. The Study Area includes the 98.92-acre Project area, as well as potential Offsite areas totaling 13.16 acres. In this document the Offsite areas are referred to as the Rio del Oro Offsite (located to the west of the Project), the Raymer Way Offsite (located to the east of the Project), the Morrison Creek Offsite (located to the north of the Project around an existing crossing of Morrison Creek), and the North Douglas Offsites (road stubs located to the south of the Project). Representative photographs of the Study Area are provided as Attachment A.

1.1 Study Area Location

The Study Area is located to the west of Raymer Way and Grant Line Road in Rancho Cordova, California. The Study Area corresponds to an unsectioned portion of the Rio de los Americanos Land Grant within the "Buffalo Creek, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1980) (Figure 1. *Study Area Location and Vicinity*). The approximate center of the site is located at 38.574614° North and -121.196708° West within the Lower Sacramento Watershed (Hydrologic Unit Code #18020163, USGS 2016).

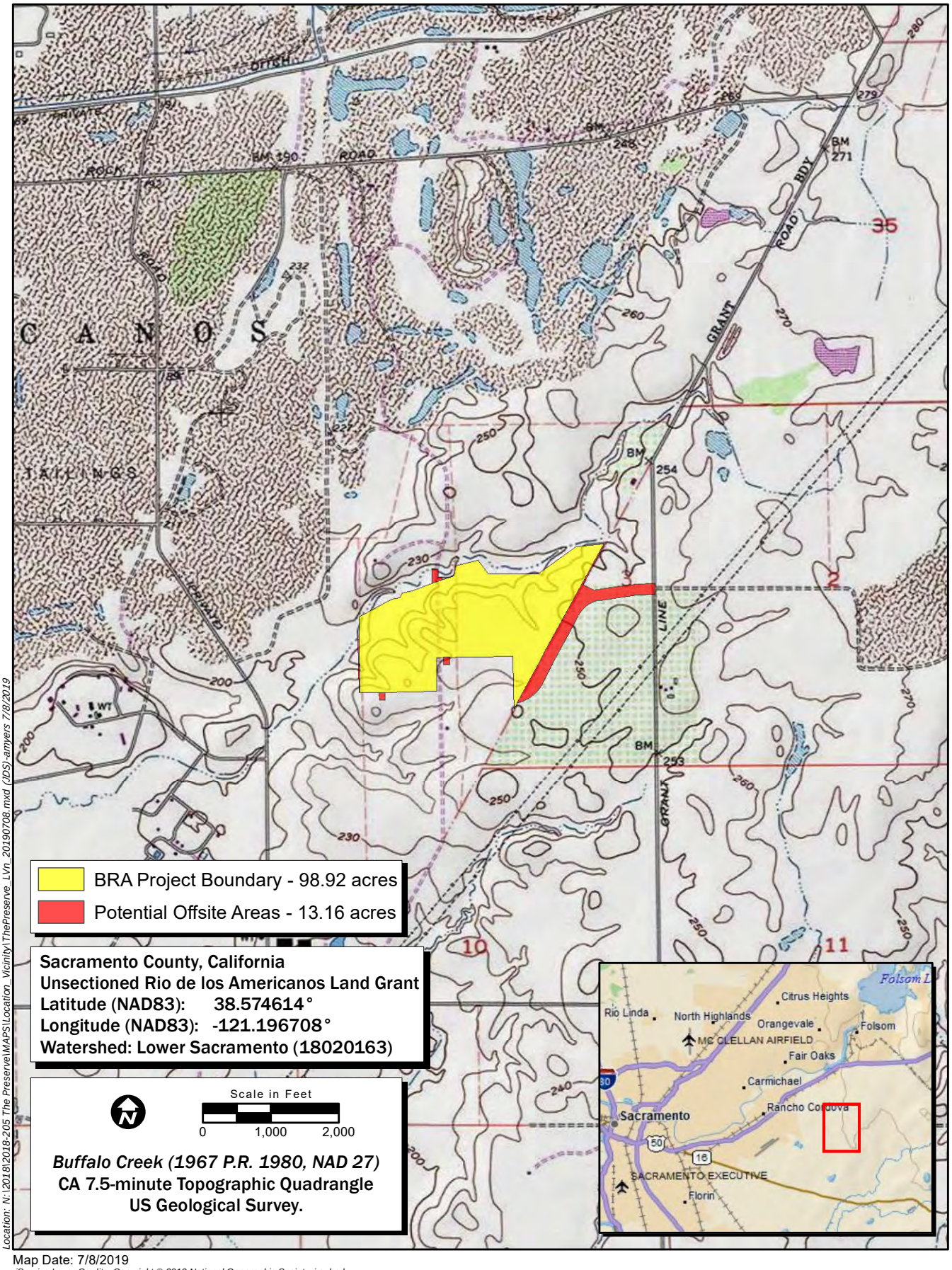
1.2 Purpose of this Biological Resources Assessment

The purpose of this BRA was to collect information on the biological resources present or with the potential to occur in the Study Area, to provide an analysis of potential Project impacts on these resources, and to recommend mitigation measures. This BRA is intended to support preparation of an environmental document pursuant to the California Environmental Quality Act (CEQA), and to support an application for a South Sacramento Habitat Conservation Plan (SSHCP) Permit.

1.3 Project Description

The Project is a residential development containing approximately 434 lots, parks, and open spaces including a trail system, residential and collector streets, and stormwater management infrastructure.

An open space trail system and parks are located immediately south of Morrison Creek as a buffer between the creek and the proposed residential neighborhood.



Location: N:\2018\2018-205 The Preserve\MAPS\Location_Vicinity\ThePreserve_LVn_20190708.mxd (JDS)-amyers 7/8/2019

Map Date: 7/8/2019

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Figure 1. Study Area Location and Vicinity

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

2018-205 The Preserve

The Project will offer a variety of housing choices that will be consistent with the Medium Density Residential General Plan designation, which allows for small lot single-family homes. The Project has a compact urban design that allows for less land to be developed than typical large lot developments, creating a more efficient land use pattern. The Project would build out to the eastern boundary of the City, which was forecasted in the General Plan as the Grant Line West Planning Area. This location allows for connection to existing infrastructure, reducing the impact footprint and need for offsite improvements. The circulation pattern of the project was designed to utilize the aesthetic views of Morrison Creek while keeping safe vehicular patterns in conjunction with inviting and enhanced pedestrian routes. The Project will have four points of access: two points from Raymer Way, one point from Thornberg Way, and one point from the extension of Edington Drive.

1.3.1 Project Offsites

An offsite area along Raymer Way (Raymer Way Offsite) has been included in this assessment in anticipation that future improvements to the roadway may be required to support the Project. In addition, there are four other potential offsite areas described in this assessment as the Morrison Creek Offsite, North Douglas Offsites, and Rio del Oro Offsite. Within the Morrison Creek Offsite, an existing berm to the east of a gravel road crossing Morrison Creek is proposed to be removed to minimize flooding of the adjacent areas during 100-year storms. The North Douglas Offsites are the locations of future roadway connections to the existing North Douglas Project. Within the Rio del Oro Offsite, a small amount of grading may be required in association with the slopes at the western side of the Project. The Rio del Oro Offsite is located entirely within a disced firebreak on the Rio del Oro property.

2.0 REGULATORY SETTING

2.1 Federal Regulations

2.1.1 Endangered Species Act

The Endangered Species Act (ESA) protects plants and animals that are listed as endangered or threatened by U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service (NMFS). Section 9 of ESA prohibits, without authorization, the taking of listed wildlife, where take is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant under federal jurisdiction and removing, cutting, digging up, damaging, or destroying any listed plant in any other area in knowing violation of state law (16 U.S. Code [USC] 1538). Under Section 7 of ESA, federal agencies are required to consult with USFWS and/or NMFS if their actions, including permit approvals and funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion (BO), USFWS and NMFS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of ESA provides for the issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan is developed.

Permitting under the SSHCP, which was developed pursuant to Section 10 of the ESA, allows for take authorization of certain Covered Species through a streamlined permitting process. The SSHCP is discussed further in Section 2.5.8.

Critical Habitat

Critical Habitat is defined in Section 3 of ESA as:

1. the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection; and

2. specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

For inclusion in a Critical Habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features essential to the conservation of the species (16 USC 1533). Critical Habitat designations identify, to the extent known and using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary constituent elements). Primary constituent elements are the physical and biological features that are essential to the conservation of the species and that may require special management considerations or protection. These include but are not limited to the following:

1. Space for individual and population growth and for normal behavior;

2. Food, water, air, light, minerals, or other nutritional or physiological requirements;

3. Cover or shelter;

4. Sites for breeding, reproduction, or rearing (or development) of offspring; and

5. Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

2.1.2 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized under the MBTA, USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State

of California has incorporated the protection of non-game birds in § 3800, migratory birds in § 3513, and birds of prey in § 3503.5 of the California Fish and Game Code.

2.1.3 Clean Water Act

The federal Clean Water Act's (CWA's) purpose is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "Waters of the U.S." without a permit from the U.S. Army Corps of Engineers (USACE). The Clean Water Rule (CWR) was published in April 2015, but implementation of the rule was stayed until July 2018. It is currently (2018) in effect for California and a few other states. The CWR defines which features are considered Waters of the U.S. (and thus subject to the CWA). The CWR defines Waters of the U.S. as features having a significant effect on the chemical, physical, or biological integrity of a Traditional Navigable Water (TNW), interstate water, or territorial seas. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) also has authority over wetlands, including the authority to veto permits issued by USACE under CWA Section 404(c).

Projects involving activities that have no more than minimal individual and cumulative adverse environmental effects may meet the conditions of one of the Nationwide Permits already issued by USACE (Federal Register 82:1860, January 6, 2017). If impacts on wetlands could be substantial, an individual permit is required. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB). The SSHCP includes an Aquatic Resources Program (ARP) to allow for streamlined permitting pursuant to CWA Sections 404 and 401. The SSHCP is discussed further in Section 2.5.8.

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California ESA (California Fish and Game Code §§ 2050-2116) protects species of fish, wildlife, and plants listed by the state as endangered or threatened. Species identified as candidates for listing may also receive protection. Section 2080 of the California ESA prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows for take incidental to otherwise lawful projects under permits issued by California Department of Fish and Wildlife (CDFW). Permitting under the SSHCP provides take authorization of certain Covered Species through a streamlined permitting process. The SSHCP is discussed further in Section 2.5.8.

2.2.2 Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the federal and the California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. Fully protected species are identified in the California Fish and Game Code § 4700 for mammals, § 3511 for birds, § 5050 for reptiles and amphibians, and § 5515 for fish.

These sections of the California Fish and Game Code provide that fully protected species may not be taken or possessed at any time, including prohibition of CDFW from issuing incidental take permits for fully protected species under the California ESA. CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit and may allow incidental take for lawful activities carried out under an approved Natural Community Conservation Plan (NCCP) within which such species are covered. The SSHCP is not an approved NCCP; however, it is consistent with California Fish and Game Code sections related to fully protected species, and SSHCP Covered Species include some fully protected species. The SSHCP is discussed further in Section 2.5.8.

2.2.3 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was established with the intent to "preserve, protect and enhance rare and endangered plants in this state." The NPPA is administered by CDFW. The Fish and Game Commission has the authority to designate native plants as "endangered" or "rare". The NPPA prohibits the take of plants listed under the NPPA, but the NPPA contains a number of exemptions to this prohibition that have not been clarified by regulation or judicial rule. In 1984, the California ESA brought under its protection all plants previously listed as endangered under NPPA. Plants listed as rare under NPPA are not protected under the California ESA, but are still protected under the provisions of NPPA. The Fish and Game Commission no longer lists plants under NPPA, reserving all listings to the California ESA.

2.2.4 California Fish and Game Code Special Protections for Birds

In addition to protections contained within the California ESA and California Fish and Game Code § 3511 described above, the California Fish and Game Code includes a number of sections that specifically protect certain birds.

Section 3800 states that it is unlawful to take nongame birds, such as those occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds, except when in accordance with regulations of the California Fish and Game Commission or a mitigation plan approved by CDFW for mining operations.

Section 3503 prohibits the take, possession, or needless destruction of the nest or eggs of any bird.

Section 3503.5 protects birds of prey (which includes eagles, hawks, falcons, kites, ospreys, and owls) and prohibits the take, possession, or destruction of any birds and their nests

Section 3505 makes it unlawful to take, sell, or purchase egrets, ospreys, and several exotic non-native species, or any part of these birds.

Section 3513 specifically prohibits the take or possession of any migratory nongame bird as designated in the MBTA.

2.2.5 Lake or Streambed Alteration Agreements

Section 1600-1616 of the California Fish and Game Code requires individuals or agencies to provide a Notification of Lake or Streambed Alteration to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW reviews the proposed actions and, if necessary, proposed measures to protect affected fish and wildlife resources. The final proposal mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alternation Agreement. The SSHCP complies with Sections 1600-1616 of the California Fish and Game Code. The SSHCP is discussed further in Section 2.5.8.

2.2.6 Porter-Cologne Water Quality Act

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb one or more acres of land require development and implementation of a Storm Water Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, with any region that could affect the water of the state" (Water Code 13260(a)). Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (Water Code 13050 (e)). The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State, that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of a Waste Discharge Requirements for these activities. The SSHCP's ARP allows for streamlined permitting pursuant to the CWA and complies with the Porter-Cologne Water Quality Act. The SSHCP is discussed further in Section 2.5.8.

2.2.7 California Environmental Quality Act

In accordance with CEQA Guidelines § 15380, a species or subspecies not specifically protected under the federal or California ESAs or NPPA may be considered endangered, rare, or threatened for CEQA review purposes if the species meets certain criteria specified in the Guidelines. These criteria include definitions similar to definitions used in ESA, the California ESA, and NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on a species that has not been listed under ESA, the California ESA, or NPPA, but that may meet the

definition of endangered, rare, or threatened. Animal species identified as species of special concern (SSC) by CDFW, and plants identified by the California Native Plant Society (CNPS) as rare, threatened, or endangered may meet the CEQA definition of rare or endangered. The SSHCP is consistent with CEQA. The SSHCP is discussed further in Section 2.5.8.

Species of Special Concern

SSC are defined by CDFW as a species, subspecies, or distinct population of an animal native to California that are not legally protected under ESA, the California ESA, or the California Fish and Game Code, but currently satisfies one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role;
- The species is listed as federally (but not state) threatened or endangered, or meets the state definition of threatened or endangered but has not formally been listed;
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status;
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status; and
- SSC are typically associated with habitats that are threatened.

Depending on the policy of the lead agency, projects that result in substantial impacts to SSC may be considered significant under CEQA.

U.S. Fish and Wildlife Service Birds of Conservation Concern

The 1988 amendment to the Fish and Wildlife Conservation Act mandates USFWS "identify species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become candidates for listing under ESA." To meet this requirement, USFWS published a list of birds of conservation concern (BCC) (USFWS 2008) for the United States. The list identifies the migratory and nonmigratory bird species (beyond those already designated as federally threatened or endangered) that represent USFWS's highest conservation priorities. Depending on the policy of the lead agency, projects that result in substantial impacts to BCC may be considered significant under CEQA.

Sensitive Natural Communities

The CDFW maintains the *California Natural Community List* (CDFW 2018a), which provides a list of vegetation alliances, associations, and special stands as defined in the *Manual of California Vegetation* (Sawyer et al. 2009), along with their respective state and global rarity ranks. Natural communities with a

state rarity rank of 1, 2, or 3 are considered sensitive natural communities. Depending on the policy of the lead agency, impacts to sensitive natural communities may be considered significant under CEQA.

California Rare Plant Ranks

The CNPS maintains the *Inventory of Rare and Endangered Plants of California* (CNPS 2018a), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six California Rare Plant Ranks (CRPRs). The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized in the California Natural Diversity Database (CNDDB). The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere
- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere
- Rare Plant Rank 3 – a review list of plants about which more information is needed
- Rare Plant Rank 4 – a watch list of plants of limited distribution

Additionally, CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 1 through 3, with 1 being the most threatened and 3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- Threat Rank 0.2 – Moderately threatened in California (20-80 percent occurrences threatened/moderate degree and immediacy of threat)
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or different protection (CNPS 2018a).

Depending on the policy of the lead agency, substantial impacts to plants ranked 1A, 1B, or 2, and 3 are typically considered significant under CEQA Guidelines § 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 4 and at the discretion of the CEQA lead agency.

California Environmental Quality Act Significance Criteria

Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of "impact significance" to populations of non-listed species (e.g., SSC) usually considers the proportion of the species' range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, § 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

2.2.8 South Sacramento Habitat Conservation Plan

The SSHCP is a regional effort that provides development and infrastructure projects with streamlined federal and state permitting processes while creating a preserve system to protect habitat, open space, and agricultural lands (County of Sacramento et al. 2018). The SSHCP allows project proponents within the Plan Area to simplify and expedite the state and federal ESA permitting process. In addition to streamlining the ESA permitting processes, a parallel ARP has been developed to address permitting pursuant to the Clean Water Act Section 404 and 401 permitting process. The SSHCP will allow Sacramento County, the City of Rancho Cordova, City of Galt, and the Southeast Connector Joint Powers Authority to receive Incidental Take Permits (ITP) for Covered Species from USFWS and CDFW for activities and projects they conduct. In addition, the three local Land Use Authority Permittees (the County, Galt, and Rancho Cordova) can extend incidental take coverage provided by the SSHCP ITPs to activities and projects implemented by Third-Party Project Proponents that are under the jurisdiction of that Land Use Authority Permittee. See www.southsachcp.com for more information.

Table 1 provides a list of the SSHCP Covered Species, adapted from Table 1-2 of the SSHCP (County of Sacramento et al. 2018).

Table 1. SSHCP Covered Species

Scientific Name Common Name	Status		
	Federal	State	CRPR
Invertebrates			
Lepidurus packardi Vernal pool tadpole shrimp	E	—	—
Branchinecta lynchi Vernal pool fairy shrimp	T	—	—
Branchinecta mesovallensis Mid-valley fairy shrimp	—	—	—
Desmocerus californicus dimorphus Valley elderberry longhorn beetle	T	—	—
*Hydrochara ricksecker*i Ricksecker's water scavenger beetle	—	—	—
Amphibians			
Ambystoma californiense California tiger salamander, (Central Valley population)	T	T	—
Spea hammondii Western spadefoot	—	CSC	—
Reptiles			
Actinemys marmorata Western pond turtle	—	CSC	—
Thamnophis gigas Giant garter snake	T	T	—
Birds			
Accipiter cooperii Cooper's hawk	—	WL	—
Agelaius tricolor Tricolored blackbird	BCC	T	—
Athene cunicularia hypugaea Western burrowing owl	BCC	CSC	—
Buteo regalis Ferruginous hawk	BCC	—	—
Buteo swainsoni Swainson's hawk	BCC	T	—
Circus cyaneus Northern harrier	—	CSC	—
Elanus leucurus White-tailed kite	—	CFP	—
Grus canadensis tabida Greater sandhill crane	—	T; CFP	—
Lanius ludovicianus Loggerhead shrike	BCC	CSC	—
Mammals			
Lasiurus blossevillii Western red bat	—	CSC	—

Table 1. SSHCP Covered Species

Scientific Name Common Name	Status		
	Federal	State	CRPR
Taxidea taxus American badger	—	CSC	—
Plants			
Downingia pusilla Dwarf downingia	—	—	2.2
Gratiola heterosepala Boggs Lake hedge-hyssop	—	E	1B.2
Juncus leiospermus var. *ahartii* Ahart's dwarf rush	—	—	1B.2
Legenere limosa Legenere	—	—	1B.1
Navarretia myersii Pincushion navarretia	—	—	1B.1
Orcuttia tenuis Slender Orcutt grass	T	E	1B.1
Orcuttia viscida Sacramento Orcutt grass	E	E	1B.1
Sagittaria sanfordii Sanford's arrowhead	—	—	1B.2

Status Definitions

Federal:
E = Listed as endangered under the federal ESA
T = Listed as threatened under the federal ESA
— = No federal ESA listing
BCC = Bird of Conservation Concern, USFWS 2008.

State:
E = Listed as endangered under state ESA
T = Listed as threatened under state ESA
CFP = Fully protected under the California Fish and Game Code
CSC = Species of special concern in California
WL = Watch List
— = No state status

California Native Plant Society California Rare Plant Rank (CRPR):
1B = Rare, threatened, or endangered in California and elsewhere
2 = Rare, threatened, or endangered in California but more common elsewhere

CRPR Threat Ranks
0.1 = Seriously threatened in California (high degree/immediacy of threat)
0.2 = Fairly threatened in California (moderate degree/immediacy of threat)
0.3 = Not very threatened in California (low degree/immediacy of threats or no current threats known)

2.2.9 City of Rancho Cordova Tree Ordinance

The City of Rancho Cordova Tree Ordinance defines Protected Trees as follows:

- Native oak trees – *Quercus lobata*, valley oak; *Quercus wislizenii*, interior live oak; *Quercus douglasii*, blue oak; or *Quercus* x. *morehus*, oracle oak – having a trunk diameter of at least six inches or greater; or
- Any tree species other than a native oak having a trunk diameter of at least 12 inches or greater on nonresidential property; or
- Any tree species other than a native oak having a trunk diameter of at least 24 inches or greater on residential property; or
- Any tree planted as a requirement tree for site development, tree permit condition, landscape plan removal replacement, or other designated condition by the public works director or planning director.

The City Ordinance defines the methods by which trunk diameter is determined as:

- "Diameter at standard height" or "dsh" means the diameter of a tree measured at four and one-half feet above natural grade, except as specified below. The diameter shall be calculated by using the following formula: diameter equals circumference/3.14.
- For a tree that branches at or below four and one-half feet, dsh means the diameter at the narrowest point between the grade and the branching point.
- For a tree with a common root system that branches at the ground, dsh means the sum of the diameter of the largest trunk and one-half the cumulative diameter of the remaining trunks at four and one-half feet above natural grade.

Trees designated with protected status under the City Ordinance may require additional reporting and planning requirements. The City ordinances require a report, to be prepared by a certified arborist, detailing the preservation, removal, replacement, or relocation of any protected trees prior to the preliminary approval of any parcel map. Protected Trees require a permit from the City of Rancho Cordova if pruning or removal of these trees is necessary.

3.0 METHODS

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the ESA;
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under § 15380 of the CEQA Guidelines;
- are identified as a SSC by the CDFW;
- are birds identified as BCC by the USFWS;

- are considered by the CNPS to be "rare, threatened, or endangered in California", "plants about which more information is needed", or "plants of limited distribution – a watch list" (i.e., species with a CRPR of 1B, 2, 3, or 4);
- are plants listed as rare under the NPPA (California Fish and Game Code, § 1900 et seq.);
- are fully protected in California in accordance with the California Fish and Game Code, §§ 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes); or
- are Covered Species as defined by the SSHCP.

Species that are tracked by the CNDDB but having no other special status are not considered to be special-status species.

Two different procedures were used to assess the potential for SSHCP Covered Species and species that are not Covered Species to occur within the Study Area. These are described below.

3.1 Analysis of SSHCP Covered Species

SSHCP Modeled Species Habitat data were used to determine which SSHCP Covered Species are considered to have the potential to occur within the Study Area (SSHCP Covered Species are listed in Table 1). Modeled Species Habitat data were obtained from Dudek and no revisions to the extent of Modeled Species Habitat were made by ECORP. Maps of Modeled Species Habitat are presented in Attachment B.

3.1.1 Field Assessment for Covered Species

Surveys for potential habitat for tricolored blackbird, burrowing owl, Swainson's hawk, other raptors, and western red bat were conducted per requirements of SSHCP Avoidance and Minimization Measures (AMMs) TCB-1, WBO-1, SWHA-1, RAPTOR-1, and BAT-1. The methods used and results of these surveys are described in Attachment C. Information from these surveys was used to determine whether specific potential habitat features (e.g., nesting trees, burrows) for these species were present onsite.

In addition, surveys for special-status plant species were conducted per AMMs PLANT-1 and ORCUTT-1 in spring 2019. The results of these surveys are described in Attachment D.

3.2 Analysis of Other Special-Status Species

3.2.1 Literature Review

The following resources were queried to determine whether any species other than SSHCP Covered Species have potential to occur within the Study Area.

- CDFW CNDDB record search for the "Buffalo Creek, California" 7.5-minute quadrangle and the eight surrounding USGS quadrangles (CDFW 2018b);

- USFWS Information, Planning, and Consultation System Resource Report List for the Study Area (USFWS 2018);
- CNPS' electronic *Inventory of Rare and Endangered Plants of California* was queried for the "Buffalo Creek, California" 7.5-minute quadrangle and the eight surrounding USGS quadrangles (CNPS 2018a).

3.2.2 Field Assessment for Other Species

Several surveys were conducted by ECORP biologists during fall 2018 and spring 2019. During these surveys, the Study Area was walked on foot where accessible, and topographic maps and aerial imagery were referenced. The Raymer Way Offsite was observed from the publicly accessible roadway, and the Rio del Oro Offsite was observed from within the Project.

Biological communities occurring within the Study Area were characterized and the following biological resource information was collected:

- Potential aquatic features (also described separately in the Aquatic Resources Delineation [ECORP 2018]);
- Protected Trees occurring onsite;
- Animal and plant species directly observed;
- Habitat and vegetation communities; and
- Representative photographs of the Study Area, provided as Attachment A.

3.2.3 Evaluation of Special-Status Species

Based on SSHCP modeled species habitat, species occurrence information from the literature review, and field assessments, a list of special-status plant and animal species considered to have the potential to occur within the Study Area was generated. This list is provided in Attachment E and the potentially occurring species are summarized in Section 4.0.

Each of the species that were considered as potentially occurring within the Study Area or vicinity was evaluated based on the following criteria:

- **Present** - Species was observed during field surveys or is known to occur within the Study Area based on documented occurrences within the CNDDB, SSHCP, or other literature.
- **Potential to Occur** - Habitat (including soil and elevation requirements) for the species occurs within the Study Area based on site assessment, literature research, or SSHCP Modeled Species Habitat data.
- **Low Potential to Occur** - Marginal or limited amounts of habitat occur, and/or the species is not known to occur within the vicinity of the Study Area based on CNDDB records and other available documentation. This designation is only used for species that are not SSHCP Covered Species.

- **Absent** - No suitable habitat (including soils and elevation requirements) and/or the species is not known to occur within the vicinity of the Study Area based on CNDDB records and other documentation, or SSHCP Modeled Species Habitat data does not indicate that habitat for the species occurs within the site.

4.0 RESULTS

4.1 Site Characteristics and Land Use

The Study Area is situated at an elevation range between approximately 200 and 250 feet above mean sea level (MSL) in Rancho Cordova, California. The Study Area is located in the Great Valley region, Sacramento Valley subregion of the California Floristic Province (Baldwin et al. 2012). This region is characterized by agricultural areas, grasslands, wetlands, and valley oaks (Baldwin et al. 2012). The average annual precipitation for the region is 36.9 inches (with the wettest period during November-March), and average daily temperatures range from 47.7˚F in winter to 73.8˚F in summer (National Oceanic and Atmospheric Administration [NOAA] 2018).

The Study Area is characterized by flat to gently rolling terrain and consists primarily of grazed annual grasslands with two residences and other outbuildings. A private road, sometimes identified as Douglas Road, leads from south of the Study Area into the two residences.

The Study Area is located within the USFWS Mather Core Area (USFWS 2005a). Core Areas are areas prioritized for the conservation and recovery of threatened and endangered vernal pool species.

4.2 Soils

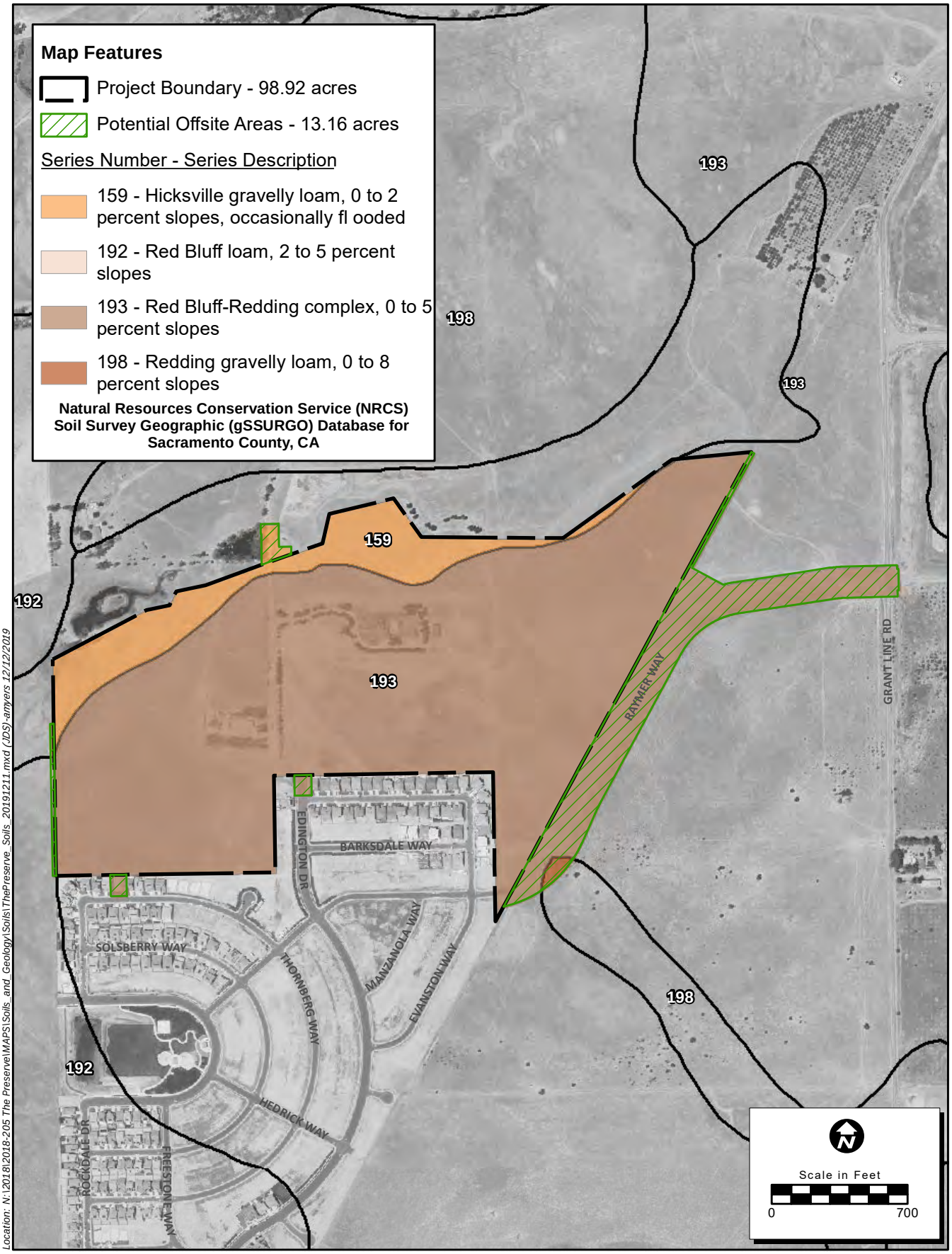
According to the *Web Soil Survey* (NRCS 2018), two soil units, or types, have been mapped within the Study Area (Figure 2. *Natural Resources Conservation Service Soil Types*):

- (159) Hicksville gravelly loam, 0 to 2 percent slopes, occasionally flooded;
- (192) Red Bluff loam, 2 to 5 percent slopes;
- (193) Red Bluff-Redding complex, 0 to 5 percent slopes; and
- (198) Redding gravelly loam, 0 to 8 percent slopes.

Hicksville and Red Bluff soils are formed in alluvium derived from mixed rock sources. Redding soils are formed in gravelly and cobbly alluvium derived from mixed rock sources (NRCS 2018). No soil units derived from serpentinite or other ultramafic parent materials have been reported to occur within the Study Area or its immediate vicinity (NRCS 2018). Furthermore, no apparent inclusions of ultramafic rocks or soils were observed during the June 2018 field survey.

4.3 Land Cover Types

SSHCP Land Cover data within the Study Area were reviewed; however, the type and extent of SSHCP Land Cover types was revised to reflect field conditions based on the onsite assessment. Baseline SSHCP



Location: N:\2018\2018-205 The Preserve\MAPS\Soils_and_Geology\Soils\ThePreserve_Soils_20191211.mxd (JDS)-amyers 12/12/2019

Map Date: 12/12/2019
Photo Source: 2016, NAIP

Figure 2. Natural Resources Conservation Service Soil Types

2018-205 The Preserve

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Land Cover data is presented in *Figure 3. Original SSHCP Land Cover*, and a revised Land Cover map is provided as *Figure 4. Revised SSHCP Land Cover*.

4.3.1 Terrestrial Land Cover Types

The SSHCP Land Cover data indicated that the Study Area primarily contains the Valley Grassland land cover type, and the reconnaissance vSisit revised the extent of this land cover type on Figure 4. The Study Area also contains Low Density Development and a small amount of Disturbed land cover.

Valley Grassland

The Valley Grassland land cover type is predominantly characterized by non-native (naturalized) annual grasses. Within the Study Area, the common plant species found in Valley Grassland are a mixture of nonnative annual grasses, including medusahead grass (*Elymus caput-medusae*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), and brome fescue (*Festuca bromoides*). Narrow tarplant (*Holocarpha virgata*), a native perennial forb, is also common in this land cover type within the Study Area.

Low Density Development

The Low Density Development land cover type consists of existing homesteads including buildings/structures and horticultural trees. Trees are described further in Section 4.8.

Disturbed/Major Roads

The Disturbed and Major Roads land cover types consists of disturbed areas, and sections of paved and gravel road within the Study Area.

Major Roads

Major Roads land cover type consists of Grant Line Road and Raymer Way within the Raymer Way Offsite.

4.3.2 Aquatic Land Cover Types

An aquatic resources delineation was conducted for the Project in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008) and is provided as Attachment F-1. The USACE verified this delineation on May 9, 2019 (Attachment F-2). An Addendum to the delineation has been prepared for the Offsites (Attachment F-3), but has not yet been verified by the USACE as of the date of this assessment.

A total of 4.727 acres of aquatic resources have been mapped within the Study Area, consisting of 4.425 acres within the Project area and 0.302 acre within the Offsites. These include Vernal Pool, Swale, and Stream/Creek land cover types. The Morrison Creek and North Douglas Offsites were included in the aquatic resources delineation for the Project (ECORP 2018a). The Rio del Oro Offsite was delineated and verified by the USACE for the Rio del Oro Project (SPK-1999-00590) and per the verified delineation, no Waters of the U.S. lie within this area. The Raymer Way Offsite has not been formally delineated due to inability to access these areas as of the date of this report; however, roadside ditches were delineated

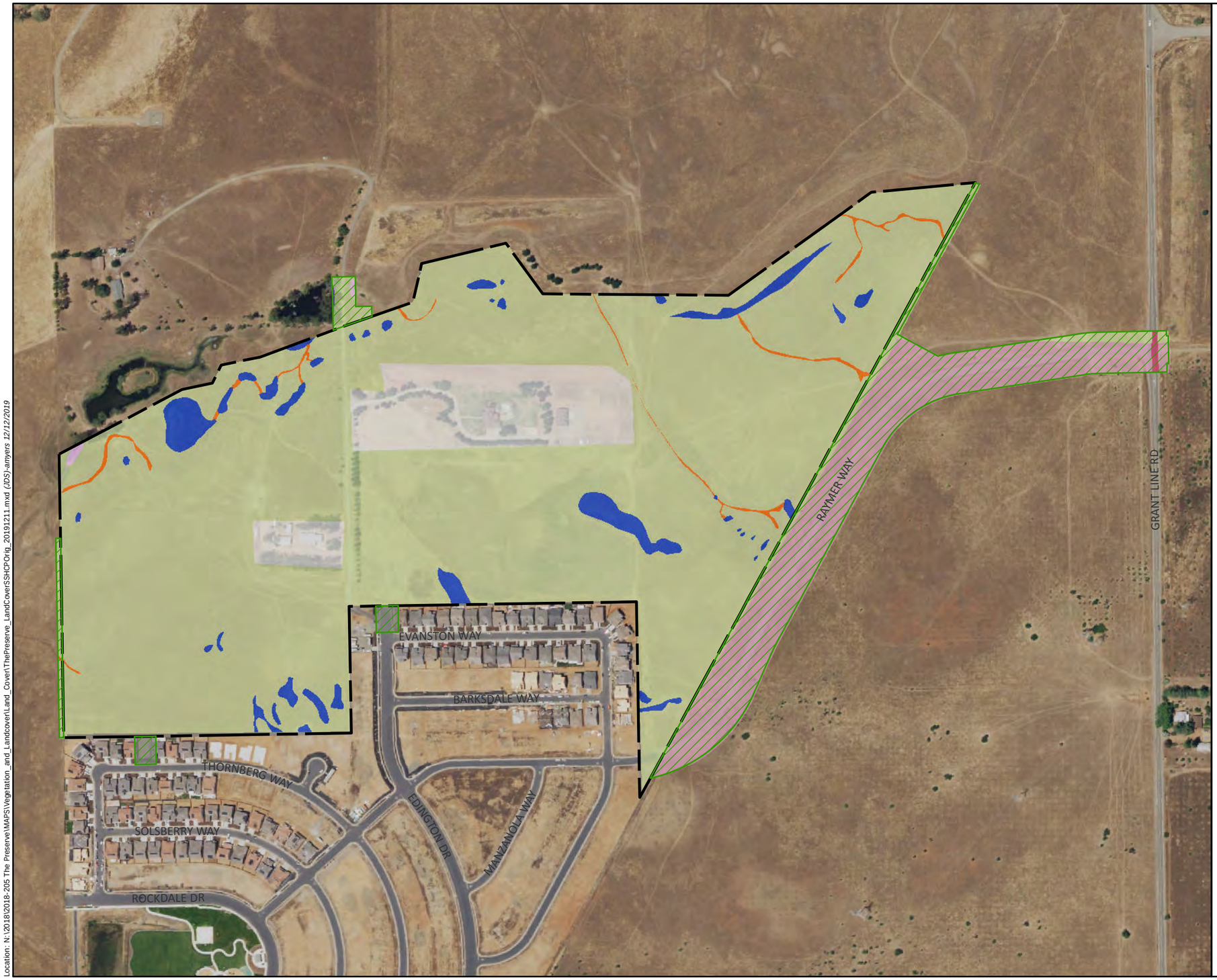


Figure 3.
The Preserve
Original SSHCP Landcover

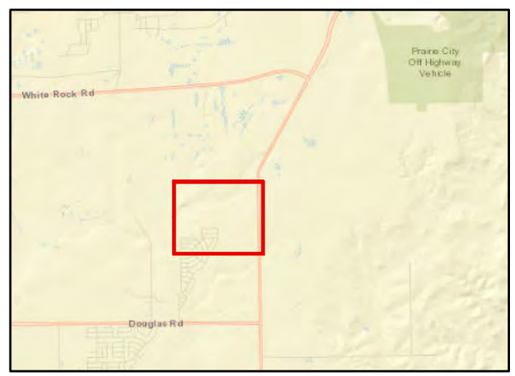
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

SSHCP Land Cover

- Disturbed
- Low Density Development
- Major Roads
- Open Water
- Orchards
- Streams/Creeks (VPIH)
- Swale
- Valley Grassland
- Vernal Pool

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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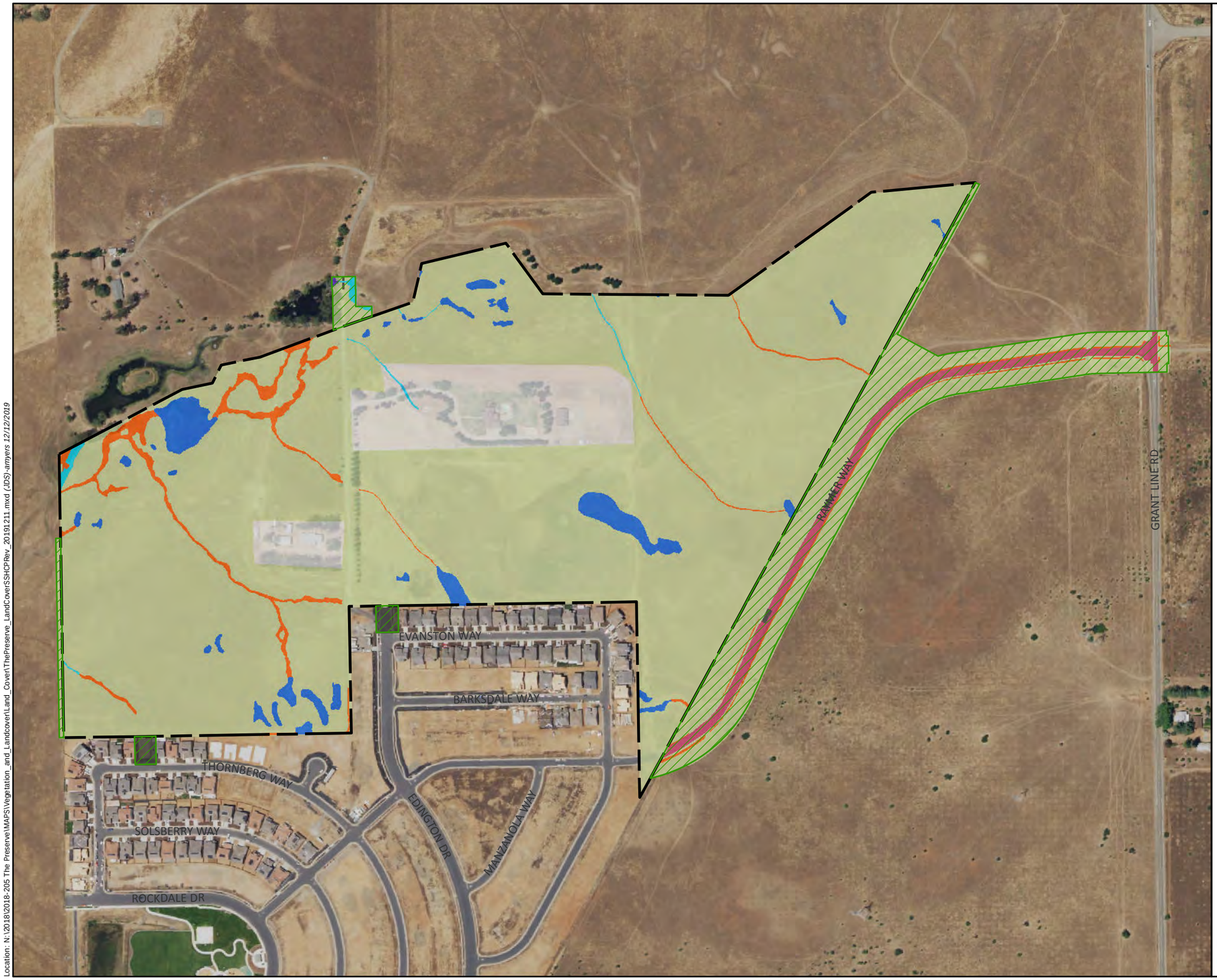
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2018-205 The Preserve

Scale in Feet
0 400

Photo Source: 2016, NAIP
Landcover Data: SSHCP
Base Data: RJA
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165018 Base.dwg

Map Date: 12/12/2019



Location: N:\2018\2018-205 The Preserve\MAPS\Vegetation_and_Landcover\Land_Cover\ThePreserve_LandCoverSSHCPRev_20191211.mxd (JDS)-amyers 12/12/2019

Figure 4.
The Preserve
Revised SSHCP Land Cover

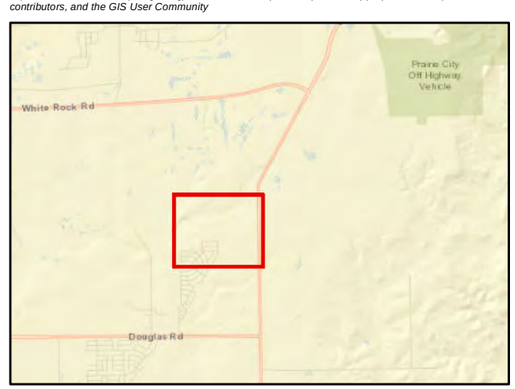
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modified SSHCP Land Cover

- Major Roads
- Open Water
- Stream/Creek
- Swale
- Vernal Pool
- Valley Grassland
- Disturbed
- Low Density Development

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
0 400

Photo Source: 2016, NAIP
Landcover Data: SSHCP/ECORP
Base Data: RJA
165018 BNDY -WINN BINDED.dwg
165018 Base.dwg

Map Date: 12/12/2019

from the publicly accessible roads. A discussion of the aquatic resources found onsite is presented below, and an aquatic resources delineation map is presented in Figure 5. *Aquatic Resources Delineation*.

Vernal Pool

Vernal pools are seasonal ephemeral wetlands that fill and dry each year, forming in shallow depressions within Valley Grassland that are underlaid by an impermeable layer (e.g., a hardpan). Water collects in the depressions during the winter rainy season and recedes during the spring. Soils typically remain moist until late spring before becoming desiccated, and then remain dry throughout the summer. Vernal pools provide habitat for several special-status species, including invertebrates, plants, and amphibians.

Vernal pools occur throughout the Study Area. These features are variously dominated by Great Valley button-celery (*Eryngium castrense*), stalked popcorn flower (*Plagiobothrys stipitatus*), woolly marbles (*Psilocarphus brevissimus*), Mediterranean barley (*Hordeum marinum*), waxy mannagrass (*Glyceria declinata*), hairy hawkbit (*Leontodon saxatilis*), and toad rush (*Juncus bufonius*).

Swale

Swales are shallow ephemeral drainages found in flat to gently rolling Valley Grassland in association with vernal pool complexes, on soils with an impermeable layer. Swales convey runoff as shallow, gently sloping ephemeral wetlands during and shortly after winter rainstorms, but usually maintain soil saturation for longer periods during the growing season. They typically have hydric soils and support hydrophytic vegetation but lack an ordinary high-water mark (OHWM). Roadside ditches that may represent habitat for vernal pool invertebrates may also be classified as swales. Swales serve as habitat for many vernal pool species and provide hydrological connections between vernal pools that allows movement/dispersal of amphibian species, plant seeds, and vernal pool invertebrates (both adults and cysts).

Swales occur throughout the Study Area, and are dominated by Italian ryegrass (*Festuca perennis*), Fitch's spikeweed (*Centromadia fitchii*), and Mediterranean barley. Swale land cover within the Raymer Way Offsite represents roadside ditches.

Stream/Creek

The Stream/Creek land cover type includes intermittent and perennial linear water features such as rivers, streams, creeks, drainages, and roadside and irrigation ditches. These features typically exhibit a bed and bank and an OHWM. Morrison Creek is primarily located outside and to the north of the Study Area, with the exception of one Offsite located around an existing crossing of Morrison Creek.

Several small headwater tributaries to the creek flow through the Study Area into Morrison Creek. These features do not represent habitat for vernal pool invertebrates, due to the fast-moving flow and ephemeral nature of the features. Stream/creek features occur throughout the Study Area, flowing northwest to Morrison Creek, and vary from steep, unvegetated features, to gently sloping features that are sparsely vegetated with creeping spikerush (*Eleocharis macrostachya*).



Figure 5.
Aquatic Resources Delineation

Map Features

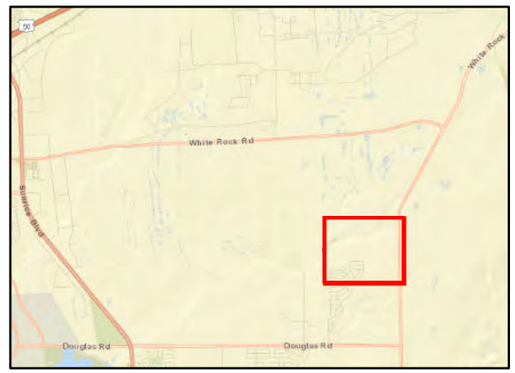
- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Potential Aquatic Resources - 4.727 acres *

- Vernal Pool - 2.613 acres
- Swale - 1.866 acres
- Stream/Creek (Non VPIH) - 0.232 acres
- Open Water - 0.016 acres

** The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.*

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
0 400

Photo Source: ESRI, Sacramento County 2018
Boundary Source: Ruggeri-Jensen-Azar & Associates
Delineator(s): C.DeLong (ECORP), Foothill Associates
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Map Date: 12/12/2019

4.4 Wildlife

Wildlife species observed within and around the Study Area during the 2018 site visits are listed in Attachment G.

4.5 Evaluation of Special-Status Species

Based on SSHCP Modeled Species Habitat data, the Study Area contains habitat for 20 Covered Species. Of these, one species was considered Present based on field observations made during habitat surveys required by SSHCP AMMs and one species was considered Present based on CNDDB data. SSHCP Modeled Species Habitat maps are provided in Attachment B. Eight SSHCP Covered Species were determined to be absent from the Study Area because no SSHCP Modeled Species Habitat existed within the Study Area.

The literature sources described in Section 3.1 were queried for any species other than the SSHCP Covered Species. These queries resulted in an additional seven species that were considered to have Potential to Occur or Low Potential to Occur.

Tabulated results of all species evaluated for the Study Area are presented in Attachment E. Each of the 27 species that were considered to be Present, Potential to Occur, or Low Potential to Occur (according to the definitions in Section 3.3) are listed in Table 2, and descriptions are provided in the following sections. Species that were considered to be Absent from the Study Area due to the lack of suitable habitat, or because the known distribution of the species does not include the Study Area vicinity, are not discussed further in this document.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Plants						
Stinkbells *(Fritillaria agrestis)*	-	-	4.2	Clay and sometimes serpentinite soils in chaparral, cismontane woodland, Pinyon and juniper woodland, and Valley and foothill grassland (33' - 5,102').	March–June	Absent within Project. Special-status plant surveys did not detect this species. Potential to Occur within Raymer Way Offsite; Valley grassland represents suitable habitat.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Boggs Lake hedge–hyssop *(Gratiola heterosepala)*	–	CE	1B.2, SSHCP Covered Species	Marshes, swamps, lake margins, and vernal pools (33'–7,792').	April–August	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Ahart's dwarf rush *(Juncus leiospermus* var. *ahartii)*	–	–	1B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland. Species has an affinity for slight disturbance such as farmed fields (USFWS 2005a) (98'–751').	March–May	Absent within Project. Special-status plant surveys did not detect this species. Small amounts of SSHCP Modeled Species Habitat present within unsurveyed Raymer Way Offsites.
Legenere *(Legenere limosa)*	–	–	1B.1, SSHCP Covered Species	Various seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005b) (3'–2,887').	April–June	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Slender Orcutt grass *(Orcuttia tenuis)*	FT	CE	1B.1, SSHCP Covered Species	Vernal pools, often gravelly (115'–5,774').	May–September	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Sacramento Orcutt grass *(Orcuttia viscida)*	FE	CE	1B.1, SSHCP Covered Species	Vernal pools (98'–328').	April–July	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Sanford's arrowhead *(Sagittaria sanfordii)*	–	–	1B.2, SSHCP Covered Species	Shallow marshes and freshwater swamps (0'–2,133').	May–October	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Invertebrates						
Conservancy fairy shrimp (*Branchinecta conservatio)*	FE	-	-	Vernal pools/wetlands.	November–April	Potential to Occur within vernal pool habitat.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	-	SSHCP Covered Species	Vernal pools/wetlands.	November-April	Potential to Occur. SSHCP Modeled Species Habitat present.
Midvalley fairy shrimp *(Branchinecta mesovallensis)*	-	-	CNDDB, SSHCP Covered Species	Vernal pools/wetlands.	November – April	Potential to Occur. SSHCP Modeled Species Habitat present.
Ricksecker's water scavenger beetle *Hydochara ricksecker*i	-	-	SSHCP Covered Species	Vernal pools/wetlands.	November-April	Potential to Occur. SSHCP Modeled Species Habitat present.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	-	SSHCP Covered Species	Vernal pools/wetlands.	November-April	Present. SSHCP Modeled Species Habitat present and CNDDB occurrence overlaps the site.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Amphibians						
Western spadefoot (*Spea hammondii*)	-	-	SSC, SSHCP Covered Species	California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March-May	Potential to Occur. SSHCP Modeled Species Habitat present.
Reptiles						
Western pond turtle (*Actinemys marmorata*)	-	-	SSC, SSHCP Covered Species	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April-September	Potential to Occur. No SSHCP Modeled Species Habitat present; however, ponded areas in Morrison Creek represent potential habitat.
Birds						
Burrowing owl *(Athene cunicularia)*	-	-	BCC, SSC, SSHCP Covered Species	Nests in burrows or burrow surrogates in open, treeless, areas within grassland, steppe, and desert biomes. Often with other burrowing mammals (e.g. prairie dogs, California ground squirrels). May also use human-made habitat such as agricultural fields, golf courses, cemeteries, roadside, airports, vacant urban lots, and fairgrounds.	February-August	Present. SSHCP Modeled Species Habitat present, and burrowing owls were observed during survey conducted per SSHCP AMM WBO-1.
Ferruginous hawk (*Buteo regalis*)	-	-	BCC, CDFW WL, SSHCP Covered Species	Rarely breeds in California (Lassen County); winter range includes grassland and shrubsteppe habitats from Northern California (except northeast and northwest corners) south to Mexico and east to Oklahoma, Nebraska, and Texas.	September-March (wintering)	Potential to Occur. SSHCP Modeled Species Habitat present.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Golden eagle (*Aquila chrysaetos*)	-	-	BCC, CFP	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/savannah, and chaparral. Nesting occurs on cliff ledges, river banks, trees, and human-made structures (e.g. windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter.	Nest (February–August); winter CV (October–February)	Potential to Occur. Winter foraging habitat present.
Grasshopper sparrow (*Ammodramus savannarum*)	-	-	SSC	In California, breeding range includes most coastal counties south to Baja California; western Sacramento Valley and western edge of Sierra Nevada region. Nests in moderately open grasslands and prairies with patchy bare ground. Avoids grasslands with extensive shrub cover; more likely to occupy large tracts of habitat than small fragments; removal of grass cover by grazing often detrimental.	May–August	Potential to Occur. Nesting habitat present.
Loggerhead shrike (*Lanius ludovicianus*)	-	-	BCC, SSC, SSHCP Covered Species	Found throughout California in open country with short vegetation, pastures, old orchards, grasslands, agricultural areas, open woodlands. Not found in heavily forested habitats.	March-July	Potential to Occur. SSHCP Modeled Species Habitat present.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Merlin *(Falco columbarius)*	-	-	CDFW WL	Breeds in Oregon, Washington north into Canada. Winters in southern Canada to South America, including California. Breeds near forest openings, fragmented woodlots, and riparian areas. Wintering habitat includes wide variety, open forests, grasslands, tidal flats, plains, and urban settings.	September–April (wintering in the Central Valley); does not breed in California	Potential to Occur. Winter foraging habitat present.
Northern harrier (*Circus hudsonius*)	-	-	SSC, SSHCP Covered Species	Nests on the ground in open wetlands, marshy meadows, wet/lightly grazed pastures, (rarely) freshwater/brackish marshes, tundra, grasslands, prairies, croplands, desert, shrub-steppe, and (rarely) riparian woodland communities.	April-September	Potential to Occur. SSHCP Modeled Species Habitat present.
Swainson's hawk (*Buteo swainsoni*)	-	CT	BCC, SSHCP Covered Species	Nesting occurs in trees in agricultural, riparian, oak woodland, scrub, and urban landscapes. Forages over grassland, agricultural lands, particularly during disking/harvesting, irrigated pastures	March-August	Potential to Occur. SSHCP Modeled Species Habitat present.
Tricolored blackbird (*Agelaius tricolor*)	-	CT	BCC, SSC, SSHCP Covered Species	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta Cos south to San Bernardino, Riverside and San Diego Counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen Counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	March-August	Present. SSHCP Modeled Species Habitat present, evidence of past nesting observed during survey per SSHCP AMM TCB-1; however, species is nomadic and may not be present every year.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
White-tailed kite (*Elanus leucurus*)	-	-	CFP, SSHCP Covered Species	Nesting occurs within trees in low elevation grassland, agricultural, wetland, oak woodland, riparian, savannah, and urban habitats.	March-August	Potential to Occur. SSHCP Modeled Species Habitat present.
Yellow-billed magpie (*Pica nuttallii*)	-	-	BCC	Endemic to California; found in the Central Valley and coast range south of San Francisco Bay and north of Los Angeles County.; nesting habitat includes oak savannah with large in large expanses of open ground; also found in urban parklike settings.	April–June	Potential to Occur. Nesting habitat present.
Mammals						
Pallid bat *(Antrozous pallidus)*	-	-	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g. basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings (Western Bat Working Group [WBWG] 2018).	April–September	Potential to Occur. Structures onsite represent potential hibernacula.
Western red bat (*Lasiurus blossevillii*)	-	-	SSC, SSHCP Covered Species	Roosts in foliage of trees or shrubs; Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores) (WBWG 2017).	April-September	Potential to Occur. SSHCP Modeled Species Habitat present; potential hibernacula habitat identified during survey per SSHCP AMM BAT-1.
American badger *(Taxidea taxus)*	-	-	SSC, SSHCP Covered Species	Drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	Any season	Potential to Occur. SSHCP Modeled Species Habitat present.

Table 2. Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			

Status Codes:

ESA	Endangered Species Act
CESA	California Endangered Species Act
FE	ESA listed, Endangered.
FT	ESA listed, Threatened.
BCC	USFWS Bird of Conservation Concern
CFP	California Fish and Game Code Fully Protected Species
CE	CESA or NPPA listed, Endangered.
CT	CESA or NPPA listed, Threatened.
CNDDB	California Natural Diversity Database
CDFW WL	CDFW Watch List
SSC	CDFW Species of Special Concern
SSHCP	South Sacramento Habitat Conservation Plan-covered species
1B	California Rare Plant Ranks (CRPRs)/Rare or Endangered in California and elsewhere.
4	CRPR /Plants of Limited Distribution - A Watch List.
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

4.5.1 Special-Status Plants

Special-status plant surveys were conducted within the Study Area, and accessible areas of the Offsites, for all plant species listed in Table 2 during spring and summer 2019. Attachment D provides the results of the special-status plant surveys. No special-status plants were documented within the Project site. However, there is potential for two species to occur in areas of the Raymer Way Offsite that were inaccessible at the time surveys were conducted. Brief descriptions of these species are presented below.

Stinkbells

Stinkbells (*Fritillaria agrestis*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.2 species. This species is a perennial bulbiferous herb that occurs in clay, sometimes serpentine areas in chaparral, cismontane woodland, pinyon and juniper woodland, and Valley and foothill grassland (CNPS 2018a). Stinkbells bloom from March to June and is known to occur at elevations ranging from 33 to 5,102 feet above MSL (CNPS 2018a). The current range of this species in California includes Alameda, Contra Costa, Fresno, Kern, Mendocino, Merced, Monterey, Mariposa, Placer, Sacramento, Santa Barbara, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo, Stanislaus, Tuolumne, Ventura, and Yuba counties, and is considered to be extirpated from Santa Cruz and San Mateo counties (CNPS 2018a).

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). However, the grassland within the Study Area provides suitable habitat for this species according to SSHCP Modeled Species Habitat. Stinkbells has potential to occur within the Raymer Way Offsite.

Ahart's Dwarf Rush

Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in mesic areas in Valley and foothill grasslands (CNPS 2018a). This species also appears to have an affinity for slight disturbance since it has been found on farmed fields and gopher turnings (USFWS 2005a). Ahart's dwarf rush blooms from March through May and is known to occur at elevations ranging from 98 to 751 feet above MSL (CNPS 2018a, USFWS 2005a). Ahart's dwarf rush is endemic to California; the current range of this species includes Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties (CNPS 2018a).

There are two documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Ahart's dwarf rush is a SSHCP Covered Species, and the aquatic features and grassland within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Ahart's dwarf rush has Potential to Occur within the Raymer Way Offsite.

4.5.2 Invertebrates

Four Covered Species invertebrates were determined to have the potential to occur within the Study Area based on SSHCP Modeled Species Habitat, and one other species was identified as having the potential to occur within the Study Area based on the literature review (Attachment G). Brief descriptions of these species are presented below.

Conservancy Fairy Shrimp

The Conservancy fairy shrimp (*Branchinecta conservatio*) is listed as endangered pursuant to the federal ESA. Critical Habitat units were designated for this species in the following counties: Butte, Colusa, Mariposa, Merced, Solano, Stanislaus, Tehama, and Ventura (USFWS 2006). This species is usually associated with cool-water pools, which are low to moderate in dissolved solids (Eriksen and Belk 1999). The species appears to be most commonly associated with relatively large, turbid vernal pools (USFWS 1994, Eriksen and Belk 1999, USFWS 2007). Conservancy fairy shrimp have been netted from November to late April, at water temperatures ranging from as low as 41°F (5°C) early in the ponding cycle, to as high as 75°F (24°C) near the end of the season (Syrdahl 1993, *as cited in* Eriksen and Belk 1999). Hatching generally occurs in the week following inundation of the pool at temperatures around 50°F (10°C). Maturation takes at least 19 days; if pool temperatures slowly increase to at least 68°F (20°C); however, the average time to maturity is 49 days (Eriksen and Belk 1999). The distribution of Conservancy fairy shrimp is limited to the northern two-thirds of the Central Valley at an elevation range of approximately 16 – 475 feet (5 – 145 meters) above mean sea level (Eriksen and Belk 1999). Populations of this species have been documented at eight widely separated locations, which include Vina Plains, Butte and Tehama counties; Sacramento National Wildlife Refuge, Glenn County; Yolo Bypass Wildlife Area, Yolo County; Jepson Prairie, Solano County; Mapes Ranch, Stanislaus County; University of California Merced area, Merced County; Grasslands Ecological Area, Merced County; and Los Padres National Forest, Ventura County (CDFG 2003; USFWS 2007).

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). However, the vernal pools within the Study Area provide suitable habitat for this species. Conservancy fairy shrimp has potential to occur within the Study Area.

Mid-Valley Fairy Shrimp

The Midvalley fairy shrimp (*Branchinecta mesovallensis*) is not listed pursuant to either the California or federal Endangered Species Acts, but occurrences of this species are tracked by the CNDDB. The Midvalley fairy shrimp was formally described as a species in 2000 (Belk and Fugate 2000). This species typically occurs in small, shallow vernal pools, swales, and various artificial ephemeral wetland types (e.g., roadside puddles, scrapes and ditches, and railroad toe-drain pools) (Belk and Fugate 2000; USFWS 2004). Midvalley fairy shrimp have been collected from late January to early April (Eriksen and Belk 1999). The cysts typically hatch in the first week of pool filling if water temperatures are near 10°C (50°F) (Eriksen and Belk 1999). This species has been documented in several California counties including: Sacramento, Solano, Contra Costa, San Joaquin, Madera, Merced, Fresno, and Yolo (Belk and Fugate 2000; USFWS 2004).

There are two documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Midvalley fairy shrimp is a SSHCP Covered Species, and the vernal pools and grassland within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Mid-valley fairy shrimp has potential to occur within the Study Area.

Ricksecker's Water Scavenger Beetle

Ricksecker's water scavenger beetle (*Hydrochara ricksecker*i) is not listed and protected under either CESA or FESA but is currently tracked by CDFW in the CNDDB. Ricksecker's water scavenger beetles inhabit ponds in the Coast Range and Central Valley.

There is one documented CNDDB occurrence of this species located within five miles of the Study Area (CDFW 2018a). Ricksecker's water scavenger beetle is a SSHCP Covered Species, and the vernal pools within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Ricksecker's water scavenger beetle has potential to occur within the Study Area.

Vernal Pool Fairy Shrimp

The vernal pool fairy shrimp (*Branchinecta lynchi*) is listed as threatened in accordance with the federal Endangered Species Act. Vernal pool fairy shrimp may occur in seasonal ponds, vernal pools, and swales during the wet season, which generally occurs from December through May. This species can be found in a variety of pool sizes, ranging from less than 0.001 acre to over 24.5 acres (Eriksen and Belk 1999). The shrimp hatch from cysts when colder water (10°C [50°F] or less) fills the pool and mature in as few as 18 days, under optimal conditions (Eriksen and Belk 1999). At maturity, mating takes place and cysts are dropped. Vernal pool fairy shrimp occur in disjunct patches dispersed across California's Central Valley from Shasta County to Tulare County, the central and southern Coast Ranges from northern Solano County to Ventura County, and three areas in Riverside County (USFWS 2003).

There are 16 documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Vernal pool fairy shrimp is a SSHCP Covered Species, and the vernal pools and grassland within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Vernal pool fairy shrimp has potential to occur within the Study Area.

Vernal Pool Tadpole Shrimp

The vernal pool tadpole shrimp (*Lepidurus packardi*) is listed as endangered pursuant to the federal ESA. This species inhabits vernal pools containing clear to highly turbid water, ranging in size from 0.001 to 89.0 acres (USFWS 1994). Vernal pool tadpole shrimp are distinguished from other vernal pool branchiopods discussed in this report by a large, shield like carapace that covers the anterior half of their body (USFWS 2003). Cysts hatch during the wet season and the shrimp reach maturity in a few weeks. This species matures slowly and is long lived, relative to other species. Vernal pool tadpole shrimp will continue to grow as long as the pools they occur in remain inundated, and in some instances can survive for six months or longer (USFWS 2003). The geographic range of vernal pool tadpole shrimp extends from Shasta County to northern Tulare County in California's Central Valley, and in the central coast range from Solano County to Alameda County (USFWS 2003).

There is one documented CNDDB occurrence polygon for this species which overlaps the Study Area, and 32 other documented occurrences of this species located within five miles of the Study Area (CDFW 2018a). Vernal pool tadpole shrimp is a SSHCP Covered Species, and the vernal pools and grassland within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Vernal pool tadpole shrimp is considered Present within the Study Area.

4.5.3 Amphibians

One Covered Species amphibian was determined to have the potential to occur within the Study Area based on SSHCP Modeled Species Habitat. A brief description of this species is presented below.

Western Spadefoot

The western spadefoot (*Spea hammondii*) is not listed pursuant to either the California or federal ESAs; however, it is designated as a CDFW SSC. Necessary habitat components of the western spadefoot include loose, friable soils in which to burrow in upland habitats and breeding ponds. Breeding sites include temporary rain pools, such as vernal pools and seasonal wetlands, or pools within portions of intermittent drainages (Jennings and Hayes 1994). Spadefoots spend most of their adult life within underground burrows or other suitable refugia, such as rodent burrows. In California, western spadefoot toads are known to occur from the Redding area, Shasta County southward to northwestern Baja California, at elevations below 4,475 ft (Jennings and Hayes 1994).

There are three documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Western spadefoot is a SSHCP Covered Species, and the grassland and aquatic areas within the Study Area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. Western spadefoot has potential to occur within the Study Area.

4.5.4 Reptiles

One reptile species were determined to have the potential to occur within the Study Area based on the literature review (Attachment G). A brief description of this species is presented below.

Western Pond Turtle

The western pond turtle (*Actinemys marmorata*) is not listed pursuant to either the California or federal Endangered Species Acts; however, it is designated as a CDFW species of special concern (SSC). Western pond turtles occur in a variety of fresh and brackish water habitats including marshes, lakes, ponds, and slow-moving streams (Jennings and Hayes 1994). This species is primarily aquatic; however, they typically leave aquatic habitats in the fall to reproduce and to overwinter (Jennings and Hayes 1994). Deep, still water with abundant emergent woody debris, overhanging vegetation, and rock outcrops is optimal for basking and thermoregulation. Although adults are habitat generalists, hatchlings and juveniles and hatchlings require shallow edgewater with relatively dense submergent or short emergent vegetation in which to forage.

Western pond turtles are typically active between March and November. Mating generally occurs during late April and early May and eggs are deposited between late April and early August (Jennings and Hayes 1994). Eggs are deposited within excavated nests in upland areas, with substrates that typically have high clay or silt fractions (Jennings and Hayes 1994). The majority of nesting sites are located within 650 ft (200 m) of the aquatic sites; however, nests have been documented as far as 1,310 ft (400 m) from the aquatic habitat.

There are four documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Western pond turtle is a SSHCP Covered Species. While there was no SSHCP Modeled Species Habitat present within the site, the ponded areas along Morrison Creek may provide suitable aquatic habitat and the adjacent grasslands provide suitable upland habitat for this species. Western pond turtle is considered to have potential to occur within the Study Area.

4.5.5 Birds

Seven Covered Species birds were determined to have the potential to occur within the Study Area based on SSHCP Modeled Species Habitat, and three other species were identified as having the potential to occur within the Study Area based on the literature review (Attachment G). Brief descriptions of these species are presented below.

Burrowing Owl

The burrowing owl (*Athene cunicularia*) is not listed pursuant to either the California or federal ESAs; however, it is designated as a bird of conservation concern by the USFWS and a SSC by the CDFW. Burrowing owls inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. They can also inhabit developed areas such as golf courses, cemeteries, roadsides within cities, airports, vacant lots in residential areas, school campuses, and fairgrounds (Poulin et al. 2011). This species typically uses burrows created by fossorial mammals, most notably the California ground squirrel

(*Spermophilus beecheyi*), but may also use man-made structures such as cement culverts or pipes; cement, asphalt, or wood debris piles; or openings beneath cement or asphalt pavement (CDFG 2012). The breeding season typically occurs between February 1 and August 31 (California Burrowing Owl Consortium [CBOC] 1993; CDFG 2012).

There are seven documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Western burrowing owl is a SSHCP Covered Species, and the grassland within the Study Area provides suitable nesting and foraging habitat for this species, and the aquatic features provide suitable foraging habitat, according to SSHCP Modeled Species Habitat. Burrowing owls and occupied burrows were observed along the southeastern boundary of the site during a preliminary survey of potential habitat (Attachment C). Burrowing owl is considered Present within the Study Area.

Ferruginous Hawk

Ferruginous hawks (*Buteo regalis*) are not listed pursuant to either the California or federal ESAs. However, they are a CDFW "watch list" species and USFWS bird of conservation concern. This species typically occurs in open environments and nests from Oregon to Canada, though nesting has recently been documented in Lassen County, California (Small 1994). For the remainder of the state, including the Central Valley, ferruginous hawk occurrences are restricted to the non-breeding season (approximately September through March) (Small 1994). Winter foraging habitat includes a variety of open communities including annual grasslands, agricultural areas, deserts, and savannahs. Ferruginous hawks do not nest in the region but may occasionally forage within grassland and other open vegetation communities on-site during winter or migration.

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). However, ferruginous hawk is a SSHCP Covered Species, and the grassland and aquatic areas within the Study Area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. Ferruginous hawk has potential to occur within the Study Area.

Grasshopper Sparrow

The grasshopper sparrow (*Ammodramus savannarum*) is not listed pursuant to either the California or federal ESAs, but it is designated as a SSC by the CDFW. The grasshopper sparrow is an uncommon and local, summer resident and breeder along the western edge of the Sierra Nevada and most coastal counties south to Baja California (Small 1994; Vickery 1996). This species generally inhabits moderately open grasslands and prairies with patchy bare ground and scattered shrubs (Vickery 1996). Grasshopper sparrows are more likely to occupy large tracts of habitat than small fragments (Samson 1980; Herkert 1994a; Vickery et al. 1994 as cited in Vickery 1996). Breeding generally occurs from early May through August.

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). However, the grassland within the Study Area provide suitable nesting habitat for this species. Grasshopper sparrow has potential to occur within the Study Area.

Loggerhead Shrike

The loggerhead shrike (*Lanius ludovicianus*) is not listed pursuant to either the California or federal ESAs; but is considered a bird of conservation concern by the USFWS and a SSC by the CDFW. Loggerhead shrikes nest throughout California except the northwestern corner, montane forests, and high deserts (Small 1994). Loggerhead shrikes nest in small trees and shrubs in open country with short vegetation such as pastures, old orchards, mowed roadsides, cemeteries, golf courses, agricultural fields, riparian areas, and open woodlands (Yosef 1996). The nesting season extends from March through July.

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Loggerhead shrike is a SSHCP Covered Species, and the grassland within the Study Area provides suitable nesting and foraging habitat for this species, and the aquatic features provide suitable foraging habitat, according to SSHCP Modeled Species Habitat. Loggerhead shrike has potential to occur within the Study Area.

Merlin

The Merlin (*Falco columbarius*) is not listed pursuant to either the California or federal ESAs, but is a CDFW "watch list" species and currently tracked in the CNDDB. This falcon breeds in Canada and Alaska and occurs in California as a migrant and during the non-breeding season (September through April). Foraging habitat in winter includes open forests, grasslands, and tidal flats (Warkentin et al. 2005). Merlin do not nest in the region but may occasionally forage within grassland and woodland communities on-site during winter or migration.

There is one documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). The grassland within the Study Area provides suitable wintering habitat for this species. Merlin has potential to occur within the Study Area.

Northern Harrier

The northern harrier (*Circus cyaneus*) is not listed pursuant to either the California or federal ESAs; however, it is considered to be a SSC by the CDFW. This species is known to nest within the Central Valley, along the Pacific Coast, and in northeastern California. The northern harrier is a ground nesting species, and typically nests in emergent wetland/marsh, open grasslands, or savannah communities usually in areas with dense vegetation (Smith et al. 2011). Foraging occurs within a variety of open environments such as marshes, agricultural fields, and grasslands. Nesting occurs during April through September.

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Northern harrier is a SSHCP Covered Species, and the grassland within the Study Area provides suitable nesting and foraging habitat for this species, and the aquatic features provide suitable foraging habitat, according to SSHCP Modeled Species Habitat. Northern harrier has potential to occur within the Study Area.

Swainson's Hawk

The Swainson's hawk (*Buteo swainsoni*) is listed as a threatened species pursuant to the California ESA. This species nests in North America (Canada, western United States, and Mexico) and typically winters from South America north to Mexico. However, a small population has been observed wintering in the Sacramento-San Joaquin River Delta (Bechard et al. 2010). In California, the nesting season for Swainson's hawk ranges from mid-March to late August. Swainson's hawks nest within tall trees in a variety of wooded communities including riparian, oak woodland, roadside landscape corridors, urban areas, and agricultural areas, among others. Foraging habitat includes open grassland, savannah, low-cover row crop fields, and livestock pastures. In the Central Valley, Swainson's hawks typically feed on a combination of California vole (*Microtus californicus*), California ground squirrel (*Spermophilus beecheyi*), ring-necked pheasant (*Phasianus colchicus*), many passerine birds, and grasshoppers (*Melanopulus* species). Swainson's hawks are opportunistic foragers and will readily forage in association with agricultural mowing, harvesting, disking, and irrigating (Estep 1989). The removal of vegetative cover by such farming activities results in more readily available prey items for this species.

There are seven documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Swainson's hawk is a SSHCP Covered Species, and the grassland and aquatic areas within the Study Area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. In addition, a preliminary survey of potential habitat found several trees within the Survey Area and survey buffers that represent potential nesting habitat. Swainson's hawk has potential to occur within the Study Area.

Tricolored Blackbird

The tricolored blackbird (*Agelaius tricolor*) is listed as threatened pursuant to the California ESA. In addition, it is currently considered a USFWS bird of conservation concern and a CDFW SSC. This colonial nesting species is distributed widely throughout the Central Valley, Coast Range, and into Oregon, Washington, Nevada, and Baja California (Meese et al. 2014). Tricolored blackbirdnest in colonies that can range from several pairs to several thousand pairs, depending on prey availability, the presence of predators, or level of human disturbance. Tricolored blackbird nesting habitat includes emergent marsh, riparian woodland/scrub, blackberry thickets, densely vegetated agricultural and idle fields (e.g., wheat, triticale, safflower, fava bean fields, thistle, mustard, cane, and fiddleneck), usually with some nearby standing water or ground saturation (Meese et al. 2014). They feed mainly on grasshoppers during the breeding season, but may also forage upon a variety of other insects, grains, and seeds in open grasslands, wetlands, feedlots, dairies, and agricultural fields (Meese et al. 2014). The nesting season is generally from March through August.

There are 10 documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). Tricolored blackbird is a SSHCP Covered Species, and the grassland within the Study Area provides suitable nesting and foraging habitat for this species, and the aquatic features provide suitable foraging habitat, according to SSHCP Modeled Species Habitat. In addition, a preliminary survey of potential habitat documented evidence of previous tricolored blackbird nesting within patches of bull

thistle (*Cirsium vulgare*) in the central portion of the site, and a small area of riparian habitat along Morrison Creek was also determined to represent potential nesting habitat (Attachment C). However, tricolored blackbirds were not observed nesting during a site visit on June 13, 2019. This species is nomadic and may or may not return to the site. Tricolored blackbirds are considered to be present within the Study Area.

White-Tailed Kite

White-tailed kite (*Elanus leucurus*) is not listed pursuant to either the California or federal ESAs; however, the species is fully protected pursuant to Section 3511 of the California Fish and Game Code. This species is a common resident in the Central Valley and the entire length of the California coast, and all areas up to the Sierra Nevada foothills and southeastern deserts (Dunk 1995). In northern California, white-tailed kite nesting occurs from March through early August, with nesting activity peaking from March through June. Nesting occurs in trees within riparian, oak woodland, savannah, and agricultural communities that are near foraging areas such as low elevation grasslands, agricultural, meadows, farmlands, savannahs, and emergent wetlands (Dunk 1995).

There are five documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). White-tailed kite is a SSHCP Covered Species, and the grassland and aquatic areas within the Study Area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. White-tailed kite has potential to occur within the Study Area.

Yellow-Billed Magpie

The yellow-billed magpie (*Pica nuttalli*) is not listed pursuant to either the California or federal ESAs but is considered a USFWS bird of conservation concern. This endemic species is a yearlong resident of the Central Valley and Coast Ranges from San Francisco Bay to Santa Barbara County. Yellow-billed magpies build large, bulky nests in trees in a variety of open woodland habitats, typically near grassland, pastures or cropland. Nest building begins in late-January to mid-February, which may take up to 6-8 weeks to complete, with eggs laid during April-May, and fledging during May-June (Koenig and Reynolds 2009). The young leave the nest at about 30 days after hatching (Koenig and Reynolds 2009). Yellow-billed magpies are highly susceptible to West Nile Virus, which may have been the cause of death to thousands of magpies during 2004-2006 (Koenig and Reynolds 2009).

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). However, the grassland and trees within the Study Area provide suitable nesting habitat for this species. Yellow-billed magpie has potential to occur within the Study Area.

4.5.6 Mammals

Two Covered Species mammals were determined to have potential to occur within the Study Area based on SSHCP Modeled Species Habitat, and one other species was identified as having the potential to occur within the Study Area based on the literature review (Attachment G). Brief descriptions of these species are presented below.

American Badger

The American badger (*Taxidea taxus*) is not listed pursuant to either the federal or California ESAs; however, this species is considered a SSC by CDFW. American badger historically ranged throughout much of the state, except in humid coastal forests. American badgers were once numerous in the Central Valley; however, populations now occur in low numbers in the surrounding peripheral parts of the Central Valley and in the adjacent lowlands of eastern Monterey, San Benito, and San Luis Obispo counties (Williams 1986). American badgers occupy a variety of habitats, including grasslands and savannas. The principal requirements seem to be significant food supply, friable soils, and relatively open, uncultivated ground (Williams 1986).

There is one documented CNDDB occurrence of this species located within five miles of the Study Area (CDFW 2018a). American badger is a SSHCP Covered Species, and the grassland and wetland areas within the Study Area provide suitable foraging habitat for this species according to SSHCP Modeled Species Habitat. American badger has potential to occur within the Study Area.

Pallid Bat

The pallid bat (*Antrozous pallidus*) is not listed pursuant to either the California or federal ESAs; however, this species is considered a SSC by CDFW. The pallid bat is a large, light-colored bat with long, prominent ears and pink, brown, or grey wing and tail membranes. This species ranges throughout North America from the interior of British Columbia, south to Mexico, and east to Texas. The pallid bat inhabits low elevation (below 6,000 ft) rocky arid deserts and canyonlands, shrub-steppe grasslands, karst formations, and higher elevation coniferous forest (above 7,000 ft). This species roosts alone or in groups in the crevices of rocky outcrops and cliffs, caves, mines, trees, and in various human structures such as bridges, and barns. Pallid bats are feeding generalists that glean a variety of arthropod prey from surfaces as well as capturing insects on the wing. Foraging occurs over grasslands, oak savannahs, ponderosa pine forests, talus slopes, gravel roads, lava flows, fruit orchards, and vineyards. Although this species utilizes echolocation to locate prey, often they use only passive acoustic cues. This species is not thought to migrate long distances between summer and winter sites (WBWG 2017).

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). However, some of the structures within the Study Area represent potential hibernacula (see Attachment C). Pallid bat has potential to occur within the Study Area.

Western Red Bat

The western red bat (*Lasiurus blossevillii*) is not listed pursuant to either the California or federal Endangered Species Acts; however, this species is considered a SSC by CDFW. The western red bat is easily distinguished from other western bat species by its distinctive red coloration. This species is broadly distributed, its range extending from southern British Columbia in Canada through Argentina and Chile in South America, and including much of the western United States. This solitary species day roosts primarily in the foliage of trees or shrubs in edge habitats bordering streams or open fields, in orchards, and occasionally urban areas. They may be associated with intact riparian habitat, especially with willows,

cottonwoods, and sycamores. This species may occasionally utilize caves for roosting as well. They feed on a variety of insects, and generally begin to forage one to two hours after sunset. This species is considered highly migratory; however, the timing of migration and the summer ranges of males and females may be different. Winter behavior of this species is poorly understood (WBWG 2017).

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2018a). However, western red bat is a SSHCP Covered Species. The grassland and wetland areas within the Study Area provide suitable foraging habitat. The Raymer Way offsite contains roosting-foraging habitat for this species according to SSHCP Modeled Species Habitat; however, site assessment did not find evidence of potential roosting habitat within the Raymer Way Offsite (Attachment C). A preliminary survey of potential habitat identified some of the trees with cavities along Morrison Creek as potential hibernacula (Attachment C). Western red bat has potential to occur within the Study Area.

4.6 Wildlife Movement/Corridors

The Study Area is located in an undeveloped area within the limits of the City of Rancho Cordova, roughly four miles south of U.S. Highway 50. The Study Area does not fall within an Essential Habitat Connectivity area mapped by the CDFW (CDFW 2018a). The upper reach of Morrison Creek runs along the northern boundary of the Study Area. Though Morrison Creek is ephemeral, the permanently ponded open waters and the small patches of riparian habitat along the creek may represent a marginal wildlife movement corridor; however, this area lies outside of the Study Area with the exception of the Morrison Creek Offsite.

4.7 Sensitive Natural Communities

Five sensitive natural communities were initially identified as having the potential to occur within the Study Area based on the literature review (CDFW 2018a). These included Great Valley Valley Oak Riparian Forest, Ione Chaparral, Northern Hardpan Vernal Pool, Northern Volcanic Mudflow Vernal Pool, and Valley Needlegrass Grassland. Valley oaks are not present within the Study Area; therefore, Great Valley Oak Riparian Forest does not occur onsite. Vernal pool communities are present onsite, and are discussed separately in Section 4.3.2. No chaparral vegetation is present within the Study Area and there are no Ione formation soils present; therefore, Ione chaparral is not present. The "Valley Needlegrass Grassland" vegetation alliance name used by the CNDDB is no longer in use, and instead "Needlegrass-Melic Grass Grassland" as well as other associations containing needlegrass (*Stipa* spp.) are now used by the California Vegetation Manual (CNPS 2018b) and the CDFW-maintained list of sensitive natural communities. No needlegrass species were found during special-status plant surveys (Attachment D). Therefore, vernal pool communities are the only sensitive natural community known to occur within the Study Area.

4.8 Trees

An arborist survey was conducted for the Study Area in October 2018 and June 2019 (Attachment H). A total of 247 trees greater than 6 inches dsh were mapped within the Study Area, and all tree species are nonnative to the region. There are 149 trees that have a dsh equal to or greater than 12 inches and therefore meet the definition of a Protected Tree as defined in the City of Rancho Cordova's Tree

Preservation Ordinance. The 149 Protected Trees include redwood (*Sequoia sempervirens*), eucalyptus (*Eucalyptus* spp.), callery pear (*Pyrus calleryana*), American sweetgum (*Liquidambar styraciflua*), Brazilian pepper-tree (*Schinus terabinthifolia*), deodar cedar (*Cedrus deodara*), white mulberry (*Morus alba*).

5.0 IMPACT ANALYSIS

5.1 Special-Status Species

The Project would require mass grading of the site. As such, the Project would have the potential to have a substantial adverse effect, either directly or through habitat modifications, on special-status species identified by CDFW, and/or USFWS. In addition, the Project is located within the USFWS Mather Core Area, an area prioritized for the conservation and recovery of federally threatened and endangered vernal pool species.

Of the 27 species identified as Present or Potential to Occur within the Study Area, 20 species are SSHCP Covered Species and are considered adequately conserved by the SSHCP. Project impacts on special-status species habitat are anticipated to be mitigated through the SSHCP In-Lieu Fee Program, and the Project proponents will comply with SSHCP AMMs as described in Section 6.0. The SSHCP also considers priorities for conservation and recovery of vernal pool species within the Mather Core Area.

The remaining seven species having Potential to Occur or Low Potential to Occur onsite that are not SSHCP Covered Species include one plant, one vernal pool invertebrate, one bat, and four birds. Though not Covered Species, the potential impacts to these species are also anticipated to be mitigated by SSHCP AMMs and by the restoration, enhancement and preservation of habitats accomplished by the SSHCP in-lieu fee program. Section 6.0 provides recommended mitigation measures. Measures BIO-5 through 14 are recommended to be implemented in order to minimize effects on special-status species.

5.2 Sensitive Natural Communities

The Study Area primarily consists of Valley Grassland that supports mostly nonnative grass and forb species, and aquatic features including vernal pool habitat. Project impacts to vernal pool communities are discussed in Section 5.3 and addressed by Mitigation Measures BIO-1 and BIO-5 (Section 6.0).

5.3 Federally Protected Wetlands and Waters of the U.S.

The Project is anticipated to impact (fill) up to roughly 4.727 acres of Waters of the U.S. The Project applicants are anticipated to apply for CWA Section 404 and 401 authorization under the SSHCP ARP, and to mitigate for Project impacts using the SSHCP In-Lieu Fee Program. Mitigation Measures BIO-1, BIO-2, and BIO-5 are recommended to address impacts to wetlands and other Waters of the U.S.

5.4 Wildlife Corridors and Nursery Sites

The Study Area does not fall within an Essential Habitat Connectivity area mapped by the CDFW (CDFW 2018a). In addition, the Project will have minimal impacts to Morrison Creek. Recommended Mitigation Measure BIO-3 requires a 100-foot setback from Morrison Creek for certain development activities that

are considered detrimental to stream/creek corridors. Morrison Creek is the only potential wildlife corridor near the site; therefore, no impacts on wildlife corridors are anticipated as a result of Project development.

5.5 Local Policies and Ordinances

The Project would remove ±142 of the 149 Protected Trees (as defined by the City of Rancho Cordova Tree Preservation Ordinance) from the Project area. The nine trees within the Morrison Creek Offsite will be avoided.

The Protected Trees onsite may provide nesting habitat for birds and roosting habitat for bats; however, none of the trees to be removed are native to the Central Valley, and several of the species are considered potentially invasive according to the California Invasive Plant Council Inventory (i.e., eucalyptus, callery pear, Brazilian pepper-tree).

Per the City of Rancho Cordova Tree Preservation Ordinance Section 19.12.070, the Public Works Director will consider the potential for the trees being removed to be a public nuisance and the overall impact on the environment (among other considerations). Removal of these trees is not anticipated to result in negative impacts on the environment aside from potential effects on nesting habitat, and the invasive tree species may become a public nuisance. For example, invasion by eucalyptus species can lead to increased fire hazard, increased soil erosion, and poor wildlife habitat quality (Rejmanek and Richardson 2011). Eucalyptus trees were planted along roadsides and around buildings within the Study Area, but appear to have invaded the adjacent riparian area along Morrison Creek. Replacement of trees with similar species is not recommended; however, incorporating locally native trees into the Project's landscaping design will maintain habitat for bird species and reduce invasion of nonnative species into adjacent habitats. Recommended Mitigation Measure BIO-14 addresses impacts to Protected Trees.

5.6 Habitat Conservation Plans

The Project is anticipated to apply for permits through the SSHCP and the ARP and the Project will comply with the SSHCP's requirements and AMMs as discussed in the recommended Mitigation Measures in Section 6.0 (full text of AMMs is provided as Attachment I). The Project impacts are anticipated to be mitigated through the SSHCP In-Lieu Fee Program as discussed in BIO-5.

6.0 RECOMMENDATIONS

The following Mitigation Measures are recommended prior to Project implementation in order to mitigate impacts on biological resources. Many of the Mitigation Measures reference SSHCP AMMs, the full text of which can be found in Attachment I.

BIO-1. Obtain Clean Water Act Section 404 Permit and Section 401 Permit and Implement All Permit Conditions:

Before the approval of grading and improvement plans and before any groundbreaking activity associated with the project, the Project applicants shall ensure that authorization pursuant to CWA Section 404 from the USACE and CWA Section 401 from the Central Valley RWQCB is obtained. CWA

Section 404 authorization is anticipated to be obtained through a Letter of Permission issued by USACE under the SSHCP ARP, and CWA Section 401 authorization is anticipated to be obtained through an individual Water Quality Certification issued by the RWQCB under the SSHCP ARP.

The construction contractor shall adhere to all conditions outlined in the permits. The Project applicants shall ensure that the project replaces, restores, or enhances on a "no net loss" basis (in accordance with the USACE and the Central Valley RWQCB) the acreage of all wetlands and other Waters of the U.S. that would be removed, lost, and/or degraded due to project implementation, either through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.

BIO-2. Obtain and Implement CDFW 1602 Streambed Alteration Agreement:

Before the approval of grading and improvement plans and before any groundbreaking activity associated with the project, the Project applicants shall ensure that a CDFW 1602 Streambed Alteration Agreement has been obtained. The construction contractor shall adhere to all conditions outlined in the Streambed Alteration Agreement.

BIO-3. Setback from Morrison Creek:

The Project applicants shall comply with SSHCP AMM STREAM-2 and a 100-foot setback from Morrison Creek will be established and only allowed compatible uses described in the SSHCP will be sited within the setback.

BIO-4. Best Management Practices:

The Project applicants shall comply with SSHCP AMMs BMP-1 through BMP-11. Per BMP-7, an approved biologist will be onsite during the period of ground disturbance, and will train an individual to act as the onsite construction monitor for the remainder of construction once ground disturbance is complete. "Ground disturbance" shall be defined as the initial disturbance of native soil. Species-specific AMMs requiring certain monitoring practices shall take priority over BMP-7.

BIO-5. Mitigate for Impacts to Aquatic Features and Habitat:

Before the approval of grading and improvement plans and before any groundbreaking activity associated with the project, or timed as required by the applicable permits if the Project is constructed in phases, the Project applicants shall ensure that mitigation for impacts to aquatic features and other habitat for special-status species has been implemented through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, RWQCB, USFWS, CDFW, City, and South Sacramento Conservation Agency as appropriate, depending on agency jurisdiction.

BIO-6. Special-Status Plant Surveys and Protection:

Special-status plant surveys were conducted in spring and summer 2019 within the Study Area but excluding inaccessible portions of the Raymer Way Offsite (Attachment D). No special-status plants or

sensitive natural communities were detected. For the Raymer Way Offsite, Project applicants shall comply with SSHCP AMM PLANT 1 (Rare Plant Surveys) conduct special-status plant surveys prior to construction. Habitat for *Orcuttia* species was determined to be absent from the Raymer Way Offsite; therefore, ORCUTT-1 does not apply. Though stinkbells is not considered an SSHCP Covered Species, special-status plant surveys conducted per PLANT-1 shall identify whether this species is present onsite.

If any SSHCP-covered plants are determined to be present, PLANT-2 (Rare Plant Protection) will be implemented. If stinkbells is determined to be present, a mitigation plan shall be prepared for review and approval by the City of Rancho Cordova and mitigation may include harvesting and transplanting of impacted bulbs into a preserved area with suitable habitat. Avoided areas containing stinkbells shall be fenced with orange construction fencing.

BIO-7. Western Spadefoot:

The Project applicants shall comply with SSHCP AMMs WS-1 through WS-6.

BIO-8. Western Pond Turtle:

There is no SSHCP Modeled Habitat for western pond turtle within the Project; however, the ponded areas along Morrison Creek may provide potential habitat for western pond turtle. Therefore, pre-construction surveys will be conducted per SSHCP AMM WPT-1. If western pond turtles are detected, WPT-2 through WPT-9 will be implemented.

BIO-9. Tricolored Blackbird:

The Project applicants shall comply with SSHCP AMMs TCB-2 through TCB-5. If tricolored blackbirds are found within the survey area during the pre-construction survey conducted per TCB-2, then TCB-3 through TCB-5 will be implemented as required based on the results of surveys conducted per TCB-2.

BIO-10. Swainson's Hawk:

The Project applicants shall comply with SSHCP AMMs SWHA-2 through SWHA-4. If Swainson's hawk nesting is found within the survey area during the pre-construction survey conducted per SWHA-2, then SWHA-3 and SWHA-4 will be implemented as required based on the results of surveys conducted per SWHA-2.

BIO-11. Western Burrowing Owl:

The Project applicants shall comply with SSHCP AMMs WBO-2 through WBO-7. If western burrowing owl is found within the survey area, WBO-3 through 7 shall be implemented as required based on the results of surveys conducted per WBO-2.

BIO-12. Other Raptors:

The Project applicants shall comply with SSHCP AMMs RAPTOR-2 through RAPTOR-4. Raptor surveys conducted per RAPTOR-2 shall include surveying for golden eagle although it is not a SSHCP Covered Species. If raptor species (including golden eagles) are found nesting within the survey area, RAPTOR-3

and RAPTOR-4 shall be implemented as required based on the results of surveys conducted per RAPTOR-2.

BIO-13. Other Nesting Birds:

A qualified biologist shall conduct a preconstruction nesting bird survey of all areas associated with construction activities, and a 100-foot buffer around these areas, within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31). If active nests are found for any SSHCP Covered Species, the applicable SSHCP AMM(s) will be implemented (i.e. TCB-3 through -5, SWHA-3 through -4, WBO-3 through -6, and RAPTOR-3 through -4). If active nests are found for any other species, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with the CDFW. The buffer shall be maintained until the fledglings are capable of flight and become independent of the nest, to be determined by a qualified biologist. Once the young are independent of the nest, no further measures are necessary.

BIO-14. Bat Species:

The Project applicants shall comply with SSHCP AMMs BAT-2 through BAT-5. Winter hibernaculum surveys conducted per BAT-2 shall also include surveying for pallid bat although it is not an SSHCP Covered Species. If winter hibernacula of western red bat or pallid bat are found within the survey area, then BAT-3 through BAT-5 will be implemented as required based on the results of surveys conducted per BAT-2.

BIO-15. American Badger:

A qualified biologist shall conduct a preconstruction survey for American badger within 14 days prior to commencement of construction and results of the survey will be provided to the City's Planning Department. If badgers or dens with signs of recent badger use are detected (i.e., fresh scat, claw marks), CDFW will be consulted and a non-disturbance buffer will be established around any active dens. The den(s) will be monitored daily by the qualified biologist during construction. No work will occur within the non-disturbance buffer until the qualified biologist determines that the badger(s) have left the work area, or as determined in consultation with CDFW.

BIO-16. Protected Tree Removal and Incorporating Native Trees into Landscaping Design:

A tree removal permit shall be procured from the City for removal of any Protected Trees. In addition, tree species that are native to the Central Valley and Sierra Nevada foothills such as interior live oak (*Quercus wislizeni*), valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), Fremont cottonwood (*Populus fremontii*), black walnut (*Juglans hindsii*), and western redbud (*Cercis occidentalis*) shall be incorporated into the planned landscaping design in public spaces such as open space, parks and parkways. Enough plantings of these native trees shall be incorporated into the landscaping such that the number of surviving native trees after five years is equal to or greater than the number of non-native trees removed. Landscaping plans detailing the tree species to be planted will be provided to the City for approval prior to tree planting.

BIO-17. South Sacramento Habitat Conservation Plan

The Project applicants shall comply with SSHCP requirements and all relevant AMMs set forth in the SSHCP Permit obtained for the Project.

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LIST OF ATTACHMENTS

Attachment A – Representative Site Photographs

Attachment B – SSHCP Modeled Species Habitat Maps

Attachment C – Results of SSHCP Habitat Surveys

Attachment D – Special-Status Plant Survey Report

Attachment E – Special-Status Species Evaluated for the Study Area

Attachment F – Aquatic Resources Delineation

Attachment G – Wildlife Observed Onsite

Attachment H – Arborist Report

Attachment I – SSHCP Avoidance and Minimization Measures

ATTACHMENT A

Representative Site Photographs



Photo 1: Gravel road north of Edington Drive in central portion of Project site. View south. Photo taken October 12, 2018.



Photo 2: Grasslands west of Edington Drive in southwestern portion of Project site. View northwest. Photo taken October 12, 2018.



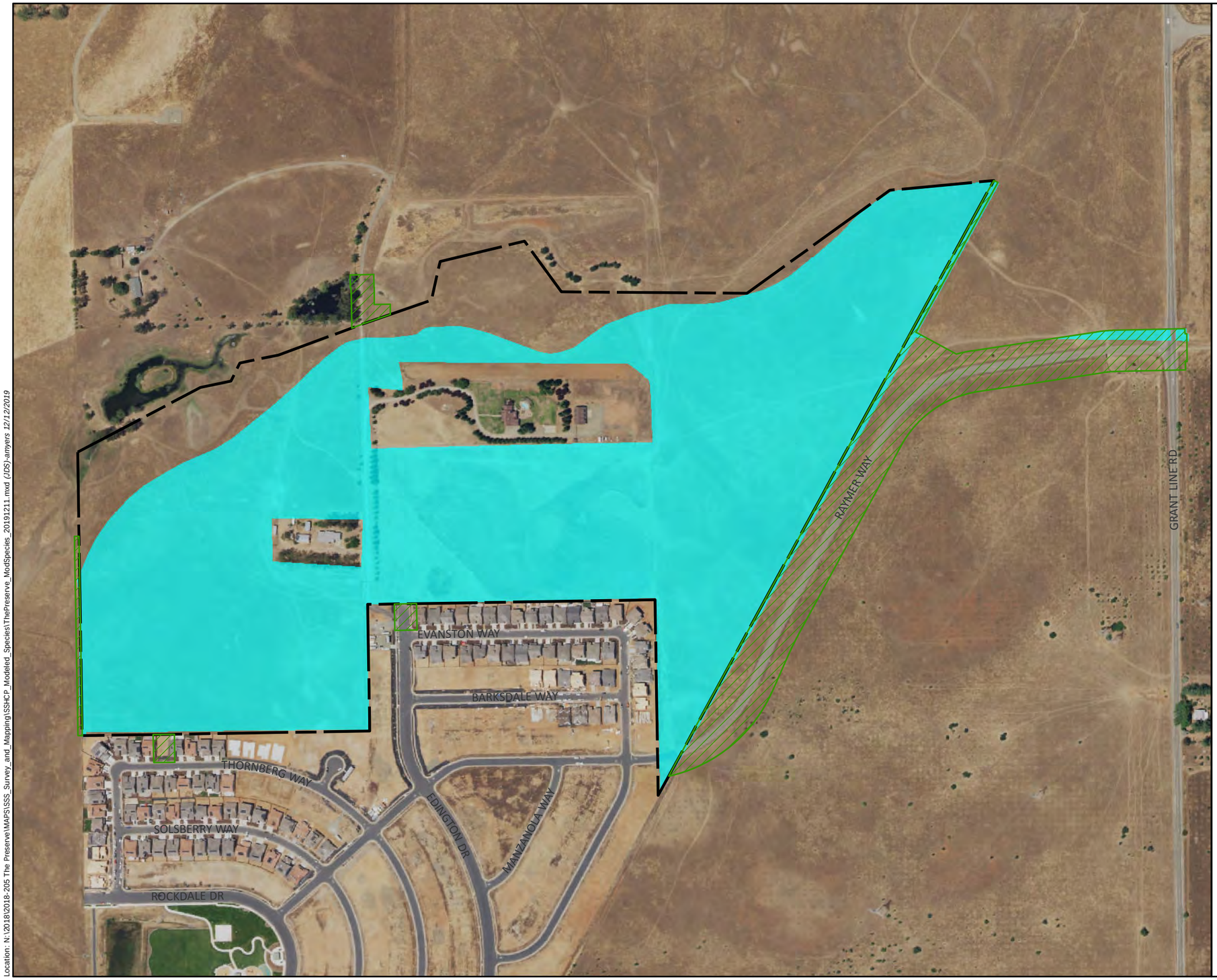
Photo 3: Stream/Creek along western boundary of Project site. View north. Photo taken October 12, 2018.



Photo 4: Large vernal pool in northwestern portion of Project site. View northeast. Photo taken October 12, 2018.

ATTACHMENT B

SSHCP Modeled Species Habitat Maps



The Preserve
Modeled Species Habitat
Ahart's Dwarf Rush

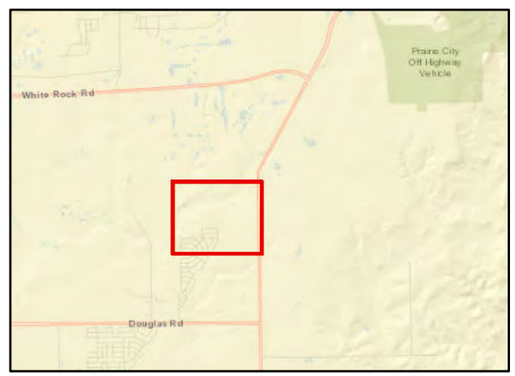
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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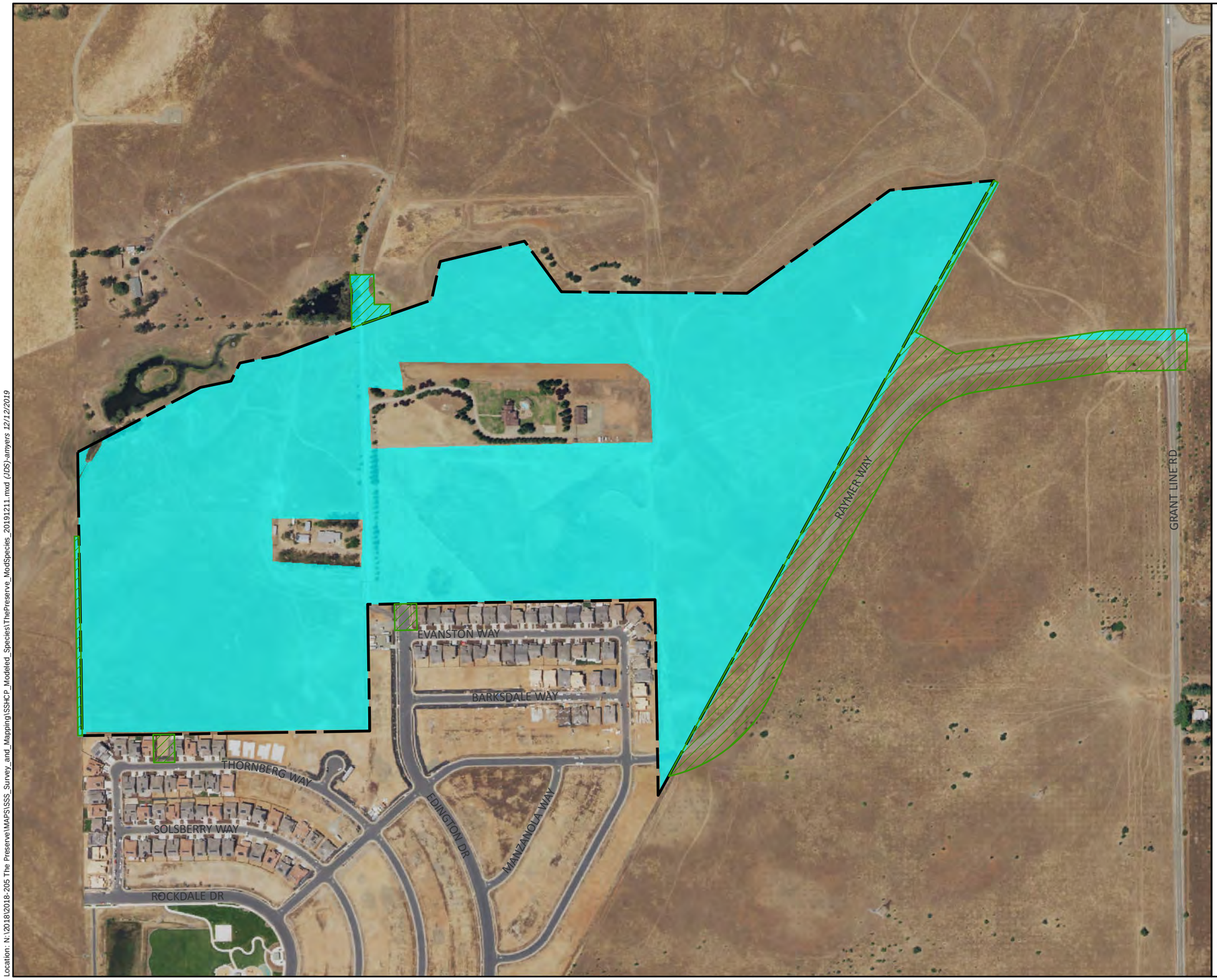
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2018-205 The Preserve

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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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The Preserve
Modeled Species Habitat
American Badger

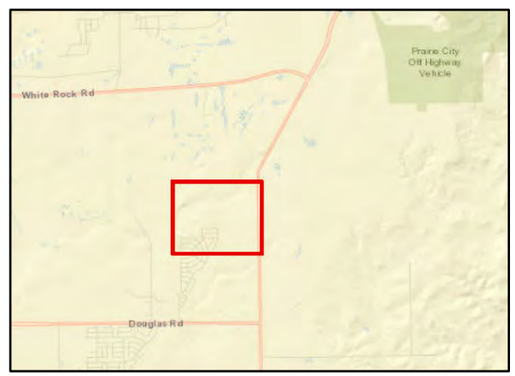
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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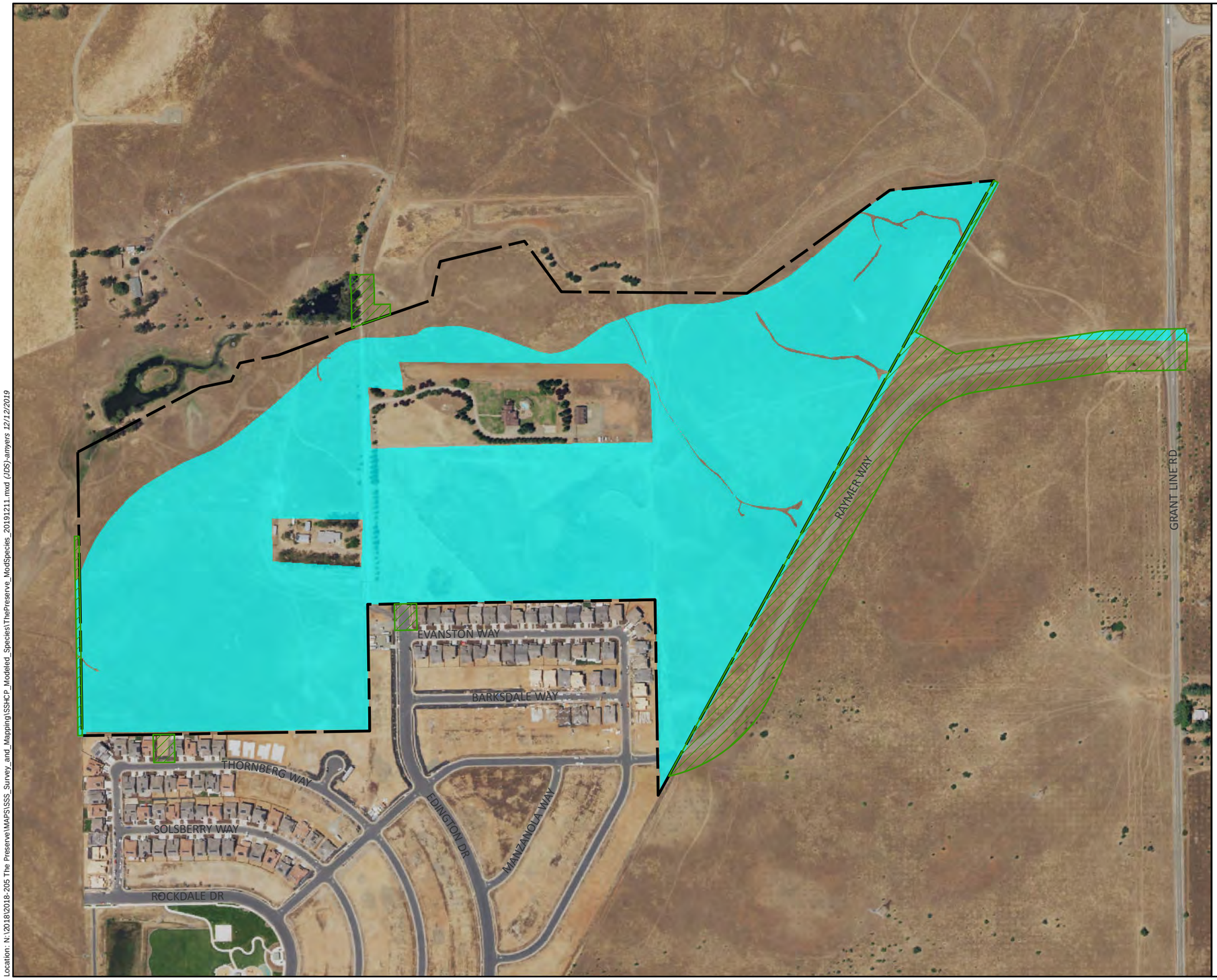
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The Preserve
Modeled Species Habitat
Bogg's Lake Hedge-hyssop

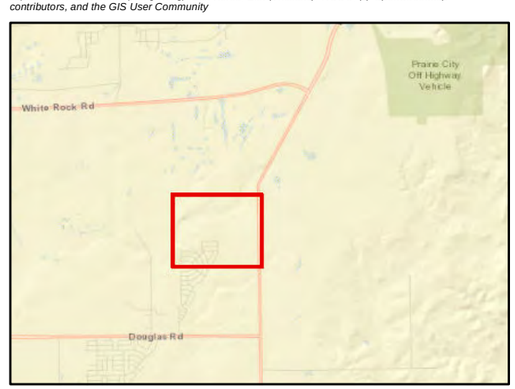
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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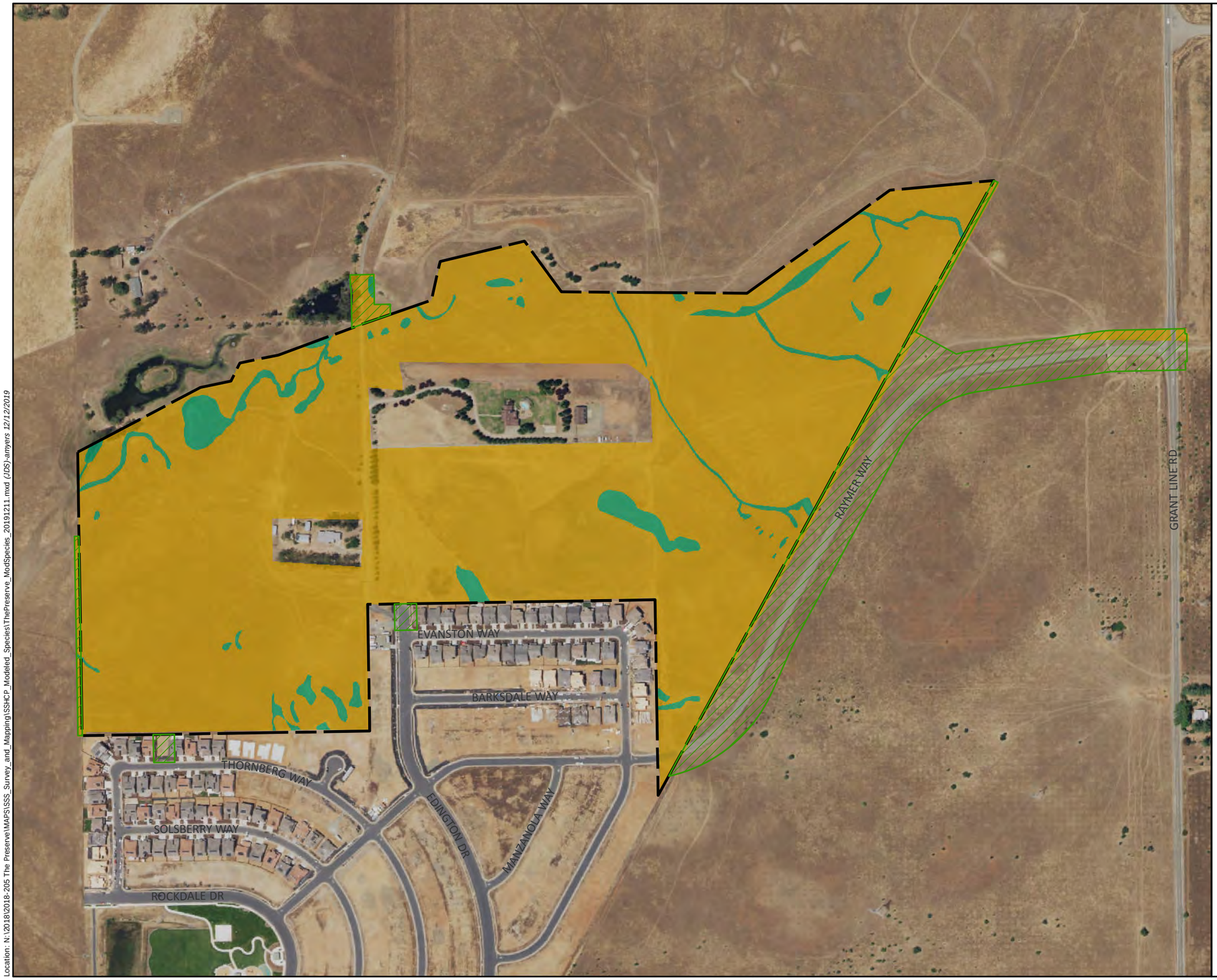
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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Burrowing Owl

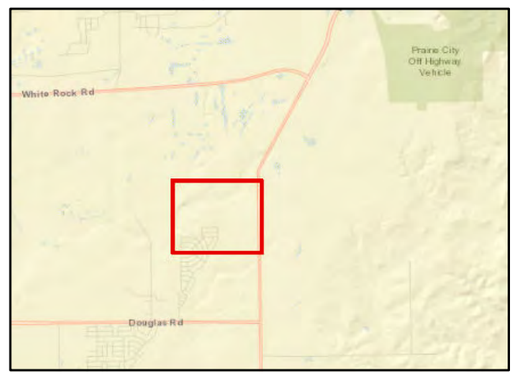
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Nesting
- Wintering

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
165018 BNDY -WINN BINDED.dwg
165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Ferruginous Hawk

Map Features

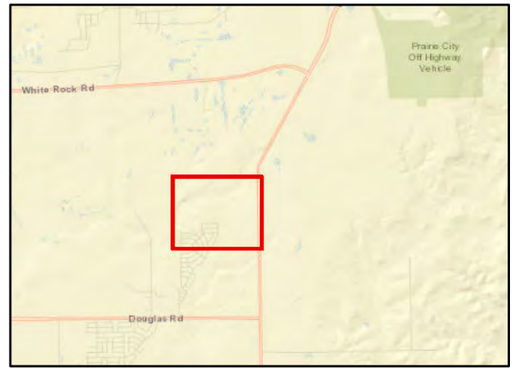
Project Boundary - 98.92 acres

Potential Offsite Areas - 13.16 acres

Modeled Habitat

Foraging

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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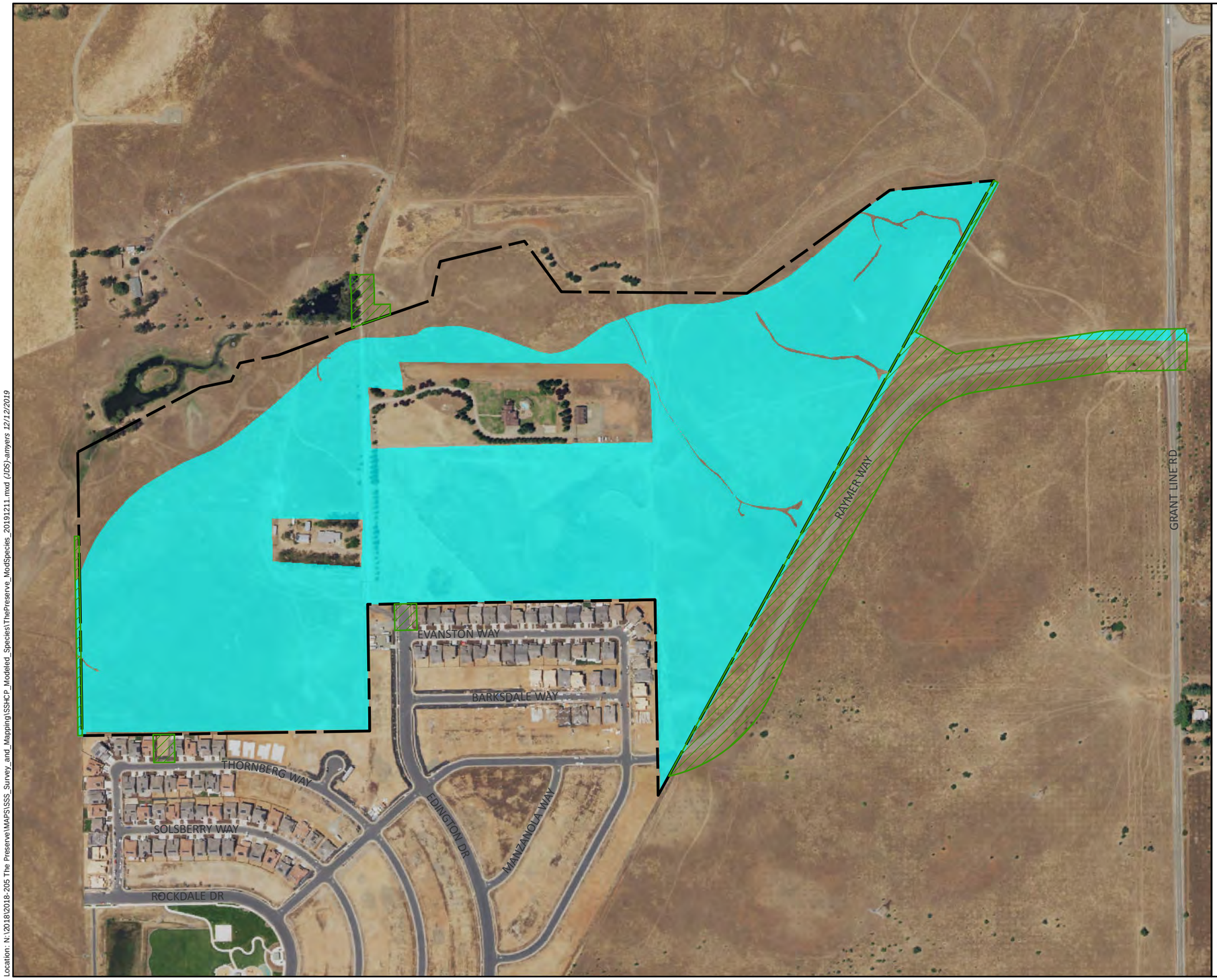
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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Legenere

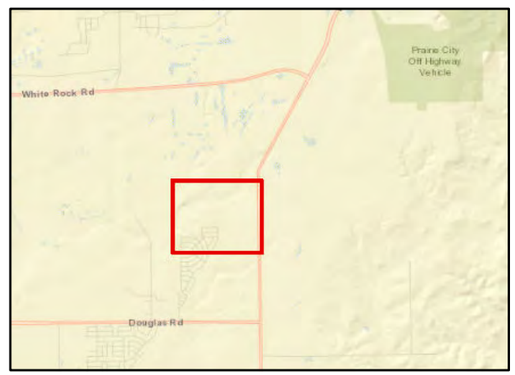
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Loggerhead Shrike

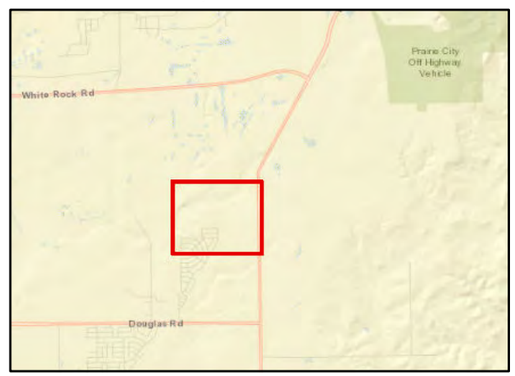
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Foraging
- Nesting-Foraging

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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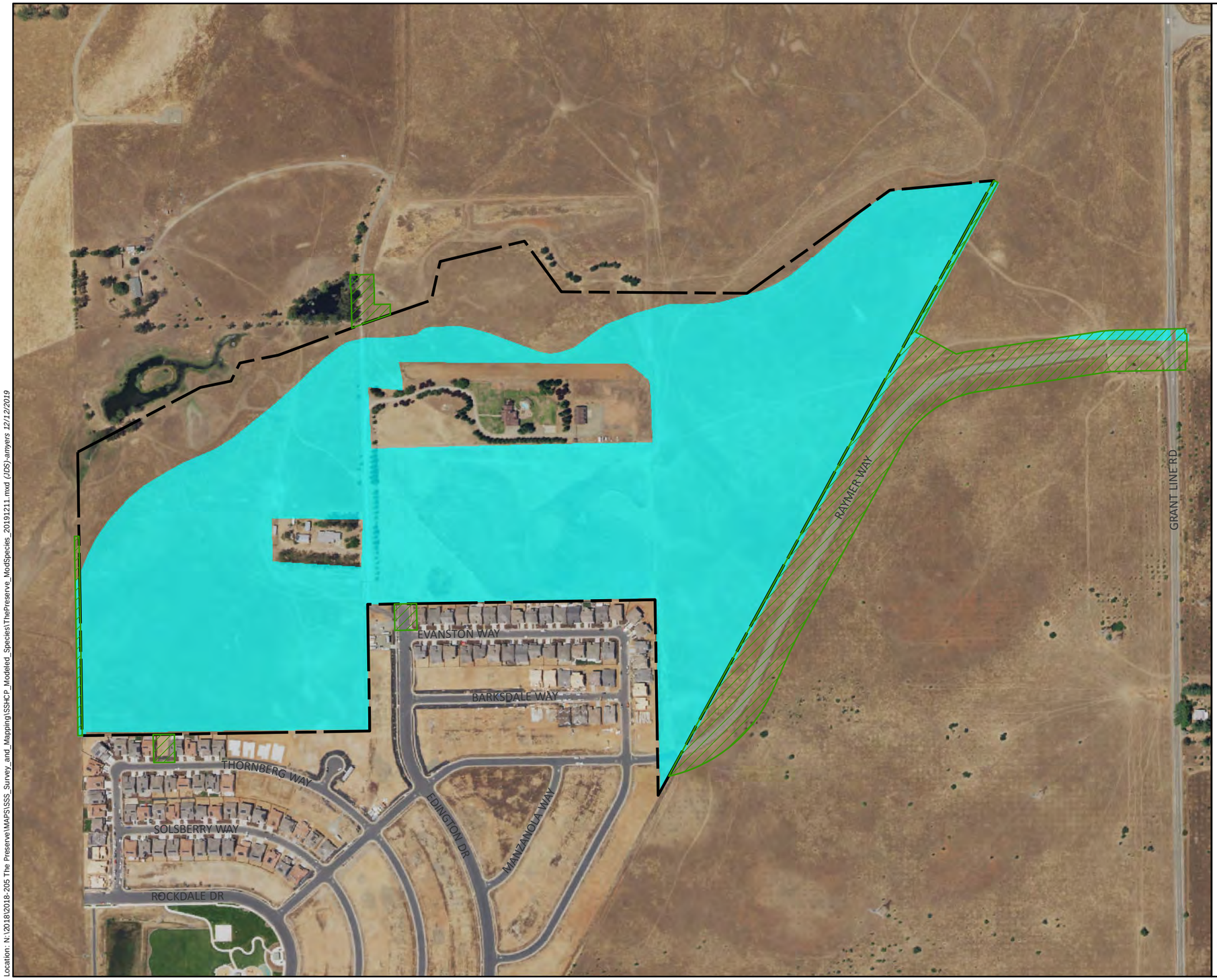
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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Mid-valley Fairy Shrimp

Map Features

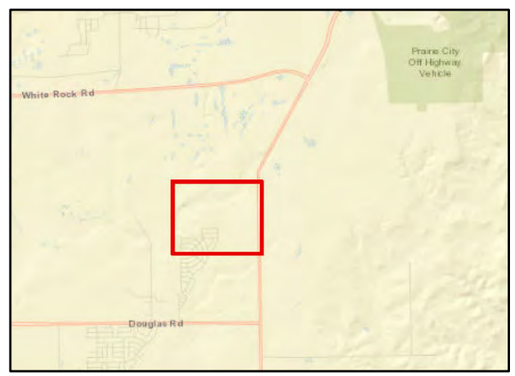
Project Boundary - 98.92 acres

Potential Offsite Areas - 13.16 acres

Modeled Habitat

Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Northern Harrier

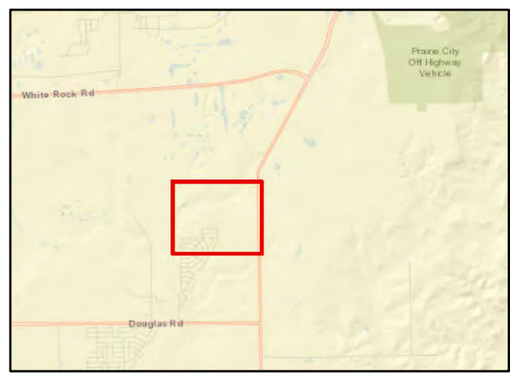
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Foraging
- Nesting-Foraging

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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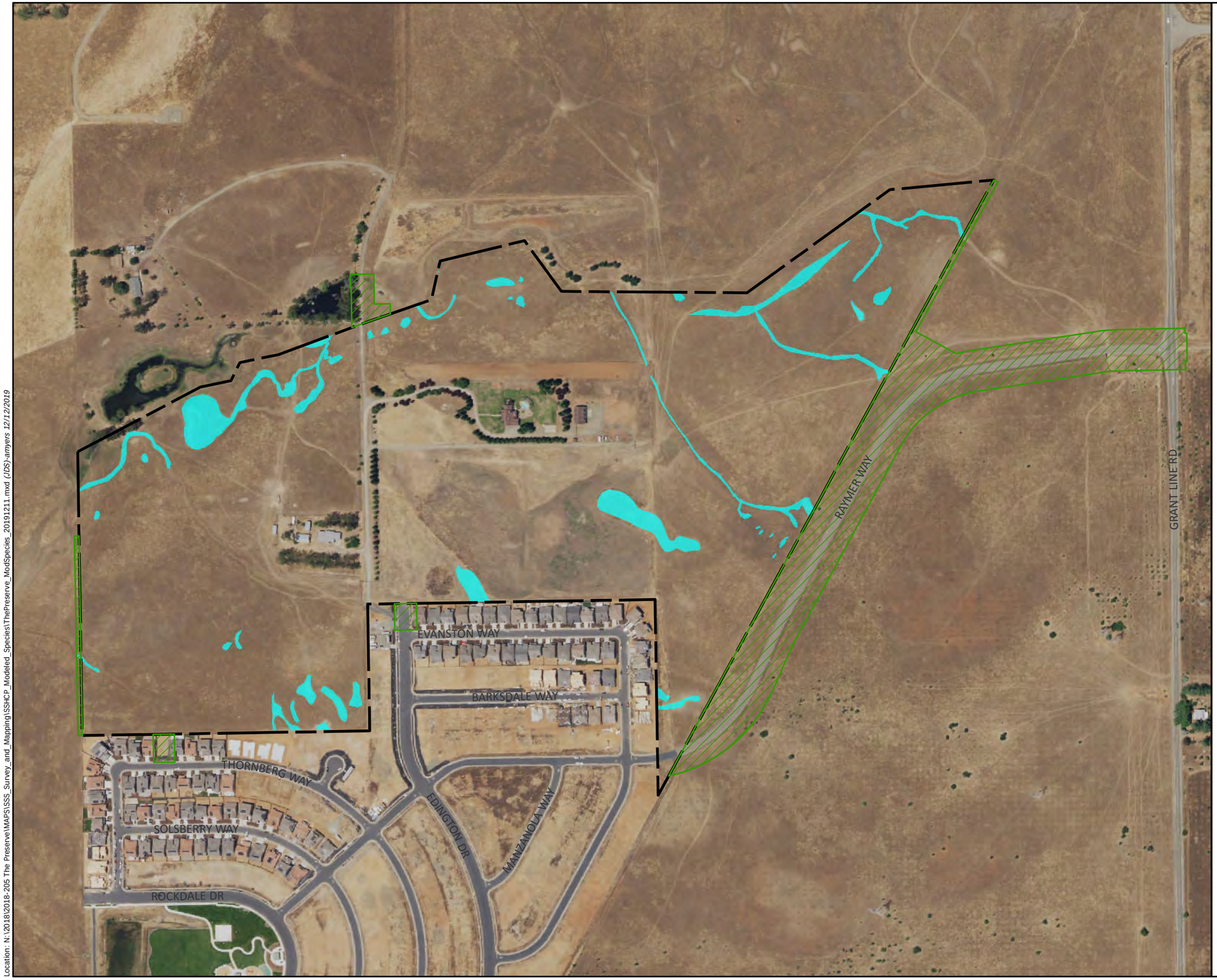
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Ricksecker's Water Scavenger Beetle

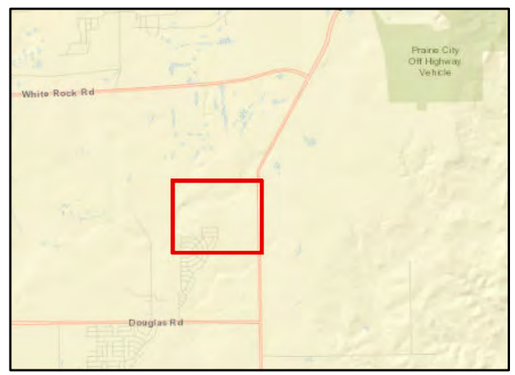
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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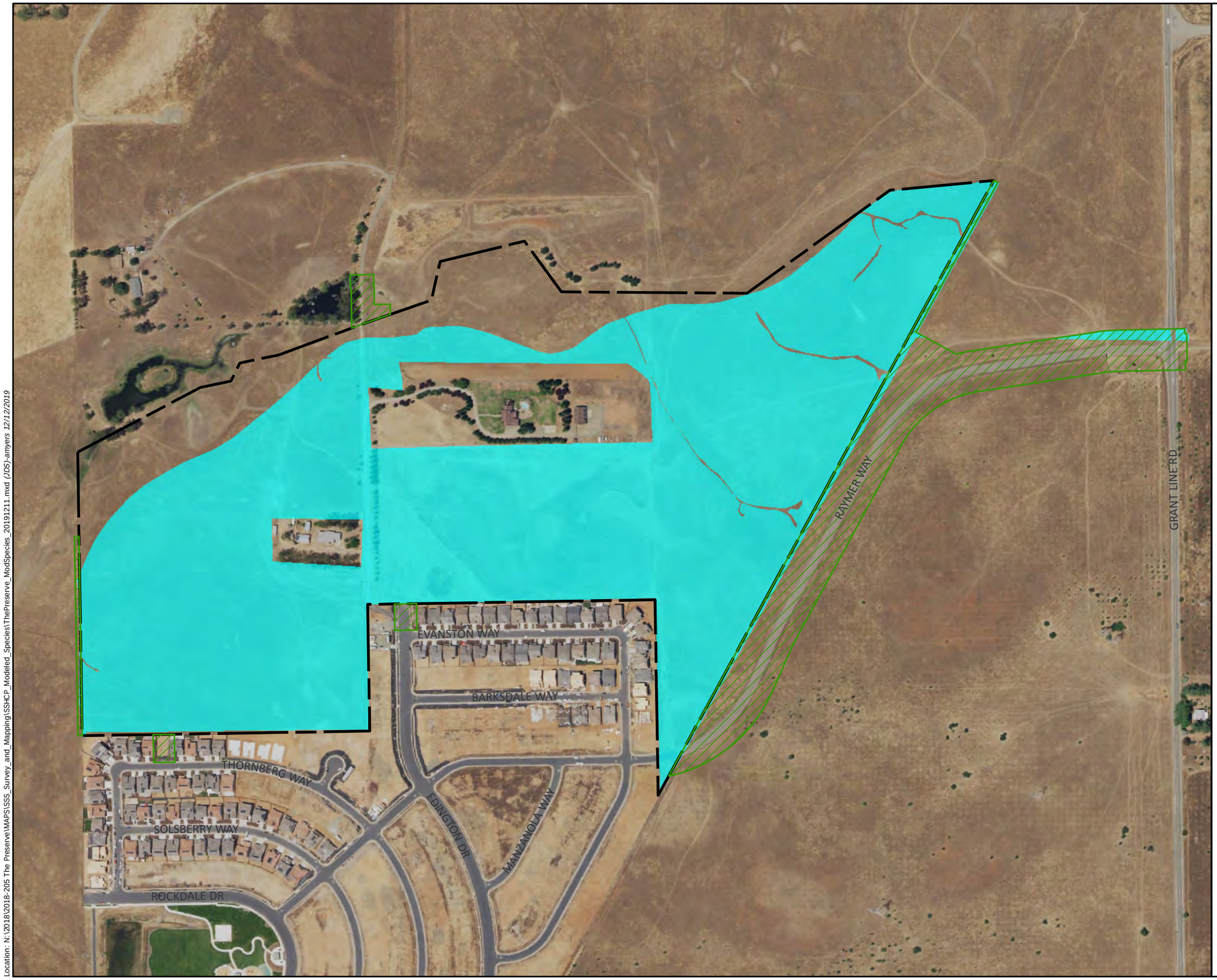
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Sacramento Orcutt Grass

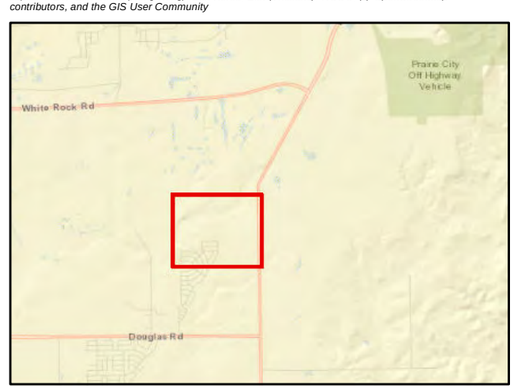
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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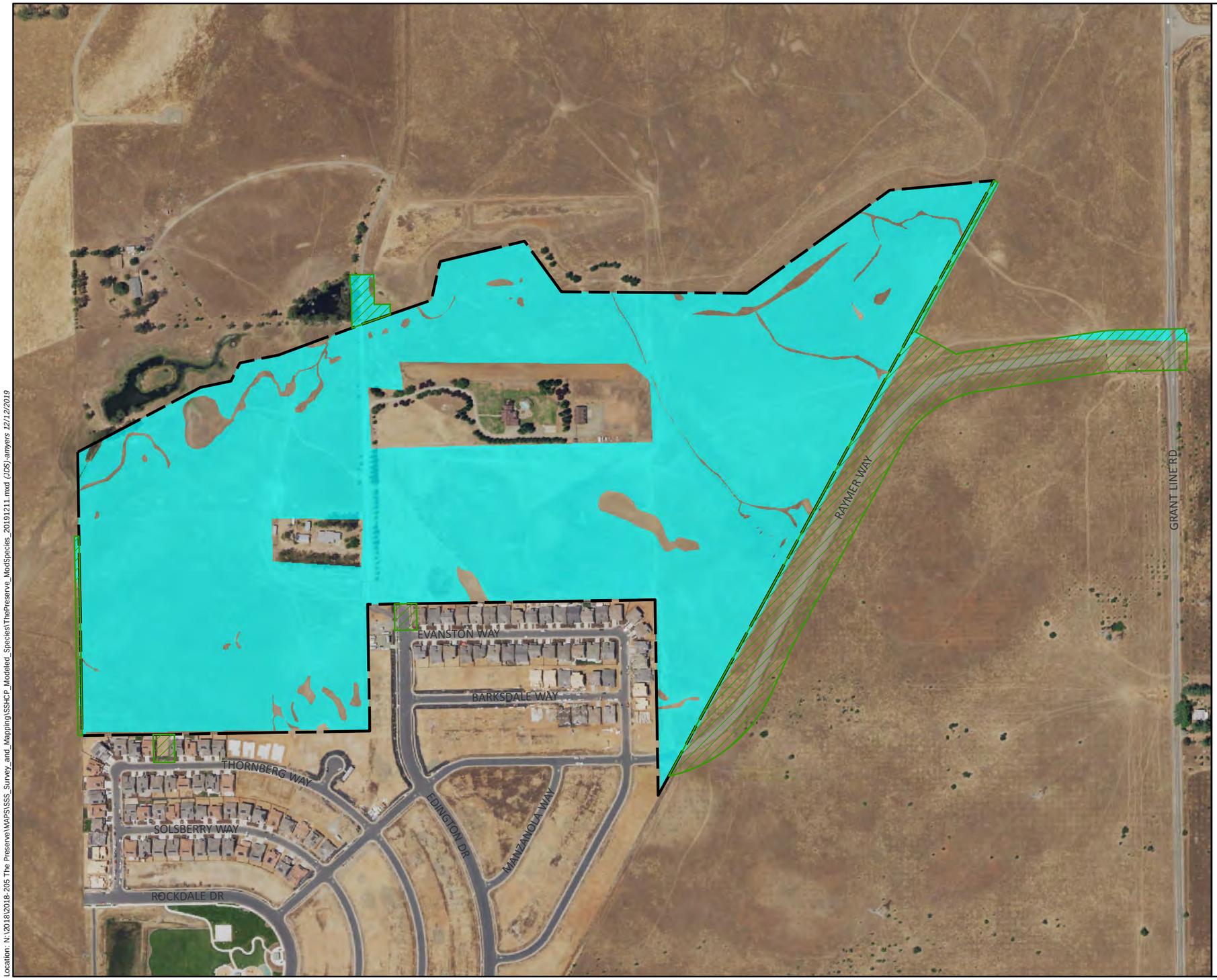
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Photo Source: 2016, NAIP
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Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Sanford's Arrowhead

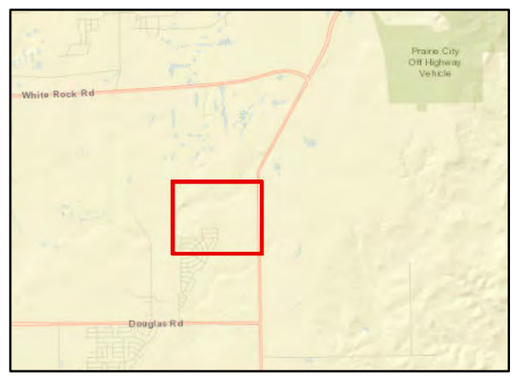
Map Features

- Project Boundary - 98.92 acres
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Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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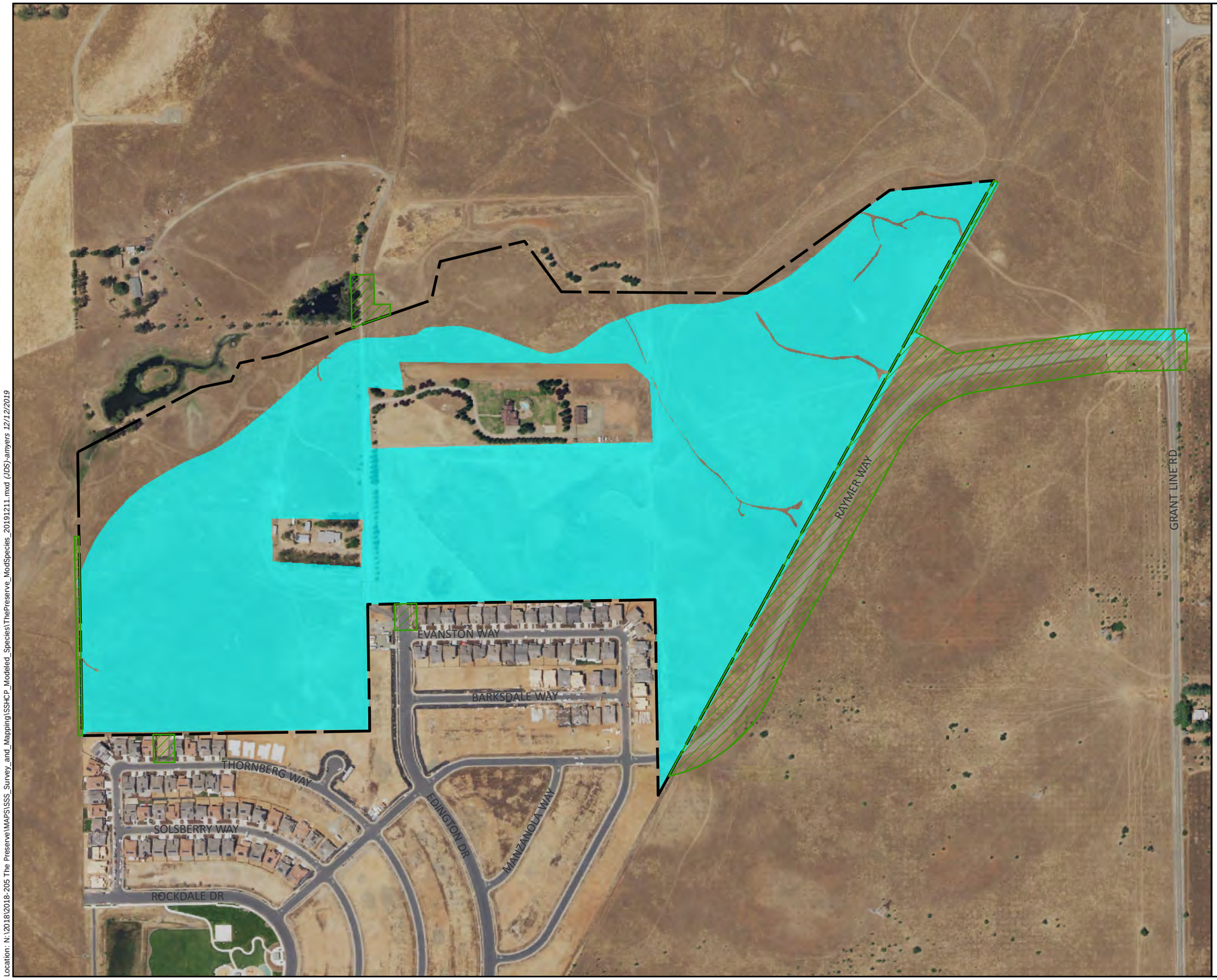
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2018-205 The Preserve

Scale in Feet
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Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Slender Orcutt Grass

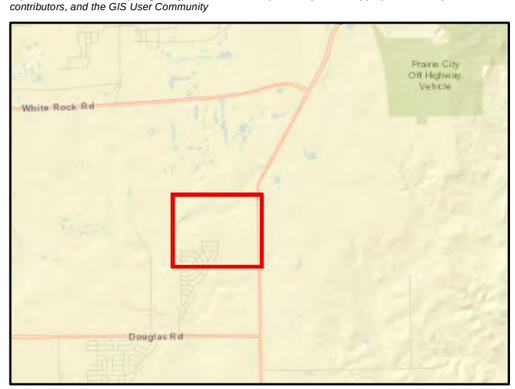
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Swainson's Hawk

Map Features

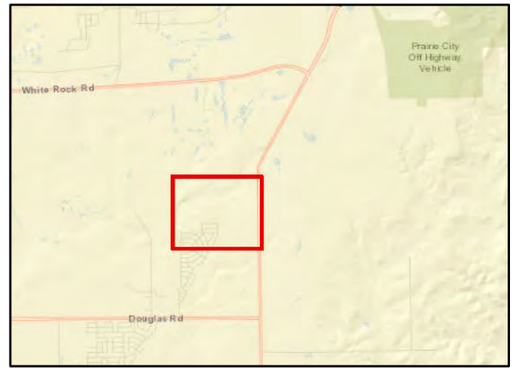
Project Boundary - 98.92 acres

Potential Offsite Areas - 13.16 acres

Modeled Habitat

Foraging

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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Scale in Feet
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Tricolored Blackbird

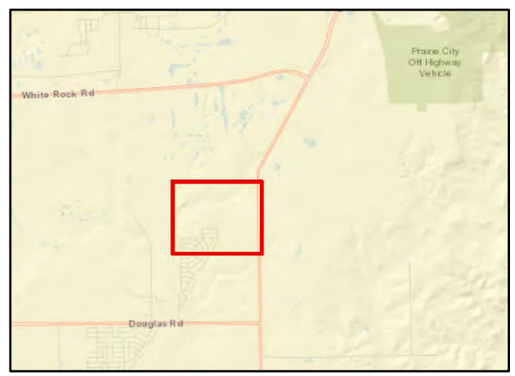
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Foraging
- Nesting-Foraging

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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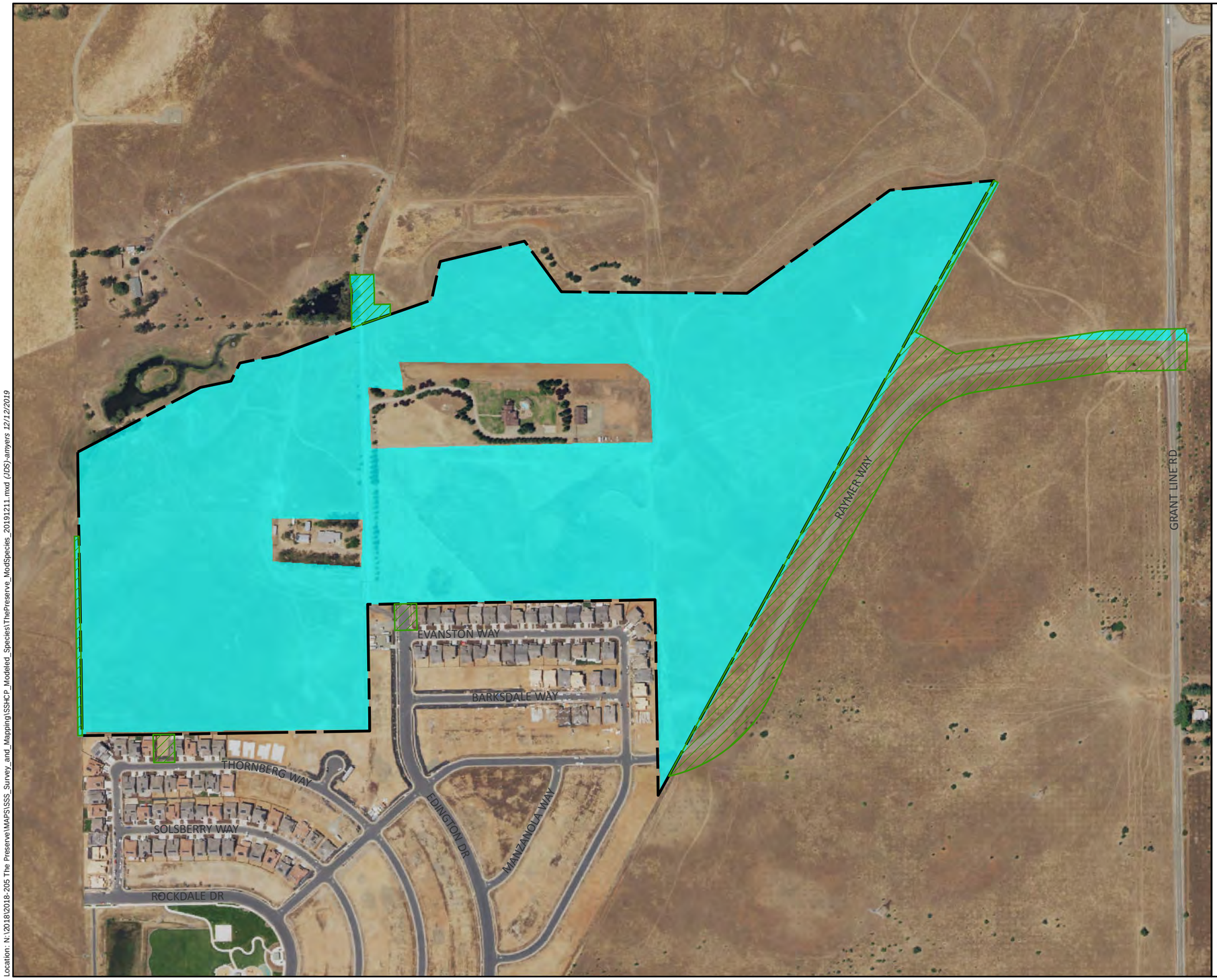
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
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Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Vernal Pool Fairy Shrimp

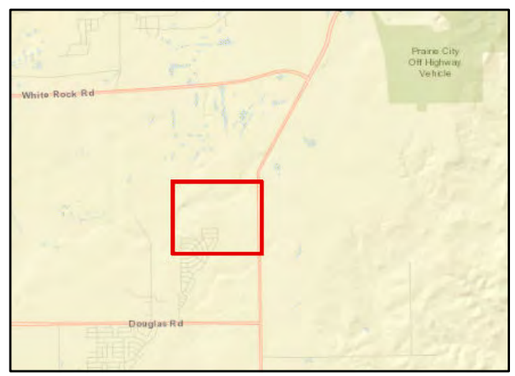
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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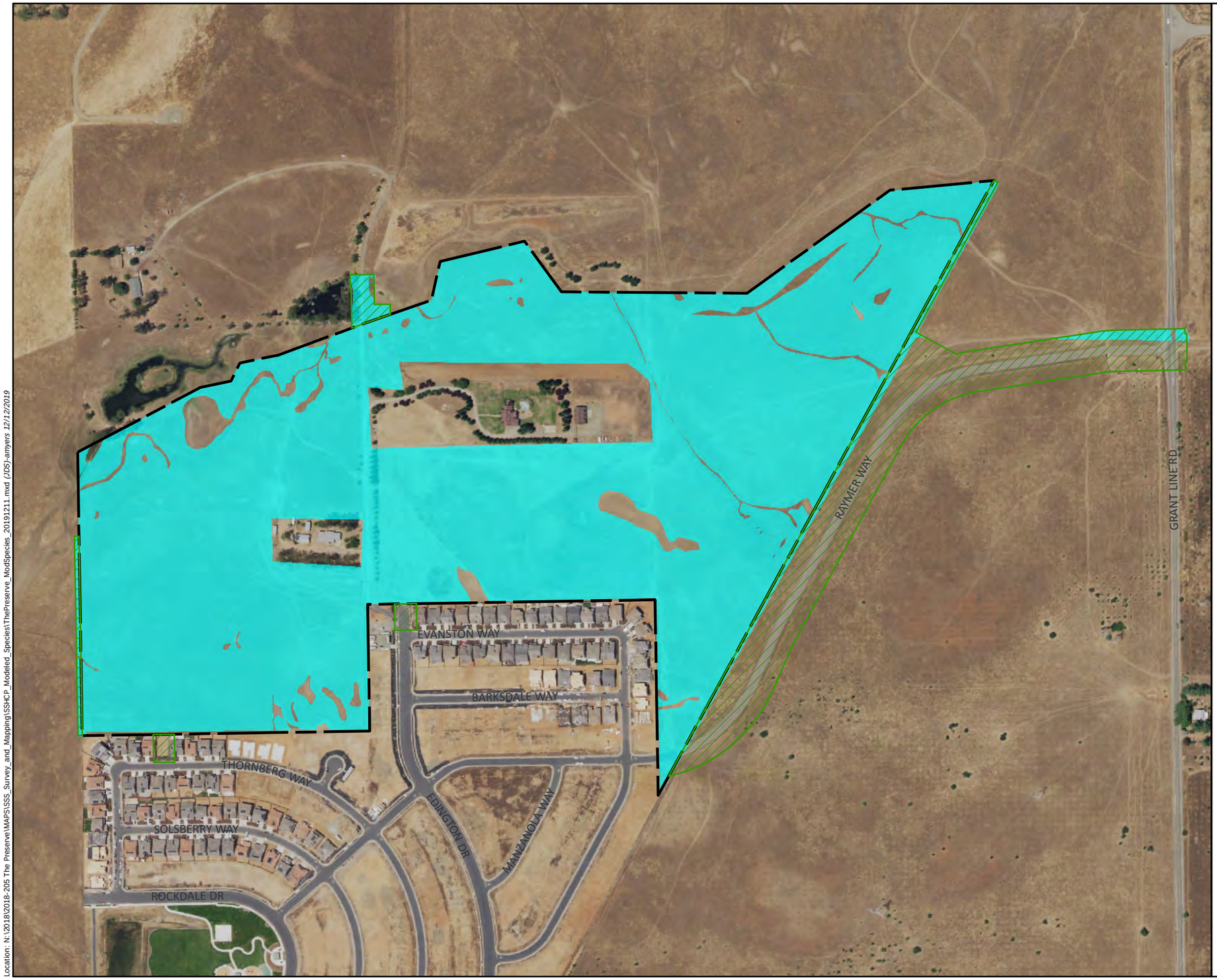
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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Vernal Pool Tadpole Shrimp

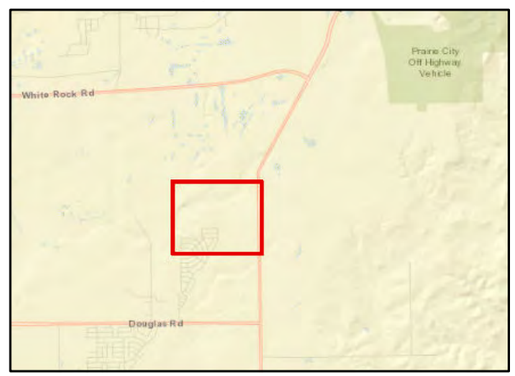
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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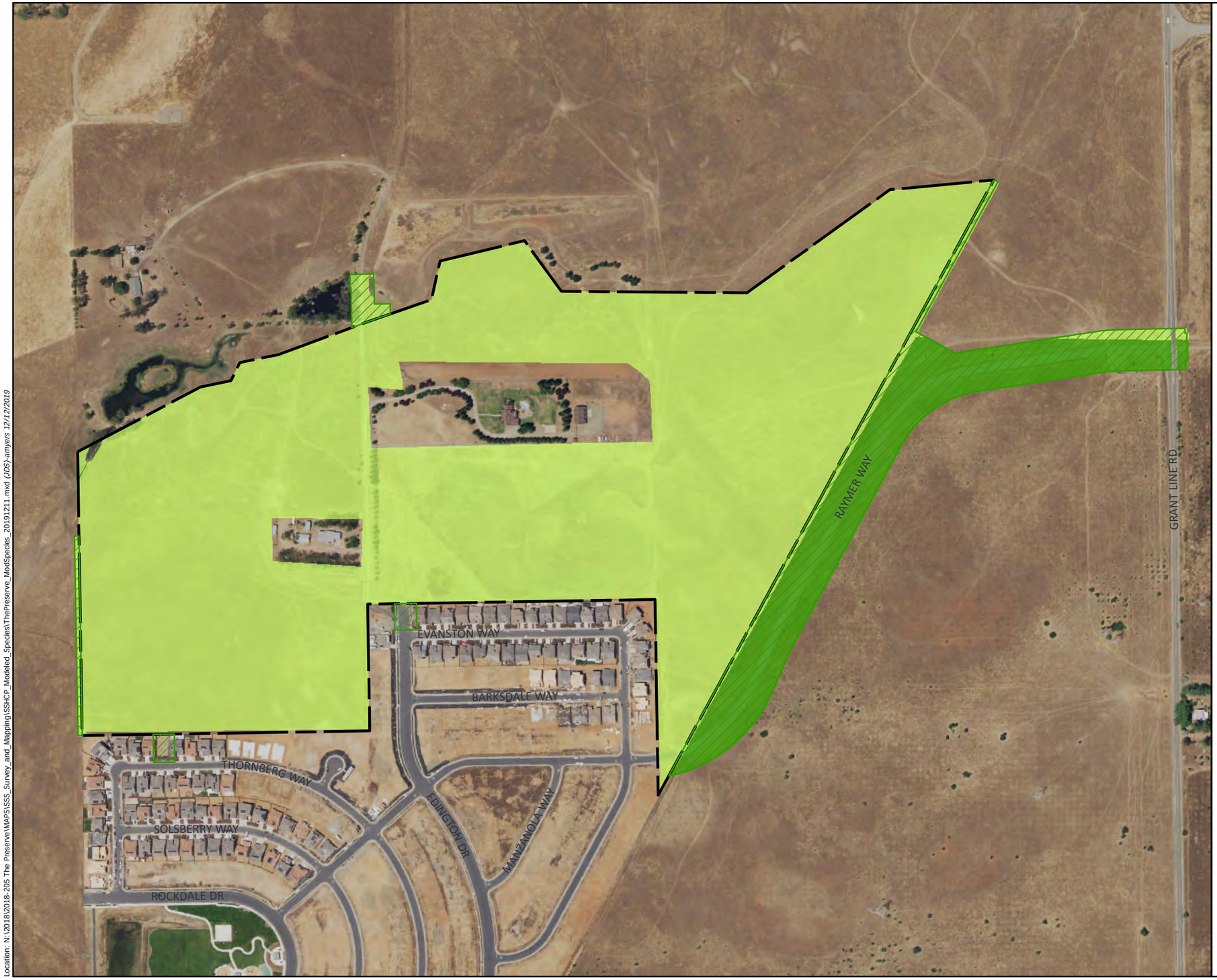
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2018-205 The Preserve

Scale in Feet
0 400

Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
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165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
Western Red Bat

Map Features

Project Boundary - 98.92 acres

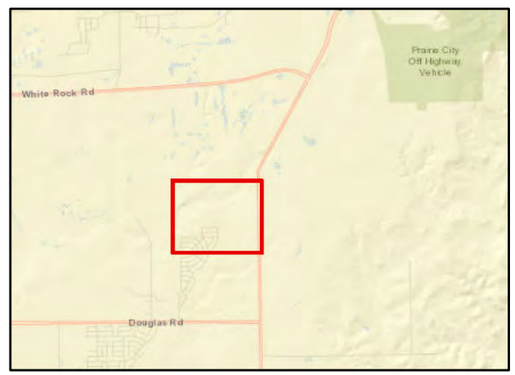
Potential Offsite Areas - 13.16 acres

Modeled Habitat

Foraging

Roosting-Foraging

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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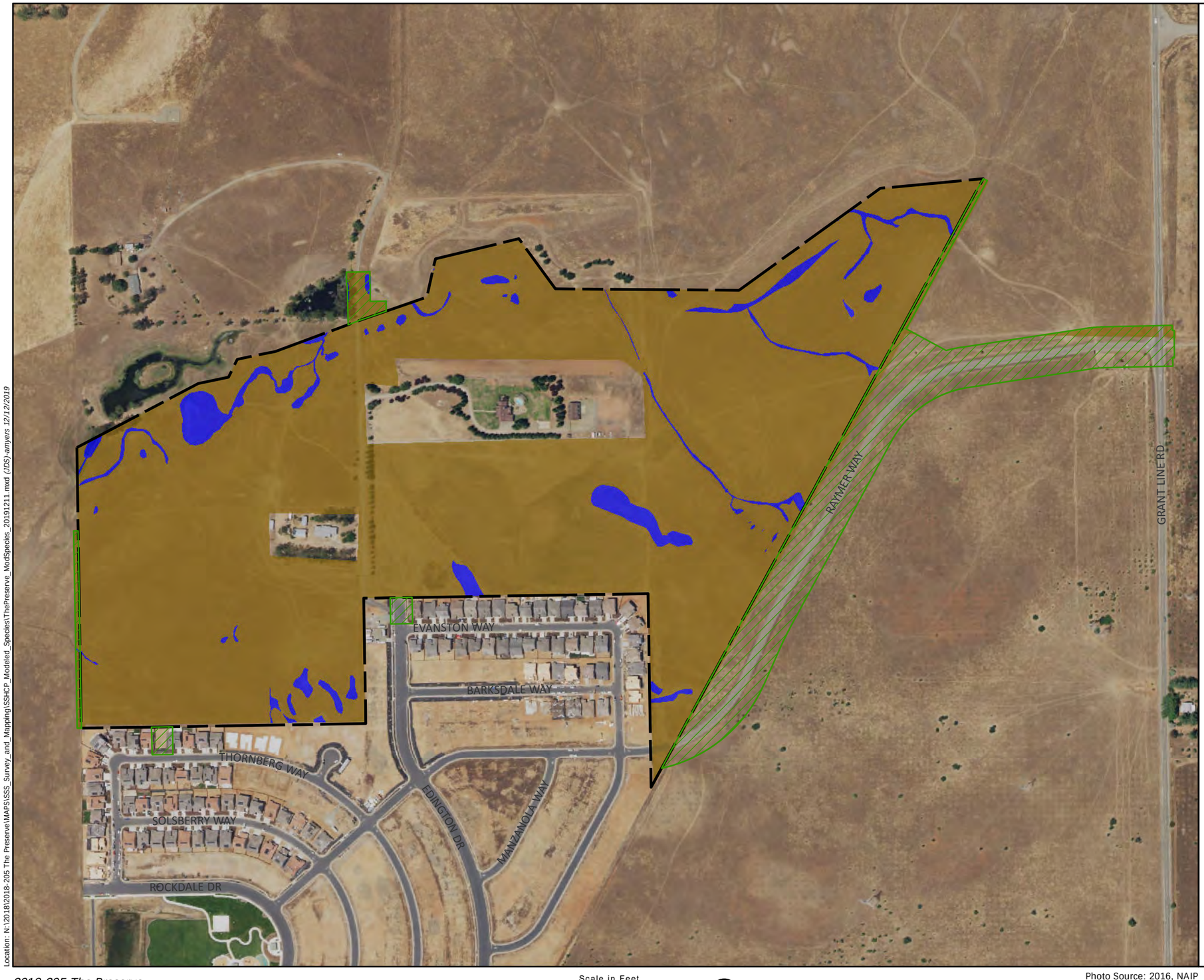
2018-205 The Preserve

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Map Date: 12/12/2019

Location: N:\2018\2018-205 The Preserve\MAPS\SSS_Survey_and_Mapping\SSHCP_Modeled_Species\ThePreserve_ModSpecies_20191211.mxd (JDS)-amyers 12/12/2019



The Preserve
Modeled Species Habitat
Western Spadefoot

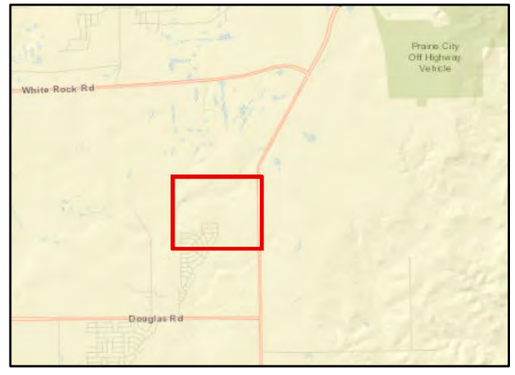
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Aquatic Habitat
- Upland Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
0 400

Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
165018 BNDY -WINN BINDED.dwg
165018 Base.dwg

Map Date: 12/12/2019



The Preserve
Modeled Species Habitat
White-tailed Kite

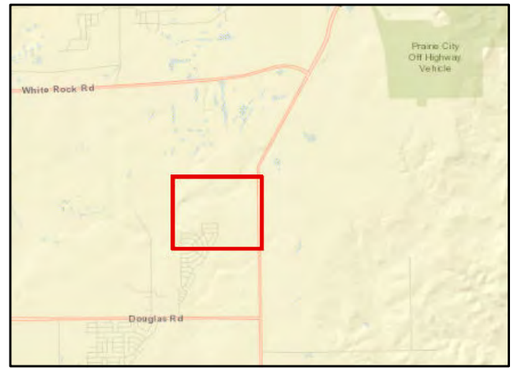
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres

Modeled Habitat

- Foraging

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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ENVIRONMENTAL CONSULTANTS

Location: N:\2018\2018-205 The Preserve\MAPS\SSS_Survey_and_Mapping\SSHCP_Modeled_Species\ThePreserve_ModSpecies_20191211.mxd (JDS)-amyers 12/12/2019

2018-205 The Preserve

Scale in Feet
0 400

Photo Source: 2016, NAIP
Habitat Data: SSHCP
Base Data: RJA
165018 BNDY -WINN BINDED.dwg
165018 Base.dwg

Map Date: 12/12/2019

ATTACHMENT C

Results of SSHCP Habitat Surveys

June 21, 2019

Mr. George Carpenter
Winn Communities
3001 I Street, Suite 300
Sacramento, CA 95816

RE: Bird and Bat Potential Habitat Assessment Surveys – The Preserve Development Project, Rancho Cordova, California

Dear Mr. Carpenter:

At the request of Winn Communities, Inc., ECORP Consulting, Inc. has conducted surveys for bird and bat habitat within the ±98.92-acre The Preserve Development Project (Project) and the ±9.33-acre potential Offsite areas. The Project is located northwest of Raymer Way and Grant Line Road in the City of Rancho Cordova, Sacramento County, California (Figure 1. *Project Location and Vicinity*). This letter supercedes the letter sent on December 10, 2018.

As required by the South Sacramento Habitat Conservation Plan (SSHCP) Avoidance and Minimization Measures (AMMs), surveys for potential habitat were conducted for tricolored blackbird (TRBL, *Agelaius tricolor*), Swainson's hawk (SWHA; *Buteo swainsoni*) and other raptors, burrowing owls (BUOW; *Athene cunicularia*), and western red bats (LABL; *Lasiurus blossevillii*). In addition, potential habitat for pallid bat (ANPA; *Antrozous pallidus*) was also assessed. Each survey also included buffers around the Project and Offsite areas as required by the AMMs for each species, as described below in the *Survey Methods* section.

REGULATORY CONTEXT

South Sacramento Habitat Conservation Plan

The SSHCP is a regional effort that will provide development and infrastructure projects with streamlined federal and state permitting processes while creating a preserve system to protect habitat, open space, and agricultural lands (County of Sacramento et al. 2018). The SSHCP allows project proponents within the Plan Area to simplify and expedite the state and federal ESA permitting process. In addition to streamlining the ESA permitting processes, a parallel Aquatic Resources Program (ARP) has been developed to address permitting pursuant to the Clean Water Act Section 404 and 401 permitting process. In addition, a Master Streambed Alternation Agreement will be requested by the SSHCP Implementing Entities to address Section 1602 of the California Fish and Game Code. The SSHCP will allow Sacramento County, the City of Rancho Cordova, City of Galt, and the Southeast Connector Joint Powers Authority to receive Incidental Take Permits (ITP) for Covered Species from USFWS and CDFW for activities and projects they conduct. In addition, the three local Land Use Authority Permittees (the County, Galt, and Rancho Cordova) can extend incidental take coverage provided by the SSHCP ITPs to activities and

projects implemented by Third-Party Project Proponents that are under the jurisdiction of that Land Use Authority Permittee. See www.southsachcp.com for more information.

SSHCP Covered Species

TRBL, SWHA, BUOW and LABL are SSHCP Covered Species. Habitat surveys for these species were determined to be required for the Project by the following SSHCP AMMs: TCB-1, SWHA-1, RAPTOR-1, WBO-1, and BAT-1.

Pallid Bat

ANPA is not an SSHCP covered species although it is considered a species of special concern by CDFW. A California Natural Diversity Database search revealed a nearby occurrence of ANPA. Therefore, although not an SSHCP-covered species, ANPA was included in the bat habitat assessment for informational purposes.

SURVEY METHODS

Bird Survey

ECORP biologists Keith Kwan and Angela Haas conducted surveys for potential SSHCP-covered bird species habitat within the Project on November 27, 2018. ECORP biologist Matthew Spaulding conducted surveys for potential SSHCP-covered bird species habitat within the potential Offsite areas on June 13, 2019. Inaccessible Offsite areas and surrounding buffers were visually assessed from within the Project or from publicly accessible roads.

Before starting the surveys, the biologists scanned all visible areas of the Project area with binoculars (10X42 magnification). The entire Project Area was visually surveyed on foot, while the surrounding buffers were visually assessed from within the Project or from publicly accessible roads due to private property. During the surveys, all potential nesting habitat were identified and all wildlife species present recorded. The methods below were enacted during surveys as per the SSHCP AMMs.

TCB-1

The biologists walked transects and visually scanned the entire Project area and the accessible portions of the Offsite areas, and visually scanned a 500-foot buffer. All potential TRBL nesting and foraging habitat was recorded and mapped.

SWHA-1 & RAPTOR-1

The biologists walked transects and visually scanned the entire Project and the accessible portions of the Offsite areas. In the surrounding 0.25-mile buffer, accessible public roads were driven, and private property was visually scanned for the presence of SWHA and other raptor nesting habitat. All potential SWHA and raptor nesting trees were recorded and mapped.

WBO-1

The biologists walked transects and visually surveyed the Project area and the accessible portions of the Offsite areas for the presence of burrows and/or evidence of BUOW. Transects were spaced 50 feet apart due to good visibility and a lack of dense vegetation. A 250-foot buffer was also visually scanned but not walked due to inaccessible private property. All potential or occupied burrows were recorded and mapped.

Bat Survey

ECORP biologist Matthew Spaulding conducted a survey for potential LABL and ANPA hibernacula on December 4, 2018 and on June 13, 2019. All potential winter hibernaculum habitat was visually scanned with binoculars (10X42 magnification) and assessed for suitability for these species. External physical features of the trees and structures located within the Project area and the Offsite area, including a 300-foot buffer, were examined for evidence of bat use (e.g., presence of guano, evidence of day roost use, culled insect parts, urine staining, odors associated with bats). Mr. Spaulding also listened for chatter indicative of roosting bats at each tree. Inaccessible Offsite areas and surrounding buffers were visually assessed from within the Project or from publicly accessible roads.

The following methods were enacted during the survey as per the SSHCP AMM BAT-1:

BAT-1

Mr. Spaulding walked and visually scanned the Project area and the accessible portions of the Offsite areas, and visually scanned a 300-foot buffer for the presence of LABL winter hibernaculum habitat. All potential LABL winter hibernaculum trees were recorded and mapped.

In addition, the same methods were used for ANPA, though not an SSHCP Covered Species.

RESULTS

Project Setting

The Project is situated at an elevation of approximately 220-240 feet above mean sea level. The Project site included a mix of rural residential and undeveloped rangeland. Two rural residences and associated outbuildings are present within the Project Area. Some horticultural tree stands occur around the residences, as well as eucalyptus (*Eucalyptus* sp.), cottonwood (*Populus* sp.) and oak (*Quercus* sp.). The remaining area is primarily annual grassland used for cattle grazing. A full list of the wildlife species observed on November 27, 2018 and June 13, 2019 are included as Attachments A and B, respectively.

Bird Survey

Potential nesting habitat for TRBL, SWHA and other raptors, and BUOW occurred within the Project and buffer areas, but not within the Offsites. One BUOW was observed within the Project.

Potential nesting habitat for TRBL was found within the Project and within the associated buffer (Figure 2. *Potential Tricolored Blackbird Nesting Habitat*). The potential nesting habitat features mapped consisted of

patches of bull thistle (*Cirsium vulgare*). Evidence of TRBL nesting during the previous year's (2018) nesting season was present within these patches, and TRBL was observed onsite during the November 27, 2018 survey; however, no evidence of active nesting was observed during the June 13, 2019 survey. Potential foraging habitat for TRBL included the grassland and wetland habitats within the Project and Offsites.

Potential nesting habitat for SWHA and other raptors occurred within the Project and within the associated buffer (Figure 3. *Potential Swainson's Hawk and Raptor Nesting Habitat*). Potential SWHA nesting habitat included large trees, while potential nesting habitat for other raptors included large and medium-sized trees.

Potential nesting habitat for BUOW occurred within the Project. Numerous unoccupied burrows were mapped along the eastern boundary and the southeastern portion of the Project site (Figure 4. *Potential Western Burrowing Owl Burrow Habitat*). Of these, one burrow had an individual BUOW present at the time of the survey (noted as "Burrow, Occupied" on Figure 4) and evidence of BUOW presence (e.g. white wash, pellets) was observed at three other burrow locations (noted as "Burrow, with Evidence"). No potential or occupied burrows could be seen within the 250-foot buffer. However, due to access limitations, the surrounding buffer could not be adequately surveyed to rule out the potential presence of suitable burrows or BUOW presence.

Bat Survey

Potential hibernaculum habitat for LABL occurred within the 300-foot buffer but not within the Project or Offsite areas. Potential hibernaculum occurred in the form of a large snag, two cottonwood trees, large eucalyptus trees all with suitable cavities and/or exfoliating bark (Figure 5. *Potential Western Red Bat and Pallid Bat Hibernacula*). There was no visible sign indicating bats were currently using the habitat.

Potential hibernaculum habitat for ANPA occurred within the Project site, but not within the buffer or Offsite areas. Potential hibernacula for ANPA were present in the form of structures with gaps or vents that could allow access to buildings (Figure 5. *Potential Western Red Bat and Pallid Bat Hibernacula)*. There was no visible sign indicating bats were currently using the habitat.

RECOMMENDATIONS

As per requirements of the SSHCP, subsequent AMMs may need to be implemented based on the results of these surveys. Please refer to Section 5.4.2 of the SSHCP for more information on required AMMs.

If you have any questions, please call me or Taraneh Emam at (916) 782-9100.

Sincerely,



Keith Kwan
Senior Biologist

LIST OF FIGURES

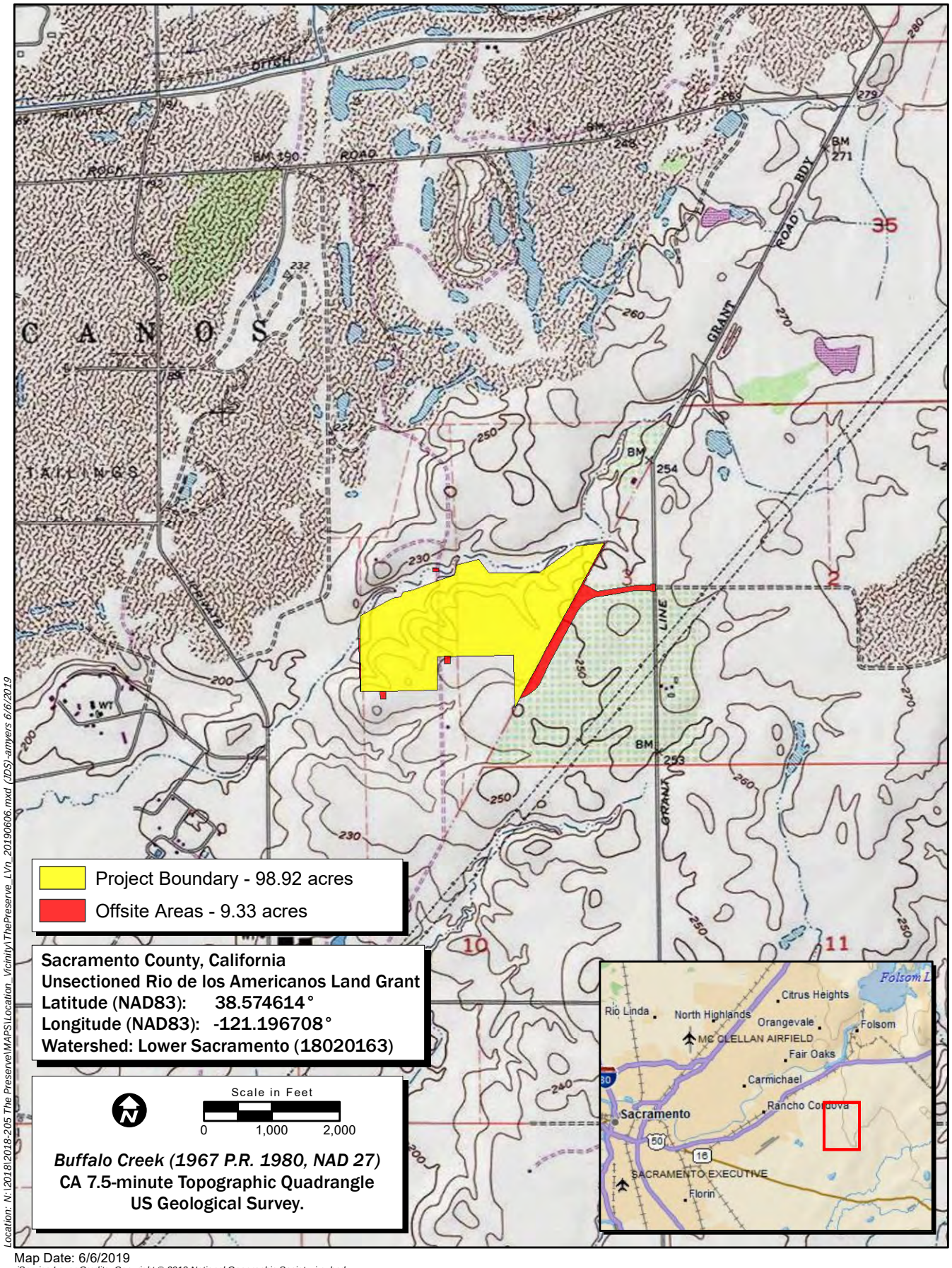
Figure 1. Project Location and Vicinity

Figure 2. Potential Tricolored Blackbird Nesting Habitat

Figure 3. Potential Swainson's Hawk and Raptor Nesting Habitat

Figure 4. Potential Western Burrowing Owl Burrow Habitat

Figure 5. Potential Western Red Bat and Pallid Bat Hibernacula



Location: N:\2018\2018-205 The Preserve\MAPS\Location_Vicinity\ThePreserve_LVn_20190606.mxd (JDS)-amyers 6/6/2019

Map Date: 6/6/2019

iService Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed
Copyright:(c) 2018 Garmin

Figure 1. Project Location and Vicinity

2018-205 The Preserve

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

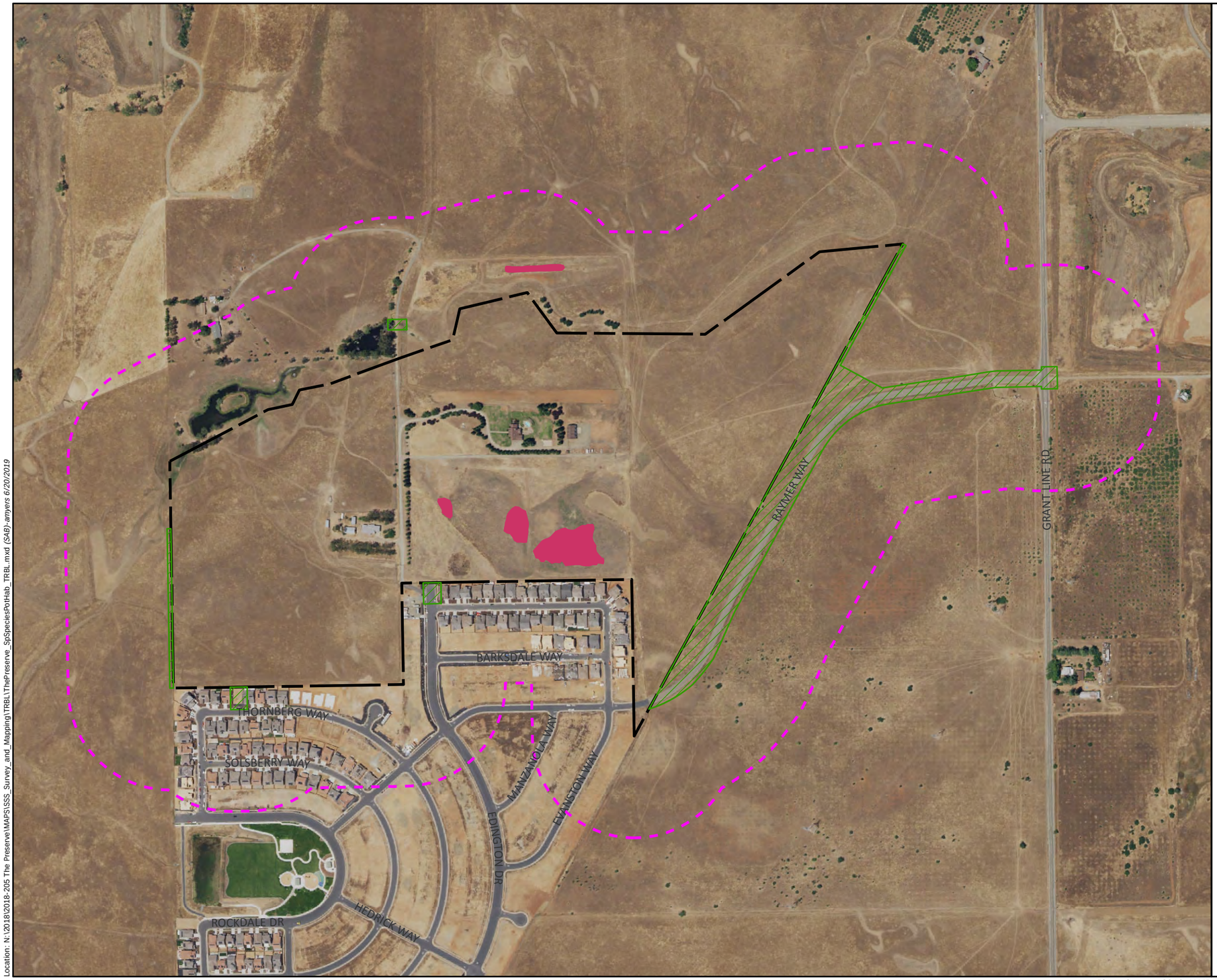
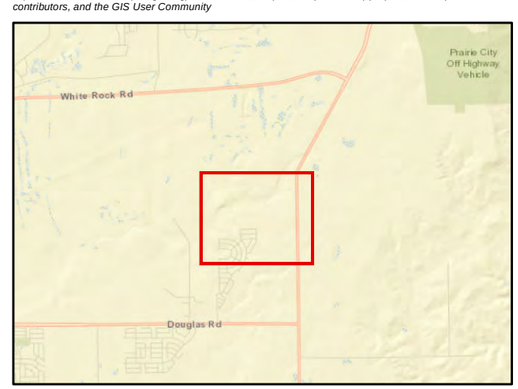


Figure 2. Potential Tricolored Blackbird Nesting Habitat

Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 9.33 acres
- 500-foot Buffer
- Potential Tricolored Blackbird Nesting Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP

Map Date: 6/20/2019

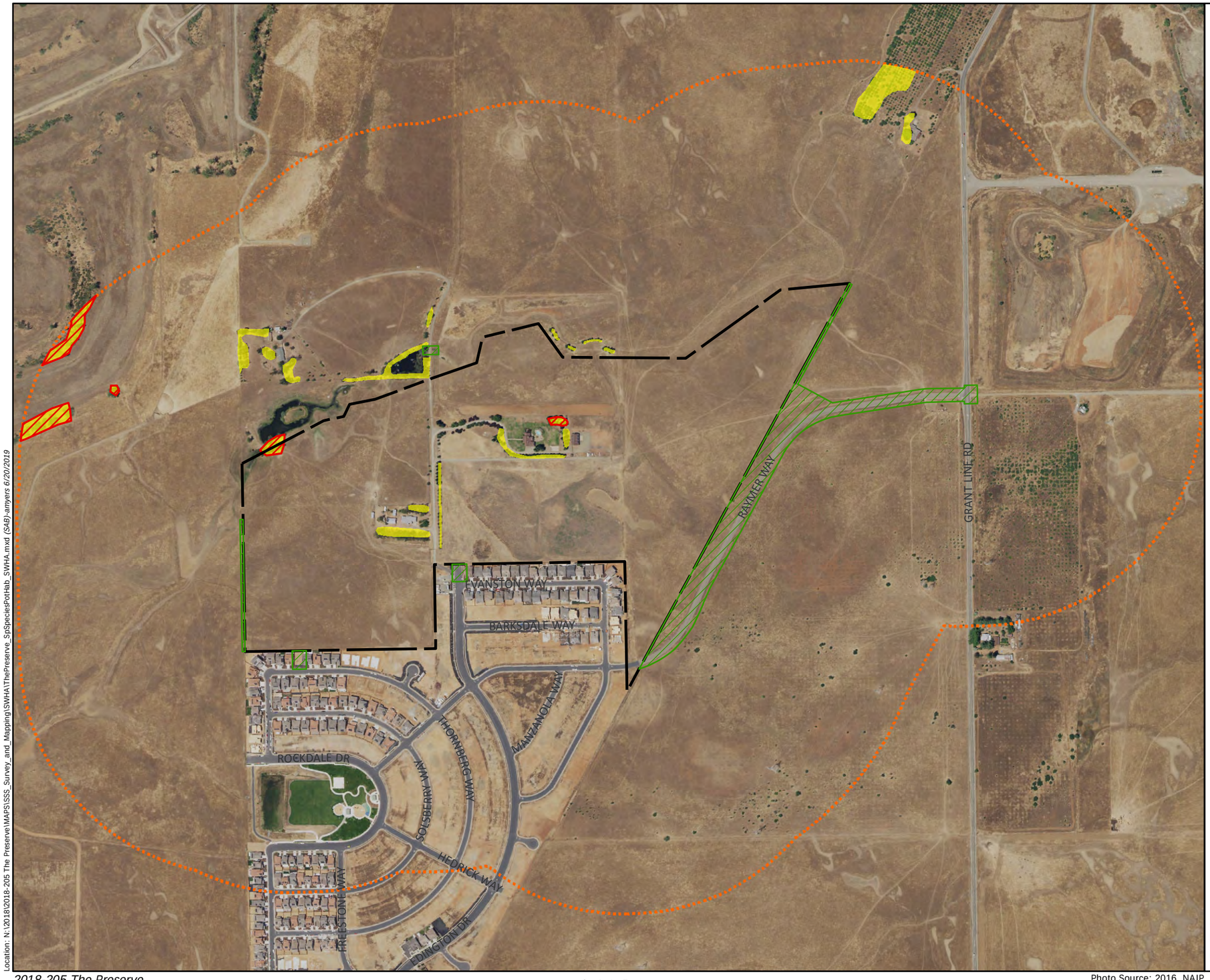
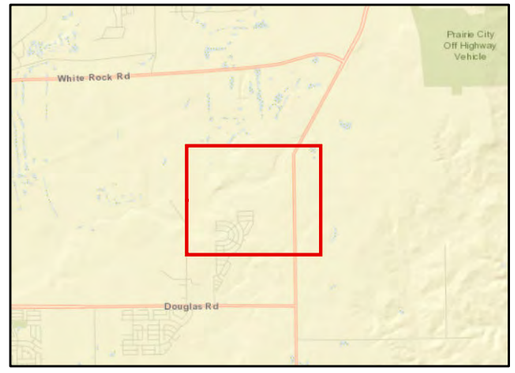


Figure 3. Potential Swainson's Hawk and Raptor Nesting Habitat

Map Features

- Potential Offsite Areas - 9.33 acres
- Project Boundary - 98.92 acres
- 1/4-mile Buffer
- Potential Swainson's Hawk Nesting Habitat
- Potential Raptor Species Nesting Habitat

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP

Map Date: 6/20/2019

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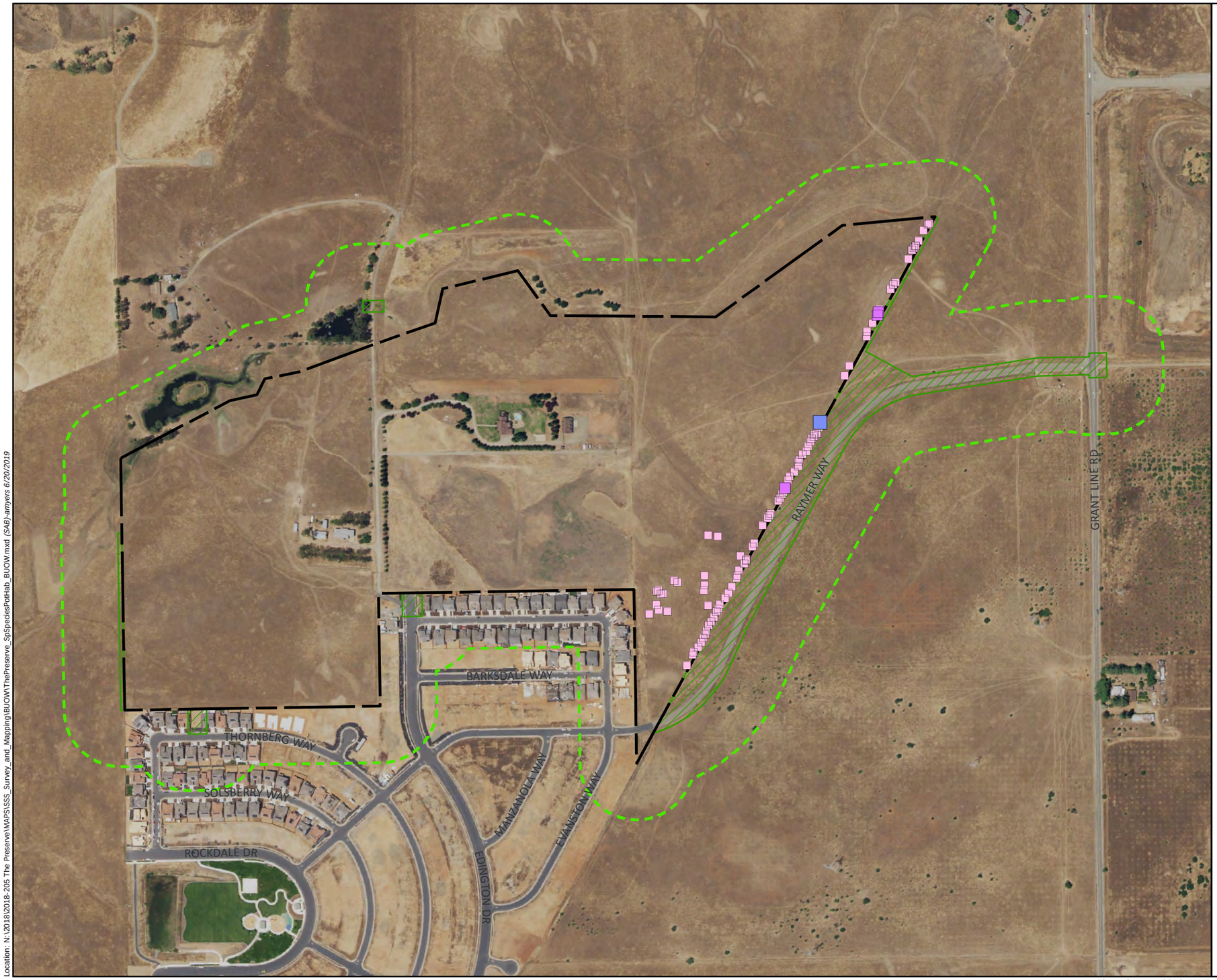


Figure 4. Potential Western Burrowing Owl Burrow Habitat

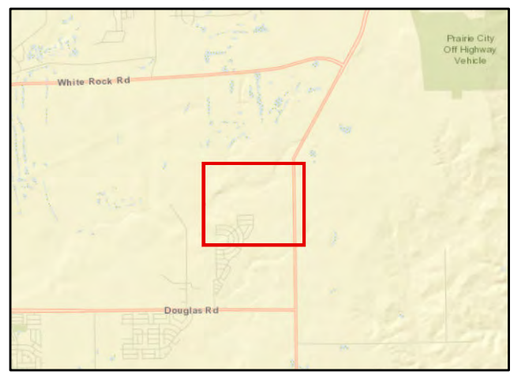
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 9.33 acres
- 250-foot Buffer

Burrowing Owl Habitat Features

- Burrow, Occupied
- Potential Burrow with Evidence
- Potential Burrow, Not Occupied

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

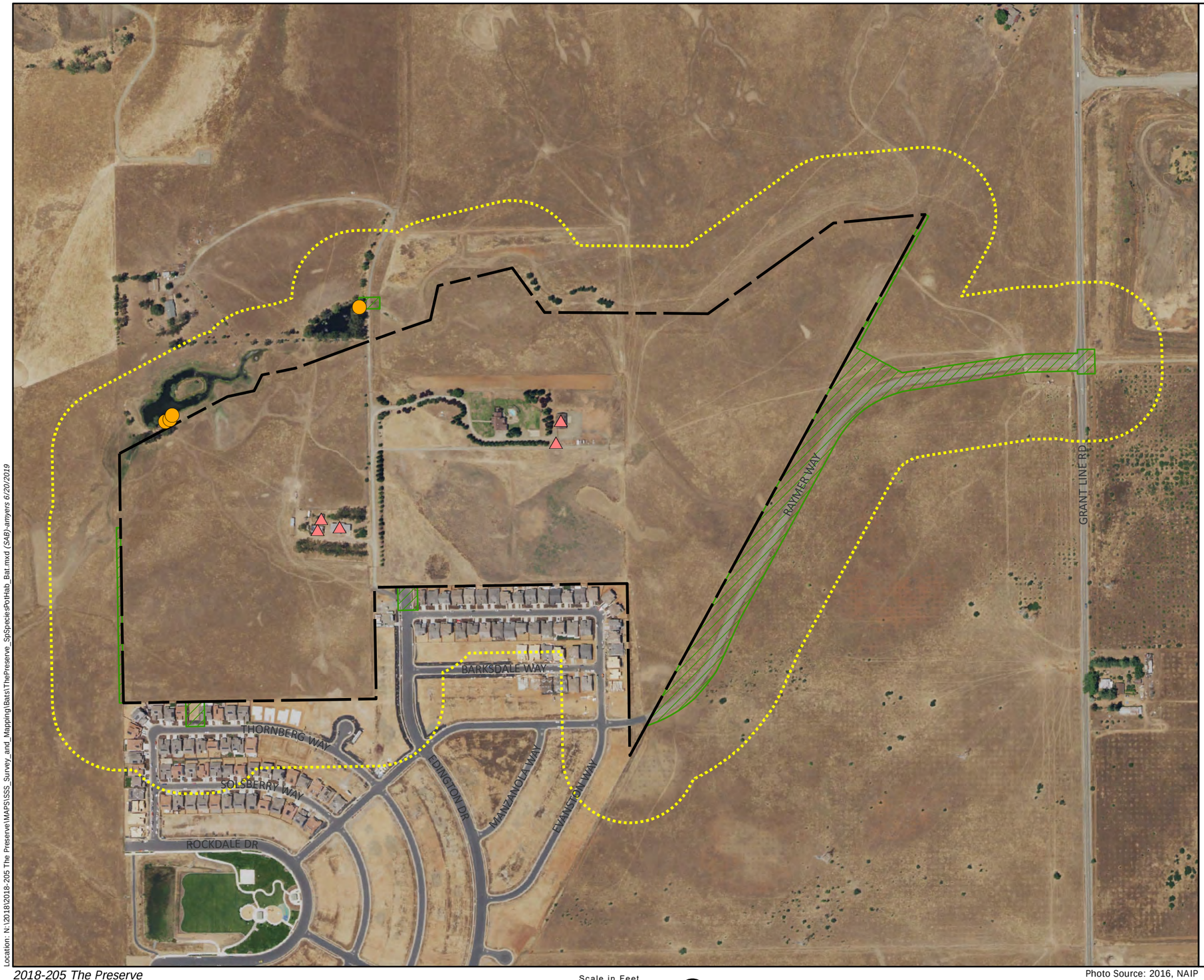
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Photo Source: 2016, NAIP

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Location: N:\2018\2018-205 The Preserve\MAPS\SSS_Survey_and_Mapping\BUOW\ThePreserve_SpSpeciesPotHab_BUOW.mxd (SAB)-amyers 6/20/2019

Figure 5. Potential Western Red Bat and Pallid Bat Hibernacula



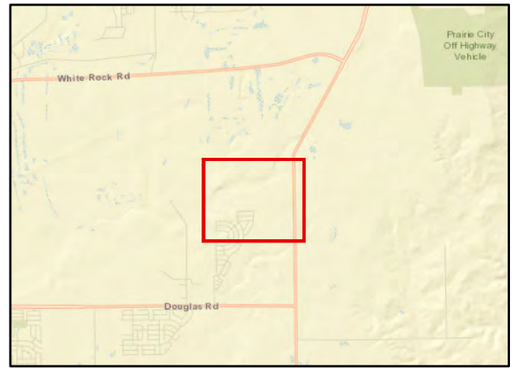
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 9.33 acres
- 300-foot Buffer

Bat Roosting Features

- Structure
- Tree

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
0 450

Photo Source: 2016, NAIP

Map Date: 6/20/2019

ATTACHMENT A

Wildlife Species Observed Onsite (November 27, 2018)

Attachment A

Wildlife Species Observed Onsite
(November 27, 2018)

Common Name	Scientific Name
Birds	
Canada Goose	*Branta canadensis*
Mourning Dove	*Zenaida macroura*
Anna's Hummingbird	*Calypte anna*
Ring-billed Gull	*Larus delawarensis*
California Gull	*Larus californicus*
Double-crested Cormorant	*Phalacrocorax auritus*
Great Egret	*Ardea alba*
Red-tailed Hawk	*Buteo jamaicensis*
Burrowing Owl	*Athene cunicularia*
Northern Flicker	*Colaptes auratus*
Black Phoebe	*Sayornis nigricans*
Say's Phoebe	*Sayornis saya*
Loggerhead shrike	*Lanius ludovicianus*
California Scrub-Jay	*Aphelocoma californica*
American Crow	*Corvus brachyrhynchos*
Horned Lark	*Eremophila alpestris*
Ruby-crowned Kinglet	*Regulus calendula*
Northern Mockingbird	*Mimus polyglottos*
American Pipit	*Anthus rubescens*
House Finch	*Haemorhous mexicanus*
American Goldfinch	*Spinus tristis*
Dark-eyed Junco	*Junco hyemalis*
White-crowned Sparrow	*Zonotrichia leucophrys*
Savannah Sparrow	*Passerculus sandwichensis*
Western Meadowlark	*Sturnella neglecta*
Red-winged Blackbird	*Agelaius phoeniceus*
Tricolored Blackbird	*Agelaius tricolor*
Brewer's Blackbird	*Euphagus cyanocephalus*
Yellow-rumped Warbler	*Setophaga coronata*
Mammals	
Black-tailed Jackrabbit	*Lepus californicus*

ATTACHMENT B

Wildlife Species Observed Onsite (June 13, 2019)

Attachment B

Wildlife Species Observed Onsite
(June 13, 2019)

Common Name	Scientific Name
Birds	
Mourning Dove	*Zenaida macroura*
Anna's Hummingbird	*Calypte anna*
Turkey Vulture	*Catgartes aura*
House Finch	*Haemorhous mexicanus*
Ash-throated flycather	*Myiarchus cinerascens*
Western Kingbird	*Tyrrannus verticalis*
Black Phoebe	*Sayornis nigricans*
Savannah Sparrow	*Passerculus sandwichensis*
Western Meadowlark	*Sturnella neglecta*
Mammals	
Black-tailed Jackrabbit	*Lepus californicus*
Amphibians	
American Bullfrog	*Lithobates catesbeianus*

ATTACHMENT D

Special-Status Plant Survey Report

Special-Status Plant Survey Report

The Preserve Development

Rancho Cordova, California

Prepared for:
Winn Communities

ECORP Consulting, Inc. has assisted public and private land owners with environmental regulation compliance since 1987. We offer full service capability, from initial baseline environmental studies through environmental planning review, permitting negotiation, liaison to obtain legal agreements, mitigation design, and construction monitoring and reporting.

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Attachment C – Statement of Qualifications
Attachment D – Plant Species Observed On-Site (April 29 and June 13, 2019)

LIST OF ACRONYMS AND ABBREVIATIONS

CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
County	Sacramento County
CRPR	California Rare Plant Rank
ESA	Endangered Species Act
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
Offsites	Five potential offsite areas outside of the Project boundary
Project	The Preserve Development Project
SSHCP	South Sacramento Habitat Conservation Plan
Study Area	The combined Project and Offsites
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

1.0 INTRODUCTION

ECORP Consulting, Inc. has conducted a special-status plant survey for the proposed The Preserve Development (Project) located in Rancho Cordova, California. The purpose of this survey was to identify and map the locations of special-status plant species observed within the Project.

1.1 Project Location

The Study Area includes the 98.92-acre Project area, as well as five potential Offsite areas totaling 9.33 acres. In this document the Offsite areas are referred to as the Rio del Oro Offsite (located to the west of the Project), the Raymer Way Offsite (located to the east of the Project), the Morrison Creek Offsite (located to the north of the Project around an existing crossing of Morrison Creek), and the North Douglas Offsites (two road stubs located to the south of the Project within the existing North Douglas development).

The Study Area is located to the west of Raymer Way and Grant Line Road in Rancho Cordova, California. The Study Area corresponds to an unsectioned portion of the Rio de los Americanos Land Grant within the "Buffalo Creek, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1980) (Figure 1. *Study Area Location and Vicinity*). The approximate center of the site is located at 38.574614° North and -121.196708° West within the Lower Sacramento Watershed (Hydrologic Unit Code #18020163, USGS 2016).

1.2 Definition of Special-Status Plant Species

For the purposes of this report, "special-status plants" are defined as plants which meet one or more of the following:

- Plants listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (ESA);
- Plants listed, proposed for listing, or candidates for future listing as threatened or endangered under the California ESA;
- Plants that meet the definitions of endangered or rare under Section 15380 of the State California Environmental Quality Act (CEQA) Guidelines;
- Plants listed as rare under the California Native Plant Protection Act (California Department of Fish and Game [CDFG] Code of California, Section 1900 et seq.);
- Plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" [California Rare Plant Rank (CRPR) 1B and 2] (see Section 1.3);
- Plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4); and
- Plants that are South Sacramento Habitat Conservation Plan (SSHCP) Covered Species (see Section 1.4).

1.3 California Rare Plant Ranks

CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2019), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six ranks (i.e., CRPR).

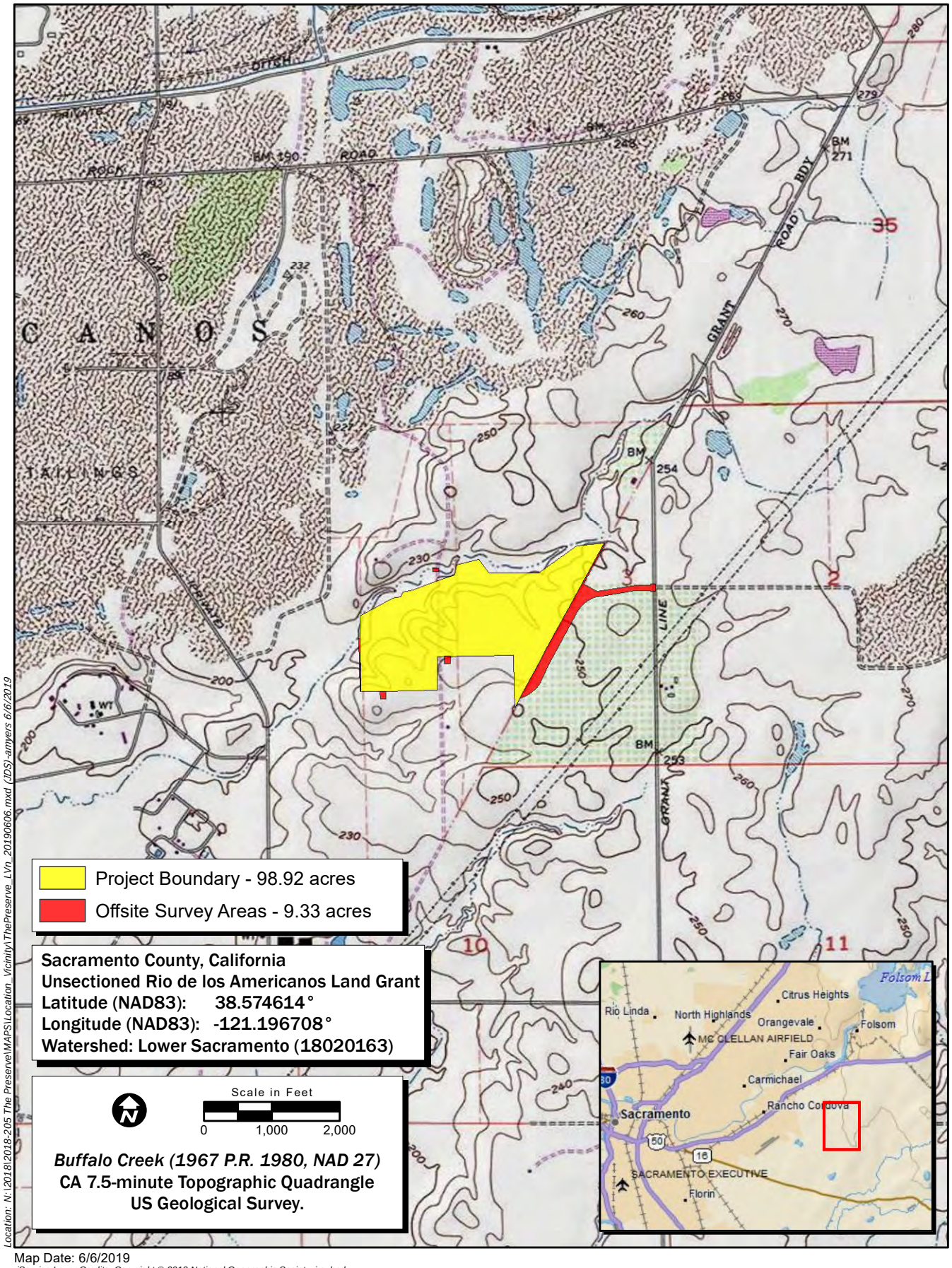
The rank system was developed in collaboration with government, academia, non-governmental organizations, and private sector botanists, and is jointly managed by the California Department of Fish and Wildlife (CDFW) and the CNPS. The ranks are currently recognized in the California Natural Diversity Database (CNDDB). The following are definitions of the CNPS CRPRs:

- CRPR 1A – presumed extirpated in California and either rare or extinct elsewhere;
- CRPR 1B – rare, threatened, or endangered in California and elsewhere;
- CRPR 2A – presumed extirpated in California, but more common elsewhere;
- CRPR 2B – rare, threatened, or endangered in California but more common elsewhere;
- CRPR 3 – a review list of plants about which more information is needed; and
- CRPR 4 – a watch list of plants of limited distribution.

Additionally, the CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 0.1 through 0.3, with 0.1 being the most threatened and 0.3 being the least threatened. Threat Ranks are generally assigned for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat);
- Threat Rank 0.2 – Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat); and
- Threat Rank 0.3 – Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known).

Factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in assigning the Threat Rank, and differences in Threat Ranks do not constitute additional or different protection (CNPS 2019). Depending on the policy of the lead agency, substantial impacts to plants listed as CRPR 1A, 1B, 2, and 3 (regardless of threat rank) are typically considered significant under CEQA Guidelines Section 15380. For CRPR 4 species (regardless of threat rank), significance under CEQA is typically evaluated if the lead agency has determined those plants to be of local significance or regional importance. Such plants may be identified in local Habitat Conservation Plans (HCPs) or City or County General Plans.



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Map Date: 6/6/2019

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Figure 1. Project Location and Vicinity

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1.4 South Sacramento Habitat Conservation Plan

The SSHCP is a regional effort that will provide development and infrastructure projects with streamlined federal and state permitting processes while creating a preserve system to protect habitat, open space, and agricultural lands (County of Sacramento et al. 2018). The SSHCP allows project proponents within the Plan Area to simplify and expedite the state and federal ESA permitting process. The SSHCP will allow Sacramento County, the City of Rancho Cordova, City of Galt, and the Southeast Connector Joint Powers Authority to receive Incidental Take Permits (ITP) for 28 Covered Species from U.S. Fish and Wildlife Service and CDFW for activities and projects they conduct. In addition, the three local Land Use Authority Permittees (the County, Galt, and Rancho Cordova) can extend incidental take coverage provided by the SSHCP ITPs to activities and projects implemented by Third-Party Project Proponents that are under the jurisdiction of that Land Use Authority Permittee. The SSHCP provides Modeled Species Habitat data for each Covered Species to determine whether Covered Species have potential to occur within a project site. The SSHCP also sets forth Avoidance and Minimization Measures with which permittees must comply. See www.southsachcp.com for more information.

Table 1 provides a list of all plant species that are considered SSHCP Covered Species, adapted from Table 1-2 of the SSHCP (County of Sacramento et al. 2018).

Table 1. SSHCP Covered Species - Plants

Scientific Name Common Name	Status		
	Federal	State	CRPR
Downingia pusilla Dwarf downingia	—	—	2.2
Gratiola heterosepala Boggs Lake hedge-hyssop	—	E	1B.2
Juncus leiospermus var. ahartii Ahart's dwarf rush	—	—	1B.2
Legenere limosa Legenere	—	—	1B.1
Navarretia myersii Pincushion navarretia	—	—	1B.1
Orcuttia tenuis Slender Orcutt grass	T	E	1B.1
Orcuttia viscida Sacramento Orcutt grass	E	E	1B.1
Sagittaria sanfordii Sanford's arrowhead	—	—	1B.2

Status Definitions

Federal:
- E = Endangered under the federal ESA
- T = Threatened under the federal ESA
- — = No federal ESA listing

State:
- E = Endangered under state ESA
- T = Threatened under state ESA
- — = No state status

CRPR:
- 1B = Rare, threatened, or endangered in California and elsewhere
- 2 = Rare, threatened, or endangered in California but more common elsewhere

CRPR Threat Ranks
- 0.1 = Seriously threatened in California (high degree/immediacy of threat)
- 0.2 = Fairly threatened in California (moderate degree/immediacy of threat)
- 0.3 = Not very threatened in California (low degree/immediacy of threats or no current threats known)

2.0 METHODS

2.1 Literature Review

Prior to conducting field surveys, background information was collected on the potential presence of special-status plants within or near the survey area from a variety of sources. This included a review of resource agency species lists, literature review, on-line database query, voucher specimen review, and reference population review. The following resources were used as part of the literature review:

- CDFW California Natural Diversity Database (CNDDB) data for the "Buffalo Creek, California" 7.5-minute quadrangle as well as the eight surrounding USGS quadrangles (CDFW 2019);
- USFWS Resource Report List Federal Endangered and Threatened Species that may be affected by the Project (USFWS 2019); and
- CNPS's electronic *Inventory of Rare and Endangered Plants of California* for the "Buffalo Creek, California" 7.5-minute quadrangle as well as the eight surrounding USGS quadrangles (CNPS 2019).
- SSHCP Modeled Species Habitat for the Study Area.

2.2 Special-Status Plants Considered for the Project

Based on species occurrence information from the CNDDB, the literature review, and general site knowledge, a list of special-status plant species that are known to occur or have the potential to occur within the survey area was generated (Attachment A). Only special-status plants as defined in Section 1.2 were included in this analysis. Each of these species' potential to occur within the survey area was assessed based on the following criteria:

- **Present** - Species was previously observed during field surveys or is known to occur within the Study Area based on documented occurrences within the CNDDB, SSHCP, or other literature.
- **Potential to Occur** - Habitat (including soils and elevation requirements) for the species occurs within the Study Area based on site assessment, literature research, or SSHCP Modeled Species Habitat data.
- **Low Potential to Occur** - Marginal or limited amounts of habitat occur, and/or the species is not known to occur within the vicinity of the Study Area based on CNDDB records and other available documentation. This designation is only used for species that are not SSHCP Covered Species.
- **Absent** - No suitable habitat (including soils and elevation requirements) and/or the species is not known to occur within the vicinity of the Study Area based on CNDDB records and other documentation and SSHCP Modeled Species Habitat data does not indicate that habitat for the species occurs within the site.

2.3 Target Species

Based on the analysis of potentially occurring special-status plant species for the survey area, the plants listed in Table 2 were considered to be the Target List for this survey effort. Species determined to be Absent are not included in the target list.

Table 2. Target Species for Special-Status Plant Survey

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Stinkbells (Fritillaria agrestis)	-	-	4.2	Clay and sometimes serpentinite soils in chaparral, cismontane woodland, Pinyon and juniper woodland, and Valley and foothill grassland (33' - 5,102').	March–June	Potential to Occur. Valley grassland represents suitable habitat.
Boggs Lake hedge–hyssop (Gratiola heterosepala)	–	CE	1B.2, SSHCP Covered Species	Marshes, swamps, lake margins, and vernal pools (33'–7,792').	April–August	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Ahart's dwarf rush (Juncus leiospermus var. ahartii)	–	–	1B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland. Species has an affinity for slight disturbance such as farmed fields (USFWS 2005a) (98'–751').	March–May	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Legenere (Legenere limosa)	–	–	1B.1, SSHCP Covered Species	Various seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005b) (3'–2,887').	April–June	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Slender Orcutt grass (Orcuttia tenuis)	FT	CE	1B.1, SSHCP Covered Species	Vernal pools, often gravelly (115'–5,774').	May–September	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Sacramento Orcutt grass (Orcuttia viscida)	FE	CE	1B.1, SSHCP Covered Species	Vernal pools (98'–328').	April–July	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Sanford's arrowhead (Sagittaria sanfordii)	–	–	1B.2, SSHCP Covered Species	Shallow marshes and freshwater swamps (0'–2,133').	May–October	Potential to Occur. SSHCP Modeled Species Habitat present onsite.

Status Codes:

ESA	Endangered Species Act
CESA	California Endangered Species Act
FE	ESA listed, Endangered
FT	ESA listed, Threatened
1B	California Rare Plant Ranks (CRPRs)/Rare or Endangered in California and elsewhere.
2B	CRPR /Rare or Endangered in California, more common elsewhere.
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

2.4 Reference Site Visits

Reference populations, where available, for the seven target species were visited to assess bloom phenology and to observe species morphology. When reference populations were not available, photographs from Calflora (Calflora 2019) and *The Jepson Manual: Vascular Plants of California, Second Edition* (Baldwin et al. 2012) were used as a reference. Attachment B identifies the reference source for each of the target species including the location of the population, dates of visits, and phenological stage of the species at the time of the field visits.

2.5 Field Surveys

Determinate-level field surveys were conducted in accordance with SSHCP Avoidance and Minimization Measures PLANT-1 and ORCUTT-1, as well as guidelines promulgated by USFWS (USFWS 2000), CDFW (CDFW 2018), and CNPS (CNPS 2001). The special-status plant surveys were conducted on April 29, 2019 and June 13, 2019 by ECORP biologist Casey Peters and Benjamin Waitman. A list of field personnel qualifications is included as Attachment C. The surveys coincided with the optimum identifiable periods for each of the target species.

Within the Project, Morrison Creek Offsite, and North Douglas Offsite, the biologists walked meandering transects to ensure complete coverage of all suitable habitat for all target species. The Rio del Oro Offsite and Raymer Way Offsite were assessed to the degree possible from accessible areas (i.e. within the Project and along roads), but transects across these offsites were not surveyed.

A complete plant list of all plants observed during the surveys was generated (Attachment D). All species were identified to the lowest possible taxonomic level required to assess rarity. Plant species identification, nomenclature, and taxonomy followed *The Jepson Manual* (Baldwin et al. 2012). Vegetation community classification was based on the classification systems presented in *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009).

3.0 EXISTING SITE CONDITIONS

The Study Area is situated at an elevation range between approximately 200 and 250 feet above mean sea level (MSL) in Rancho Cordova, California. The Study Area is located in the Great Valley region, Sacramento Valley subregion of the California Floristic Province (Baldwin et al. 2012). This region is characterized by agricultural areas, grasslands, wetlands, and valley oaks (Baldwin et al. 2012). The average annual precipitation for the region is 36.9 inches (with the wettest period during November-March), and average daily temperatures range from 47.7˚F in winter to 73.8˚F in summer (National Oceanic and Atmospheric Administration [NOAA] 2018).

The Study Area is characterized by flat to gently rolling terrain and consists primarily of grazed annual grasslands with two residences and other outbuildings. A private road, sometimes identified as Douglas Road, leads from south of the Study Area into the two residences. The Study Area is located within the USFWS Mather Core Area (USFWS 2005a). Core Areas are areas prioritized for the conservation and recovery of threatened and endangered vernal pool species.

3.1 Land Cover Types

SSHCP land cover data within the Study Area were reviewed and field-revised as needed. Revised land cover types are shown in Figure 2. More information on land cover types is provided in the Biological Resources Assessment for the Project (ECORP 2019).

3.1.1 Terrestrial Land Cover Types

The Study Area primarily contains the Valley Grassland SSHCP land cover type. The Study Area also contains Low Density Development and a small amount of Disturbed and Major Roads land cover.

Valley Grassland

The Valley Grassland land cover type is predominantly characterized by non-native (naturalized) annual grasses. Within the Study Area, the common plant species found in Valley Grassland are a mixture of nonnative annual grasses, including medusahead grass (*Elymus caput-medusae*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), and brome fescue (*Festuca bromoides*). Narrow tarplant (*Holocarpha virgata*), a native perennial forb, is also common in this land cover type within the Study Area.

Low Density Development

The Low Density Development land cover type consists of existing homesteads including buildings/structures and horticultural trees.

Disturbed/Major Roads

The Disturbed and Major Roads land cover types consists of sections of paved road within the Study Area.

3.1.2 Aquatic Land Cover Types

An aquatic resources delineation was conducted for the Study Area, in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008).

A discussion of the aquatic resources found onsite is presented below, and Figure 2 includes aquatic land cover types (field delineation was used to revise the SSHCP baseline land cover data for aquatic resources).

Vernal Pool

Vernal pools are seasonal ephemeral wetlands that fill and dry each year, forming in shallow depressions within Valley Grassland that are underlaid by an impermeable layer (e.g. a hardpan). Water collects in the depressions during the winter rainy season and recedes during the spring. Soils typically remain moist until late spring before becoming desiccated, and then remain dry throughout the summer. Vernal pools provide habitat for several special-status species, including invertebrates, plants, and amphibians.

Vernal pools occur throughout the Study Area. These features are variously dominated by Great Valley button-celery (*Eryngium castrense*), stalked popcorn flower (*Plagiobothrys stipitatus*), woolly marbles (*Psilocarphus brevissimus*), Mediterranean barley (*Hordeum marinum*), waxy mannagrass (*Glyceria declinata*), hairy hawkbit (*Leontodon saxatilis*), and toad rush (*Juncus bufonius*).

Swale

Swales are shallow ephemeral drainages found in flat to gently rolling Valley Grassland in association with vernal pool complexes, on soils with an impermeable layer. Swales convey runoff as shallow, gently sloping ephemeral wetlands during and shortly after winter rainstorms, but usually maintain soil saturation for longer periods during the growing season. They typically have hydric soils and support hydrophytic vegetation but lack an ordinary high-water mark (OHWM). Swales serve as habitat for many vernal pool species and provide hydrological connections between vernal pools that allows movement/dispersal of amphibian species, plant seeds, and vernal pool invertebrates (both adults and cysts).

Swales occur throughout the Study Area, and are dominated by Italian ryegrass (*Festuca perennis*), Fitch's spikeweed (*Centromadia fitchii*), and Mediterranean barley.

Stream/Creek

The Stream/Creek land cover type includes intermittent and perennial linear water features such as rivers, streams, creeks, drainages, and roadside and irrigation ditches. These features typically exhibit a bed and bank and an OHWM. Morrison Creek is located to the north of the Study Area, and several small headwater tributaries to the creek flow through the Study Area into Morrison Creek. Stream/creek features occur throughout the Study Area, flowing north to Morrison Creek, and vary from steep, unvegetated features, to gently sloping features that are sparsely vegetated with creeping spikerush (*Eleocharis macrostachya*).

3.2 Soils

According to the *Web Soil Survey* (NRCS 2018), two soil units, or types, have been mapped within the Study Area (Figure 2. *Natural Resources Conservation Service Soil Types*):

- (159) Hicksville gravelly loam, 0 to 2 percent slopes, occasionally flooded
- (193) Red Bluff-Redding complex, 0 to 5 percent slopes

Hicksville and Red Bluff soils are formed in alluvium derived from mixed rock sources. Redding soils are formed in gravelly and cobbly alluvium derived from mixed rock sources (NRCS 2018). No soil units derived from serpentinite or other ultramafic parent materials have been reported to occur within the Study Area or its immediate vicinity (NRCS 2018). Furthermore, no apparent inclusions of ultramafic rocks or soils were observed during the field survey.

4.0 SPECIES DESCRIPTIONS

As listed in Section 2.3, seven special-status plants were considered to be target species for this survey. A description of each target species is provided in the following sections.

4.1 Stinkbells

Stinkbells (*Fritillaria agrestis*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 4.2 species. This species is a perennial bulbiferous herb that occurs in clay, sometimes serpentine areas in chaparral, cismontane woodland, pinyon and juniper woodland, and

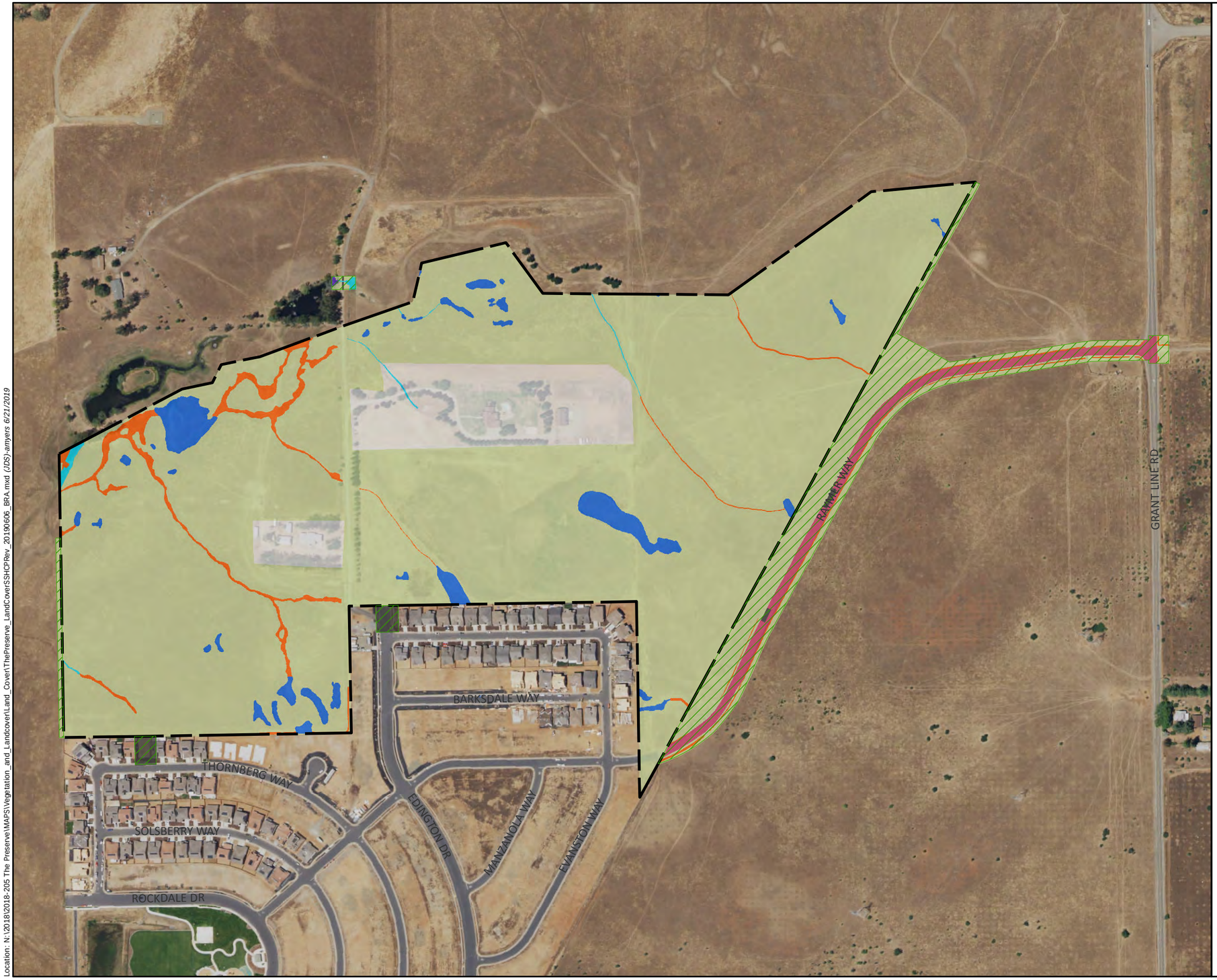


Figure 2.
The Preserve
Revised SSHCP Land Cover

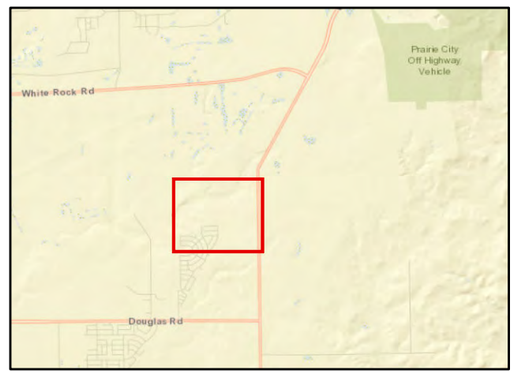
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 9.33 acres

Modified SSHCP Land Cover

- Major Roads
- Open Water
- Stream/Creek
- Swale
- Vernal Pool
- Valley Grassland
- Disturbed
- Low Density Development

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
0 400

Photo Source: 2016, NAIP
Landcover Data: SSHCP/ECORP
Base Data: RJA
165018 BNDY -WINN BINDED.dwg
165018 Base.dwg

Map Date: 6/21/2019

Valley and foothill grassland (CNPS 2019). Stinkbells bloom from March to June and is known to occur at elevations ranging from 33 to 5,102 feet above MSL (CNPS 2019). The current range of this species in California includes Alameda, Contra Costa, Fresno, Kern, Mendocino, Merced, Monterey, Mariposa, Placer, Sacramento, Santa Barbara, San Benito, Santa Clara, Santa Cruz, San Luis Obispo, San Mateo, Stanislaus, Tuolumne, Ventura, and Yuba counties, and is considered to be extirpated from Santa Cruz and San Mateo counties (CNPS 2019).

There are no documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2019). However, the grassland within the Study Area provides suitable habitat for this species. Stinkbells has potential to occur within the Study Area.

4.2 Ahart's Dwarf Rush

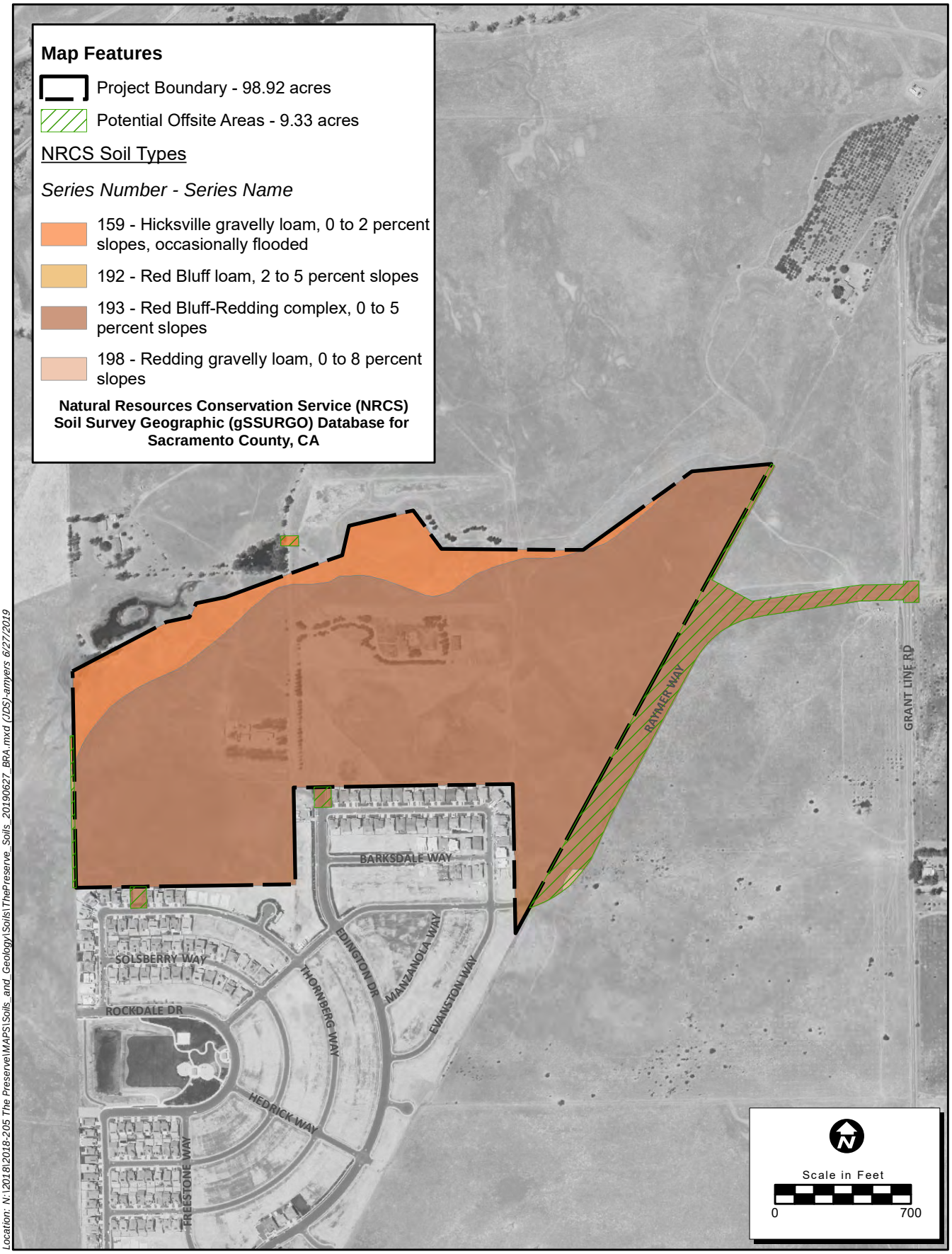
Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is an herbaceous annual that occurs in mesic areas in Valley and foothill grasslands (CNPS 2019). This species also appears to have an affinity for slight disturbance since it has been found on farmed fields and gopher turnings (USFWS 2005a). Ahart's dwarf rush blooms from March through May and is known to occur at elevations ranging from 98 to 751 feet above MSL (CNPS 2019, USFWS 2005a). Ahart's dwarf rush is endemic to California; the current range of this species includes Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba counties (CNPS 2019).

There are two documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2019). Ahart's dwarf rush is a SSHCP Covered Species, and the aquatic features and grassland within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Ahart's dwarf rush has Potential to Occur within the Study Area.

4.3 Boggs Lake Hedge-Hyssop

Boggs Lake hedge-hyssop (*Gratiola heterosepala*) is not listed pursuant to the federal ESA, but is listed as endangered pursuant to the California ESA, and a CRPR 1B.2 species. This species is an herbaceous annual that occurs in marshes, swamps, lake margins, and vernal pools (CNPS 2019). Boggs Lake hedge-hyssop blooms from April through August and is known to occur at elevations ranging from 33 to 7,792 feet above MSL (CNPS 2019). The current range of this species in California includes Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, Sonoma, and Tehama counties (CNPS 2019).

There are five documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2019). Bogg's lake hedge-hyssop is a SSHCP Covered Species, and the grassland and



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Map Date: 6/27/2019
Photo Source: 2016, NAIP

Figure 3. Natural Resources Conservation Service Soil Types

2018-205 The Preserve

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vernal pools within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Boggs lake hedge-hyssop has potential to occur within the Study Area.

4.4 Legenere

Legenere (*Legenere limosa*) is not listed pursuant to either the federal or California ESAs, but is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in a variety of seasonally inundated environments including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005b). Legenere blooms from April through June and is known to occur at elevations ranging from 3 feet to 2,887 feet above MSL (CNPS 2019). Legenere is endemic to California; the current range of this species includes Alameda, Lake, Monterey, Napa, Placer, Sacramento, Santa Clara, San Joaquin, Shasta, San Mateo, Solano, Sonoma, Stanislaus, Tehama and Yuba counties and is believed to be extirpated from Stanislaus County (CNPS 2019).

There are 10 documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2019). Legenere is a SSHCP Covered Species, and the grassland and vernal pools within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Legenere has potential to occur within the Study Area.

4.5 Sacramento Orcutt Grass

Sacramento Orcutt grass (*Orcuttia viscida*) is listed as endangered pursuant to both the federal and California ESAs, and is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in vernal pools (CNPS 2017). The median area of occupied pools discovered prior to 1988 was 0.69 acre and ranged from 0.25 to 2.03 acres (USFWS 2005a). Sacramento Orcutt grass blooms from April through September and is known to occur at elevations ranging from 98 to 328 feet above MSL (CNPS 2017). Sacramento Orcutt grass is endemic to California and to the southeastern Sacramento Valley (Keeler-Wolf et al. 1998, as cited in USFWS 2005a), with all known occurrences restricted to Sacramento County. Known occurrences of this species within the general region are limited to a small area east of Mather Field, Phoenix Field Ecological Reserve, Phoenix Park (introduced population), and an area near Rancho Seco Lake (USFWS 2005a).

There are six documented CNDDB occurrences of this species located within five miles of the Study Area (CDFW 2019). Sacramento Orcutt Grass is a SSHCP Covered Species, and the grassland and vernal pools within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Sacramento Orcutt grass has potential to occur within the Study Area.

4.6 Sanford's Arrowhead

Sanford's arrowhead (*Sagittaria sanfordii*) is not listed pursuant to the federal or California ESAs, but is designated as a CRPR 1B.2 species. This species is a rhizomatous, herbaceous perennial that occurs in shallow marshes and freshwater swamps (CNPS 2019). Sanford's arrowhead blooms from May through November and is known to occur at elevations ranging from sea level to 2,133 feet above MSL (CNPS 2019). Sanford's arrowhead is endemic to California; the current range of this species includes Butte, Del Norte, El Dorado, Fresno, Merced, Mariposa, Marin, Napa, Orange, Placer, Sacramento, San Bernardino, San Joaquin,

Shasta, Solano, Tehama, Tulare, Ventura and Yuba counties; it is believed to be extirpated from both Orange and Ventura counties (CNPS 2019).

There is one documented CNDDB occurrence of this species located within five miles of the Study Area (CDFW 2019). Sanford's arrowhead is a SSHCP Covered Species, and the grassland within the Study Area provides suitable habitat for this species according to SSHCP Modeled Species Habitat. Sanford's arrowhead has potential to occur within the Study Area.

4.7 Slender Orcutt Grass

Slender Orcutt grass (*Orcuttia tenuis*) is listed as threatened and endangered pursuant to both the federal and California ESAs, respectively, and is designated as a CRPR 1B.1 species. This species is an herbaceous annual that occurs in vernal pools (CNPS 2019) primarily on substrates of volcanic origin (Crampton 1959, Corbin and Schoolcraft 1989; as cited in USFWS 2005a). This species is known to occur in the same type of vernal pool complexes as Sacramento Orcutt grass in Sacramento County; however, these species have not been observed co-existing in the same vernal pool (USFWS 2005a). The median area of pools occupied by populations studied by Stone et al. (1988, as cited in USFWS 2005a) was 1.6 acres and ranged from 0.2 to 111.0 acres (USFWS 2005a). Slender Orcutt grass blooms from May through October and is known to occur at elevations ranging from 115 to 5,774 feet above MSL (CNPS 2019). Slender Orcutt grass is endemic to California; the current range for this species includes Butte, Lake, Lassen, Modoc, Plumas, Sacramento, Shasta, Siskiyou, and Tehama counties (CNPS 2019).

There is one documented CNDDB occurrence of this species located within five miles of the Study Area (CDFW 2019). Slender Orcutt grass is a SSHCP Covered Species, and the grassland and vernal pools within the Study Area provide suitable habitat for this species according to SSHCP Modeled Species Habitat. Slender Orcutt grass has potential to occur within the Study Area.

5.0 RESULTS

ECORP conducted special-status plant surveys on April 29, 2019 and June 13, 2019 within the Study Area. The Rio del Oro Offsite and Raymer Way Offsite were assessed to the degree possible from accessible areas, but transects across these offsites were not surveyed. No special-status plant species were observed during the special-status plant surveys. However, the Raymer Way Offsite was not accessible for a complete survey, and the grassland within this offsite may represent potential habitat for stinkbells and Ahart's dwarf rush.

White-headed navarretia (*Navarretia leucocephala*) was observed within the Project. White-headed navarretia is a common species with no special status, but is difficult to distinguish from pincushion navarretia (*Navarretia myersii*), which has a CRPR of 1B.1 and is an SSHCP Covered Species. While pincushion navarretia was not considered a target species for the surveys because no SSHCP Modeled Species Habitat was mapped within the Study Area, ECORP consulted with experts at the University of California, Davis Herbarium, and identification of the species as white-headed navarretia was confirmed based on the following characteristics:

- Stems greater than 2.5cm
- Sparseness of puberulent hairs on the calyx
- Flower tubes shorter than typical for pincushion navarretia

- Inflorescence is a tightly packed cyme, rather than a true head

6.0 CONCLUSION

No special-status plant species were documented within the Project or publicly accessible portions of the Offsites. However, there is potential for stinkbells and Ahart's dwarf rush to occur in unsurveyed areas of the Raymer Way Offsite.

While the SSHCP Modeled Species Habitat was used to determine the target species list for this survey, the survey was comprehensive and included identification of each species encountered.

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Attachment A – Full Species Search Table

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ATTACHMENT A

Full Species Search Table

Attachment A. Special-Status Plant Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Plants						
Ione Manzanita *(Arctostaphylos myrtifolia)*	FT	-	1B.2	Chaparral and cismontane woodlands associated with very acidic, nutrient-poor, coarse soils typical of the Ione Formation (196'–1,903').	November–March	Absent. Suitable habitat not present onsite.
Brewer's calandrinia *(Calandrinia breweri)*	–	–	4.2	Sandy or loamy soils, disturbed sites, and burns within chaparral and coastal scrub (33'–4,003').	March–June	Absent. Suitable habitat not present onsite.
Pine Hill ceanothus *(Ceanothus roderickii)*	FE	CR	1B.1	Rocky serpentinite or gabbroic soil in chaparral and cismontane woodland (804'–3,576').	April–June	Absent. Suitable habitat not present onsite.
Red Hills soaproot *(Chlorogalum grandiflorum)*	–	–	1B.2	Serpentinite or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest, occasionally on non–ultramafic soils (804'–5,545').	May–June	Absent. Suitable habitat not present onsite.
Brandegee's clarkia *(Clarkia biloba* ssp. *brandegeeae)*	-	-	4.2	Chaparral, cismontane woodlands, and lower montane coniferous forest often along roadcuts (246' - 3,002').	May–July	Absent. Suitable habitat not present onsite.
Bisbee Peak rush–rose *(Crocanthemum suffrutescens)*	–	–	3.2	Often gabbroic or Ione soil or in burned or disturbed areas within chaparral (246'–2,198').	April–August	Absent. Suitable habitat not present onsite.
Dwarf downingia *(Downingia pusilla)*	–	–	2B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland, and vernal pools. Species appears to have an affinity for slight disturbance (i.e., scraped depressions, ditches, etc.) (Baldwin et al. 2012, CDFW 2018) (3'–1,460').	March–May	Absent. No SSHCP Modeled Species Habitat onsite.
Ione Buckwheat *(Eriogonum apricum* var. *apricum)*	FE	CE	1B.1	Openings in chaparral communities found on Ione soils (197'–476').	July–October	Absent. Suitable habitat not present onsite.
Irish Hill Buckwheat *(Eriogonum apricum* var. *prostratum)*	FE	CE	1B.1	Openings in chaparral communities found on Ione soils (295'–394').	June–July	Absent. Suitable habitat not present onsite.
Jepson's woolly sunflower *(Eriophyllum jepsonii)*	–	–	4.3	Chaparral, cismontane woodland, and coastal scrub, sometimes on serpentinite (656'–3,363').	April–June	Absent. Suitable habitat not present onsite.

Attachment A. Special-Status Plant Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Tuolumne Button–celery *(Eryngium pinnatisectum)*	–	–	1B.2	Vernal pools and other mesic conditions in cismontane woodland and lower montane coniferous forests (230'–3,002').	May–August	Absent. Suitable habitat not present onsite.
Pine Hill flannelbush *(Fremontodendron decumbens)*	FE	CR	1B.2	Serpentine or gabbro rock outcrops in chaparral and cismontane woodland (1,394'–2,493').	April–July	Absent. Suitable habitat not present onsite.
Stinkbells *(Fritillaria agrestis)*	-	-	4.2	Clay and sometimes serpentinite soils in chaparral, cismontane woodland, Pinyon and juniper woodland, and Valley and foothill grassland (33' - 5,102').	March–June	Potential to Occur. Valley grassland represents suitable habitat.
El Dorado bedstraw *(Galium californicum* ssp. *sierrae)*	FE	CR	1B.2	Gabbroic soil in chaparral, cismontane woodland and lower montane coniferous forest communities (328'–1,919').	May–June	Absent. Suitable habitat not present onsite.
Boggs Lake hedge–hyssop *(Gratiola heterosepala)*	–	CE	1B.2, SSHCP Covered Species	Marshes, swamps, lake margins, and vernal pools (33'–7,792').	April–August	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Parry's horkelia *(Horkelia parryi)*	–	–	1B.2	Ione and other soil formations in chaparral and cismontane woodlands (262'–3,510').	April–September	Absent. Suitable habitat not present onsite.
Ahart's dwarf rush *(Juncus leiospermus* var. *ahartii)*	–	–	1B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland. Species has an affinity for slight disturbance such as farmed fields (USFWS 2005) (98'–751').	March–May	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Legenere *(Legenere limosa)*	–	–	1B.1, SSHCP Covered Species	Various seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005) (3'–2,887').	April–June	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Hoary navarretia *(Navarretia eriocephala)*	-	-	4.3	Vernally mesic areas in cismontane woodland and Valley and foothill grassland (345' - 1,312').	May-June	Absent. Suitable habitat not present onsite.
Pincushion navarretia *(Navarretia myersii* ssp. *myersii)*	–	–	1B.1, SSHCP Covered Species	Often acidic soils in vernal pools (66'–1,083').	April–May	Absent. No SSHCP Modeled Species Habitat onsite.

Attachment A. Special-Status Plant Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Slender Orcutt grass *(Orcuttia tenuis)*	FT	CE	1B.1, SSHCP Covered Species	Vernal pools, often gravelly (115'–5,774').	May–September	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Sacramento Orcutt grass *(Orcuttia viscida)*	FE	CE	1B.1, SSHCP Covered Species	Vernal pools (98'–328').	April–July	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Layne's ragwort (*Packera layneae*)	FT	CR	1B.2	Rocky serpentinite or gabbroic soil in chaparral and cismontane woodland communities (656'–3,560').	April–August	Absent. Suitable habitat not present onsite.
Sanford's arrowhead *(Sagittaria sanfordii)*	–	–	1B.2, SSHCP Covered Species	Shallow marshes and freshwater swamps (0'–2,133').	May–October	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
El Dorado County Mule Ears *(Wyethia reticulata)*	–	–	1B.2	Clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest communities (607'–2,067').	April–August	Absent. Suitable habitat not present onsite.

Status Codes:

AMM	SSHCP Avoidance and Minimization Measure
ESA	Endangered Species Act
CESA	California Endangered Species Act
FE	ESA listed, Endangered.
FT	ESA listed, Threatened.
CE	CESA or NPPA listed, Endangered.
CR	CESA- or NPPA-listed, Rare.
CT	CESA or NPPA listed, Threatened.
CC	Candidate for CESA listing as Endangered or Threatened.
SSHCP	South Sacramento Habitat Conservation Plan
1B	California Rare Plant Ranks (CRPRs)/Rare or Endangered in California and elsewhere.
2B	CRPR /Rare or Endangered in California, more common elsewhere.
2	CRPR /Rare or Endangered in California, more common elsewhere.
4	CRPR /Plants of Limited Distribution - A Watch List.
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Threat Rank/Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

ATTACHMENT B

Target Species Reference Source

Target Species Reference Source[1]				
Name	Location of Observation	Dates of Observation	Phenology	Remarks
Stinkbells *Fritillaria agrestis*	Calflora Website	NA	Photographs from Calflora and the Jepson manual were used as a reference as reference populations were not available.	Reference population not available.
Boggs Lake hedge-hyssop *Gratiola heterosepala*	Calflora Website	NA	Photographs from Calflora and the Jepson manual were used as a reference as reference populations were not available.	Reference population not available.
Ahart's dwarf rush *Juncus leiospermus* var. *ahartii*	Calflora Website	NA	Photographs from Calflora and the Jepson manual were used as a reference as reference populations were not available.	Reference population not available.
Legenere *Legenere limosa*	Calflora Website	NA	Photographs from Calflora and the Jepson manual were used as a reference as reference populations were not available.	Reference population not available.
Slender Orcutt grass *Orcuttia tenuis*	Calflora Website	NA	Photographs from Calflora and the Jepson manual were used as a reference as reference populations were not available.	Reference population not available.
Sacramento Orcutt grass *Orcuttia viscida*	Calflora Website	NA	Photographs from Calflora and the Jepson manual were used as a reference as reference populations were not available.	Reference population not available.
Sanford's arrowhead *Sagittaria sanfordii*	Near Rancho Cordova, Sacramento County	30 May 2019	Population vegetative, then observed in fruit	Distinctive triangular stems were noted.

[1] Calflora and/or The Jepson Manual were used as reference for any species not listed in this table.

ATTACHMENT C

Statement of Qualifications

Attachment C

Statement of Qualifications

Casey Peters, PhD

Associate Biologist, ECORP Consulting, Inc.

Casey Peters is a botanist/biologist with experience in general floristic surveys, special-status plant surveys, and restoration planning, implementation, and monitoring. Dr. Peters holds a PhD in Ecology with an emphasis in plant communities and a certificate in conservation management. He has conducted scientific research in plant communities throughout California including annual grassland, oak savannah, mixed-conifer forest, sub-alpine forest, coastal dune, coastal prairie, annual forbland, and desert plant communities. He has also taught courses in California floristics and plant ecology.

Benjamin Waitman, MS

Staff Biologist, ECORP Consulting, Inc.

Ben Waitman is a botanist/biologist with a wide range of experience conducting research and designing and managing projects throughout California and Nevada. Mr. Waitman received an M.S. in Biology from the University of Nevada and is a PhD candidate in Ecology at the University of California, Davis. He has published and presented on a variety of species of plants, animals and fungi. Mr Waitman has over 10 years of experience conducting plant surveys in California, including surveys in valley grasslands, oak woodlands, riparian woodlands, alpine meadows, and Mojave desert ecosystems. Mr. Waitman is an ISA-certified arborist and has performed numerous tree surveys.

ATTACHMENT D

Plant Species Observed On-Site (April 29 and June 13, 2018)

The Preserve Development
Plant Species Observed on April 29, 2019

Scientific Name	Common Name
ASTERACEAE	SUNFLOWER FAMILY
Agoseris heterophylla	Annual mountain dandelion
Alopecurus saccatus	Goldfields
*Carduus pycnocephalus**	Italian thistle
*Cotula coronopifolia**	Brassbuttons
*Hypochaeris glabra**	Smooth cat's-ear
*Hypochaeris radicata**	Perennial cat's-ear
Lasthenia californica	California goldfields
Lasthenia fremontii	Fremont's goldfields
Lasthenia glaberrima	Smooth goldfields
*Leontodon saxatilis**	Hairy hawkbit
Psilocarphus oregonus	Oregon woolly-heads
Psilocarphus tenellus	Slender woolly-heads
*Silybum marianum**	Milk thistle
BORAGINACEAE	BORAGE FAMILY
Plagiobothrys stipitatus	Slender popcorn-flower
BRASSICACEAE	MUSTARD FAMILY
*Capsella bursa-pastoris**	Shepherd's purse
Cardamine oligosperma	Few-seed bitter-cress
Lepidium latipes	Dwarf pepper grass
*Raphanus sativus**	Purple wild radish
CAMPANULACEAE	BELLFLOWER FAMILY
Downingia bicornuta	Double-horn downingia
CARYOPHYLLACEAE	PINK FAMILY
*Spergularia rubra**	Purple sandspurry
CYPERACEAE	SEDGE FAMILY
Eleocharis macrostachya	Creeping spikerush
CUPRESSACEAE	CYPRESS FAMILY
Sequoia sempervirens	Coast Redwood
FABACEAE	LEGUME FAMILY
Lupinus bicolor	Bicolored lupine
*Medicago polymorpha**	Bur clover
Trifolium ciliolatum	Foothill clover
*Trifolium dubium**	Shamrock clover
*Trifolium hirtum**	Rose clover
*Trifolium repens**	White clover
*Trifolium subterraneum**	Subterranean clover
Trifolium variegatum	White-tip clover
GENTIANACEAE	GENTIAN FAMILY
Cicendia quadrangularis	Oregon timwort
GERANIACEAE	GERANIUM FAMILY
*Erodium botrys**	Broad leaf filaree
*Erodium cicutarium**	Cut leaf filaree
*Geranium dissectum**	Cut-leaved geranium
HAMAMELIDACEAE	WITCH-HAZEL FAMILY
*Liquidambar styraciflua**	Sweetgum
JUNCACEAE	RUSH FAMILY
Juncus bufonius	Toad rush
Juncus effusus	Soft rush

Juncus xiphioides	Iris-leaf rush
LAMIACEAE	MINT FAMILY
*Marrubium vulgare**	Common horehound
LYTHRACEAE	LOOSESTRIFE FAMILY
*Lythrum hyssopifolia**	Hyssop loosestrife
MALVACEAE	MALLOW FAMILY
*Malva parviflora**	Cheeseweed
OROBANCHACEAE	BROOMRAPE FAMILY
Castilleja attenuata	Valley tassels
Castilleja campestris ssp. *campestris*	Field owl's-clover
PHRYMACEAE	LOPSEED FAMILY
Mimulus guttatus	Common large monkey-flower
PLANTAGINACEAE	PLANTAIN FAMILY
Gratiola ebracteata	Bractless hedgehyssop
POACEAE	GRASS FAMILY
*Aira caryophyllea**	Silver hairgrass
Alopecurus saccatus	Pacific foxtail
*Avena barbata**	Slender wild oat
*Briza minor**	Little quaking grass
*Bromus diandrus**	Ripgut brome
*Bromus hordeaceus**	Soft brome
Deschampsia danthonioides	Annual hairgrass
*Festuca myuros**	Rat-tail vulpia
*Festuca perennis**	Italian Ryegrass
*Glyceria declinata**	Mannagrass
Hordeum marinum ssp. *gussoneanum**	Mediterranean barley
Hordeum murinum ssp. *glaucum**	Foxtail barley
*Poa annua**	Annual bluegrass
POLEMONIACEAE	PHLOX FAMILY
Navarretia leucocephala	White-head navarretia
POLYGONACEAE	BUCKWHEAT FAMILY
*Rumex pulcher**	Fiddle dock
RANUNCULACEAE	BUTTERCUP FAMILY
Ranunculus aquatilis	White water buttercup
Ranunculus bonariensis var. *trisepalus*	Carter's buttercup
*Ranunculus muricatus**	Spiny-fruit buttercup
ROSACEAE	ROSE FAMILY
Pyrus calleryana	Callery pear
RUBIACEAE	MADDER FAMILY
Galium aparine	Common bedstraw
THEMIDACEAE	BRODIAEA FAMILY
Brodiaea elegans	Harvest brodiaea
VITACEAE	GRAPE FAMILY
Vitis vinifera	Cultivated grape

An asterisk (*) indicates a non-native species.

The Preserve Development
Plant Species Observed on June 13, 2019

Scientific Name	Common Name
ALISMATACEAE	WATER-PLANTAIN FAMILY
Alisma triviale	Broad-leaf water plantain
ANACARDIACEAE	SUMAC FAMILY
*Schinus terebinthifolius**	Brazilian pepper-tree
APIACEAE	CARROT FAMILY
Eryngium castrense	Button-celery
*Torilis arvensis**	Torilis (hedge parsley)
APOCYNACEAE	DOGBANE FAMILY
Asclepias fascicularis	Narrow-leaf milkweed
ASTERACEAE	SUNFLOWER FAMILY
*Carduus pycnocephalus**	Italian thistle
*Centaurea solstitialis**	Yellow star-thistle
Centromadia fitchii	Fitch's spikeweed
*Cotula coronopifolia**	Brassbuttons
Heliotropium curassavicum	Seaside heliotrope
Holocarpha virgata	Sticky tarweed
*Lactuca serriola**	Prickly lettuce
*Leontodon saxatilis**	Hairy hawkbit
Pseudognaphalium californicum	Everlasting
Psilocarphus oregonus	Oregon woolly-heads
*Senecio vulgaris**	Common groundsel
Stephanomeria virgata	Rod wirelettuce
BRASSICACEAE	MUSTARD FAMILY
*Capsella bursa-pastoris**	Shepherd's purse
*Hirschfeldia incana**	Shortpod mustard
*Raphanus sativus**	Purple wild radish
CARYOPHYLLACEAE	PINK FAMILY
*Spergularia rubra**	Purple sandspurry
CHENOPODIACEAE	GOOSEFOOT FAMILY
*Chenopodium album**	White goosefoot
CONVOLVULACEAE	MORNING-GLORY FAMILY
*Convolvulus arvensis**	Field bindweed
CUPRESSACEAE	CYPRESS FAMILY
Sequoia sempervirens	Redwood
CYPERACEAE	SEDGE FAMILY
Cyperus eragrostis	Tall flatsedge
Eleocharis macrostachya	Creeping spikerush
EUPHORBIACEAE	SPURGE FAMILY
Croton setigerus	Turkey mullein
FABACEAE	LEGUME FAMILY
Acmispon americanus	American bird's foot trefoil
*Medicago polymorpha**	Bur clover
*Trifolium dubium**	Shamrock clover
*Trifolium hirtum**	Rose clover
*Vicia sativa**	Common vetch
*Vicia villosa**	Winter vetch
GENTIANACEAE	GENTIAN FAMILY
Zeltnera muehlenbergii	Muhlenberg's centaury
GERANIACEAE	GERANIUM FAMILY
*Erodium cicutarium**	Cut leaf filaree

*Erodium moschatum**	White stemmed filaree
HAMAMELIDACEAE	WITCH-HAZEL FAMILY
*Liquidambar styraciflua**	Liquidambar
JUNCACEAE	RUSH FAMILY
Juncus bufonius	Toad rush
Juncus effusus	Soft rush
Juncus xiphioides	Iris-leaf rush
LAMIACEAE	MINT FAMILY
Trichostema lanceolatum	Vinegar weed
LYTHRACEAE	LOOSESTRIFE FAMILY
*Lythrum portula**	Broad-leaved loosestrife
MALVACEAE	MALLOW FAMILY
*Malva parviflora**	Cheeseweed
MARSILEACEAE	MARSILEA FAMILY
Marsilea vestita	Hairy water fern
MYRTACEAE	MYRTLE FAMILY
*Eucalyptus polyanthemos**	Silver dollar gum
ONAGRACEAE	EVENING PRIMROSE FAMILY
Epilobium brachycarpum	Panicled willow-herb
Epilobium campestre	Smooth spike primrose
OROBANCHACEAE	BROOMRAPE FAMILY
*Parentucellia viscosa**	Yellow parentucellia
PLANTAGINACEAE	PLANTAIN FAMILY
*Plantago coronopus**	Cut-leaf plantain
*Plantago lanceolata**	English plantain
POACEAE	GRASS FAMILY
*Aegilops triuncialis**	Barbed goatgrass
*Aira caryophyllea**	Silver hairgrass
Alopecurus saccatus	Pacific foxtail
*Avena barbata**	Slender wild oat
*Briza minor**	Little quaking grass
*Bromus tectorum**	Cheatgrass
*Cynodon dactylon**	Bermuda grass
*Elymus caput-medusae**	Medusahead grass
*Festuca myuros**	Rat-tail vulpia
*Festuca perennis**	Italian Ryegrass
Hordeum marinum ssp. *gussoneanum**	Mediterranean barley
*Hordeum murinum**	Foxtail barley
*Polypogon monspeliensis**	Annual rabbit-foot grass
*Triticum aestivum**	Cultivated wheat
POLYGONACEAE	BUCKWHEAT FAMILY
Polygonum aviculare ssp. *depressum*	Prostrate knotweed
*Rumex crispus**	Curly dock
SALICACEAE	WILLOW FAMILY
Salix exigua	Sandbar willow
SOLANACEAE	NIGHTSHADE FAMILY
Datura wrightii	Sacred thornapple
Nicotiana attenuata	Coyote tobacco
Solanum americanum	Nightshade
Solanum rostratum	Buffalobur nightshade
THEMIDACEAE	BRODIAEA FAMILY
Brodiaea elegans	Harvest brodiaea
VITACEAE	GRAPE FAMILY
Vitis vinifera	Cultivated grape
ZYGOPHYLLACEAE	CALTROP FAMILY

*Tribulus terrestris**	Puncture vine

An asterisk (*) indicates a non-native species.

ATTACHMENT E

Special-Status Species Evaluated for the Study Area

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Plants						
Ione Manzanita *(Arctostaphylos myrtifolia)*	FT	-	1B.2	Chaparral and cismontane woodlands associated with very acidic, nutrient-poor, coarse soils typical of the Ione Formation (196'–1,903').	November–March	Absent. Suitable habitat not present onsite.
Brewer's calandrinia *(Calandrinia breweri)*	–	–	4.2	Sandy or loamy soils, disturbed sites, and burns within chaparral and coastal scrub (33'–4,003').	March–June	Absent. Suitable habitat not present onsite.
Pine Hill ceanothus *(Ceanothus roderickii)*	FE	CR	1B.1	Rocky serpentinite or gabbroic soil in chaparral and cismontane woodland (804'–3,576').	April–June	Absent. Suitable habitat not present onsite.
Red Hills soaproot *(Chlorogalum grandiflorum)*	–	–	1B.2	Serpentinite or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest, occasionally on non–ultramafic soils (804'–5,545').	May–June	Absent. Suitable habitat not present onsite.
Brandegee's clarkia *(Clarkia biloba* ssp. *brandegeeae)*	-	-	4.2	Chaparral, cismontane woodlands, and lower montane coniferous forest often along roadcuts (246' - 3,002').	May–July	Absent. Suitable habitat not present onsite.
Bisbee Peak rush–rose *(Crocanthemum suffrutescens)*	–	–	3.2	Often gabbroic or Ione soil or in burned or disturbed areas within chaparral (246'–2,198').	April–August	Absent. Suitable habitat not present onsite.
Dwarf downingia *(Downingia pusilla)*	–	–	2B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland, and vernal pools. Species appears to have an affinity for slight disturbance (i.e., scraped depressions, ditches, etc.) (Baldwin et al. 2012, CDFW 2018) (3'–1,460').	March–May	Absent. No SSHCP Modeled Species Habitat onsite.
Ione Buckwheat *(Eriogonum apricum* var. *apricum)*	FE	CE	1B.1	Openings in chaparral communities found on Ione soils (197'–476').	July–October	Absent. Suitable habitat not present onsite.
Irish Hill Buckwheat *(Eriogonum apricum* var. *prostratum)*	FE	CE	1B.1	Openings in chaparral communities found on Ione soils (295'–394').	June–July	Absent. Suitable habitat not present onsite.
Jepson's woolly sunflower *(Eriophyllum jepsonii)*	–	–	4.3	Chaparral, cismontane woodland, and coastal scrub, sometimes on serpentinite (656'–3,363').	April–June	Absent. Suitable habitat not present onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Tuolumne Button–celery *(Eryngium pinnatisectum)*	–	–	1B.2	Vernal pools and other mesic conditions in cismontane woodland and lower montane coniferous forests (230'–3,002').	May–August	Absent. Suitable habitat not present onsite.
Pine Hill flannelbush *(Fremontodendron decumbens)*	FE	CR	1B.2	Serpentine or gabbro rock outcrops in chaparral and cismontane woodland (1,394'–2,493').	April–July	Absent. Suitable habitat not present onsite.
Stinkbells *(Fritillaria agrestis)*	-	-	4.2	Clay and sometimes serpentinite soils in chaparral, cismontane woodland, Pinyon and juniper woodland, and Valley and foothill grassland (33' - 5,102').	March–June	Absent within Project. Special-status plant surveys did not detect this species. Potential to Occur within Raymer Way Offsite; Valley grassland represents suitable habitat.
El Dorado bedstraw *(Galium californicum* ssp. *sierrae)*	FE	CR	1B.2	Gabbroic soil in chaparral, cismontane woodland and lower montane coniferous forest communities (328'–1,919').	May–June	Absent. Suitable habitat not present onsite.
Boggs Lake hedge–hyssop *(Gratiola heterosepala)*	–	CE	1B.2, SSHCP Covered Species	Marshes, swamps, lake margins, and vernal pools (33'–7,792').	April–August	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Parry's horkelia *(Horkelia parryi)*	–	–	1B.2	Ione and other soil formations in chaparral and cismontane woodlands (262'–3,510').	April–September	Absent. Suitable habitat not present onsite.
Ahart's dwarf rush *(Juncus leiospermus* var. *ahartii)*	–	–	1B.2, SSHCP Covered Species	Mesic areas in valley and foothill grassland. Species has an affinity for slight disturbance such as farmed fields (USFWS 2005a) (98'–751').	March–May	Absent within Project. Special-status plant surveys did not detect this species. Small amounts of SSHCP Modeled Species Habitat present within unsurveyed Raymer Way Offsites.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Legenere *(Legenere limosa)*	–	–	1B.1, SSHCP Covered Species	Various seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005b) (3'–2,887').	April–June	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Hoary navarretia *(Navarretia eriocephala)*	-	-	4.3	Vernally mesic areas in cismontane woodland and Valley and foothill grassland (345' - 1,312').	May-June	Absent. Suitable habitat not present onsite.
Pincushion navarretia *(Navarretia myersii* ssp. *myersii)*	–	–	1B.1, SSHCP Covered Species	Often acidic soils in vernal pools (66'–1,083').	April–May	Absent. No SSHCP Modeled Species Habitat onsite.
Slender Orcutt grass *(Orcuttia tenuis)*	FT	CE	1B.1, SSHCP Covered Species	Vernal pools, often gravelly (115'–5,774').	May–September	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Sacramento Orcutt grass *(Orcuttia viscida)*	FE	CE	1B.1, SSHCP Covered Species	Vernal pools (98'–328').	April–July	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
Layne's ragwort (*Packera layneae*)	FT	CR	1B.2	Rocky serpentinite or gabbroic soil in chaparral and cismontane woodland communities (656'–3,560').	April–August	Absent. Suitable habitat not present onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Sanford's arrowhead *(Sagittaria sanfordii)*	–	–	1B.2, SSHCP Covered Species	Shallow marshes and freshwater swamps (0'–2,133').	May–October	Absent. Special-status plant surveys did not detect this species. Field surveys have determined that there is no habitat present for this species within the unsurveyed Raymer Way Offsite.
El Dorado County Mule Ears *(Wyethia reticulata)*	–	–	1B.2	Clay or gabbroic soils in chaparral, cismontane woodland, and lower montane coniferous forest communities (607'–2,067').	April–August	Absent. Suitable habitat not present onsite.
Invertebrates						
Conservancy fairy shrimp (*Branchinecta conservatio)*	FE	-	-	Vernal pools/wetlands.	November–April	Potential to Occur within vernal pool habitat onsite.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	-	SSHCP Covered Species	Vernal pools/wetlands.	November-April	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Midvalley fairy shrimp *(Branchinecta mesovallensis)*	-	-	CNDDB, SSHCP Covered Species	Vernal pools/wetlands.	November – April	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	-	SSHCP Covered Species	Elderberry shrubs.	Any season	Absent. No SSHCP Modeled Species Habitat onsite.
Ricksecker's water scavenger beetle *Hydochara rickseckeri*	-	-	SSHCP Covered Species	Vernal pools/wetlands.		Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	-	SSHCP Covered Species	Vernal pools/wetlands.	November-April	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Fish						
Delta smelt (*Hypomesus transpacificus*)	FT	CE	-	Sacramento-San Joaquin delta		Absent. Suitable habitat not present onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Steelhead (CA Central Valley DPS) (*Oncorhynchus mykiss irideus*)	FT	-	-	Undammed rivers, streams, and creeks		Absent. Suitable habitat not present onsite.
Amphibians						
California tiger salamander (Central California DPS) (*Ambystoma californiense*)	FT	CT	SSC, SSHCP Covered Species	Vernal pools, wetlands (breeding) and adjacent grassland or oak woodland; needs underground refuge (e.g., ground squirrel and/or gopher burrows). Largely terrestrial as adults.	March-May	Absent. No SSHCP Modeled Species Habitat onsite.
California red-legged frog (*Rana draytonii*)	FT	-	SSC	Lowlands or foothills at waters with dense shrubby or emergent riparian vegetation. Adults must have aestivation habitat to endure summer dry down.		Absent. Suitable habitat not present onsite.
Foothill yellow-legged frog (*Rana boylii*)	-	CC	SSC	Foothill yellow-legged frogs can be active all year in warmer locations, but may become inactive or hibernate in colder climates. At lower elevations, foothill yellow-legged frogs likely spend most of the year in or near streams. Adult frogs, primarily males, will gather along main-stem rivers during spring to breed.	May–October	Absent. Suitable habitat not present onsite.
Western spadefoot (*Spea hammondii*)	-	-	SSC, SSHCP Covered Species	California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March-May	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Reptiles						
Giant garter snake (*Thamnophis gigas*)	FT	CT	SSHCP Covered Species	Freshwater ditches, sloughs, and marshes in the Central Valley. Almost extirpated from the southern parts of its range.	April-October	Absent. No SSHCP Modeled Species Habitat onsite.
Western pond turtle (*Actinemys marmorata*)	-	-	SSC, SSHCP Covered Species	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April-September	Potential to Occur. No SSHCP Modeled Species Habitat present; however, ponded areas in Morrison Creek represent potential habitat.
Birds						

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Bald eagle (*Haliaeetus leucocephalus)*	Delisted	CE	CFP, BCC	Typically nests in forested areas near large bodies of water in the northern half of California; nest in trees and rarely on cliffs; wintering habitat includes forest and woodland communities near water bodies (e.g. rivers, lakes), wetlands, flooded agricultural fields, open grasslands	February–September (nesting); October-March (wintering)	Absent. Suitable habitat not present onsite.
Bank swallow (*Riparia riparia*)	-	CT	-	Nests colonially along coasts, rivers, streams, lakes, reservoirs, and wetlands in vertical banks, cliffs, and bluffs in alluvial, friable soils. May also nest in sand, gravel quarries and road cuts. In California, breeding range includes northern and central California.	May–July	Absent. Suitable habitat not present onsite.
Burrowing owl *(Athene cunicularia)*	-	-	BCC, SSC, SSHCP Covered Species	Nests in burrows or burrow surrogates in open, treeless, areas within grassland, steppe, and desert biomes. Often with other burrowing mammals (e.g. prairie dogs, California ground squirrels). May also use human-made habitat such as agricultural fields, golf courses, cemeteries, roadside, airports, vacant urban lots, and fairgrounds.	February-August	Present. SSHCP Modeled Species Habitat present onsite, and evidence of burrow use onsite observed during survey conducted per SSHCP AMM WBO-1.
California black rail (*Laterallus jamaicensis coturniculus*)	-	CT	BCC, CFP	Salt marsh, shallow freshwater marsh, wet meadows, and flooded grassy vegetation. In California, primarily found in coastal and Bay-Delta communities, but also in Sierran foothills (Butte, Yuba, Nevada, Placer counties)	March–September (breeding)	Absent. Suitable habitat not present onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
California spotted owl *(Strix occidentalis occidentalis)*	-	-	BCC, SSC	Found in the southern Cascade Range and northern Sierra Nevada from Pit River, Shasta Co. south to Tehachapi Mountains, Kern Co, in the coastal ranges from Monterey Co. to Santa Barbara Co., in Transverse and Peninsular Ranges south to northern Baja California. At lower elevations, they breed in hardwood forests and coniferous forests at higher elevations. They use forests with greater complexity and structure.	March–September (breeding)	Absent. Suitable habitat not present onsite.
California thrasher (*Toxostoma redivivum*)	-	-	SSC	Resident and endemic to coastal and Sierra Nevada-Cascade foothill areas of California. Nests are usually well hidden in dense shrubs, including scrub oak, California lilac, and chamise.	February–July	Absent. Suitable habitat not present onsite.
Clark's grebe (*Aechmophorus clarkia*)	-	-	BCC	The breeding range of Clark's grebe includes all of California with major breeding areas such as Eagle Lake (Lassen County), Clear Lake (Lake County), Lake Almanor (Plumas County), Bridgeport Reservoir (Butte County), and Goose Lake (Modoc County). Clark's grebe occurs seasonally in suitable wetland habitat with a preference for large lakes. Clarke's grebe is a diving bird that forages primarily under water.	January–December	Absent. Suitable habitat not present onsite.
Cooper's hawk *(Accipiter cooperii)*	-	-	CDFW WL, SSHCP Covered Species	Nests in trees in riparian woodlands in deciduous, mixed and evergreen forests, as well as urban landscapes	March-July	Absent. No SSHCP Modeled Species Habitat onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Double-crested cormorant *(Phalacrocorax auritus)*	-	-	CDFW WL	Nests near ponds, lakes, artificial impoundments, slow-moving rivers, lagoons, estuaries, and open coastlines and typically forages in shallow water. Non-nesters are found in many coastal and inland waters.	April–August	Absent. Suitable habitat not present onsite.
Ferruginous hawk (*Buteo regalis*)	-	-	BCC, CDFW WL, SSHCP Covered Species	Rarely breeds in California (Lassen County); winter range includes grassland and shrubsteppe habitats from Northern California (except northeast and northwest corners) south to Mexico and east to Oklahoma, Nebraska, and Texas.	September-March (wintering)	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Golden eagle (*Aquila chrysaetos*)	-	-	BCC, CFP	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/savannah, and chaparral. Nesting occurs on cliff ledges, river banks, trees, and human-made structures (e.g. windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during Winter.	Nest (February–August); winter CV (October–February)	Potential to Occur. Winter foraging habitat present.
Grasshopper sparrow (*Ammodramus savannarum*)	-	-	SSC	In California, breeding range includes most coastal counties south to Baja California; western Sacramento Valley and western edge of Sierra Nevada region. Nests in moderately open grasslands and prairies with patchy bare ground. Avoids grasslands with extensive shrub cover; more likely to occupy large tracts of habitat than small fragments; removal of grass cover by grazing often detrimental.	May–August	Potential to Occur. Nesting habitat present.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Great blue heron (*Ardea herodias*)	-	-	CNDDB	Colonial nester; prefers to nest in vegetation on islands or in swamps but may also be found in upland habitats in trees, bushes, on the ground and on artificial structures. Foraging habitat is widely diverse and includes swamps, coastlines, estuaries, beaches, pastures, cultivated fields, and riparian areas.	February–July	Absent. Suitable habitat not present onsite.
Great egret *(Ardea alba)*	-	-	CNDDB	Colonial nester; nests in woody vegetation, shrubs and trees usually near lakes, ponds, marshes estuaries, human-made impoundments, or natural and human-made islands.	March–July	Absent. Suitable habitat not present onsite.
Greater sandhill crane *(Antigone canadensis tabida)*	-	CT	CFP, SSHCP Covered Species	Breeds in NE California, Nevada, Oregon, Washington, and BC, Canada; winters from CA to Florida. In winter, they forage in burned grasslands, pastures, and feed on waste grain in a variety of agricultural settings (corn, wheat, milo, rice, oats, and barley), tilled fields, recently planted fields, alfalfa fields, row crops and burned rice fields.	March-August (breeding); September-March (wintering)	Absent. No SSHCP Modeled Species Habitat onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Lawrence's goldfinch (*Spinus lawrencei*)	-	-	BCC	Breeds in Sierra Nevada and inner Coast Range foothills surrounding the Central Valley and the southern Coast Range to Santa Barbara County east through southern California to the Mojave Desert and Colorado Desert into the Peninsular Range. Nests in arid and open woodlands with chaparral or other brushy areas, tall annual weed fields, and a water source (e.g. small stream, pond, lake), and to a lesser extent riparian woodland, coastal scrub, evergreen forests, pinyon-juniper woodland, planted conifers, and ranches or rural residences near weedy fields and water.	March–September	Absent. Suitable habitat not present onsite.
Lewis' woodpecker (*Melanerpes lewis*)	-	-	BCC	In California, breeds in Siskiyou and Modoc Counties, Warmer Mountains, inner coast ranges from Tehama to San Luis Obispo Counties, San Bernardino Mountains, and Big Pine Mountain (Inyo Co.); nesting habitat includes open ponderosa pine forest, open riparian woodland, logged/burned forest, and oak woodlands. Does not breed on the west side of Sierran crest (Beedy and Pandalfino 2013).	April–September (breeding); September–March (winter in Central Valley).	Absent. Suitable habitat not present onsite.
Loggerhead shrike (*Lanius ludovicianus*)	-	-	BCC, SSC, SSHCP Covered Species	Found throughout California in open country with short vegetation, pastures, old orchards, grasslands, agricultural areas, open woodlands. Not found in heavily forested habitats.	March-July	Potential to Occur. SSHCP Modeled Species Habitat present onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Merlin *(Falco columbarius)*	-	-	CDFW WL	Breeds in Oregon, Washington north into Canada. Winters in southern Canada to South America, including California. Breeds near forest openings, fragmented woodlots, and riparian areas. Wintering habitat includes wide variety, open forests, grasslands, tidal flats, plains, and urban settings.	September–April (wintering in the Central Valley); does not breed in California	Potential to Occur. Winter foraging habitat present.
Northern harrier (*Circus hudsonius*)	-	-	SSC, SSHCP Covered Species	Nests on the ground in open wetlands, marshy meadows, wet/lightly grazed pastures, (rarely) freshwater/brackish marshes, tundra, grasslands, prairies, croplands, desert, shrub-steppe, and (rarely) riparian woodland communities.	April-September	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Nuttall's woodpecker *(Picoides nuttallii)*	-	-	BCC	Resident from northern California south to Baja California. Nests in tree cavities in oak woodlands and riparian woodlands.	April–July	Absent. Suitable habitat not present onsite.
Oak titmouse (*Baeolophus inornatus*)			BCC	Nests in tree cavities within dry oak or oak-pine woodland and riparian; where oaks are absent, they nest in juniper woodland, open forests (gray, Jeffrey, Coulter, pinyon pines and Joshua tree)	March–July	Absent. Suitable habitat not present onsite.
Rufous hummingbird *(Selasphorus rufus)*	-	-	BCC, SSHCP Covered Species	Breeds in extreme northwestern California north into British Columbia and Alaska. Winters in coastal Southern California south into Mexico. Common migrant during March-April in Sierra Nevada foothills and June-August in Lower Conifer to Alpine zone of Sierra Nevada. Nesting habitat includes secondary succession communities and openings, mature forests, parks and residential area.	April–July	Absent. Suitable habitat not present onsite.
Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*)	-	-	BCC, SSC	Breeds in salt marshes of San Francisco Bay; winters San Francisco south along coast to San Diego Co.	March–July	Absent. Suitable habitat not present onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Song sparrow "Modesto" (*Melospiza melodia heermanni*)	-	-	BCC, SSC	Resident in central and southwest California, including Central Valley; nests in marsh, scrub habitat	April–June	Absent. Suitable habitat not present onsite.
Swainson's hawk (*Buteo swainsoni*)	-	CT	BCC, SSHCP Covered Species	Nesting occurs in trees in agricultural, riparian, oak woodland, scrub, and urban landscapes. Forages over grassland, agricultural lands, particularly during disking/harvesting, irrigated pastures	March-August	Potential to Occur. SSHCP Modeled Species Habitat present onsite.
Tricolored blackbird (*Agelaius tricolor*)	-	CT	BCC, SSC, SSHCP Covered Species	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta Cos south to San Bernardino, Riverside and San Diego Counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen Counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	March-August	Present. SSHCP Modeled Species Habitat present, evidence of past nesting observed during survey per SSHCP AMM TCB-1; however, species is nomadic and may not be present every year.
White-tailed kite (*Elanus leucurus*)	-	-	CFP, SSHCP Covered Species	Nesting occurs within trees in low elevation grassland, agricultural, wetland, oak woodland, riparian, savannah, and urban habitats.	March-August	Potential to Occur. SSHCP Modeled Species Habitat present onsite.

Special-Status Species Evaluated for the Study Area						
Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Wrentit (*Chamaea fasciata*)	-	-	BCC	Resident bird found along the California and Oregon coast and California Central Valley regions. Breeds in many habitats that generally have a relatively dense understory including riparian oak woodlands, Douglas fir and redwood forests, riparian willow scrub, and mixed conifer habitats. This species will also nest in and use manzanita, scrubby oaks, coastal sage scrub, California lilac, coyote bush and blackberry thickets. Wrentit prefer to stay elevated and rarely forage on the ground for sources of food, which are primarily made up of arthropods including insects and spiders as well as fruit and seeds.	March–August	Absent. Suitable habitat not present onsite.
Yellow-billed magpie (*Pica nuttallii*)	-	-	BCC	Endemic to California; found in the Central Valley and coast range south of San Francisco Bay and north of Los Angeles County.; nesting habitat includes oak savannah with large in large expanses of open ground; also found in urban parklike settings.	April–June	Potential to Occur. Nesting habitat present.
Mammals						
Pallid bat *(Antrozous pallidus)*	-	-	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g. basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings (Western Bat Working Group [WBWG] 2018).	April–September	Potential to Occur. Structures onsite represent potential hibernacula.

Special-Status Species Evaluated for the Study Area

Common Name (Scientific Name)	Status			Habitat Description	Survey Period	Potential To Occur On-Site
	ESA	CESA	Other			
Western red bat (*Lasiurus blossevillii*)	-	-	SSC, SSHCP Covered Species	Roosts in foliage of trees or shrubs; Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores) (WBWG 2017).	April-September	Potential to Occur. SSHCP Modeled Species Habitat present; potential hibernacula habitat identified during survey per SSHCP AMM BAT-1.
American badger *(Taxidea taxus)*	-	-	SSC, SSHCP Covered Species	Drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	Any season	Potential to Occur. SSHCP Modeled Species Habitat present onsite.

Status Codes:

AMM	SSHCP Avoidance and Minimization Measure
ESA	Endangered Species Act
CESA	California Endangered Species Act
FE	ESA listed, Endangered.
FT	ESA listed, Threatened.
FPD	Listed under ESA, but formally proposed for delisting.
FC	Candidate for ESA listing as Threatened or Endangered.
CFP	California Fish and Game Code Fully Protected Species
CE	CESA or NPPA listed, Endangered.
CR	CESA- or NPPA-listed, Rare.
CT	CESA or NPPA listed, Threatened.
CC	Candidate for CESA listing as Endangered or Threatened.
BCC	USFWS Bird of Conservation Concern
CDFW WL	CDFW Watch List
Delisted	Formally Delisted (delisted ESA species are monitored for 5 years).
SSC	CDFW Species of Special Concern
SSHCP	South Sacramento Habitat Conservation Plan
1B	California Rare Plant Ranks (CRPRs)/Rare or Endangered in California and elsewhere.
2B	CRPR /Rare or Endangered in California, more common elsewhere.
2	CRPR /Rare or Endangered in California, more common elsewhere.
4	CRPR /Plants of Limited Distribution - A Watch List.
0.1	Threat Rank/Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
0.2	Threat Rank/Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
0.3	Threat Rank/Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

ATTACHMENT F

F-1. Aquatic Resources Delineation

F-2. USACE Verification

F-3. Addendum to Aquatic Resources Delineation

Aquatic Resources Delineation

The Preserve Development

Rancho Cordova, California

Prepared for:

Winn Communities, Inc.

ECORP Consulting, Inc. has assisted public and private land owners with environmental regulation compliance since 1987. We offer full service capability, from initial baseline environmental studies through environmental planning review, permitting negotiation, liaison to obtain legal agreements, mitigation design, and monitoring and compliance reporting.

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Attachment B – Preliminary Jurisdictional Determination for Wong & Wagner Property
Attachment C – Wetland Determination Data Forms - Arid West
Attachment D – Plant Species Observed Onsite
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Attachment F – USACE ORM Aquatic Resources Table
Attachment G – Wetland Delineation Shape File (to be included with USACE submittal only)

LIST OF ACRONYMS AND ABBREVIATIONS

CARI	California Aquatic Resource Inventory
CFR	Code of Federal Register
CWA	Clean Water Act
CWR	Clean Water Rule
FAC	Facultative
FACW	Facultative wetland
FR	Federal Register
HQUSACE	Headquarters USACE
NOAA	National Oceanic and Atmospheric Administration
NRCS	Natural Resources Conservation Service
OBL	Obligate
OHWM	Ordinary high-water mark"
ORM	USACE Operations and Maintenance Business Information Link Regulatory Module
PJD	Preliminary Jurisdictional Determination
Project	The Preserve Development
SFEI	San Francisco Estuary Institute
SSHCP	South Sacramento Habitat Conservation Plan
TNW	Traditional Navigable Waters
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USGS	U.S. Geological Survey

1.0 INTRODUCTION

On behalf of Winn Communities, Inc., ECORP Consulting, Inc. conducted an aquatic resources delineation for the ±113.8-acre Delineation Area encompassing The Preserve Development (Project) located in Rancho Cordova, Sacramento County, California. The Delineation Area is located to the northwest of Raymer Way and Grant Line Road. The Delineation Area corresponds to an unsectioned portion of the Rio de los Americanos Land Grant within the "Buffalo Creek, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1980) (Figure 1. *Project Location and Vicinity*). The approximate center of the Delineation Area is located at 38.574873° latitude and -121.196728° longitude within the Lower Sacramento Watershed (Hydrologic Unit Code #18020163, Natural Resources Conservation Service [NRCS], USGS, and U.S. Environmental Protection Agency [USEPA] 2016). Driving directions to the Delineation Area are included as Attachment A.

This report describes aquatic resources identified within the Delineation Area that may be regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA). The information presented in this report provides data required by the USACE Sacramento District's Minimum Standards for Acceptance of Aquatic Resources Delineation Reports (USACE 2016a). A Preliminary Jurisdictional Determination (PJD) was issued in 2012 for a ±72.6-acre portion of the Delineation Area, verifying the location and extent of aquatic resources delineated therein (USACE 2012, Attachment B). The aquatic resource boundaries depicted in this report, including those located in the previously verified portion of the Delineation Area, represent a calculated estimation of the jurisdictional area within the Delineation Area, and are subject to modification following the USACE verification process.

The purpose of this report is to provide adequate information to USACE for the issuance of a PJD covering the entirety of the Delineation Area.

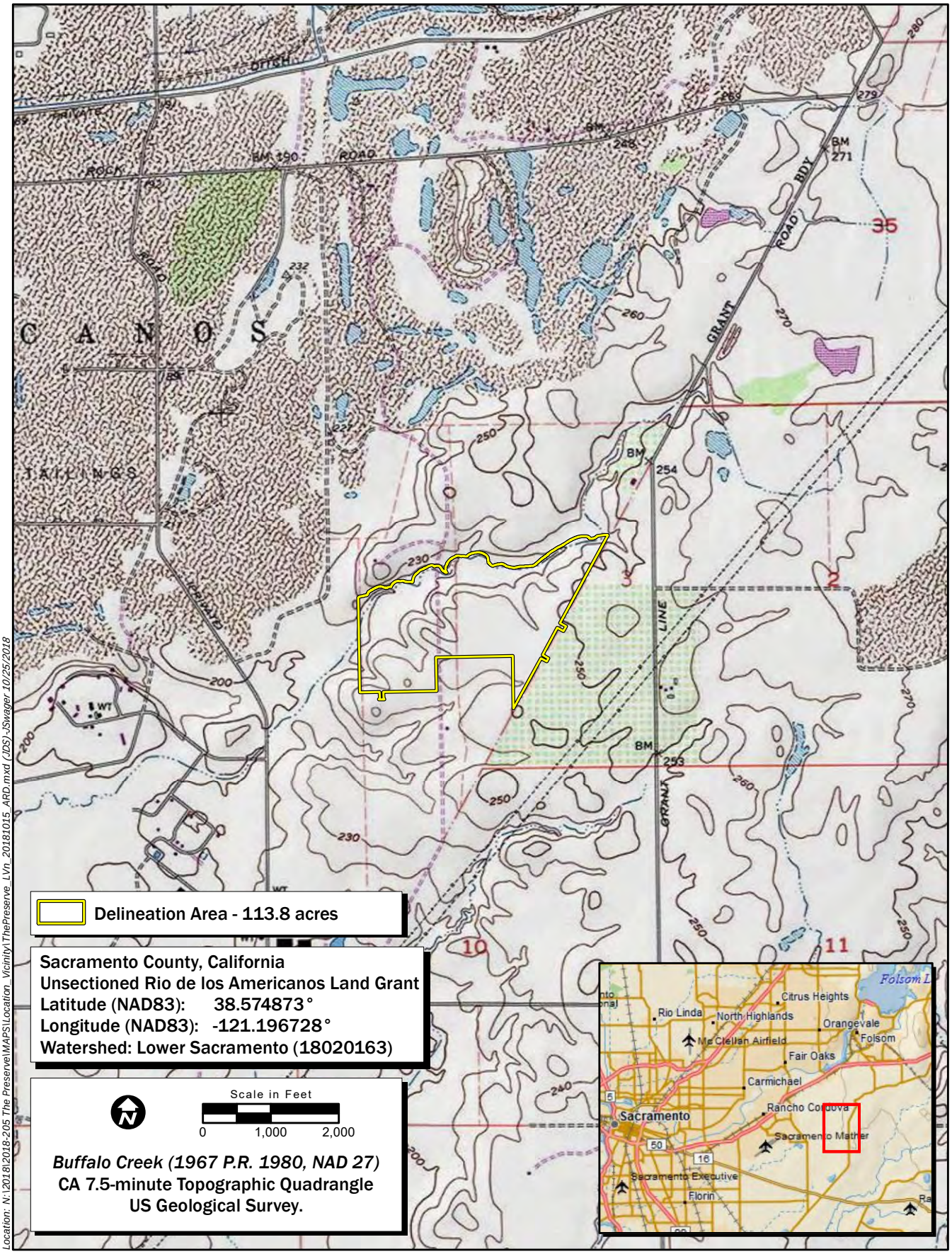
2.0 REGULATORY SETTING

2.1 Waters of the United States

This report describes aquatic resources, including wetlands that may be regulated by USACE under Section 404 of the federal CWA. The following sections define these regulations.

2.1.1 Wetlands

Wetlands are "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" [51 Federal Register (FR) 41250, Nov. 13, 1986, as amended at 58 FR 45036, Aug. 25, 1993]. Wetlands can be perennial or intermittent.



Location: N:\2018\2018-205 The Preserve\MAPS\Location_Vicinity\ThePreserve_LVn_20181015_ARD.mxd (JDS) JSwager 10/25/2018

Map Date: 10/25/2018

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Figure 1. Project Location and Vicinity

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2.1.2 Other Waters

Other waters are nontidal, perennial, and intermittent watercourses and tributaries to such watercourses [51 FR 41250, Nov. 13, 1986, as amended at 58 FR 45036, August 25, 1993]. The limit of USACE jurisdiction for nontidal watercourses (without adjacent wetlands) is defined in 33 Code of Federal Register (CFR) 328.4(c)(1) as the "ordinary high-water mark" (OHWM). The OHWM is defined as the "line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas" approximation of the lateral limit of USACE jurisdiction. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

2.2 Clean Water Act

The USACE regulates discharge of dredged or fill material into Waters of the U.S. under Section 404 of the CWA. "Discharges of fill material" is defined as the addition of fill material into Waters of the U.S., including, but not limited to the following: placement of fill necessary for the construction of any structure, or impoundment requiring rock, sand, dirt, or other material for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; and fill for intake and outfall pipes, and subaqueous utility lines [33 CFR § 328.2(f)]. In addition, Section 401 of the CWA (33 U.S. Code 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into Waters of the U.S. to obtain a certification that the discharge will comply with the applicable effluent limitations and water quality standards.

Substantial impacts to wetlands, over 0.5 acre of impact, may require an individual permit. Projects that only minimally affect wetlands, less than 0.5 acre of impact, may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board.

2.3 Jurisdictional Assessment

The Clean Water Rule (CWR) was published in June 2015, but implementation of the rule was stayed until September 2018. It is currently (2018) in effect for 22 states, including California, the District of Columbia, and the U.S. territories. The CWR establishes categories of waters that are jurisdictional, waters that are excluded, and waters that require a case-specific significant nexus evaluation to determine if they are Waters of the U.S. By rule, the CWR defines Waters of the U.S. to include Traditional Navigable Waters (TNW), interstate waters, and territorial seas, impoundments of jurisdictional waters, and tributaries and adjacent (i.e., bordering, contiguous, or neighboring) waters to TNW, interstate waters, or territorial seas (USACE and USEPA 2015).

According to the CWR, neighboring is defined as waters located: within 100 feet of the OHWM of a jurisdictional feature, within the 100-year floodplain of a jurisdictional feature and within 1,500 feet of the

feature, or within 1,500 feet of the high tide line of TNW, interstate water, or territorial sea. Western vernal pools in California and several other location-specific aquatic feature types are evaluated on a case-by-case basis to determine whether they have a significant nexus to TNW, interstate waters, or territorial seas (USACE and USEPA 2015).

Feature types that are categorically excluded from CWA jurisdiction include waste treatment systems, prior converted cropland, ditches with intermittent or ephemeral flow that are not relocated tributaries or excavated in a tributary, ditches that do not flow, directly or indirectly, into a jurisdictional water, artificially irrigated areas that would revert to dry land in the absence of irrigation, artificial, constructed lakes or ponds created by excavating and/or diking dry land, small ornamental waters, artificial reflecting or swimming pools created by excavating and/or diking dry land, water-filled depressions created in dry land incidental to mining or construction activities, erosional features such as gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways, and puddles (USACE and USEPA 2015).

3.0 METHODS

This aquatic resources delineation was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Region Supplement) (USACE 2008). The boundaries of aquatic resources were delineated through standard field methods (e.g., paired sample set analyses) and aerial photograph interpretation. Field data were recorded on Wetland Determination Data Forms - Arid West Region (Attachment C). A color aerial photograph (1"=200' scale, NAIP 2016) used to assist with mapping and ground-truthing. *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990) and the Web Soil Survey (NRCS 2018a) were used to aid in identifying hydric soils in the field. The Jepson Manual, 2nd Edition (Baldwin et al. 2012) was used for plant nomenclature and identification.

Field surveys were conducted on October 12, 2018 by ECORP biologist Clay DeLong. Mr. DeLong walked the entire ±41.2-acre unverified portion of the Delineation Area to determine the location and extent of aquatic resources. Paired locations were sampled to evaluate whether or not the vegetation, hydrology, and soils data supported an aquatic resource determination. At each paired location, one point was located such that it was within the estimated aquatic resource area, and the other point was situated outside the limits of the estimated aquatic resource area. Aquatic resources within the unverified portion of the Delineation Area were recorded in the field using a post-processing capable global positioning system unit with sub-meter accuracy (Trimble GeoXT). The previously verified portion of the Delineation Area was reviewed via aerial photograph interpretation and limited field reconnaissance.

3.1 Routine Determinations for Wetlands

To be determined a wetland, the following three criteria must be met:

- A majority of dominant vegetation species are wetland-associated species;

- Hydrologic conditions exist that result in periods of flooding, ponding, or saturation during the growing season; and
- Hydric soils are present.

3.1.1 Vegetation

Hydrophytic vegetation is defined as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanent or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present (Environmental Laboratory 1987). The definition of wetlands includes the phrase "a prevalence of vegetation typically adapted for life in saturated soil conditions." Prevalent vegetation is characterized by the dominant plant species comprising the plant community (Environmental Laboratory 1987). The dominance test is the basic hydrophytic vegetation indicator and was applied at each sampling point location. The "50/20 rule" was used to select the dominant plant species from each stratum of the community. The rule states that for each stratum in the plant community, dominant species are the most abundant plant species (when ranked in descending order of coverage and cumulatively totaled) that immediately exceed 50 percent of the total coverage for the stratum, plus any additional species that individually comprise 20 percent or more of the total cover in the stratum (Headquarters USACE [HQUSACE] 1992, USACE 2008).

Dominant plant species observed at each sampling point were then classified according to their indicator status (probability of occurrence in wetlands, Table 1), *North American Digital Flora: National Wetland Plant List* (Lichvar et al. 2016). If the majority (more than 50 percent) of the dominant vegetation on a site are classified as obligate (OBL), facultative wetland (FACW), or facultative (FAC), the site was considered to be dominated by hydrophytic vegetation.

Table 1. Classification of Wetland-Associated Plant Species[1]

Plant Species Classification	Abbreviation	Probability of Occurring in Wetland
Obligate	OBL	Almost always occur in wetlands
Facultative Wetland	FACW	Usually occur in wetlands, but may occur in non-wetlands
Facultative	FAC	Occur in wetlands and non-wetlands
Facultative Upland	FACU	Usually occur in non-wetlands, but may occur in wetlands
Upland	UPL	Almost never occur in wetlands
Plants That Are Not Listed (assumed upland species)	N/L	Does not occur in wetlands in any region.

[1]Source: Lichvar et al. 2016

In instances where indicators of hydric soil and wetland hydrology were present, but the plant community failed the dominance test, the vegetation was re-evaluated using the Prevalence Index. The Prevalence Index is a weighted-average wetland indicator status of all plant species in the sampling plot, where each indicator status category is given a numeric code (OBL=1, FACW=2, FAC=3, FACU=4, and UPL=5) and

weighting is by abundance (percent cover). If the plant community failed the Prevalence Index, the presence/absence of plant morphological adaptations to prolonged inundation or saturation in the root zone was evaluated.

3.1.2 Soils

A hydric soil is defined as a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (NRCS 2003). Indicators that a hydric soil is present include, but are not limited to, histosols, histic epipedon, hydrogen sulfide, depleted below dark surface, sandy redox, loamy gleyed matrix, depleted matrix, redox dark surface, redox depressions, and vernal pools.

At each sampling point a soil pit was excavated to the depth needed to document an indicator, to confirm the absence of indicators, or until refusal at each sampling point. The soil was then examined for hydric soil indicators. Soil colors were determined while the soil was moist using the *Munsell Soil Color Charts* (Kollmorgen Instruments Co. 1990). Hydric soils are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds in a saturated and anaerobic environment. These processes and the features in the soil that develop can be identified by looking at the color and texture of the soils.

3.1.3 Hydrology

Wetlands, by definition, are seasonally or perennially inundated or saturated at or near (within 12 inches of) the soil surface. Primary indicators of wetland hydrology include, but are not limited to: visual observation of saturated soils, visual observation of inundation, surface soil cracks, inundation visible on aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks (secondary indicator in riverine environments), drift lines (secondary indicator in riverine environments), and sediment deposits (secondary indicator in riverine environments). The occurrence of one primary indicator is sufficient to conclude that wetland hydrology is present. If no primary indicators are observed, two or more secondary indicators are required to conclude wetland hydrology is present. Secondary indicators include, but are not limited to: drainage patterns, crayfish burrows, FAC-neutral test, and shallow aquitard.

4.0 RESULTS

4.1 Existing Site Conditions

The Delineation Area is located within flat to rolling terrain situated at an elevational range of approximately 210 - 250 feet above mean sea level in the Sacramento Valley Subregion of the Great Central Valley floristic region of California (Baldwin et al. 2012). The average winter low temperature in the vicinity of the Delineation Area is 41.5˚F and the average summer high temperature is 91.2˚F. Average annual precipitation is approximately 20 inches, which falls as rain (National Oceanic and Atmospheric Administration [NOAA] 2018a).

The Delineation Area is composed of a mixture of developed and undeveloped land. Developed areas include two single-family homes and several gravel roads. Rows of redwood (*Sequoia sempervirens*) and blue gum (*Eucalyptus globulus*) are planted at several locations adjacent to the roads and homes. Surrounding land uses include suburban residential developments, aggregate mines, and undeveloped grasslands.

The majority of the Delineation Area is composed of annual grassland, a vegetation community dominated primarily by a mixture of nonnative annual grasses, including medusahead grass (*Elymus caput-medusae*), soft brome (*Bromus hordeaceus*), wild oats (*Avena fatua*), and brome fescue (*Festuca bromoides*). Narrow tarplant (*Holocarpha virgata*), a native perennial forb, was also dominant in grasslands within the Delineation Area. See Section 4.2 for detailed descriptions of the vegetation associated with aquatic resources within the Delineation Area.

This aquatic resources delineation was conducted in late summer, outside the blooming season for most plant species. However, most plants were identifiable to species based upon vegetative or fruit morphology. Hydrologic conditions within the Delineation Area were typical for late summer (i.e., dry), and precipitation totals during the water year preceding the survey were only marginally below normal. During the 2017-2018 water year prior to the field survey (October 1, 2017 to October 1, 2018), approximately 17 inches of precipitation were recorded at the Sacramento 5 ESE reporting station (NOAA 2018b), located approximately 12 miles from the Study Area. The most recent significant precipitation event prior to the surveys occurred on May 25, 2018, resulting in 0.32 inches of rainfall (NOAA 2018b).

4.1.1 California Aquatic Resource Inventory

The California Aquatic Resource Inventory (CARI, San Francisco Estuary Institute [SFEI] 2017) is a statewide map of surface waters and related habitats combining multiple national and regional datasets, including the National Wetlands Inventory, and the National Hydrography Dataset. CARI includes aquatic resource features mapped using a variety of remote sensing and modeling techniques. As such, these aquatic features may or may not exist as represented. In addition, CARI data varies in detail, accuracy, and age, and is meant to be used as a tool to assist with an aquatic resource delineation but not as the only source of information (SFEI 2017).

According to CARI, there are several aquatic features mapped within the Delineation Area (Figure 2. *California Aquatic Resource Inventory Features*). These include stream features mapped as fluvial natural and fluvial unnatural, which roughly correspond to onsite streams and creeks. Figure 2 also shows CARI features mapped as individual vernal pools, depressional seasonal, depressional, and riverine, which roughly correspond to onsite vernal pools, open water features, swales, streams, and creeks.

4.1.2 Soils

According to the Web Soil Survey (NRCS 2018a), three soil units, or types, have been mapped within the Delineation Area (Figure 3. *Natural Resources Conservation Service Soil Types*):

- 159 – Hicksville gravelly loam, 0 to 2 percent slopes, occasionally flooded;

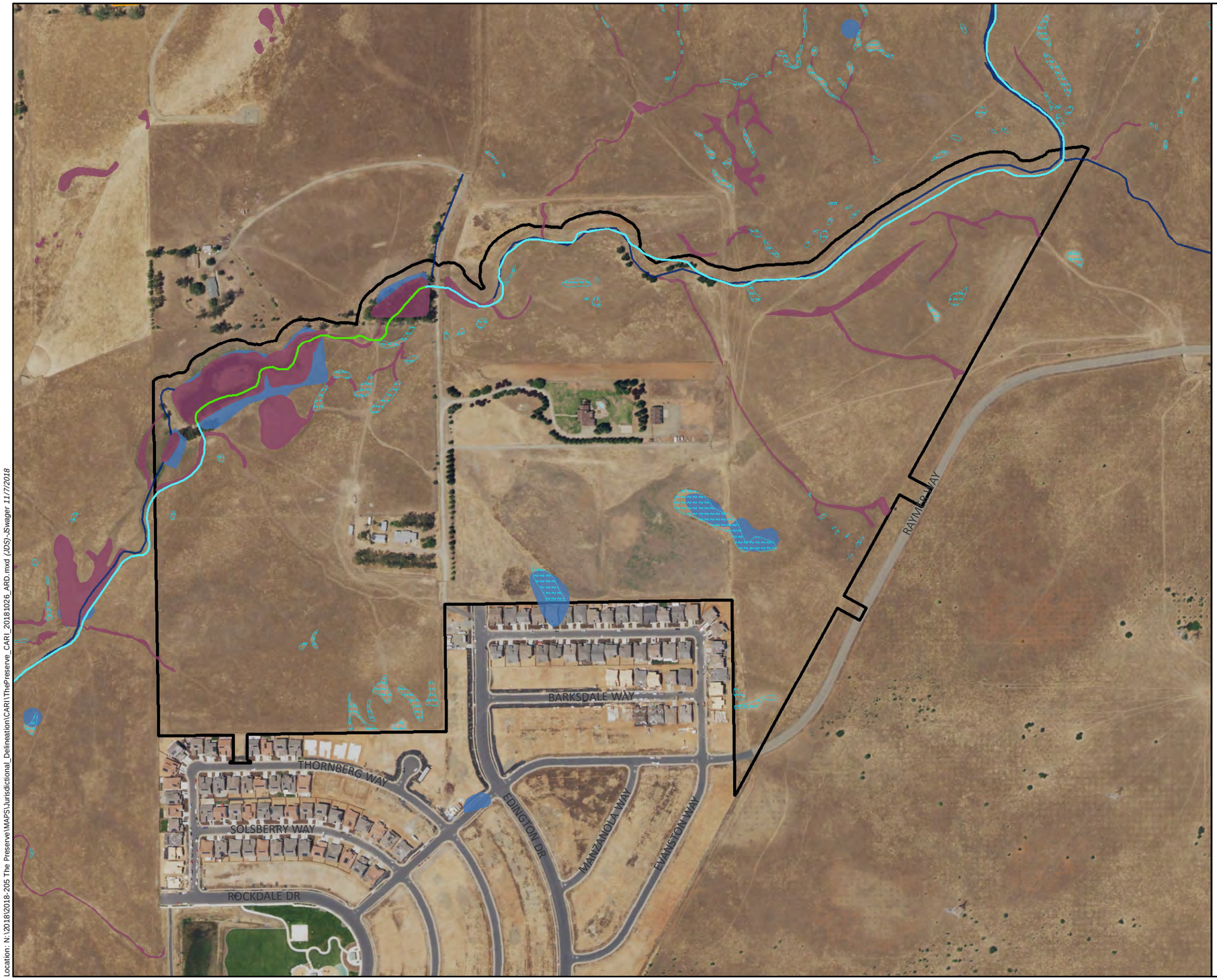


Figure 2.
California Aquatic Resources Inventory Features

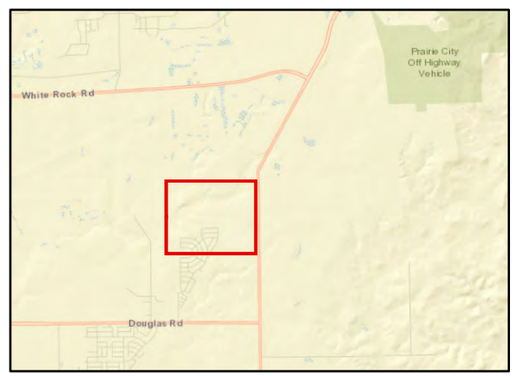
Map Features

- Delineation Area - 113.8 acres

CARI Data

- Fluvial Unnatural
- Fluvial Natural
- Individual Vernal Pool
- Depressional Seasonal
- Depressional
- Riverine

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community



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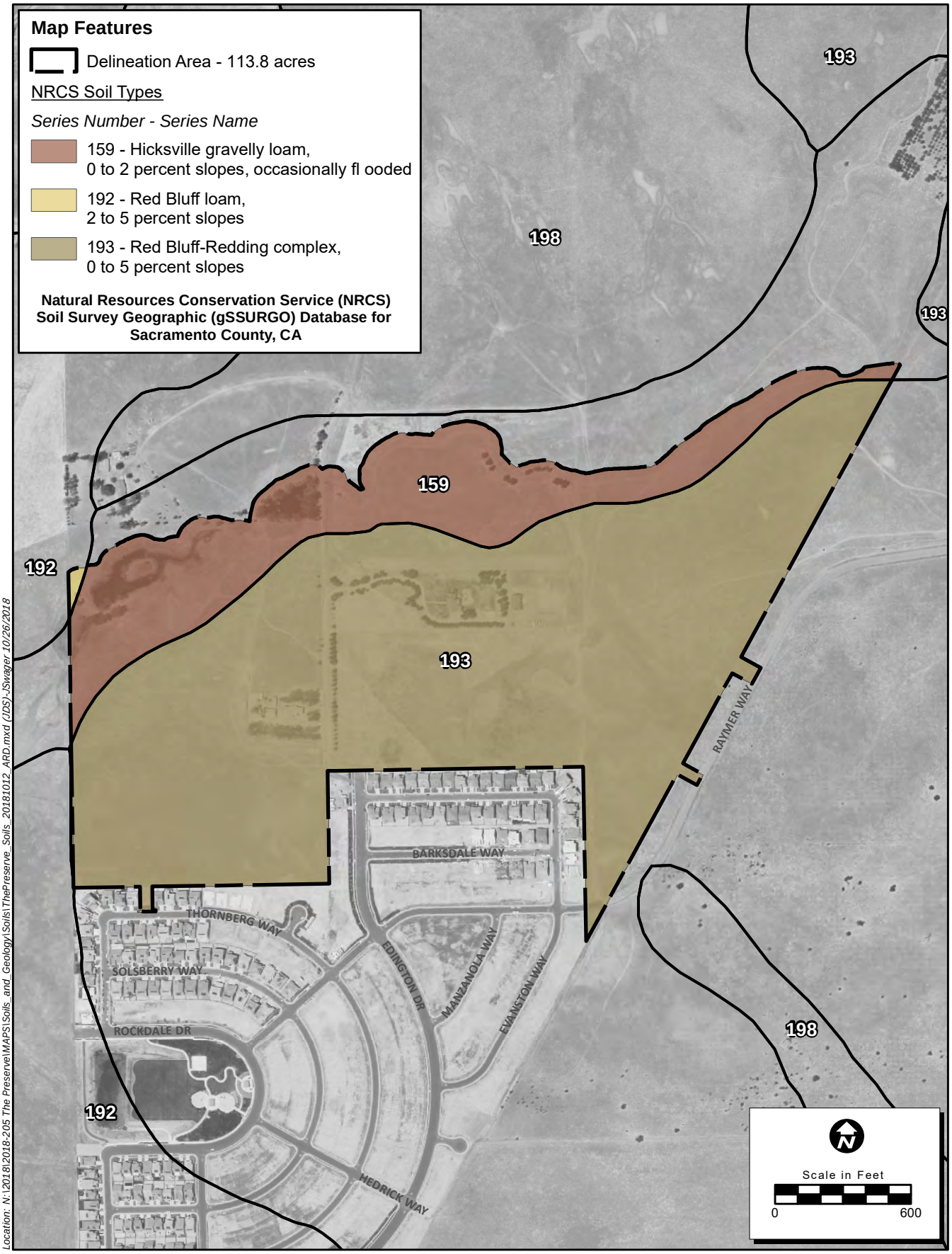
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Scale in Feet
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Photo Source: 2016, NAIP
CARI Data: Version 0.3 (December 2017)
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Map Date: 10/26/2018
Photo Source: 2016, NAIP

Figure 3. Natural Resources Conservation Service Soil Types

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- 192 – Red Bluff loam, 2 to 5 percent slopes; and
- 193 – Red Bluff-Redding complex, 0 to 5 percent slopes.

Hicksville gravelly loam, 0 to 2 percent slopes (159) is partially composed of the Columbia and Cosumnes components, which are considered hydric when occurring on floodplains. Red Bluff loam, 2 to 5 percent slopes (192) and Red Bluff-Redding complex, 0 to 5 percent slopes (193), are partially composed of unnamed components that are considered hydric when occurring in depressions (NRCS 2018b).

4.2 Aquatic Resources

A total of 7.861 acres of aquatic resources have been mapped within the Delineation Area, including 5.107 acres of unverified aquatic resources and 2.755 acres of previously verified aquatic resources (Table 2). The wetland determination data forms are included in Attachment C, and a list of plant species observed within the Delineation Area is included as Attachment D. A discussion of the aquatic resources is presented below, and the aquatic resources delineation map is presented in Figure 4. *Aquatic Resources Delineation*.

Representative site photographs are included as Attachment E. The USACE Operations and Maintenance Business Information Link Regulatory Module (ORM) aquatic resources table of potential Waters of the U.S. is included in Attachment F.

Table 2. Aquatic Resources

Type	Acreage[1]
Unverified Area	
Wetlands	
Vernal Pool	1.273
Swale	1.713
Other Waters	
Stream/Creek	0.307
Open Water	1.814
Previously Verified Area	
Wetlands	
Vernal Pool	1.373
Swale	0.128
Other Waters	
Stream/Creek	0.708
Open Water	0.546
Total:	7.861

[1]Acreages represent a calculated estimation and are subject to modification following the USACE verification process.

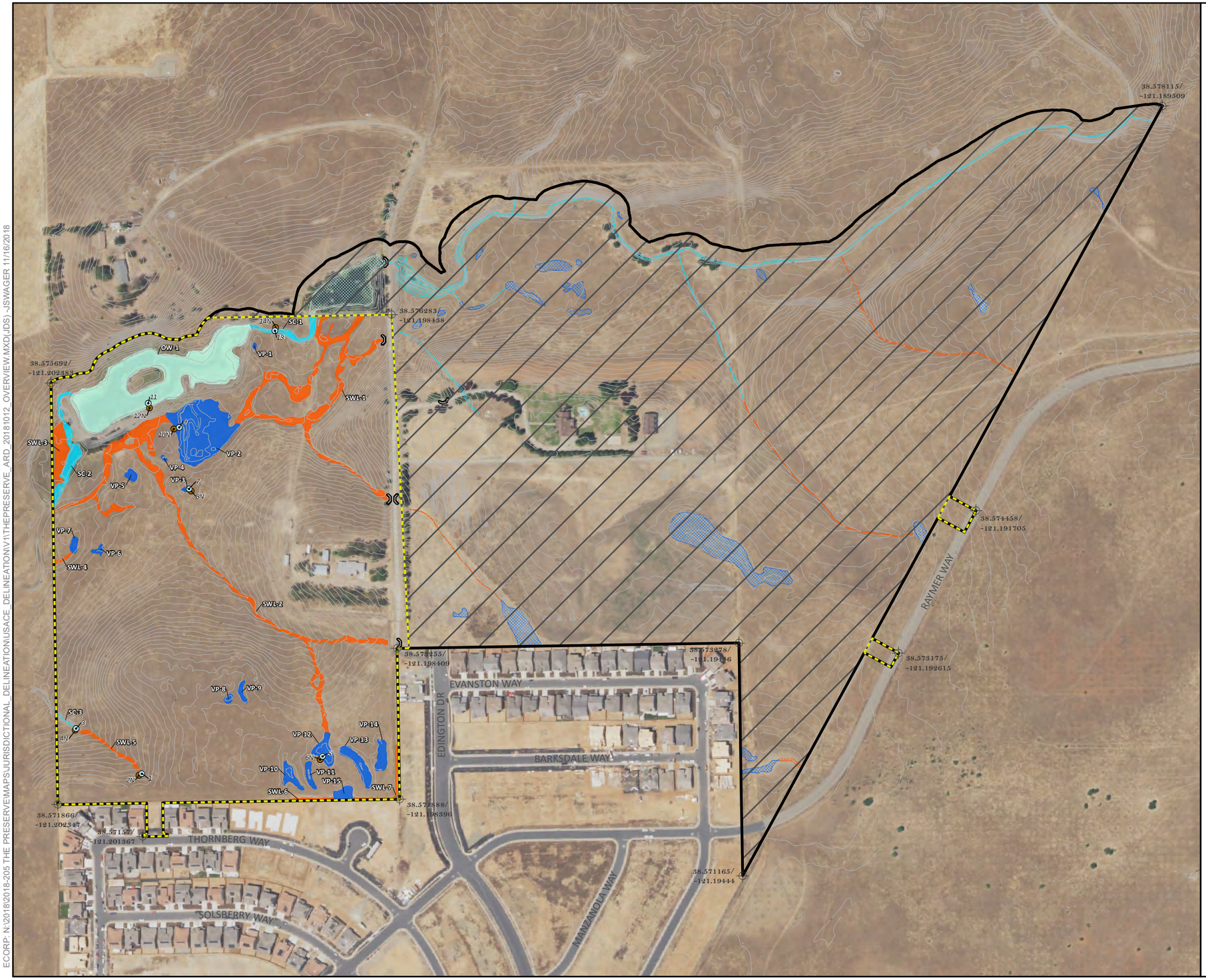


Figure 4.
Aquatic Resources Delineation Overview [1]

Map Features

- Delineation Area - 113.8 acres
- Previously Verified Area - 72.6 acres
- Unverified Area - 41.2 acres
- Reference Coordinate (NAD83)
- Culvert

Three Criteria Sample Points

- Waters Point
- Upland Point

Potential Aquatic Resources (Unverified) - 5.107 acres [1] *

- Vernal Pool - 1.273 acres
- Swale - 1.713 acres
- Stream/Creek - 0.307 acres
- Open Water - 1.814 acres

Verified Waters of the U.S. - 2.754 acres [2] *

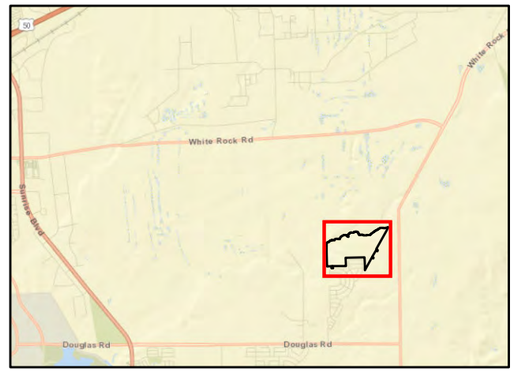
- Vernal Pool - 1.373 acres
- Swale - 0.128 acres
- Stream/Creek - 0.708 acres
- Open Water - 0.546 acres

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*

[2] *PJD for Wong-Wagner Issued 11/20/2012, SPK-2004-00666*

* *The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.*

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2018-205 The Preserve

Scale in Feet
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Photo Source: 2016, NAIP
Boundary Source: Ruggeri-Jensen-Azar & Associates
Delineator(s): C.DeLong (ECORP), Foothill Associates
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Map Date: 11/16/2018

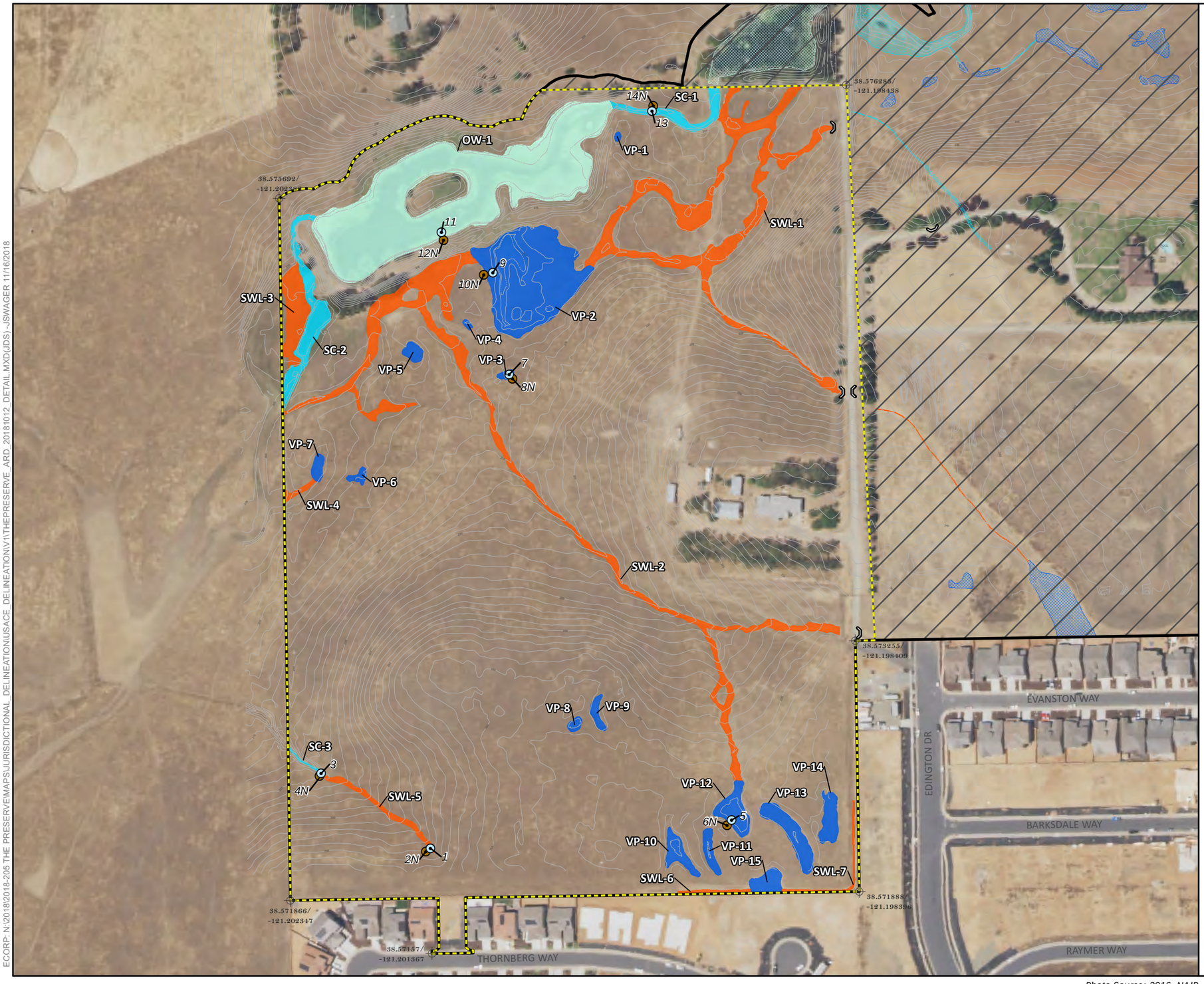


Figure 4.
Aquatic Resources Delineation
Unverified Portion [1]

Map Features

- Delineation Area - 113.8 acres
- Previously Verified Area - 72.6 acres
- Unverified Area - 41.2 acres
- Reference Coordinate (NAD83)
- Culvert

Three Criteria Sample Points

- Waters Point
- Upland Point

Potential Aquatic Resources (Unverified) - 5.107 acres [1] *

- Vernal Pool - 1.273 acres
- Swale - 1.713 acres
- Stream/Creek - 0.307 acres
- Open Water - 1.814 acres

Verified Waters of the U.S. [2]

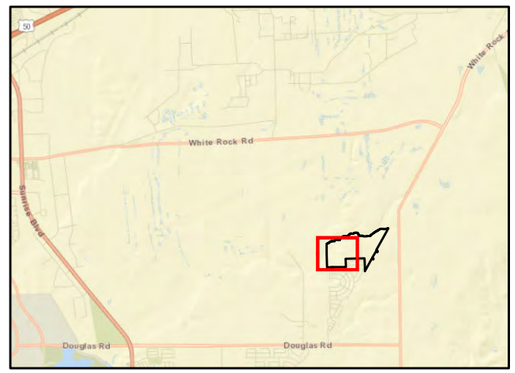
- Vernal Pool
- Swale
- Stream/Creek
- Open Water

[1] *Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.*

[2] *PJD for Wong-Wagner Issued 11/20/2012, SPK-2004-00666*

* *The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.*

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2018-205 The Preserve

Scale in Feet
0
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Photo Source: 2016, NAIP
Boundary Source: Ruggeri-Jensen-Azar & Associates
Delineator(s): C.DeLong (ECORP), Foothill Associates
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Map Date: 11/16/2018

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The feature types described in Table 2 were classified according to definitions within the South Sacramento Habitat Conservation Plan (SSHCP, County of Sacramento et al. 2018). However, previously verified features were given different classifications in the original delineation and PJD. Table 3 provides the classifications used in the PJD and the corresponding SSHCP land cover type used in this report.

Table 3. Previously Verified Feature Types and SSHCP Land Cover Types

Feature Types as defined in PJD	Corresponding SSHCP Feature Type
Wetlands	
Vernal Pool	Vernal Pool
Seasonal Wetland	Vernal Pool
Seasonal Wetland Swale	Swale
Other Waters	
Ephemeral Drainage	Stream/Creek
Ephemeral Drainage – Culverted	Stream/Creek
Pond	Open Water

4.2.1 Wetlands

Vernal Pool

Vernal pools are seasonal ephemeral wetlands that fill and dry each year, forming in shallow depressions within grasslands that are underlain by an impermeable layer (e.g., a hardpan). Water collects in the depressions during the winter rainy season and recedes during the spring. Soils typically remain moist until late spring before becoming desiccated, and then remain dry throughout the summer. Vernal pools occur throughout the Delineation Area. These features are variously dominated by Great Valley button-celery (*Eryngium castrense*), stalked popcorn flower (*Plagiobothrys stipitatus*), woolly marbles (*Psilocarphus brevissimus*), Mediterranean barley (*Hordeum marinum*), waxy mannagrass (*Glyceria declinata*), hairy hawkbit (*Leontodon saxatilis*), and toad rush (*Juncus bufonius*). Sampling points 5, 7, and 9 were collected within vernal pools.

Soil matrix colors within the vernal pools at sampling points 5, 7 and 9 ranged from 10YR4/1 to 7.5YR 4/2. Redox concentrations colored 5YR 4/6 were present at each of these sampling points. Soils at sampling points 5, 7, and 9 met the criteria for hydric soil indicators Depleted Matrix (F3) and Redox Depressions (F8). Wetland hydrology indicators observed within the vernal pools included Biotic Crust (B12). While hydric soils were observed at sampling points 6N and 10N, no other wetland parameters were observed at uplands adjacent to vernal pools.

Swale

Swales are generally linear wetland features that convey precipitation runoff and support a predominance of hydrophytic vegetation, but do not exhibit an OHWM. These are typically inundated for short periods during and immediately after rain events, but usually maintain soil saturation for longer periods during the wet season. Swales occur throughout the Delineation Area, and are dominated by Italian ryegrass

(*Festuca perennis*), Fitch's spikeweed (*Centromadia fitchii*), and Mediterranean barley. Sampling Point 1 was collected within a swale.

The soil matrix color within the swale at sampling point 1 was 10YR 4/2 with five percent redox concentrations colored 5YR 4/6. Soils at sampling point 1 were determined to be hydric based on the presence of hydric soil indicator Depleted Matrix (F3). Wetland hydrology indicators observed within on-site swales include Biotic Crust (B12). No wetland parameters were observed at Sampling Point 2N, located in an upland adjacent to Sampling Point 1.

4.2.2 Other Waters

Stream/Creek

Aquatic resources identified as stream/creek within the Delineation Area include ephemeral drainages and a seasonal creek (Morrison Creek). These are linear features that exhibit a bed and bank and an OHWM. They convey runoff seasonally for short to moderate duration, and may or may not be influenced by groundwater sources. Stream/creek features occur throughout the Delineation Area, and vary from steep, unvegetated features, to gently sloping features that are sparsely vegetated with creeping spikerush (*Eleocharis macrostachya*). Sampling points 3 and 13 were collected within stream/creek features.

Sampling Point 3 was collected within a steep, narrow ephemeral drainage along the western boundary of the Delineation Area. The soil matrix color at sampling point 3 was 7.5YR 4/2 with 10 percent redox features colored 5YR 4/6. Soils at sampling point 3 met the criteria for hydric soil indicator Depleted Matrix (F3). Wetland hydrology indicator Water Marks (B1) was observed at Sampling Point 3. No wetland parameters were observed at Sampling Point 4N, located in an upland adjacent to Sampling Point 3.

Sampling Point 13 was collected within Morrison Creek, a broad, gently sloped seasonal creek. The soil matrix color at sampling point 13 was 7.5YR 4/2 with 20 percent redox features colored 5YR 4/6. Soils at sampling point 3 met the criteria for hydric soil indicator Depleted Matrix (F3). Wetland hydrology indicators Water Marks (B1) and Biotic Crust (B12) were observed at Sampling Point 13. Hydric soil indicator Depleted Matrix (F3) was observed at Sampling Point 14N, located in an upland adjacent to Sampling Point 13. However, hydrophytic vegetation and wetland hydrology were absent at Sampling Point 14N.

Open Water

Open water features identified within the Delineation Area include two perennial ponds, which occur in the northwestern portion of the Delineation Area. These features are manmade impoundments of Morrison Creek. These features exhibit an OHWM and support hydrophytic vegetation along their fringes, while deeper portions are unvegetated. The vegetated fringes of the open water features are dominated by creeping spikerush and smartweed (*Persicaria* sp.). Sampling Point 11 was collected within an open water feature.

The soil matrix color at sampling point 11 was 7.5YR 4/1 with 30 percent redox concentrations colored 5YR 4/6. Soils at sampling point 11 met the criteria for hydric soil indicator Depleted Matrix (F3). Wetland

hydrology indicators observed at Sampling Point 11 include Surface Water (A1), Water Marks (B1), Biotic Crust (B12), and Aquatic Invertebrates (B13). No wetland parameters were observed at Sampling Point 12N, located in an upland adjacent to Sampling Point 13.

5.0 JURISDICTIONAL ASSESSMENT

As per Regulatory Guidance Letter 16-01, an applicant may request a PJD "in order to move ahead expeditiously to obtain a Corps permit authorization where the requestor determines that it is in his or her best interest to do so … even where initial indications are that the aquatic resources on a parcel may not be jurisdictional" (USACE 2016b). A significant nexus evaluation is not necessary to obtain a PJD. The following information on connectivity of wetlands and other waters in the Delineation Area to TNW is provided should an Approved Jurisdictional Determination be necessary.

The vernal pools, swales, and several stream/creek features within the Delineation Area flow directly or indirectly into Morrison Creek, or impoundments of Morrison Creek, along the northern boundary of the Delineation Area. Morrison Creek is a tributary to the Sacramento River. The USACE Sacramento District has identified the Sacramento River as TNW. Therefore, the aquatic resources within the Delineation Area likely have a significant nexus (affecting the chemical, physical, or biological integrity) with downstream TNW, and are likely subject to regulation under Section 404 of the CWA.

6.0 CONCLUSION

A total of 7.861 acres of aquatic resources have been mapped within the Delineation Area. This acreage represents a calculated estimation of the extent of aquatic resources within the Delineation Area, and is subject to modification following USACE review and/or the verification process. The placement of dredged or fill material into jurisdictional features would require a permit pursuant to Section 404 of the CWA and certification or waiver in compliance with Section 401 of the CWA.

7.0 REFERENCES

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LIST OF ATTACHMENTS

Attachment A – Driving Directions to Delineation Area

Attachment B – Preliminary Jurisdictional Determination for Wong & Wagner Property

Attachment C – Wetland Determination Data Forms - Arid West

Attachment D – Plant Species Observed Onsite

Attachment E – Representative Site Photographs

Attachment F – USACE ORM Aquatic Resources Table

Attachment G – Wetland Delineation Shape File (to be included with USACE submittal only)

ATTACHMENT A

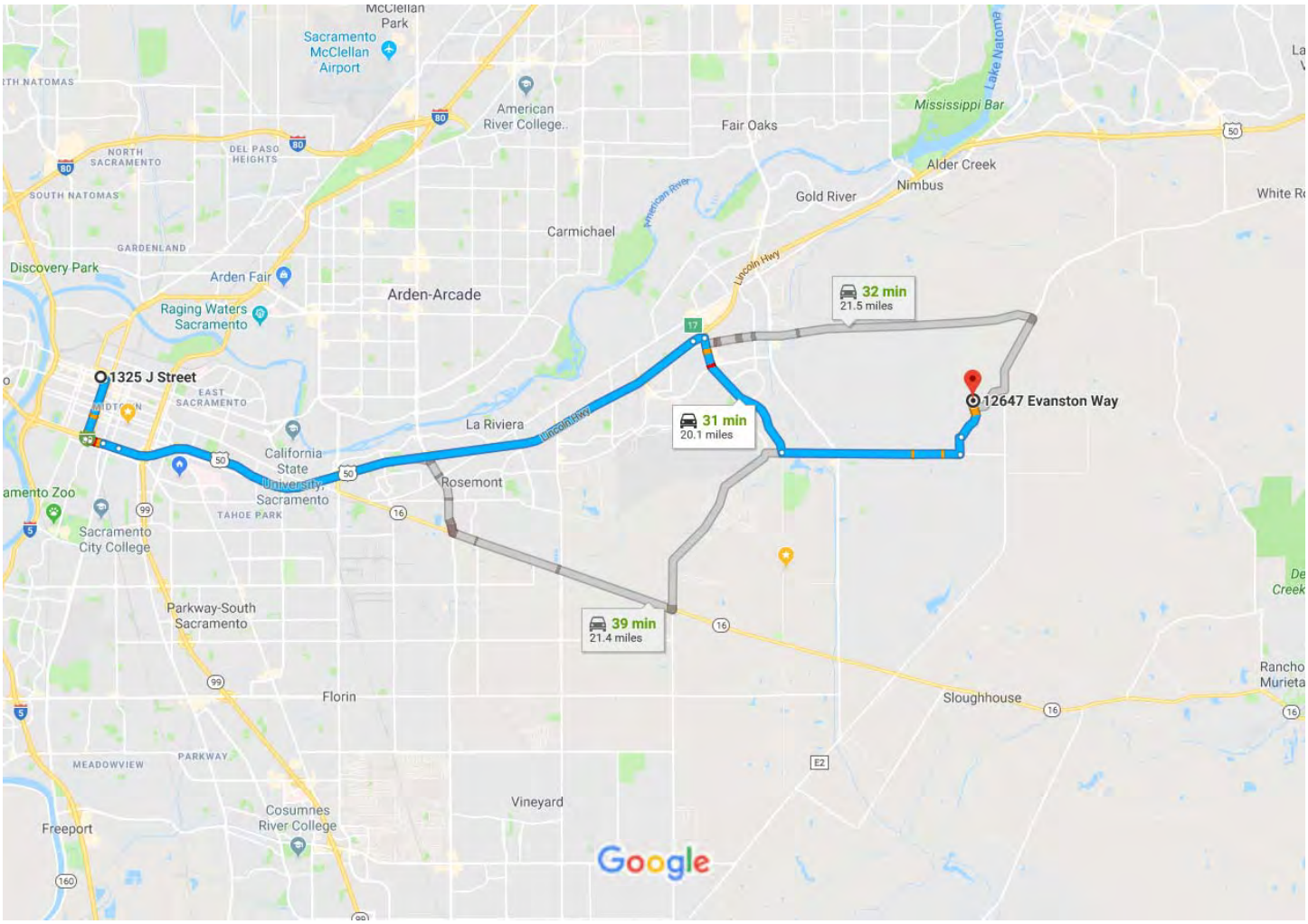
Driving Directions to Delineation Area

ITEM 11.1. **ATTACHMENT 4**

Google Maps

1325 J Street, Sacramento, CA to 12647 Evanston Way, Rancho Cordova, CA 95742

Drive 20.1 miles, 31 min



Map data ©2018 Google 2 mi

1325 J St

Sacramento, CA 95814

Get on I-80BL E from 15th St

6 min (1.6 mi)

1. Head east on J St toward 14th St

0.1 mi

2. Use the right 2 lanes to turn right onto 15th St

1.1 mi

3. Use the left 2 lanes to turn left onto X St

407 ft

4. Use the middle 2 lanes to turn slightly left onto the I-80 E ramp

0.3 mi

Follow US-50 E to Zinfandel Dr in Rancho Cordova. Take exit

17 from US-50 E

11 min (11.7 mi)

5. Merge onto I-80BL E

0.3 mi

6. Continue onto US-50 E

11.1 mi

7. Use the right lane to take exit 17 for Zinfandel Dr

0.2 mi

Continue on Zinfandel Dr. Take Douglas Rd to Edington Dr

13 min (6.9 mi)

8. Use the right 2 lanes to turn right onto Zinfandel Dr

2.6 mi

9. Use the left 2 lanes to turn left onto Douglas Rd

3.2 mi

10. Turn left onto Americanos Blvd

0.3 mi

11. Continue onto Edington Dr

0.8 mi

12647 Evanston Way

Rancho Cordova, CA 95742

These directions are for planning purposes only. You may find that construction projects, traffic, weather, or other events may cause conditions to differ from the map results, and you should plan your route accordingly. You must obey all signs or notices regarding your route.

ATTACHMENT B

Preliminary Jurisdictional Determination for Wong & Wagner Property

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

RECEIVED
DEC 01 2012
By

REPLY TO
ATTENTION OF

November 20, 2012

Regulatory Division SPK-2004-00666

Mr. George Carpenter
Tom Winn Communities, Inc.
1130 Iron Point Road
Folsom, California 95630-8308

Dear Mr. Carpenter:

We are responding to your September 25, 2012, request for a preliminary jurisdictional determination (JD), in accordance with our Regulatory Guidance Letter (RGL) 08-02, for the Wong & Wagner or Heritage Falls site. The approximately 237-acre site is located on or near Morrison Creek, Section 2, Township 8 North, Range 7 East, MDBM, Latitude 38.578°, Longitude -121.195°, Rancho Cordova, Sacramento County, California.

Based on available information, we concur with the amount and location of wetlands and/or other water bodies on the site as depicted on the enclosed copy of the September 24, 2012, revised *Delineated Waters of the U.S. Wong & Wagner* drawing prepared by Foothill Associates. The approximately 6.85 acres of wetlands and/or other water bodies present within the survey area are potential waters of the United States regulated under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act.

A copy of our RGL 08-02 Preliminary Jurisdictional Determination Form for this site is enclosed. Please sign and return a copy of the completed form to this office. Once we receive the form with your signature we can accept and process a Pre-Construction Notification or permit application for your proposed project.

You should not start any work in potentially jurisdictional waters of the United States unless you have Department of the Army permit authorization for the activity. You may request an approved JD for this site at any time prior to starting work within waters. In certain circumstances, as described in RGL 08-02, an approved JD may later be necessary.

You should provide a copy of this letter and notice to all other affected parties, including any individual who has an identifiable and substantial legal interest in the property.

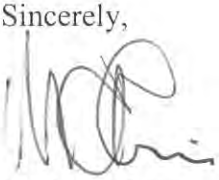
This preliminary determination has been conducted to identify the potential limits of wetlands and other water bodies which may be subject to Corps of Engineers' jurisdiction for the particular site identified in this request. A Notification of Appeal Process and Request for Appeal form is enclosed to notify you of your options with this determination. This

determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are U.S. Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

We appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey*.

Please refer to identification number SPK-2004-00666 in any correspondence concerning this project. If you have any questions, please contact me at Regulatory Division, 1325 J Street, Room 1350, Sacramento, California 95814-2922, email *Michael.C.Finan@usace.army.mil*, or telephone 916-557-5324. For more information regarding our program, please visit our website at *www.spk.usace.army.mil/Missions/Regulatory.aspx*.

Sincerely,

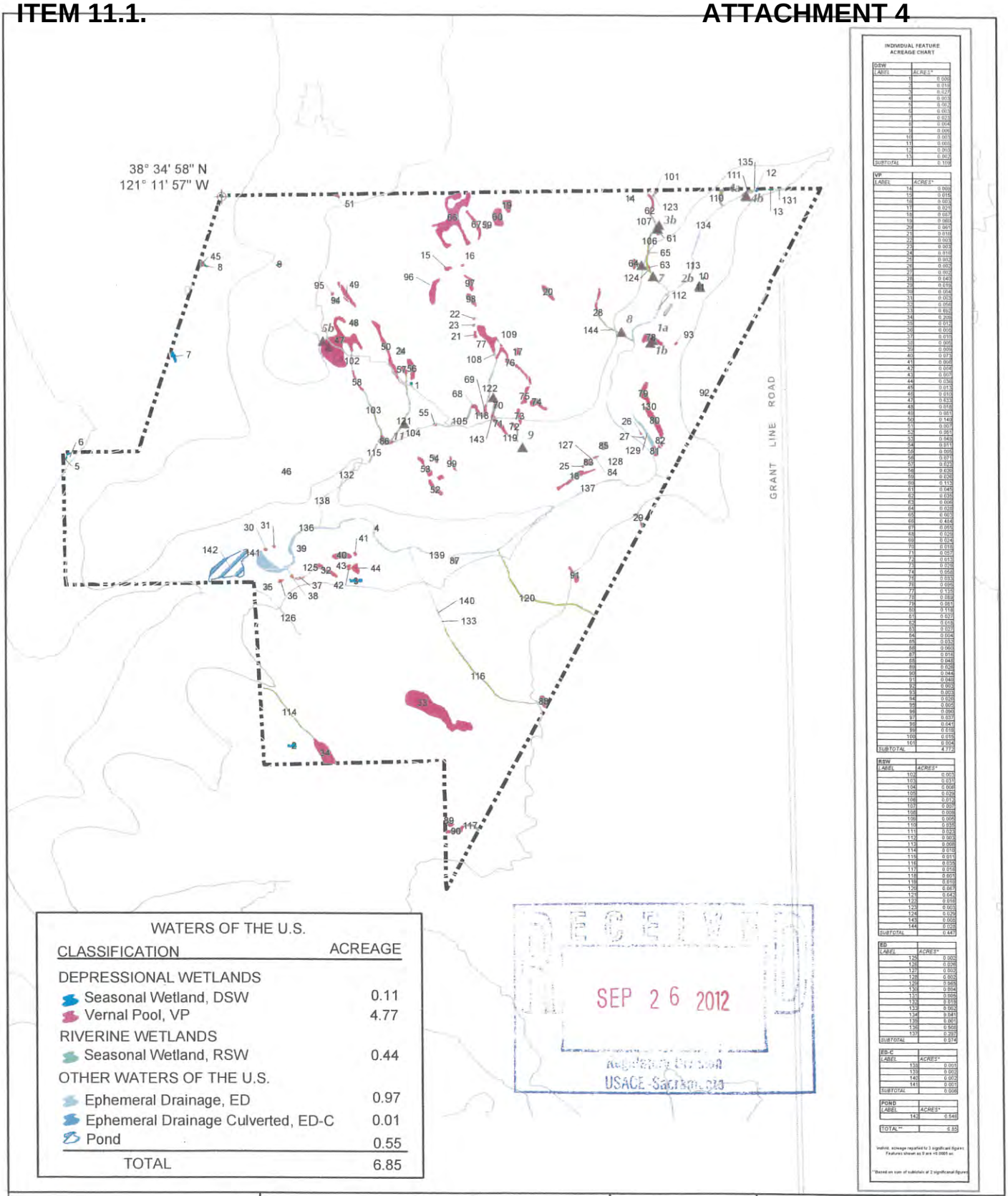


Michael Finan
Wetland Specialist
Regulatory Division

Enclosures

Copies Furnished without enclosures:

Mr. Ken Whitney, Foothill Associates, 590 Menlo Drive, Rocklin, California 95675-3724
Mr. Jason Brush, Chief, Wetlands Regulatory Office (WTR-8), U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, California 94105-3901
Mr. Ken Sanchez, U.S. Fish and Wildlife Service, Endangered Species Division 2800 Cottage Way, W-2605, Sacramento, California 95825-1888
Mr. Kent Smith, California Department of Fish and Game Region 2, 1701 Nimbus Drive, Rancho Cordova, California 95670-4599



INDIVIDUAL FEATURE ACREAGE CHART

DSW LABEL	ACRES*
1	0.005
2	0.010
3	0.027
4	0.003
5	0.002
6	0.003
7	0.023
8	0.004
9	0.005
10	0.003
11	0.003
12	0.003
13	0.002
SUBTOTAL	0.109

VP LABEL	ACRES*
14	0.009
15	0.015
16	0.003
17	0.021
18	0.687
19	0.068
20	0.061
21	0.010
22	0.003
23	0.003
24	0.010
25	0.003
26	0.052
27	0.003
28	0.043
29	0.019
30	0.004
31	0.003
32	0.056
33	0.692
34	0.205
35	0.013
36	0.005
37	0.010
38	0.005
39	0.009
40	0.973
41	0.008
42	0.004
43	0.007
44	0.036
45	0.013
46	0.010
47	0.633
48	0.018
49	0.051
50	0.140
51	0.007
52	0.951
53	0.049
54	0.011
55	0.005
56	0.071
57	0.021
58	0.026
59	0.026
60	0.113
61	0.041
62	0.035
63	0.006
64	0.020
65	0.003
66	0.414
67	0.055
68	0.029
69	0.024
70	0.018
71	0.057
72	0.013
73	0.029
74	0.056
75	0.033
76	0.095
77	0.133
78	0.082
79	0.951
80	0.118
81	0.027
82	0.018
83	0.023
84	0.004
85	0.033
86	0.060
87	0.016
88	0.040
89	0.029
90	0.044
91	0.040
92	0.003
93	0.003
94	0.020
95	0.005
96	0.090
97	0.037
98	0.041
99	0.018
100	0.015
101	0.004
SUBTOTAL	4.777

RSW LABEL	ACRES*
102	0.003
103	0.010
104	0.008
105	0.029
106	0.015
107	0.007
108	0.009
109	0.007
110	0.055
111	0.020
112	0.002
113	0.008
114	0.010
115	0.011
116	0.015
117	0.018
118	0.001
119	0.011
120	0.007
121	0.043
122	0.010
123	0.003
124	0.029
125	0.002
144	0.028
SUBTOTAL	0.441

ED LABEL	ACRES*
126	0.003
127	0.026
128	0.003
129	0.003
130	0.965
131	0.004
132	0.099
133	0.018
134	0.062
135	0.041
136	0.007
137	0.508
SUBTOTAL	0.297

ED-C LABEL	ACRES*
138	0.003
139	0.003
140	0.002
141	0.001
SUBTOTAL	0.006

POND LABEL	ACRES*
142	0.548
TOTAL**	6.85

Individual acreage reported to 3 significant figures. Features shown as 0 are <0.0005 ac.

**Based on sum of subtotals at 2 significant figures

WATERS OF THE U.S.

CLASSIFICATION	ACREAGE
DEPRESSIONAL WETLANDS	
Seasonal Wetland, DSW	0.11
Vernal Pool, VP	4.77
RIVERINE WETLANDS	
Seasonal Wetland, RSW	0.44
OTHER WATERS OF THE U.S.	
Ephemeral Drainage, ED	0.97
Ephemeral Drainage Culverted, ED-C	0.01
Pond	0.55
TOTAL	6.85

RECEIVED
SEP 26 2012
Regulatory Division
USACE-Sacramento

OTHER FEATURES
- Culvert
- Data Points
- Project Boundary
- Excavated Area

NOTES
- Delineated waters of the U.S. are subject to U.S. Army Corps of Engineers verification.
- Boundary derived from digital base data provided by Wood Rodgers, Inc.
- One meter topo data created from 7.5' digital elevation model for Buffalo Creek, 1978.
- The Hydrologic Unit Code for this site is 18020109.

REVERIFICATION

0 300 600
SCALE IN FEET

FIGURE 3

DELINEATED WATERS OF THE U.S.

WONG AND WAGNER

FOOTHILL ASSOCIATES
ENVIRONMENTAL CONSULTING • PLANNING • LANDSCAPE ARCHITECTURE

© 2012

FILE NAME: wetland_delineation_to_ACOE_rvsd_7-16-07_8x11.mxd
DATE: 03/18/04 DELINEATED BY: KDW (10/10/03 & 3/11/04), MJF (01/17/07)
REVISION: 01/18/07, 0716/07
REVISED: 09/24/12 DRAWN BY: MAB, MMJ, DSD

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: George Carpenter, Tom Winn mmunities, Inc.	File No.: SPK-2004-00666	Date: November 20, 2012

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
	APPROVED JURISDICTIONAL DETERMINATION	D
x	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at *http://www.usace.army.mil/cecw/pages/reg_materials.aspx* or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer (address on reverse). This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the eliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by ntacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

PRELIMINARY JURISDICTIONAL DETERMINATION FORM
Sacramento District

This preliminary JD finds that there *"may be"* waters of the United States on the subject project site, and identifies all aquatic features on the site that could be affected by the proposed activity, based on the following information:

Regulatory Branch: **California Delta** File/ORM #: **SPK-2004-00666** PJD Date: **November 20, 2012**

State: **CA** City/County: **Rancho Cordova, Sacramento County**
Nearest Waterbody:

Location (Lat/Long): **38.5783765977327°, -121.194835033837°**

Size of Review Area: **237** acres

Name/Address Of Property Owner/ Potential Applicant: **George Carpenter, Tom Winn Communities, Inc., 1130 Iron Point Road, Folsom, California 95630-8**

Identify (Estimate) Amount of Waters in the Review Area
Non-Wetland Waters:
linear feet ft wide **1.53** acre(s)
Stream Flow: **Perennial and Seasonal**

Wetlands: **5.32** acre(s) Cowardin Class: **Palustrine, emergent**

Name of any Water Bodies on the site identified as Section 10 Waters: Tidal: Non-Tidal:

☒ Office (Desk) Determination
☐ Field Determination:
Date(s) of Site Visit(s):

SUPPORTING DATA: Data reviewed for preliminary JD (check all that apply – checked items should be included in case file and, where checked and requested, appropriately reference sources below)

☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant:
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Data sheets prepared by the Corps.
☐ Corps navigable waters' study.
☒ U.S. Geological Survey Hydrologic Atlas:
  ☒ USGS NHD data.
  ☐ USGS HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name: **1:24K; CA-BUFFALO CREEK**
☒ USDA Natural Resources Conservation Service Soil Survey.
☒ National wetlands inventory map(s).
☐ State/Local wetland inventory map(s).
☐ FEMA/FIRM maps.
☐ 100-year Floodplain Elevation (if known):
☒ Photographs: ☒ Aerial ☒ Other
☒ Previous determination(s). File no. and date of response letter: **200400666; July 25, 2007**
☐ Other information (please specify):

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

11/20/2012

Signature and Date of Regulatory Project Manager (REQUIRED)

Signature and Date of Person Requesting Preliminary JD (REQUIRED, unless obtaining the signature is impracticable)

EXPLANATION OF PRELIMINARY AND APPROVED JURISDICTIONAL DETERMINATIONS:
1. The Corps of Engineers believes that there may be jurisdictional waters of the United States on the subject site, and the permit applicant or other affected party who requested this preliminary JD is hereby advised of his or her option to request and obtain an approved jurisdictional determination (JD) for that site. Nevertheless, the permit applicant or other person who requested this preliminary JD has declined to exercise the option to obtain an approved JD in this instance and at this time.
2. In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an approved JD for the activity, the permit applicant is hereby made aware of the following: (1) the permit applicant has elected to seek a permit authorization based on a preliminary JD, which does not make an official determination of jurisdictional waters; (2) that the applicant has the option to request an approved JD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an approved JD could possibly result in less compensatory mitigation being required or different special conditions; (3) that the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) that the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) that undertaking any activity in reliance upon the subject permit authorization without requesting an approved JD titutes the applicant's acceptance of the use of the preliminary JD, but that either form of JD will be processed as soon as is practicable; (6) accepting a permit authorization (e.g., signing a ered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a preliminary JD constitutes agreement that all wetlands and other water bodies on the site affected in any way by that activity are jurisdictional waters of the United States, and precludes any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an approved JD or a preliminary JD, that JD will be processed as soon as is practicable. Further, an approved JD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331, and that in any administrative appeal, jurisdictional issues can be raised (see 33 C.F.R. 331.5(a)(2)). If, during that administrative appeal, it becomes necessary to make an official determination whether CWA jurisdiction exists over a site, or to provide an official delineation of jurisdictional waters on the site, the Corps will provide an approved JD to accomplish that result, as soon as is practicable.

ATTACHMENT C

Wetland Determination Data Forms - Arid West Region

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 1

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 15

Subregion (LRR): C Lat: 38.572149 Long: -121.201385 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

Seasonal wetland swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Festuca perennis	20	Y	FAC
2. Hordeum marinum	15	Y	FAC
3. Holocarpha virgata	5	N	N/L
4. Leontodon saxatilis	10	N	FACU
5. Juncus bufonius	10	N	FACW
6.			
7.			
8.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 40 % Cover of Biotic Crust 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	10YR 4/2	95	5YR 4/6	5	C	M, PL		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 5

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ✓ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 2N

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 25

Subregion (LRR): C Lat: 38.572131 Long: -121.201417 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Upland adjacent to seasonal wetland swale.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Elymus caput-medusae	30	Y	N/L
2. Hordeum marinum	20	Y	FAC
3. Holocarpha virgata	10	N	N/L
4. Leontodon saxatilis	10	N	FACU
5.			
6.			
7.			
8.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 2N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 3/3	90	5YR 4/4	10	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 6

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 3

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 20

Subregion (LRR): C Lat: 38.572561 Long: -121.202139 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: Depressional seasonal

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Ephemeral drainage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 3'x3')			
1. Hordeum marinum	2	N	FAC
2. Juncus bufonius	1	N	FACW
3.			
4.			
5.			
6.			
7.			
8.			
	3 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 97 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

Feature is less than 5% vegetated. Hydrophytic vegetation absent.

SOIL

Sampling Point: 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 4/2	90	5YR 4/6	10	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 6

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ✓ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 4N

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 35

Subregion (LRR): C Lat: 38.572549 Long: -121.202151 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Upland adjacent to ephemeral drainage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Elymus caput-medusae	50	Y	N/L
2. Bromus hordeaceus	20	Y	FACU
3. Leontodon saxatilis	15	N	FACU
4.			
5.			
6.			
7.			
8.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 4N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 3/3	100						Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 5

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 5

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): C Lat: 38.572288 Long: -121.199292 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: Ind. vernal pool

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes ✓	No _____	

Remarks:

Vernal pool.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Eryngium castrense	10		OBL
2. Plagiobothrys stipitatus	25	Y	FACW
3. Glyceria declinata	20	Y	FACW
4.			
5.			
6.			
7.			
8.			
	55 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust 40

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	10YR 4/1	85	5YR 4/6	15	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 6

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ✓ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 6N

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15

Subregion (LRR): C Lat: 38.57226 Long: -121.199323 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Upland adjacent to vernal pool.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Elymus caput-medusae	30	Y	N/L
2. Hordeum marinum	20	Y	FAC
3. Holocarpha virgata	15		N/L
4. Leontodon saxatilis	15		FACU
5. Bromus hordeaceus	5		FACU
6.			
7.			
8.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 6N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-3	7.5YR 3/3	100						Clay loam
3-7	7.5YR 4/2	95	5YR 4/6	5	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 7

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 7

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 0

Subregion (LRR): C Lat: 38.574727 Long: -121.200809 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

Seasonal wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Hordeum marinum	20	Y	FAC
2. Centromadia fitchii	10		FACU
3. Leontodon saxatilis	15	Y	FACU
4. Juncus bufonius	15	Y	FACW
5. Lythrum hyssopifolia	10		OBL
6.			
7.			
8.			
	70 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 50

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 66.7 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 7

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 4/2	95	5YR 4/6	5	C	M, PL		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 5

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ✓ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 8N

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 15

Subregion (LRR): C Lat: 38.574704 Long: -121.200786 Datum: NAD83

Soil Map Unit Name: Red Bluff-Redding complex, 0-5% slopes NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Upland adjacent to seasonal wetland.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Elymus caput-medusae	80	Y	N/L
2. Holocarpha virgata	10		N/L
3. Festuca bromoides	15		FACU
4.			
5.			
6.			
7.			
8.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 8N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 4/3	100						Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 6

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 9

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 5

Subregion (LRR): C Lat: 38.575282 Long: -121.200916 Datum: NAD83

Soil Map Unit Name: Hicksville gravelly loam, 0-2% slopes, occasionally flooded NWI classification: Depressional seasonal

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

Large, deep vernal pool.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Plagiobothrys stipitatus	20	Y	FACW
2. Eryngium castrense	5		OBL
3. Crypsis schoenoides	15	Y	FACW
4. Trichostema lanceolatum	2		FACU
5.			
6.			
7.			
8.			
	42 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 58 % Cover of Biotic Crust 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 9

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 4/2	85	5YR 4/6	15	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ✓ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 6

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ✓ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 10N

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 10

Subregion (LRR): C Lat: 38.575272 Long: -121.200979 Datum: NAD83

Soil Map Unit Name: Hicksville gravelly loam, 0-2% slopes, occasionally flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Upland adjacent to vernal pool.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Festuca bromoides	30	Y	FACU
2. Holocarpha virgata	10		N/L
3. Centromadia fitchii	20	Y	FACU
4. Leontodon saxatilis	15		FACU
5. Hordeum marinum	10		FAC
6.			
7.			
8.			
	85 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 10N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 4/2	98	5YR 4/6	2	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 5

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 11

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Convex Slope (%): 50

Subregion (LRR): C Lat: 38.575505 Long: -121.201271 Datum: NAD83

Soil Map Unit Name: Hicksville gravelly loam, 0-2% slopes, occasionally flooded NWI classification: Depressional

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

Perennial pond. Impoundment of imtermittent drainage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Eleocharis macrostachya	90	Y	OBL
2. Persicaria sp.	15		OBL
3.			
4.			
5.			
6.			
7.			
8.			
	105 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 0 % Cover of Biotic Crust 10

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 11

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-12	7.5YR 4/1	70	5YR 4/6	30	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ✓ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ✓ Biotic Crust (B12)
- ✓ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ✓ No ___ Depth (inches): 48

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 12N

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Convex Slope (%): 70

Subregion (LRR): C Lat: 38.575462 Long: -121.201258 Datum: NAD83

Soil Map Unit Name: Hicksville gravelly loam, 0-2% slopes, occasionally flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Upland adjacent to perennial pond.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Bromus hordeaceus	70	Y	FACU
2. Holocarpha virgata	10		N/L
3. Acmispon americanus	10		UPL
4.			
5.			
6.			
7.			
8.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 12N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-7	7.5YR 3/3	100						Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 7

Hydric Soil Present? Yes _____ No ✓

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ✓ Depth (inches): _____

Water Table Present? Yes _____ No ✓ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No ✓ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 13

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Drainageway Local relief (concave, convex, none): Concave Slope (%): 10

Subregion (LRR): C Lat: 38.576156 Long: -121.199801 Datum: NAD83

Soil Map Unit Name: Hicksville gravelly loam, 0-2% slopes, occasionally flooded NWI classification: Fluvial unnatural

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks:

Intermittent drainage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Eleocharis macrostachya	50	Y	OBL
2. Cyperus eragrostis	5		FACW
3.			
4.			
5.			
6.			
7.			
8.			
	55 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 45 % Cover of Biotic Crust 20

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✓ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

SOIL

Sampling Point: 13

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-6	7.5YR 4/2	80	5YR 4/6	20	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 6

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ✓ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ✓ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ✓ **No** ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: The Preserve Development City/County: Rancho Cordova Sampling Date: 10/12/2018

Applicant/Owner: Winn Communities, Inc. State: CA Sampling Point: 14N

Investigator(s): Clay DeLong Section, Township, Range: Rio de los Americanos Land Grant

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): Convex Slope (%): 15

Subregion (LRR): C Lat: 38.576184 Long: -121.199792 Datum: NAD83

Soil Map Unit Name: Hicksville gravelly loam, 0-2% slopes, occasionally flooded NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes ✓	No _____	
Wetland Hydrology Present?	Yes _____	No ✓	

Remarks:

Upland adjacent to intermittent drainage.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: N/A)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: N/A)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5'x5')			
1. Leontodon saxatilis	30	Y	FACU
2. Acmispon americanus	5		UPL
3. Centromadia fitchii	5		FACU
4. Lythrum hyssopifolia	5		OBL
5. Dittrichia graveolens	5		N/L
6. Centaurium tenuiflorum	5		FACW
7. Festuca perennis	10	Y	FAC
8.			
	65 = Total Cover		
Woody Vine Stratum (Plot size: N/A)			
1.			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 35 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✓

Remarks:

SOIL

Sampling Point: 14N

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-5	7.5YR 4/2	90	5YR 4/6	10	C	M		Clay loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ✓ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: Refusal

Depth (inches): 5

Hydric Soil Present? Yes ✓ **No** ___

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✓ Depth (inches): ___

Water Table Present? Yes ___ No ✓ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✓ Depth (inches): ___

Wetland Hydrology Present? Yes ___ **No** ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

ATTACHMENT D

Plant Species Observed On-Site

The Preserve Development:

Plant Species Observed On-Site (October 12, 2018)

SCIENTIFIC NAME	COMMON NAME	Indicator
APIACEAE	**CARROT FAMILY**	
Eryngium castrense	Button-celery	OBL
ASTERACEAE	**SUNFLOWER FAMILY**	
*Centaurea solstitialis**	Yellow star-thistle	N/L
Centromadia fitchii	Fitch's spikeweed	FACU
*Dittrichia graveolens**	Stinkwort	N/L
Holocarpha virgata	Sticky tarweed	N/L
*Leontodon saxatilis**	Hairy hawkbit	FACU
Psilocarphus brevissimus	Woolly marbles	FACW
BORAGINACEAE	**BORAGE FAMILY**	
Plagiobothrys stipitatus	Slender popcorn-flower	FACW
CUPRESSACEAE	**CYPRESS FAMILY**	
Sequoia sempervirens	Redwood	N/L
CYPERACEAE	**SEDGE FAMILY**	
Cyperus eragrostis	Tall flatsedge	FACW
Eleocharis macrostachya	Creeping spikerush	OBL
EUPHORBIACEAE	**SPURGE FAMILY**	
Croton setigerus	Turkey mullein	N/L
FABACEAE	**LEGUME FAMILY**	
Acmispon americanus	American bird's foot trefoil	UPL
GENTIANACEAE	**GENTIAN FAMILY**	
*Centaurium tenuiflorum**	Slender centaury	FACW
JUNCACEAE	**RUSH FAMILY**	
Juncus bufonius	Toad rush	FACW
LAMIACEAE	**MINT FAMILY**	
Trichostema lanceolatum	Vinegar weed	FACU
LYTHRACEAE	**LOOSESTRIFE FAMILY**	
*Lythrum hyssopifolia**	Hyssop loosestrife	OBL
MYRTACEAE	**MYRTLE FAMILY**	
*Eucalyptus globulus**	Blue gum	N/L
POACEAE	**GRASS FAMILY**	
*Avena fatua**	Wild oat	N/L

The Preserve Development:

Plant Species Observed On-Site (October 12, 2018)

SCIENTIFIC NAME	COMMON NAME	Indicator
POACEAE	**GRASS FAMILY**	
*Bromus diandrus**	Ripgut brome	N/L
*Bromus hordeaceus**	Soft brome	FACU
*Crypsis schoenoides**	Swamp grass	FACW
*Elymus caput-medusae**	Medusahead grass	N/L
*Festuca bromoides**	Brome fescue	FACU
*Festuca perennis**	Italian Ryegrass	FAC
*Glyceria declinata**	Mannagrass	FACW
Hordeum marinum ssp. *gussoneanum**	Mediterranean barley	FAC
Hordeum murinum ssp. *glaucum**	Foxtail barley	FACU
POLYGONACEAE	**BUCKWHEAT FAMILY**	
Persicaria sp.	Smartweed	OBL
SALICACEAE	**WILLOW FAMILY**	
Populus fremontii	Fremont's cottonwood	FAC
Salix exigua	Sandbar willow	FACW
Salix gooddingii	Goodding's black willow	FACW

ATTACHMENT E

Representative Site Photographs



Photo 1. Gravel road north of Edington Drive in central portion of Delineation Area. View south. Photo taken October 12, 2018.



Photo 2. Grasslands west of Edington Drive in southwestern portion of Delineation Area. View northwest. Photo taken October 12, 2018.



Photo 3. Vernal pool in southwestern portion of Delineation Area. View south. Photo taken October 12, 2018.



Photo 4. Large vernal pool in northwestern portion of Delineation Area. View northeast. Photo taken October 12, 2018.



Photo 5. Open water feature in northwestern portion of Delineation Area. View northeast. Photo taken October 12, 2018.



Photo 6. Stream/creek in northwestern portion of Delineation Area. View southwest. Photo taken October 12, 2018.



Photo 3. Stream/creek in central portion of Delineation Area. View southwest. Photo taken October 12, 2018.



Photo 4. Swale in northwestern portion of Delineation Area. View east. Photo taken October 12, 2018.

ATTACHMENT F

USACE ORM Aquatic Resources Table

Waters_Name	State	Cowardin_Code	HGM_Code	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude	Local_Waterway	Similarity_Situated	Sim_Situated_Aggregated_SPOE	Adjcent_Waters_Sbjct_33USC1344	OHWM_Chg_In_Plant_Community	OHWM_Bed_And_Banks	OHWM_Break_In_Slope	OHWM_Chg_In_Character_Of_Soil	OHWM_Chg_In_Veg_Density_Maturity	OHWM_Chg_In_Sediment_Texture	OHWM_Line_Impressed_On_Bank	OHWM_Destr_Of_Terrestrial_Veg	OHWM_Leaf_Litter_Disturbed	OHWM_Multiple_Flow_Events	OHWM_Scour	OHWM_Sediment_Deposition	OHWM_Sediment_Sorting	OHWM_Shelving	OHWM_Litter_and_Debris_Present	OHWM_Wrack_Line_Present	OHWM_Veg_Matted_Bent_Or_Absent	OHWM_Water_Staining	OHWM_Other	OHWM_Other_Text	Func_I_Sediment_Trapping	Func_II_Nutrient_Recycling	Func_III_Pollutant_Management	Func_IV_Retntn_Attenu_Fld_Wtrs	Func_V_Runoff_Storage	Func_VI_Contribution_of_Flow	Func_VII_Export_Organic_Matter	Func_VIII_Export_Food_Rsources	Func_IX_Prov_Life_Cycle_Depdnt
OW-1	CALIFORNIA	POW		Area	1.81393515	ACRE	DELINPJD	38.57572037	-121.2011449																																		
SC-1	CALIFORNIA	R4		Area	0.09565673	ACRE	DELINPJD	38.57614458	-121.1995959																																		
SC-2	CALIFORNIA	R4		Area	0.20350649	ACRE	DELINPJD	38.57503792	-121.2022099																																		
SC-3	CALIFORNIA	R6		Area	0.00808377	ACRE	DELINPJD	38.57261952	-121.202234																																		
SWL-1	CALIFORNIA	PEM		Area	0.68594234	ACRE	DELINPJD	38.57561682	-121.199356																																		
SWL-2	CALIFORNIA	PEM		Area	0.74594614	ACRE	DELINPJD	38.57437114	-121.2007471																																		
SWL-3	CALIFORNIA	PEM		Area	0.15958671	ACRE	DELINPJD	38.57507329	-121.2022859																																		
SWL-4	CALIFORNIA	PEM		Area	0.01706369	ACRE	DELINPJD	38.57409691	-121.2022748																																		
SWL-5	CALIFORNIA	PEM		Area	0.05769086	ACRE	DELINPJD	38.57236595	-121.2017111																																		
SWL-6	CALIFORNIA	PEM		Area	0.02266507	ACRE	DELINPJD	38.5718949	-121.1993982																																		
SWL-7	CALIFORNIA	PEM		Area	0.02407002	ACRE	DELINPJD	38.57202812	-121.1985756																																		
VP-1	CALIFORNIA	PEM		Area	0.00434661	ACRE	DELINPJD	38.57601498	-121.20003																																		
VP-10	CALIFORNIA	PEM		Area	0.0580631	ACRE	DELINPJD	38.57210442	-121.1996532																																		
VP-11	CALIFORNIA	PEM		Area	0.03692233	ACRE	DELINPJD	38.57211532	-121.1994322																																		
VP-12	CALIFORNIA	PEM		Area	0.0907379	ACRE	DELINPJD	38.57233482	-121.19926																																		
VP-13	CALIFORNIA	PEM		Area	0.11069019	ACRE	DELINPJD	38.57220356	-121.198872																																		
VP-14	CALIFORNIA	PEM		Area	0.06648923	ACRE	DELINPJD	38.57228403	-121.1986023																																		
VP-15	CALIFORNIA	PEM		Area	0.051276	ACRE	DELINPJD	38.57194554	-121.1990378																																		
VP-2	CALIFORNIA	PEM		Area	0.73462272	ACRE	DELINPJD	38.57525093	-121.2006518																																		
VP-3	CALIFORNIA	PEM		Area	0.01049221	ACRE	DELINPJD	38.5747219	-121.2008208																																		
VP-4	CALIFORNIA	PEM		Area	0.00545335	ACRE	DELINPJD	38.57500032	-121.2010844																																		
VP-5	CALIFORNIA	PEM		Area	0.02653871	ACRE	DELINPJD	38.57484909	-121.2014638																																		
VP-6	CALIFORNIA	PEM		Area	0.01577674	ACRE	DELINPJD	38.57417363	-121.2018499																																		
VP-7	CALIFORNIA	PEM		Area	0.02369595	ACRE	DELINPJD	38.57422298	-121.2021317																																		
VP-8	CALIFORNIA	PEM		Area	0.01376218	ACRE	DELINPJD	38.57281178	-121.2003619																																		
VP-9	CALIFORNIA	PEM		Area	0.02380634	ACRE	DELINPJD	38.57287288	-121.2002068																																		

ATTACHMENT G

Wetland Delineation Shape File (to be included with USACE submittal only)

May 9, 2019

Regulatory Division (SPK-2019-00197)

Winn Communities
Attn: Mr. George Carpenter
3001 I Street, Suite 300
Sacramento, California 95816
georgemcarpenter@comcast.net

Dear Mr. Carpenter:

We are responding to your consultant's March 20, 2019, request for verification of an Aquatic Resource delineation for the Preserve Development site. The approximately 113.8-acre project site is located northwest of Raymer Way and west of Grant Line Road, Latitude 38.57489°, Longitude -121.19673°, City of Rancho Cordova, Sacramento County, California.

Based on available information, we concur with your consultant's aquatic resources delineation for the site, which consists of approximately 7.861 acres of aquatic resources (consisting of 2.646 acres of vernal pool, 1.841 acres of seasonal wetland swale, 1.015 acres of stream/creek [Morrison Creek, a perennial water, and several ephemeral drainages], and 2.360 acres of open water (pond), as depicted on the enclosed April 24, 2019, *Figure 4a-b Aquatic Resources Delineation* drawings prepared by ECORP Consulting, Inc. (Enclosure 1).

This verification letter does not constitute a determination of jurisdiction (JD). A JD is not required to process an application for a Department of the Army permit. If you do not require a JD for the site, your permit application may be processed sooner.

You may request a JD for this site at any time prior to starting work in aquatic resources, including after a permit decision is made. To request a JD for this site, complete the attached *Request for Jurisdictional Determination Form* (Enclosure 2) and return it to this office at the address listed below.

Please refer to identification number SPK-2019-00197 in any correspondence concerning this project. If you have any questions, please contact me at U.S. Army Corps of Engineers Regulatory Division, California Delta Section, 1325 J Street, Room 1350, Sacramento, CA 95814-2922, by email at *Mary.R.Pakenham-Walsh@usace.army.mil,* or telephone at (916) 557-7718. For program information or to complete our Customer Survey, visit our website at www.spk.usace.army.mil/Missions/Regulatory.aspx.

Sincerely,

Mary R. Pakenham-Walsh
Senior Project Manager
California Delta Section

Enclosures

cc: (w/o encls)
Mr. Joseph Morgan, U.S. Environmental Protection Agency, Region 9, morgan.josepth@epamail.epa.gov
Ms. Stephanie Tadlock, California Regional Water Quality Control Board, Central Valley Region, Stephanie.Tadlock@waterboards.ca.gov
Mr. Bjorn Gregersen, ECORP Consulting, BGregers@ecorpconsulting.com

June 27, 2019

Mr. George Carpenter
Winn Communities
3001 I Street, Suite 300
Sacramento, CA 95816

RE: Addendum to Aquatic Resources Delineation for The Preserve Development

Dear Mr. Carpenter:

An Aquatic Resources Delineation was prepared by ECORP Consulting, Inc. for The Preserve Development (Project) on November 26, 2018. The delineation was verified by the U.S. Army Corps of Engineers (USACE) on May 5, 2019 (SPK-2019-00197). This letter provides information on an additional ±8.8-acre area to be included as a potential Offsite work area for the Project, and serves as an addendum to the Aquatic Resources Delineation dated November 26, 2018.

Offsite Assessment

An assessment of potential Waters of the U.S. within the Offsite along Raymer Way was conducted on June 13, 2019 by ECORP biologist Matt Spaulding. Access to the property was not authorized; therefore, Mr. Spaulding walked along Raymer Way and assessed potential aquatic features from the publicly accessible roadway. In addition, historic aerial photos were reviewed. Several roadside ditches were mapped and classified as swales according to land cover definitions within the South Sacramento Habitat Conservation Plan.

Summary

The unverified Offsite was determined to contain 0.215 acre of swale based on the assessment-level survey. Figure 1 provides a revised delineation map for the overall Project area, and Figure 2 provides a detailed view of the unverified Offsite area. If you have any questions, please call me at (916) 782-9100 or email at temam@ecorpconsulting.com.

Sincerely,

Taraneh Emam
Senior Biologist/Project Manager

Figure 1

Aquatic Resources Delineation Overview

Figure 1.
Aquatic Resources Delineation Overview

Map Features

- Overall ARD Study Area - 122.6 acres
- Reference Coordinate (NAD83)

Three Criteria Sample Points

- Waters Point
- Upland Point

Potential Aquatic Resources (Unverified) - 0.215 acres [1] *

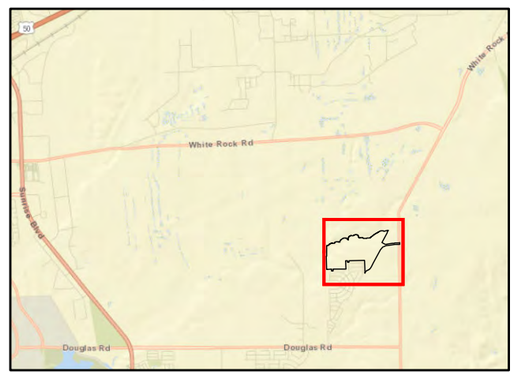
- Swale - 0.215 acres

Verified Waters of the U.S. - 7.861 acres [2] *

- Vernal Pool - 2.645 acres
- Swale - 1.841 acres
- Stream/Creek - 1.015 acres
- Open Water - 2.360 acres

[1] Features are assessment level. The assessment was not conducted in accordance with the Corps of Engineers Wetland Delineation Manual and Sacramento District Minimum Standards. The project boundaries, wetland boundaries, and acreage values are approximate.
[2] PJD for Wong-Wagner Issued 11/20/2012, SPK-2004-00666.
[2] PJD for The Preserve Issued 05/09/2019, SPK -2019-00197
* The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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ECORP: N:\2018\2018-205 THE PRESERVE\MAPS\JURISDICTIONAL_DELINEATION\USACE_DELINEATION\V1\THEPRESERVE_ARD_20190620_OVERVIEW.MXD(JDS) -JSWAGER 6/20/2019

2018-205 The Preserve

Scale in Feet
0 400

Photo Source: ESRI, Sacramento County 2018
Boundary Source: Ruggeri-Jensen-Azar & Associates
Delineator(s): C.DeLong (ECORP), Foothill Associates
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Map Date: 6/20/2019

Figure 2

Aquatic Resources Delineation Unverified Offsite Detail



ECORP- N:\2018\2018-205 THE PRESERVE\MAPS\JURISDICTIONAL_DELINEATION\USACE_DELINEATIONV1\THEPRESERVE_ARD_20190620_DETAIL.MXD(JDS)-JSWAGER 6/20/2019

Figure 2.
Aquatic Resources Delineation
Unverified Offsite Detail

Map Features

- Overall ARD Study Area - 122.6 acres
- Unverified Area
- Reference Coordinate (NAD83)
- Culvert

Potential Aquatic Resources (Unverified) - 0.215 acres [1] *

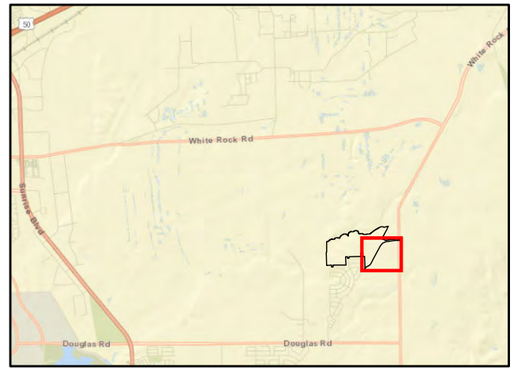
- Swale - 0.215 acres

Verified Waters of the U.S. - 7.861 acres [2]

- Vernal Pool
- Swale
- Stream/Creek

[1] Features are assessment level. The assessment was not conducted in accordance with the Corps of Engineers Wetland Delineation Manual and Sacramento District Minimum Standards. The project boundaries, wetland boundaries, and acreage values are approximate.
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** The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.*

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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2018-205 The Preserve

Scale in Feet
0 200

Photo Source: ESRI, Sacramento County 2018
Boundary Source: Ruggeri-Jensen-Azar & Associates
Delineator(s): C.DeLong (ECORP), Foothill Associates
Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

Map Date: 6/20/2019

ATTACHMENT G

Wildlife Observed Onsite

Wildlife Species Observed Onsite

Common Name	Scientific Name
Amphibians	
American bullfrog	*Lithobates catesbeianus*
Reptiles	
red-eared slider	*Trachemys scripta elegans*
Birds	
American crow	*Corvus brachyrhynchos*
black phoebe	*Sayornis nigricans*
European starling	*Sturnus vulgaris*
great blue heron	*Ardea herodias*
great egret	*Ardea alba*
house finch	*Haemorhous mexicanus*
killdeer	*Charadrius vociferous*
mourning dove	*Zenaida macroura*
northern flicker	*Colaptes auratus*
Say's phoebe	*Sayornis saya*
western blue bird	*Sialia mexicana*
western meadowlark	*Sturnella neglecta*
white-crowned sparro	*Zonotrichia leucophrys*
yellow-rumped warbler	*Setophaga coronata*
Mammals	
Black-tailed Jackrabbit	*Lepus californicus*

Wildlife Species Observed Onsite
(November 27, 2018)

Common Name	Scientific Name
Birds	
Canada Goose	*Branta canadensis*
Mourning Dove	*Zenaida macroura*
Anna's Hummingbird	*Calypte anna*
Ring-billed Gull	*Larus delawarensis*
California Gull	*Larus californicus*
Double-crested Cormorant	*Phalacrocorax auritus*
Great Egret	*Ardea alba*
Red-tailed Hawk	*Buteo jamaicensis*
Burrowing Owl	*Athene cunicularia*
Northern Flicker	*Colaptes auratus*
Black Phoebe	*Sayornis nigricans*
Say's Phoebe	*Sayornis saya*
Loggerhead shrike	*Lanius ludovicianus*
California Scrub-Jay	*Aphelocoma californica*
American Crow	*Corvus brachyrhynchos*
Horned Lark	*Eremophila alpestris*
Ruby-crowned Kinglet	*Regulus calendula*
Northern Mockingbird	*Mimus polyglottos*
American Pipit	*Anthus rubescens*
House Finch	*Haemorhous mexicanus*
American Goldfinch	*Spinus tristis*
Dark-eyed Junco	*Junco hyemalis*
White-crowned Sparrow	*Zonotrichia leucophrys*
Savannah Sparrow	*Passerculus sandwichensis*
Western Meadowlark	*Sturnella neglecta*
Red-winged Blackbird	*Agelaius phoeniceus*
Tricolored Blackbird	*Agelaius tricolor*
Brewer's Blackbird	*Euphagus cyanocephalus*
Yellow-rumped Warbler	*Setophaga coronata*
Mammals	
Black-tailed Jackrabbit	*Lepus californicus*

ATTACHMENT H

Arborist Report

Arborist Survey Report

The Preserve

Rancho Cordova, California

Prepared For:

Winn Communities, Inc.

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2.0 SITE DESCRIPTION 2
3.0 METHODS 2
4.0 RESULTS 4
5.0 CONCLUSIONS 5
6.0 REFERENCES 6

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LIST OF ATTACHMENTS

Attachment A – Tree Inventory Map for The Preserve

Attachment B – Tree Survey Data

Attachment C – Representative Site Photographs

1.0 INTRODUCTION

On behalf of Winn Communities, Inc., ECORP Consulting, Inc. (ECORP) conducted an arborist survey for The Preserve Project, a planned development within the City of Rancho Cordova, Sacramento County, California. The purpose of this survey was to identify, map, and assess the general condition of trees within according to the Rancho Cordova Ordinance for the Preservation and Protection of Private Trees (Tree Ordinance, Ranch Cordova Municipal Code - Chapter 19.12).

The following are definitions from the Tree Ordinance that guide the methodology and data collection for this survey effort:

- **Protected Tree:**

    1. Native oak – *Quercus lobata*, valley oak; *Quercus wislizenii*, interior live oak; *Quercus douglasii*, blue oak; or *Quercus* x. *morehus*, oracle oak – having a trunk diameter of at least six inches or greater; or

    2. Any tree species other than a native oak having a trunk diameter of at least 12 inches or greater on nonresidential property; or

    3. Any tree species other than a native oak having a trunk diameter of at least 24 inches or greater on residential property; or

    4. Any tree planted as a requirement tree for site development, tree permit condition, landscape plan removal replacement, or other designated condition by the public works director or planning director.

- **Diameter at Standard Height:** The City Ordinance defines the methods by which trunk diameter is determined as:

    1. "Diameter at standard height" or "dsh" means the diameter of a tree measured at four and one-half feet above natural grade, except as specified below. The diameter shall be calculated by using the following formula: diameter equals circumference/3.14.

    2. For a tree that branches at or below four and one-half feet, dsh means the diameter at the narrowest point between the grade and the branching point.

    3. For a tree with a common root system that branches at the ground, DSH means the sum of the diameter of the largest trunk and one-half the cumulative diameter of the remaining trunks at four and one-half feet above natural grade.

Trees designated with protected status under the City Ordinance may carry additional reporting and planning requirements. The City ordinances requires a report, to be prepared by a certified arborist,

detailing the preservation, removal, replacement, or relocation of any protected trees prior to the preliminary approval of any parcel map.

2.0 SITE DESCRIPTION

The arborist survey was conducted within a 112.08-acre Study Area including the 98.92-acre Project area, as well as potential Offsite areas totaling 13.16 acres. In this document the Offsite areas are referred to as the Rio del Oro Offsite (located to the west of the Project), the Raymer Way Offsite (located to the east of the Project), the Morrison Creek Offsite (located to the north of the Project around an existing crossing of Morrison Creek), and the North Douglas Offsites (road stubs located to the south of the Project).

The Study Area corresponds to a portion of an unsectioned portion of the Rio de los Americanos Land Grant within the "Buffalo Creek, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1980) (Figure 1. *Study Area Location and Vicinity*). The approximate center of the site is located at 38.574614° North and -121.196708° West within the Lower Sacramento Watershed (Hydrologic Unit Code #18020163, USGS 2016).

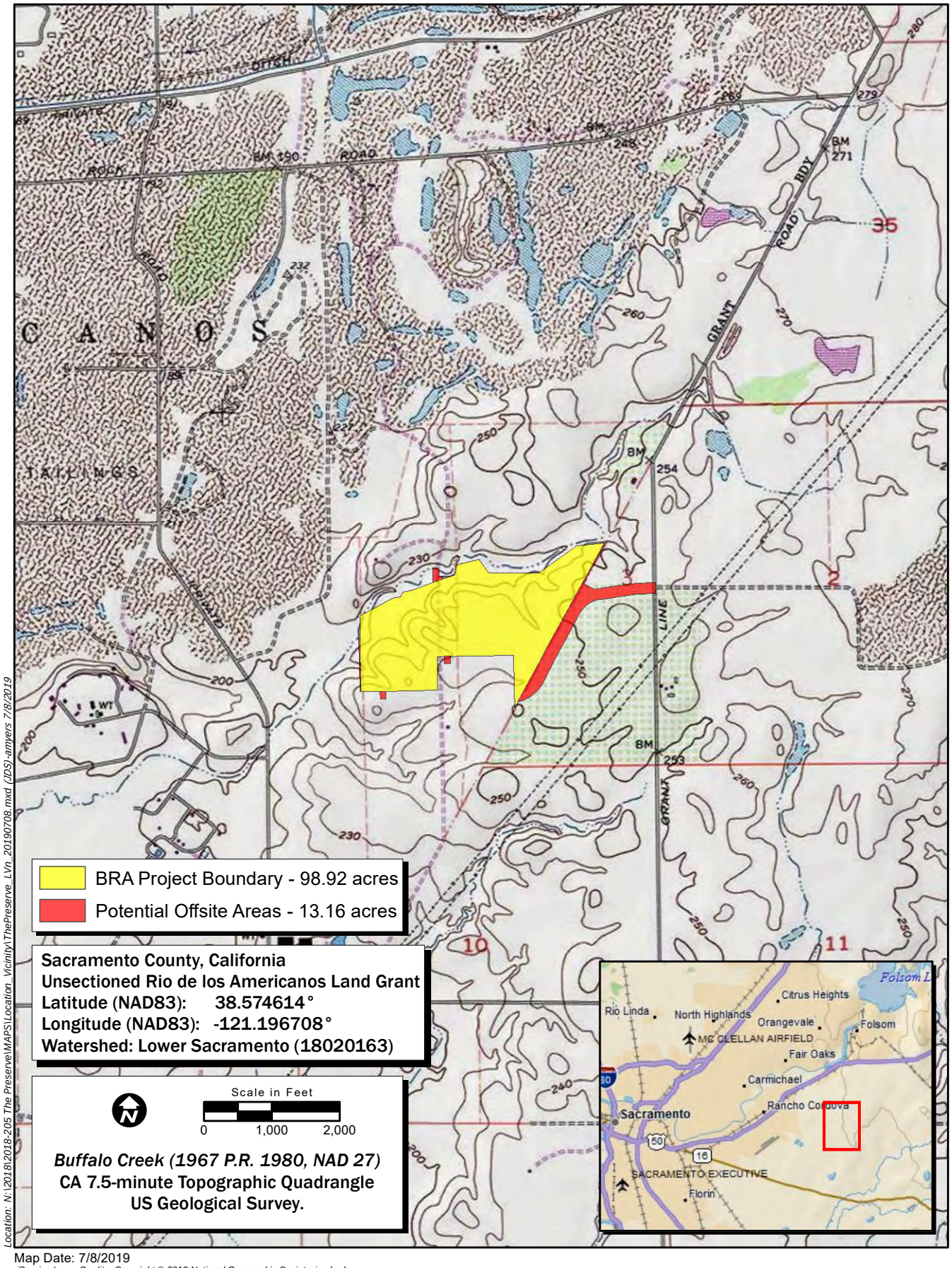
The current land use within the Study Area is rural residential and agricultural. The Study Area is situated at an elevational range of approximately 220 - 240 feet above mean sea level in the Sacramento Valley Subregion of the Great Central Valley floristic region of California (Baldwin et al. 2012). Two residences and associated outbuildings are present within the Study Area, and the remaining area is used for cattle grazing. The vegetation community present in the Study Area is grazed annual grassland and mainly consists of nonnative annual grasses and horticultural tree plantings around the residences. The land uses to the north, west, and east of the Study Area are primarily agricultural and residential, to the south of the Study Area lies the North Douglas residential development.

3.0 METHODS

ECORP arborist Ben Waitman (ISA Certification #WE-12108), assisted by ECORP biologist Daniel Wong, conducted the field survey of the Study Area on October 9, 2018, June 13, 2019, and July 15, 2019. During the field survey dates, the entire Study Area was walked or viewed across level ground, and data were recorded using an iPad paired with a Global Positioning System unit accurate to less than one meter.

The survey data collection included species, dsh, dripline radius, tree structure, and tree condition. Each surveyed tree was tagged with a permanent numbered aluminum tag at roughly breast height (~4.5 feet). The survey results are intended for general Project planning purposes only and should not be considered a detailed tree analysis (i.e., results do not include hazard assessment, tree health diagnosis, preservation/removal recommendations, or pruning advisement). The following terms define the collected data:

Diameter at standard height (dsh): Trunk diameter as defined by the Tree Ordinance.



Location: N:\2018\2018-205 The Preserve\MAPS\Location_Vicinity\ThePreserve_LVn_20190708.mxd (JDS)-amyers 7/8/2019

Map Date: 7/8/2019

iService Layer Credits: Copyright:© 2013 National Geographic Society, i-cubed
Copyright:(c) 2018 Garmin

Figure 1. Study Area Location and Vicinity

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2018-205 The Preserve

Dripline Radius: The maximum distance from trunk to the edge of the canopy.

Condition: An estimate of the tree's overall health. This includes evaluation of foliage, evidence of wound healing, evidence of fungal infection, and the amount and condition of attached deadwood. Tree condition was rated on a five-point scale (poor, fair to poor, fair, fair to good, and good).

Structure: An estimate of the tree's structural soundness, based on obvious external evidence. This evaluates the obvious potential for structural failure of one or more major branches or trunks, the environment and condition of the root crown, symmetry of the canopy, and any noticeable effects of crowding caused by adjacent trees. Tree structure was rated on a five-point scale (poor, fair to poor, fair, fair to good, and good).

4.0 RESULTS

A total of 247 living trees greater than six inches in dsh were found during the survey, and three dead trees. A map depicting the locations of the inventoried trees is included as Attachment A. Detailed tree survey data for each tree are included as Attachment B. Representative site photographs are included as Attachment C.

Eleven different species of living trees were recorded during the survey. Of the trees present, one species (coast redwood [*Sequoia sempervirens*]) is considered native to California. However, coast redwood does not naturally occur in the Central Valley and is generally planted as horticultural plantings. Sixty-eight coast redwoods were recorded within the study area (including one dead tree).

The remaining trees are not native to California and include 108 gum trees (*Eucalyptus* spp.; including one dead tree), 19 purple leaf plum (*Prunus cerasifera*), 18 Callery pear (*Pyrus calleryana*), 17 American sweetgum (*Liquidambar styraciflua*), six Brazilian pepper-tree (*Schinus terebinthifolius*), five deodar cedar (*Cedrus deodara*), three white mulberry (*Morus alba*), two crepe myrtle (*Lagerstroemia* sp.), two Japanese Maple (*Acer palmatum*), one Chinese tallow (*Triadica sebifera*), and one dead silver birch (*Betula pendula*).

None of the above are protected native species. However, the Tree Ordinance specifically protects trees of any species present on residential property with a dsh greater than 24 inches, or with a dsh of 12 inches or greater on non-residential properties. Because the entire site is proposed for development, it may be considered a non-residential property. By this definition, 149 living trees having a dsh equal to or greater than 12 inches may be considered protected trees by the City of Rancho Cordova (see Attachment B for tree dsh data). Each of these trees was grown in landscaped rows of trees, likely planted for protection from wind or to enhance the view scape. Even though these trees are not native to the survey area, these 149 trees may require a permit from the City of Rancho Cordova if pruning or removal of these trees is necessary.

5.0 CONCLUSIONS

The Study Area contains 247 total trees greater than 6 inches dsh and three dead trees, and all trees are nonnative to the Study Area. There are 149 living trees that have a dsh equal to or greater than 12 inches and therefore meet the definition of a Protected Tree as defined in the City of Rancho Cordova's Tree Preservation Ordinance. Should removal be required, a tree removal permit should be procured from the City and mitigation may be required at the discretion of the City. In addition, the City may require an additional report that details a proposal to avoid, relocate, or replace any protected trees present within the Study Area.

6.0 REFERENCES

Baldwin, B.G; D.H. Goldman; D.J. Keil; R. Patterson; and T.J. Rosatti, editors. 2012. The Jepson Manual: Vascular Plants of California, Second Edition. University of California Press, Berkeley.

ECORP. 2019. Biological Resources Assessment for The Preserve Development. Prepared for Winn Communities. June.

USGS. 2016. Watershed Boundary Dataset for Sacramento County, California. Available at http://datagateway.nrcs.usda.gov. Accessed August 28, 2017.

_____. 1967, photorevised 1980. "Buffalo Creek, California" 7.5-minute Topographic Quadrangle. Geological Survey. Denver, Colorado.

LIST OF ATTACHMENTS

Attachment A – Tree Inventory Map for The Preserve

Attachment B – Tree Survey Data

Attachment C – Representative Site Photographs

ATTACHMENT A

Tree Inventory Map for The Preserve



Attachment A
Tree Locations
Overview

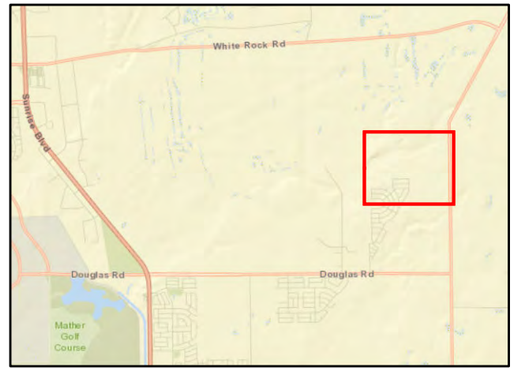
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres
- Protected Tree (dsh >=12")

Tree Species

- Brazilian Pepper-tree
- Callery Pear
- Chinese Tallow
- Coast Redwood
- Crepe Myrtle
- Deodar Cedar
- Eucalyptus spp.
- Japanese Maple
- Purple Leaf Plum
- Silver Birch
- Sweetgum
- White Mulberry

Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community



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Location: N:\2018\2018-205 The Preserve\MAPS\SSS_Survey_and_Mapping\Arborist_Tree_Locations\ThePreserve_Trees_20181009_Overview.mxd (JDS)-amyers 7/17/2019

2018-205 The Preserve

Scale in Feet
0 400

Photo Source: 2017, ESRI, DigitalGlobe

Map Date: 7/17/2019



Attachment A.
Tree Locations
(Sheet 1 of 3)

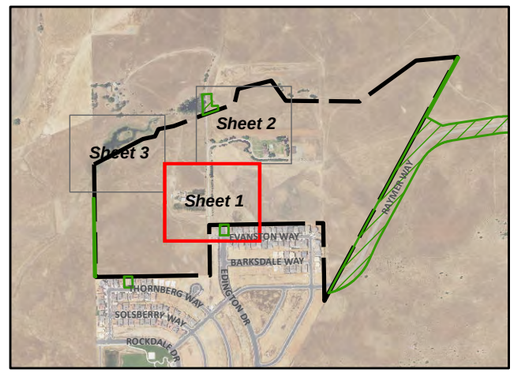
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Tree Species

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- Chinese Tallow
- Coast Redwood
- Eucalyptus spp.
- Sweetgum
- White Mulberry

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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Location: N:\2018\2018-205 The Preserve\MAPS\SSS_Survey_and_Mapping\Arborist_Tree_Locations\ThePreserve_Trees_20181009_MapBook.mxd (JDS)-amyers 7/17/2019

2018-205 The Preserve

Scale in Feet
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Photo Source: 2017, ESRI, DigitalGlobe

Map Date: 7/17/2019



Attachment A.
Tree Locations
(Sheet 2 of 3)

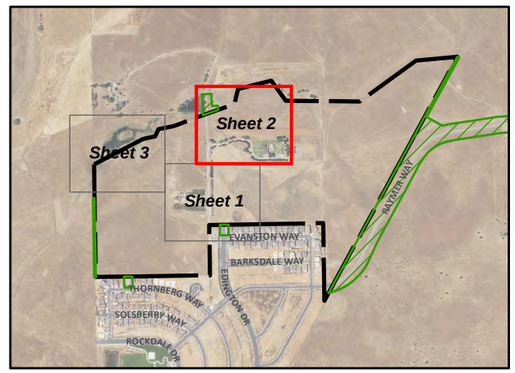
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres
- Protected Tree (dsh >=12")

Tree Species

- Brazilian Pepper-tree
- Callery Pear
- Coast Redwood
- Crepe Myrtle
- Deodar Cedar
- Eucalyptus spp.
- Japanese Maple
- Purple Leaf Plum
- Silver Birch
- Sweetgum

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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Location: N:\2018\2018-205 The Preserve\MXD\SSS_Survey_and_Mapping\Arborist_Tree_Locations\ThePreserve_Trees_20181009_MapBook.mxd (JDS)-amyers 7/17/2019

2018-205 The Preserve

Scale in Feet
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Photo Source: 2017, ESRI, DigitalGlobe

Map Date: 7/17/2019



Attachment A.
Tree Locations
(Sheet 3 of 3)

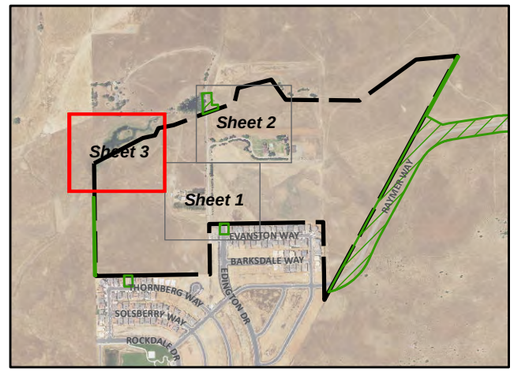
Map Features

- Project Boundary - 98.92 acres
- Potential Offsite Areas - 13.16 acres
- Protected Tree (dsh >=12")

Tree Species

- Eucalyptus spp.

Service Layer Credits: Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



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Location: N:\2018\2018-205 The Preserve\MAPS\SSS_Survey_and_Mapping\Arborist_Tree_Locations\ThePreserve_Trees_20181009_MapBook.mxd (JDS)-amyers 7/17/2019

2018-205 The Preserve

Scale in Feet
0 80

Photo Source: 2017, ESRI, DigitalGlobe

Map Date: 7/17/2019

ATTACHMENT B

Tree Survey Data (October 9, 2018 and June 13, 2019)

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
3654	Non-Native	Brazilian Pepper-tree	*Schinus terabinthifolia*	10	10	Fair to Good	Fair to Poor
3784	Non-Native	Brazilian Pepper-tree	*Schinus terabinthifolia*	10	10	Good	Good
3785	Non-Native	Brazilian Pepper-tree	*Schinus terabinthifolia*	11	12	Good	Good
3787	Non-Native	Brazilian Pepper-tree	*Schinus terabinthifolia*	14	8	Good	Good
3788	Non-Native	Brazilian Pepper-tree	*Schinus terabinthifolia*	6	7	Good	Good
3789	Non-Native	Brazilian Pepper-tree	*Schinus terabinthifolia*	12	10	Good	Good
36	Non-Native	Callery Pear	*Pyrus calleryana*	11.5	20	Good	Good
37	Non-Native	Callery Pear	*Pyrus calleryana*	10	17	Good	Good
38	Non-Native	Callery Pear	*Pyrus calleryana*	9	15	Good	Good
39	Non-Native	Callery Pear	*Pyrus calleryana*	8	15	Good	Good
40	Non-Native	Callery Pear	*Pyrus calleryana*	6.5	10	Good	Good
41	Non-Native	Callery Pear	*Pyrus calleryana*	10	15	Good	Good
42	Non-Native	Callery Pear	*Pyrus calleryana*	10.5	15	Good	Good
3390	Non-Native	Callery Pear	*Pyrus calleryana*	10	10	Good	Good
3743	Non-Native	Callery Pear	*Pyrus calleryana*	6	12	Fair	Good
3754	Non-Native	Callery Pear	*Pyrus calleryana*	16.5	20	Good	Good
3755	Non-Native	Callery Pear	*Pyrus calleryana*	12	15	Good	Good
3756	Non-Native	Callery Pear	*Pyrus calleryana*	6.5	8	Good	Good
3757	Non-Native	Callery Pear	*Pyrus calleryana*	9	10	Good	Good
3763	Non-Native	Callery Pear	*Pyrus calleryana*	13	15	Good	Good
3764	Non-Native	Callery Pear	*Pyrus calleryana*	12	15	Good	Good
3765	Non-Native	Callery Pear	*Pyrus calleryana*	10.5	10	Good	Good
3766	Non-Native	Callery Pear	*Pyrus calleryana*	10.5	15	Good	Good
3786	Non-Native	Callery Pear	*Pyrus calleryana*	8	8	Fair	Good
3359	Non-Native	Chinese Tallow	*Triadica sebifera*	8	10	Fair to Good	Fair to Good
6	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	14.5	10	Good	Fair to Poor
7	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	19	12	Good	Fair to Good
8	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	19.5	10	Good	Good
9	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	14	10	Good	Good
10	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	16	6	Fair to Poor	Fair to Poor
17	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	25	15	Good	Good
18	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	26.5	15	Good	Good

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
19	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	25.5	15	Good	Good
20	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	23.5	17	Good	Good
21	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	22	15	Good	Good
22	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	21	13	Good	Good
23	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	21	15	Good	Good
26	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	20.5	15	Fair	Good
27	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	12	Good	Good
28	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18	16	Good	Fair
29	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	10	10	Good	Good
30	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18	10	Good	Good
48	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18	15	Good	Good
49	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	15.5	16	Good	Good
50	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	14.5	15	Good	Good
51	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	15	Good	Good
52	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	15	Good	Good
3125	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18.5	20	Good	Good
3364	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17.5	10	Good	Good
3365	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	15.5	15	Good	Good
3366	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	19.5	16	Good	Good
3367	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	13	Good	Good
3370	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	11	9	Good	Good
3372	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	16.5	14	Good	Good
3373	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18.5	14	Good	Good
3379	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	16.5	13	Good	Good
3380	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	15.5	15	Good	Good
3381	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	12	Good	Good
3382	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18	10	Good	Good
3383	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	21	10	Good	Good
3391	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	16	12	Good	Good
3394	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	19	15	Good	Good
3395	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18	12	Good	Good
3399	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	15	Good	Good

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
3713	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	14.5	12	Good	Good
3714	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	12	Good	Good
3715	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	15.5	13	Good	Good
3716	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	14	15	Good	Good
3717	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	16	16	Good	Good
3718	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18	16	Good	Good
3719	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18.5	15	Good	Good
3720	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18.5	14	Good	Good
3721	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	18	12	Good	Good
3722	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	12	Good	Good
3723	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	16.5	12	Good	Good
3724	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	14	Good	Good
3726	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	23.5	25	Good	Good
3727	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	23	18	Good	Good
3730	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	15	Good	Good
3732	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	19.5	16	Good	Good
3734	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	20	15	Good	Good
3735	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	22	16	Good	Good
3736	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	22.5	18	Good	Good
3740	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	15.5	12	Good	Good
3742	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	26.5	22	Good	Good
3747	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	25.5	18	Good	Good
3748	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	28	20	Good	Good
3767	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17.5	13	Good	Good
3768	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	16.5	10	Good	Good
3769	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	17	12	Good	Poor
3770	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	19	15	Good	Good
3771	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	20.5	12	Good	Good
Not Tagged	Native (Out of Natural Range)	Coast Redwood	*Sequoia sempervirens*	13	0	Good	DEAD
3752	Non-Native	Crapemyrtle	*Lagerstoemia indica*	9	8	Good	Good
3753	Non-Native	Crapemyrtle	*Lagerstoemia indica*	9.5	8	Good	Good
3728	Non-Native	Deodar Cedar	*Cedrus deodara*	16	20	Good	Good

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
3729	Non-Native	Deodar Cedar	*Cedrus deodara*	15	15	Fair to Good	Poor
3737	Non-Native	Deodar Cedar	*Cedrus deodara*	23	20	Good	Good
3744	Non-Native	Deodar Cedar	*Cedrus deodara*	19.5	15	Fair	Fair to Good
3746	Non-Native	Deodar Cedar	*Cedrus deodara*	12.5	14	Good	Good
898	Non-Native	Gum Tree	*Eucalyptus sp.*	99	35	Fair to Good	Fair to Good
901	Non-Native	Gum Tree	*Eucalyptus sp.*	12	20	Fair to Poor	Poor
967	Non-Native	Gum Tree	*Eucalyptus sp.*	39	15	Fair	Fair
968	Non-Native	Gum Tree	*Eucalyptus sp.*	33	15	Good	Good
3103	Non-Native	Gum Tree	*Eucalyptus sp.*	10.5	20	Fair	Fair
3104	Non-Native	Gum Tree	*Eucalyptus sp.*	8.5	15	Fair	Fair
3129	Non-Native	Gum Tree	*Eucalyptus sp.*	10	12	Fair	Fair
3130	Non-Native	Gum Tree	*Eucalyptus sp.*	8	10	Fair	Fair
3132	Non-Native	Gum Tree	*Eucalyptus sp.*	8.5	12	Fair	Fair
3133	Non-Native	Gum Tree	*Eucalyptus sp.*	13	20	Fair	Fair
3135	Non-Native	Gum Tree	*Eucalyptus sp.*	8.5	15	Fair to Poor	Fair
3137	Non-Native	Gum Tree	*Eucalyptus sp.*	11.5	15	Fair	Fair
3138	Non-Native	Gum Tree	*Eucalyptus sp.*	10	10	Fair to Poor	Fair
3146	Non-Native	Gum Tree	*Eucalyptus sp.*	18.5	15	Fair	Fair
3154	Non-Native	Gum Tree	*Eucalyptus sp.*	24	25	Fair	Fair to Good
3155	Non-Native	Gum Tree	*Eucalyptus sp.*	8	10	Fair	Fair
3156	Non-Native	Gum Tree	*Eucalyptus sp.*	15	25	Fair	Fair to Good
3162	Non-Native	Gum Tree	*Eucalyptus sp.*	9	5	Poor	Fair to Poor
3169	Non-Native	Gum Tree	*Eucalyptus sp.*	13	25	Fair	Fair to Good
3170	Non-Native	Gum Tree	*Eucalyptus sp.*	13	20	Fair	Fair
3173	Non-Native	Gum Tree	*Eucalyptus sp.*	12.5	15	Fair to Poor	Fair
3176	Non-Native	Gum Tree	*Eucalyptus sp.*	6	10	Fair	Fair to Good
3180	Non-Native	Gum Tree	*Eucalyptus sp.*	20	12	Fair to Poor	Fair to Poor
3181	Non-Native	Gum Tree	*Eucalyptus sp.*	14	15	Fair	Fair
3183	Non-Native	Gum Tree	*Eucalyptus sp.*	12.5	15	Fair	Fair
3184	Non-Native	Gum Tree	*Eucalyptus sp.*	11.5	15	Fair	Good
3185	Non-Native	Gum Tree	*Eucalyptus sp.*	10.5	15	Fair	Fair to Good
3192	Non-Native	Gum Tree	*Eucalyptus sp.*	16	15	Fair	Fair

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
3193	Non-Native	Gum Tree	*Eucalyptus sp.*	15	15	Fair	Fair
3194	Non-Native	Gum Tree	*Eucalyptus sp.*	24	10	Fair to Poor	Fair to Poor
3195	Non-Native	Gum Tree	*Eucalyptus sp.*	15	10	Fair to Poor	Fair to Poor
3196	Non-Native	Gum Tree	*Eucalyptus sp.*	14.5	20	Fair	Fair to Good
3200	Non-Native	Gum Tree	*Eucalyptus sp.*	13	15	Fair	Fair
3206	Non-Native	Gum Tree	*Eucalyptus sp.*	7	15	Fair	Fair
3208	Non-Native	Gum Tree	*Eucalyptus sp.*	11	15	Fair	Fair
3209	Non-Native	Gum Tree	*Eucalyptus sp.*	12	12	Fair	Fair
3210	Non-Native	Gum Tree	*Eucalyptus sp.*	20	10	Fair	Fair to Poor
3220	Non-Native	Gum Tree	*Eucalyptus sp.*	13	15	Good	Good
3221	Non-Native	Gum Tree	*Eucalyptus sp.*	15	15	Good	Good
3222	Non-Native	Gum Tree	*Eucalyptus sp.*	14.5	25	Fair	Good
3223	Non-Native	Gum Tree	*Eucalyptus sp.*	12.5	15	Fair	Good
3228	Non-Native	Gum Tree	*Eucalyptus sp.*	11	15	Fair	Fair to Poor
3229	Non-Native	Gum Tree	*Eucalyptus sp.*	8	8	Fair	Fair
3232	Non-Native	Gum Tree	*Eucalyptus sp.*	23	15	Fair	Fair to Good
3240	Non-Native	Gum Tree	*Eucalyptus sp.*	16	12	Fair	Fair
3242	Non-Native	Gum Tree	*Eucalyptus sp.*	15	15	Fair	Fair to Good
3244	Non-Native	Gum Tree	*Eucalyptus sp.*	11.5	14	Fair	Fair to Poor
3246	Non-Native	Gum Tree	*Eucalyptus sp.*	6	10	Fair to Poor	Fair
3248	Non-Native	Gum Tree	*Eucalyptus sp.*	23	20	Fair	Fair
3249	Non-Native	Gum Tree	*Eucalyptus sp.*	15	15	Fair	Good
3250	Non-Native	Gum Tree	*Eucalyptus sp.*	18	20	Fair	Fair to Good
3252	Non-Native	Gum Tree	*Eucalyptus sp.*	10	10	Fair	Fair to Good
3253	Non-Native	Gum Tree	*Eucalyptus sp.*	24	20	Fair	Fair
3312	Non-Native	Gum Tree	*Eucalyptus sp.*	26	20	Fair	Poor
3315	Non-Native	Gum Tree	*Eucalyptus sp.*	16.5	20	Fair	Fair
3316	Non-Native	Gum Tree	*Eucalyptus sp.*	12.5	15	Fair	Fair to Good
3322	Non-Native	Gum Tree	*Eucalyptus sp.*	18	20	Fair	Fair
3325	Non-Native	Gum Tree	*Eucalyptus sp.*	6	10	Fair	Fair
3326	Non-Native	Gum Tree	*Eucalyptus sp.*	9	5	Poor	Poor
3327	Non-Native	Gum Tree	*Eucalyptus sp.*	14	10	Fair	Fair

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
3329	Non-Native	Gum Tree	*Eucalyptus sp.*	14	20	Fair	Fair to Good
3333	Non-Native	Gum Tree	*Eucalyptus sp.*	17	20	Fair	Fair to Good
3334	Non-Native	Gum Tree	*Eucalyptus sp.*	10	20	Fair	Fair
3337	Non-Native	Gum Tree	*Eucalyptus sp.*	7	8	Fair	Fair to Poor
3347	Non-Native	Gum Tree	*Eucalyptus sp.*	13	15	Fair	Fair
3360	Non-Native	Gum Tree	*Eucalyptus sp.*	9	10	Poor	Poor
3470	Non-Native	Gum Tree	*Eucalyptus sp.*	17	25	Fair to Good	Fair to Good
3631	Non-Native	Gum Tree	*Eucalyptus sp.*	12.5	15	Fair	Fair to Good
3632	Non-Native	Gum Tree	*Eucalyptus sp.*	7	8	Fair	Fair
3633	Non-Native	Gum Tree	*Eucalyptus sp.*	13	20	Fair	Fair to Good
3636	Non-Native	Gum Tree	*Eucalyptus sp.*	13	15	Fair	Fair
3637	Non-Native	Gum Tree	*Eucalyptus sp.*	15.5	15	Fair	Fair to Good
3640	Non-Native	Gum Tree	*Eucalyptus sp.*	21	20	Fair to Poor	Fair to Good
3641	Non-Native	Gum Tree	*Eucalyptus sp.*	16.5	25	Fair to Good	Fair to Good
3643	Non-Native	Gum Tree	*Eucalyptus sp.*	11	15	Good	Good
3647	Non-Native	Gum Tree	*Eucalyptus sp.*	14	10	Fair to Poor	Fair
3648	Non-Native	Gum Tree	*Eucalyptus sp.*	8.5	15	Fair	Fair
3650	Non-Native	Gum Tree	*Eucalyptus sp.*	8	8	Fair	Fair
3652	Non-Native	Gum Tree	*Eucalyptus sp.*	26	25	Fair to Good	Fair to Good
3653	Non-Native	Gum Tree	*Eucalyptus sp.*	20	25	Fair to Good	Fair to Good
3655	Non-Native	Gum Tree	*Eucalyptus sp.*	12.5	15	Fair	Fair
3656	Non-Native	Gum Tree	*Eucalyptus sp.*	10	7	Fair	Fair
3657	Non-Native	Gum Tree	*Eucalyptus sp.*	20.5	25	Fair to Good	Fair to Good
3659	Non-Native	Gum Tree	*Eucalyptus sp.*	13.5	15	Good	Fair to Good
3662	Non-Native	Gum Tree	*Eucalyptus sp.*	18	15	Fair	Fair to Good
3663	Non-Native	Gum Tree	*Eucalyptus sp.*	14	10	Poor	Poor
3665	Non-Native	Gum Tree	*Eucalyptus sp.*	11.5	20	Fair	Fair
3671	Non-Native	Gum Tree	*Eucalyptus sp.*	7	10	Fair to Poor	Fair
3773	Non-Native	Gum Tree	*Eucalyptus sp.*	15	20	Good	Good
3775	Non-Native	Gum Tree	*Eucalyptus sp.*	27	25	Good	Good
3776	Non-Native	Gum Tree	*Eucalyptus sp.*	6	8	Fair	Fair
3776	Non-Native	Gum Tree	*Eucalyptus sp.*	22	20	Good	Good

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
3777	Non-Native	Gum Tree	*Eucalyptus sp.*	28	25	Fair	Good
3778	Non-Native	Gum Tree	*Eucalyptus sp.*	23	25	Good	Good
3781	Non-Native	Gum Tree	*Eucalyptus sp.*	20.5	15	Good	Good
3782	Non-Native	Gum Tree	*Eucalyptus sp.*	29	20	Fair	Good
3783	Non-Native	Gum Tree	*Eucalyptus sp.*	10.5	25	Good	Good
3790	Non-Native	Gum Tree	*Eucalyptus sp.*	24	10	Fair	Fair to Good
3791	Non-Native	Gum Tree	*Eucalyptus sp.*	7	10	Fair to Good	Fair to Good
3792	Non-Native	Gum Tree	*Eucalyptus sp.*	16	12	Fair to Good	Fair to Good
3793	Non-Native	Gum Tree	*Eucalyptus sp.*	22	20	Fair	Fair
3794	Non-Native	Gum Tree	*Eucalyptus sp.*	20	20	Fair to Good	Fair to Good
3795	Non-Native	Gum Tree	*Eucalyptus sp.*	6	5	Fair to Poor	Fair to Good
3796	Non-Native	Gum Tree	*Eucalyptus sp.*	22	10	Fair to Poor	Fair to Poor
3797	Non-Native	Gum Tree	*Eucalyptus sp.*	16.5	15	Good	Good
3798	Non-Native	Gum Tree	*Eucalyptus sp.*	9	10	Fair to Poor	Fair to Poor
3799	Non-Native	Gum Tree	*Eucalyptus sp.*	20	10	Poor	Fair
Not Tagged	Non-Native	Gum Tree	*Eucalyptus sp.*	0	0	Poor	Dead
3750	Non-Native	Japanese Maple	*Acer palmatum*	8.5	10	Good	Good
3751	Non-Native	Japanese Maple	*Acer palmatum*	8.5	10	Good	Good
31	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	8	7	Good	Good
32	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	9.5	9	Good	Good
33	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	10	15	Good	Good
34	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	6	12	Good	Good
35	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	6.5	10	Good	Good
43	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	9	10	Good	Good
44	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	9	10	Good	Good
45	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	10.5	15	Good	Good
46	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	8	10	Good	Good
47	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	9	12	Good	Fair to Poor
3733	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	9	10	Good	Good
3738	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	10	15	Good	Poor
3739	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	11	15	Good	Good
3740	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	10	15	Good	Good

The Preserve
Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health
3758	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	8	8	Good	Good
3759	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	6	8	Good	Good
3760	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	7.5	10	Good	Good
3761	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	7.5	10	Good	Good
3762	Non-Native	Purple Leaf Plum	*Prunus cerasifera*	8.5	10	Good	Fair
Not Tagged	Non-Native	Silver Birch	*Betula pendula*	0	0	Poor	Dead
1	Non-Native	Sweetgum	*Liquidambar styraciflua*	7	8	Good	Good
2	Non-Native	Sweetgum	*Liquidambar styraciflua*	7	9	Good	Good
3	Non-Native	Sweetgum	*Liquidambar styraciflua*	7	8	Good	Good
4	Non-Native	Sweetgum	*Liquidambar styraciflua*	6.5	7	Good	Fair to Good
5	Non-Native	Sweetgum	*Liquidambar styraciflua*	6.5	7	Good	Good
11	Non-Native	Sweetgum	*Liquidambar styraciflua*	7.5	8	Good	Good
12	Non-Native	Sweetgum	*Liquidambar styraciflua*	8	10	Good	Good
13	Non-Native	Sweetgum	*Liquidambar styraciflua*	9.5	12	Good	Fair to Good
14	Non-Native	Sweetgum	*Liquidambar styraciflua*	8.5	10	Good	Fair
15	Non-Native	Sweetgum	*Liquidambar styraciflua*	9	12	Good	Good
16	Non-Native	Sweetgum	*Liquidambar styraciflua*	9	15	Good	Good
24	Non-Native	Sweetgum	*Liquidambar styraciflua*	7	8	Good	Good
25	Non-Native	Sweetgum	*Liquidambar styraciflua*	7.5	8	Good	Good
3344	Non-Native	Sweetgum	*Liquidambar styraciflua*	8	7	Fair	Poor
3731	Non-Native	Sweetgum	*Liquidambar styraciflua*	7	12	Good	Good
3745	Non-Native	Sweetgum	*Liquidambar styraciflua*	12	15	Good	Good
3749	Non-Native	Sweetgum	*Liquidambar styraciflua*	8.5	13	Good	Good
3148	Non-Native	White Mulberry	*Morus alba*	15	20	Good	Fair to Good
3335	Non-Native	White Mulberry	*Morus alba*	6.5	10	Fair to Good	Fair
3800	Non-Native	White Mulberry	*Morus alba*	10	15	Good	Good

The Preserve

Arborist Survey Data

Tree #	Native/Non-native	Common Name	Species Name	DSH (in)	Dripline (ft)	Structure	Health

SUMMARY

Tree Species	*Number ≥12" DSH*
Brazilian Pepper-Tree	2
Callery Pear	4
Chinese Tallow	0
Coast Redwood	66
Deodar Cedar	5
Eucalyptus spp.	70
Japanese Maple	0
Purple Leaf Plum	0
Sweetgum	1
White Mulberry	1
TOTAL	149

ATTACHMENT C

Representative Site Photographs



Horticultural plantings of sweetgum and coast redwood trees along a driveway.
Photo taken facing south on 10.12.18.



One of two gum tree windrows planted near a residence within the study area.
Photo taken facing north on 10.12.18

ATTACHMENT I

SSHCP Avoidance and Minimization Measures

welfare of the public. Although access to the Preserves will be allowed by the Implementing Entity and Wildlife Agencies, these emergency repairs are not covered by SSHCP permits.

The Permitting Agencies will not obstruct any emergency response decisions regarding Preserves made by the Implementing Entity. However, existing ESA consultation regulations will apply to all emergency activities (50 Code of Federal Regulations 402.05).

5.4 Conditions on Covered Activities

As required by the ESA (Section 10(a)(2)(A)(ii)) and Fish and Game Code Section 2081, this Plan includes measures to avoid and minimize take of Covered Species. This section describes the Avoidance and Minimization Measures that will be implemented as part of each SSHCP Covered Activity to avoid or minimize direct and indirect impacts to Covered Species and their habitats to the maximum extent, including species habitats that are also waters of the state and waters of the United States. AMMs are presented in this chapter as conditions on Covered Activities. Each condition contains several AMMs that are intended to eliminate or reduce direct or indirect effects to species that could result from implementation of a Covered Activity.

Third-Party Project Proponents are responsible for incorporating all SSHCP requirements (including appropriate AMMs) into their project design. The Land Use Authority Permittee with authority over a Covered Activity is responsible for reviewing and ensuring that all applicable AMMs are appropriately incorporated into project design, and is responsible for ensuring that the required AMMs are correctly applied by the Third-Party Project Proponent during implementation of the Covered Activity.

The CEQA process for individual Covered Activities may result in additional conditions for third-party projects that are not related to the ESA, CESA, or Clean Water Act. The SSHCP AMMs described in this chapter do not supersede requirements by other agencies and are not intended to provide a basis for non-compliance with other applicable design guidelines and avoidance measures required by federal, state, and local agencies. Compliance with the SSHCP does constitute full CEQA compliance with regard to mitigation of impacts to Covered Species. Ultimately, the Plan Permittees are responsible for ensuring that implementation of each SSHCP Covered Activity fully complies with the SSHCP, but it remains the Third-Party Project Proponent's responsibility to ensure project compliance with all applicable laws and regulations.

Before construction begins, the Third-Party Project Proponent must demonstrate to the Land Use Authority Permittee that all necessary AMMs will be fulfilled. This is accomplished by having pre-construction AMMs in place prior to construction and by having a plan that shows how all applicable post-construction AMMs will be addressed. During construction, it is the responsibility of the Land Use Authority Permittee to ensure that the AMMs are being

implemented. The Land Use Authority Permittee can compel a Third-Party Project Proponent to stop working if a project is not in compliance with all SSHCP AMMs.[16] Upon construction completion, the Land Use Authority Permittee will monitor and confirm that post-construction conditions are acceptable and consistent with the requirements of the SSHCP permits (e.g., revegetation, soil treatments).[17] Once the constructed project has received final clearance from the Land Use Authority, it is the responsibility of the Land Use Authority to monitor continued operation of installed AMMs (e.g., swales, retention basins) and to monitor compliance with AMMs required for future operations and maintenance of the Covered Activity. The Implementing Entity may also assist with and in some instances may assume responsibility for monitoring continued operation of installed AMMs when those AMMs are part of the Preserve System, Preserve Setbacks, or Stream Setbacks.

On occasion, a local Land Use Authority Permittee may not have authority over a Covered Activity proposed by a Third-Party Project Proponent. In that event, the SSHCP Implementing Entity may develop a Participating Special Entity agreement with the Third-Party Project Proponent (see Chapter 9). As a Participating Special Entity, the Third-Party Project Proponent will incorporate and implement all applicable design and construction AMMs. The Implementing Entity will ensure that AMMs specific to that SSHCP Covered Activity are included in the project's Participating Special Entity agreement and ensure that AMMs are being implemented during construction.

As the SSHCP will be implemented over a 50-year Permit Term, the results of construction monitoring may indicate that certain AMMs are ineffective. Should the Plan Permittees wish to modify or replace an SSHCP AMM, they will follow the modification process outlined in the Adaptive Management Program (see Chapter 8).

5.4.1 General Avoidance and Minimization Measures

General AMMs are designed to avoid or minimize effects of Covered Activities on SSHCP land cover types and Covered Species.

Condition 1. Avoid and Minimize Urban Development Impacts to Watershed Hydrology and Water Quality

National Pollution Discharge Elimination System permits are issued by the Regional Water Quality Control Board to jurisdictions in the region, including the jurisdictions that are also SSHCP Land Use Authority Permittees (i.e., County of Sacramento, and Cities of Rancho

[16] In a situation like this, the Local Land Use Authority Permittee will suspend one or more local permits (e.g., grading permit, building permit) until compliance with terms of all SSHCP requirements is demonstrated.

[17] Post-construction monitoring by the Land Use Authority Permittee could continue for several years.

Cordova and Galt). The National Pollution Discharge Elimination System permit is issued to each of the Land Use Authority Permittees every 5 years, and is referred to as the Municipal Separate Storm Sewer System (MS4) permit. MS4 permits contain specific design measures required for all projects constructed within the region. The Stormwater Quality Design Manual for the Sacramento and South Placer Regions (Stormwater Manual) outlines planning tools and requirements to reduce urban runoff from new development and redevelopment projects within the region (Sacramento Stormwater Quality Partnership 2007). The Stormwater Manual is used as a general guidance document to aid with the selection, siting, design, operation, and long-term maintenance of stormwater quality control measures. The Stormwater Manual contains control measures intended to meet the standard of "reducing pollutants in urban runoff to the maximum extent practicable" set forth in the local agencies' MS4 permits issued by the Central Valley Regional Water Quality Control Board. AMM LID-1 (see below) is designed to ensure compliance with MS4 requirements by requiring Third-Party Project Proponents to minimize increases of peak discharge of stormwater and to eliminate or reduce runoff of pollutants.

Development Covered Activities may adversely alter watershed hydrology and degrade water quality, which, in turn, could diminish or eliminate the conservation benefits provided by the SSHCP Preserve System. Condition 1 is designed to conserve and/or rehabilitate on-site natural creeks and streams. This condition will require the provision of BMPs and low-impact development (LID) drainage control measures to ensure that runoff from developed lands will closely mimic the pre-development hydrograph and retain most pre-development hydrologic functions. Condition 1 will accomplish the hydrograph and hydrologic objectives through application of the listed AMMs to all UDA Covered Activities that occur at the parcel, subdivision, or master plan scale.

LID-1 (Stormwater Quality): When the size of a Covered Activity project exceeds the thresholds established by the State Water Resources Control Board (SWRCB) (see the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions, or future SWRCB-approved design manuals applicable to the Plan Area), incorporate stormwater management into site design to satisfy the requirements outlined in the most recent Stormwater Quality Design Manual for the Sacramento and South Placer Regions. Stormwater management may include groundwater recharge (LID-2) and natural site features (LID-3).

LID-2 (Groundwater Recharge): When siting SSHCP Preserves containing Riparian, Open Water, or Freshwater Marsh SSHCP land cover types, the Implementing Entity will prioritize locations that are suitable for groundwater recharge.

LID-3 (Natural Site Features): Incorporate preservation of a site's natural aquatic features (such as creeks and streams) into project design to retain natural hydrologic patterns and to retain habitat that might be used by Covered Species.

Condition 2. Avoid and Minimize Urban Development Direct and Indirect Impacts to Existing Preserves and SSHCP Preserves

Development Covered Activities adjacent to Preserves may adversely impact species that use the Preserve, and erode or eliminate the conservation benefits provided by the Preserve. Condition 2 seeks to avoid or minimize the following Covered Activity environmental stressors that may result in direct and indirect impacts to the SSHCP Preserve System:

- Alterations to landscape hydrology from new impervious surfaces may adversely affect natural communities in the lower watershed, the ecology of a Preserve, and/or downstream aquatic resources.
- Water runoff from development or from roadways directed into Preserves may introduce harmful substances into Preserves. Unseasonal and/or additional water entering a Preserve may eliminate vernal pools and other seasonal wetlands native to the region by converting them to low-functioning perennial wetlands.
- Development adjacent to Preserves may partially to fully remove the soil's "perched aquifer" (see Chapter 3) and reduce or eliminate the micro-watersheds that support the hydrology of vernal pools within the Preserve boundary. These changes may adversely affect the existing hydrologic regime of vernal pools by changing the timing, depth, and/or duration of vernal pool saturation and/or ponding, causing long-term changes to a suite of vernal pool functions. For example, changes to water chemistry could adversely affect species habitat. Although the vernal pools remain, the environmental conditions of the pools may no longer provide habitat for vernal pool Covered Species, or provide the benefit of other wetland functions (e.g., stormwater attenuation) compared to pre-project conditions.
- Introduction or proliferation of non-native or invasive plant and wildlife species may displace native species.
- Landscaping in the interface of a development and a Vernal Pool–Grassland Preserve often includes native or non-native trees and other plant species that are not found in California grasslands and, therefore, cannot survive on the Vernal Pool–Grassland Preserve border without intensive irrigation and cultivation. In addition to adverse effects from irrigation and landscape maintenance, adult trees may become landscape barriers that inhibit species movement and may act to isolate individual Preserves from the larger SSHCP Preserve System.
- Recreational use of Preserves near developed areas may compact soils, eliminate vegetation, impair hydrologic functions, introduce weeds or invasive plant species, and disturb plants and wildlife.

- Introduction of light, noise, or vibrations may disrupt normal nocturnal and diurnal cycles of native species.

AMMs associated with Condition 2 must be applied to all UDA Covered Activities that border an existing Preserve or planned SSHCP Preserve.

EDGE-1 (Compatible Land Uses): To the maximum extent practicable, development project Covered Activities will locate compatible land uses (e.g., designated open space such as parks and ball fields, detention basins, and other land uses with less-intensive human activity) in areas immediately adjacent to existing or planned Preserve boundaries. The compatible land use will provide additional buffering of Preserves from potential indirect effects of adjacent urban development. The soil surfaces in a compatible land use area may be re-contoured provided that the soil restrictive layer remains undamaged and most of the soil profile above the restrictive layer remains intact. The Land Use Authority will determine when it is not practicable to locate a compatible land use adjacent to existing or planned Preserve boundaries.

EDGE-2 (Single-Loaded Streets): To the maximum extent practicable, the design of Urban Development Covered Activities will locate single-loaded streets adjacent to existing or planned Preserve. The Land Use Authority will determine when single-loaded streets are not practicable.

EDGE-3 (Preserve Setbacks): Urban Development Covered Activities constructed adjacent to existing or planned Preserves must establish a minimum 50-foot-wide setback outward from the boundary of any existing Preserve or planned SSHCP Preserve. This minimum 50-foot-wide setback will function as a transition between Urban Development and the Preserve, and must be managed to maintain the natural community of vegetation present in the adjacent Preserve. As much of the setback as possible should remain in the same natural habitat as the Preserve.

However, as discussed in Section 5.2.5, Covered Activities in Preserve Setbacks in the UDA, where an existing or planned Preserve is adjacent to an existing roadway (e.g., collectors, arterials, thoroughfares), the 50-foot Preserve Setback will not be required, and any bicycle or pedestrian trail will be established in the road right-of-way. In addition, where a planned roadway crosses an existing or planned Preserve, no Preserve Setback will be required, and any bicycle or pedestrian trail will be established in the road right-of-way.

EDGE-3a (Setback Recreational Trails): Trails are best suited outside of the setback; however, certain types of recreational trails or facilities (e.g., benches, trash receptacles, shade structures, fencing) that can be constructed with minimum ground disturbance and in compliance with EDGE-7 may be allowed within a Preserve Setback, as specified in Section 5.2.5, Covered Activities in Preserve Setbacks in the UDA. Preserve Setback design must locate trails on the side nearest development, away from the Preserve boundary. Trails may be permeable or semi-permeable hiking trails or paved community trials. The maximum trail width will be 16 feet total, including 2-foot-wide shoulders. Post and cable fencing, split rail, or other open fencing will be installed adjacent to recreation trails to keep pedestrians on the trail.

EDGE-3b (Setback Firebreaks): If approved by the local authorities, the Preserve Setback trail may also be used as a firebreak. In instances where a trail cannot act as a firebreak, the firebreak will be located between the trail and the Preserve boundary (see Section 5.2.7). Firebreaks allowed inside the setbacks must be created by methods that will not disturb the soil's restrictive layer, such as mowing, minor scraping of surface vegetation, or shallow tilling, to comply with EDGE-7. Firebreak width within Preserve Setbacks is the minimum width needed to comply with applicable local codes.

EDGE-3c (Setback Shade Trees and Landscaping): To prevent potential impacts from irrigation water or from accumulation of leaf litter onto the grasslands or vernal pools of a Preserve, planting of shade trees or landscaping vegetation will be limited to the area of the Preserve Setback located between the recreation trail and the adjacent urban development (i.e., away from Preserves).

- Only drought-tolerant plant species will be planted. The planting pallet used for Preserve Setback landscaping will not include invasive plant species listed in the California Invasive Plant Council's (Cal-IPC) California Invasive Plant Inventory Database or listed in the Cal-IPC California Invasive Plant Watch List (see http://www.cal-ipc.org/paf/). Any shade trees planted along Preserve Setback trails will be native species that are found in California grasslands and that can survive in the Vernal Pool–Grassland border without long-term irrigation or fertilization (e.g., valley oak, black oak, blue oak, oracle oak). In general, no more than 30% of any 1,000-foot-long segment of a Preserve Setback trail will have canopy cover from tree plantings (to be consistent with maximum tree densities naturally found within native California grasslands and savanna).

- Drip irrigation will be allowed for a maximum of 5 years to establish shade trees or landscape vegetation between the recreation trail and adjacent urban development. The Implementing Entity has the discretion to allow irrigation to continue past 5 years if extenuating circumstances necessitate it (e.g., during a drought) and the continuance of irrigation will not affect the Preserve. Any irrigation systems located within Preserve Setbacks will be inspected quarterly to determine if such systems are affecting soils or vegetation not part of the intended plantings. Irrigation system repairs will be completed immediately if it is determined that the irrigation system is affecting vegetation or soil moisture not part of the intended tree planting.
- If, during annual monitoring of the adjacent Preserve (see Chapter 8), adverse indirect effects (e.g., leaf litter accumulation, irrigation runoff, plant encroachment) of the Preserve Setback's planted vegetation are detected, then the SSHCP Implementing Entity, the Preserve Manager, and the entity responsible for the Preserve Setback will identify appropriate adaptive management of the Preserve Setback tree or landscape plantings in accordance with the Preserve Setback Easement (see Section 5.2.5 and Chapter 9).

EDGE-4 (Locate Stormwater Control Outside Preserves): Roads, sidewalks, and other impermeable surfaces of Urban Development Covered Activities adjacent to existing or planned Preserves will slope away from Preserves and Preserve Setbacks or intercept drainage with swales or curbs and gutters to preclude drainage from entering Preserves and Preserve Setbacks. Stormwater flows must be directed away from Preserves and Preserve Setbacks and directed into stormwater control facilities inside the development (outside Preserves and Preserve Setbacks)[18] (see EDGE-6 for exception to EDGE-4 in certain SSHCP Linkage Preserves).

EDGE-5 (Stormwater Control in Preserve Setbacks): If trails are established in any Preserve Setback in compliance with EDGE-3, the trail must be sloped away from the Preserve, and rainwater leaving the trail surface must flow into an adjacent low-velocity bio-retention swale or cell to keep rainwater runoff and trail contaminants from entering the Preserve. Low-velocity bio-retention swales or cells are typically small linear features placed on one or both sides of a trail. As required by EDGE-3, trails and their adjacent bio-retention swales or cells must be located on the side of the Preserve Setback nearest development.

[18] Detention basins are allowed in some Linkage Preserves consistent with the requirements of EDGE-6. At the time of SSHCP preparation, seven Linkage Preserves with drainages are planned SSHCP Preserves: L1, L2, L4, L7, L8, L9, and L10 (see Section 5.2.7 and Section 7.5). Also see project-specific measures in Section 5.5.1.

EDGE-6 (Detention Basins in Linkage Preserves): Because planned SSHCP Linkage Preserves L1, L2, L4, L7, L8, L9, and L10 (see Section 7.5) surround natural creeks or streams that must receive stormwater from planned adjacent Urban Development Covered Activities, a limited number of stormwater detention basins will be allowed on those Linkage Preserves. Detention basins within Linkage Preserves (see Section 5.2.7) will be designed and constructed with fill material to build up the perimeter of the detention basin so as not to impact the soil restrictive layer (duripan or hardpan) and function of the soil perched aquifer. Detention basins within Linkage Preserves will capture stormwater flows and runoff, and will discharge water to the stream/creek or percolate collected water to the soil perched aquifer. Detention basin structures that collect stormwater entering the basin or convey stormwater leaving the basin must be designed to avoid and minimize effects to Covered Species habitat in the Linkage Preserve.

EDGE-7 (Hardpan/Duripan Protection): To protect the soil perched aquifer and the micro-watersheds supporting existing vernal pool hydrology, activities that have the potential to cut into, disrupt, or remove the soil's restrictive layer (hardpan or duripan) will not occur within Preserves or Preserve Setbacks. However, in certain circumstances, the Covered Activities defined in Section 5.2.6, Covered Activities in Stream Setbacks in the UDA, and Section 5.2.8, Covered Activities in the Laguna Creek Wildlife Corridor of the Preserve System, may result in punctures[19] or other minor disruptions of the soil hardpan or duripan if approved by the Implementing Entity and the Technical Advisory Committee according to the process described in Chapter 9 of the SSHCP. If a Covered Activity on a Preserve or Preserve Setback results in a puncture or other disruption to the soil hardpan or duripan, the puncture will be sealed using bentonite clay or other material that maintains the functionality of the soil's restrictive layer and associated perched aquifer.

EDGE-8 (Outdoor Lighting): All outdoor lighting in Urban Development Covered Activity projects will be designed to minimize light pollution into existing and planned Preserves, except where a Land Use Authority Permittee determines lighting is necessary for public safety or security. Minimization measures may include light fixture placement (e.g., as low to the ground as possible), lamp designs (e.g., shielding, low glare, or no lighting), directing light away from Preserves, or other means to avoid or minimize light pollution. The Third-Party Project Proponent will use the best information available at the time of project design to minimize effects of light pollution on target SSHCP Covered Species (e.g., western spadefoot (*Spea*

[19] Punctures may include small holes that penetrate the soil hardpan or duripan such as might occur when digging or drilling holes for the installation of fence posts, sign posts, or trees.

hammondii), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), and Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*)).

EDGE-9 (Livestock Access to Preserves): Urban Development Covered Activity projects that include on-site Preserves will include in their design an adequate number of access points and facilities for delivery and pick up of grazing animals (livestock), such that these activities will not significantly alter the Preserve's habitat and are consistent with the protection of livestock and protection of adjacent public property, and include adequate public safety measures.

EDGE-10 (Prevent Invasive Species Spread): Completed Covered Activities (including roads) will be maintained in a manner that avoids the spread of invasive species into Preserve and Open Space areas. Such maintenance measures will include the following:

- To prevent the transport of non-native invasive species onto Preserves, before bringing any equipment onto an SSHCP Preserve or Preserve Setback, equipment must be cleaned of mud, dirt, and plant material. Cleaning will occur in the infested area or another appropriate location as approved by a Plan Permittee.
- Mowing rotation will start in un-infested areas and move to infested areas.
- Invasive plant prevention techniques will be incorporated into maintenance plans.
- The SSHCP Implementing Entity will survey road shoulders, ditches, and rights-of-way that border SSHCP Preserves for invasive weeds or other exotic plant species. Where roadside weed infestations have reached a critical control point, the Implementing Entity or Land Use Authority Permittee will apply the appropriate manual, mechanical, or chemical treatment.

Condition 3. Implement Construction Best Management Practices

AMMs associated with Condition 3 must be applied to all UDA Covered Activities.

BMP-1 (Construction Fencing): Orange construction fencing will be installed to ensure that ground disturbance does not extend beyond the allowed construction footprint (i.e., the limit of project construction plus equipment staging areas and access roads). Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will mark the outer boundary of any Preserve Setback or Stream Setback adjacent to or within the project site with orange construction fencing prior to ground disturbance. This fencing will remain in place until project completion, as identified by the Plan Permittee.

BMP-2 (Erosion Control): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will install temporary control measures for sediment, stormwater, and pollutant runoff as required by the Plan Permittee to protect water quality and species habitat. Silt fencing or other appropriate sediment control device(s) will be installed downslope of any Covered Activity that disturbs soils.

Fiber rolls and seed mixtures used for erosion control will be certified as free of viable noxious weed seed. As discussed in Section 5.4.2, Covered Species Take Avoidance and Minimization Measures, erosion controls installed in or adjacent to Plan Area modeled habitat for giant gartersnake (*Thamnophis gigas*), western pond turtle (*Actinemys marmorata*), California tiger salamander (*California tiger salamander*), or western spadefoot (see Chapter 3) must be of appropriate design and materials that will not entrap the species (e.g., not contain mesh netting). Regular monitoring and maintenance of the project's erosion control measures will be conducted until project completion to ensure effective operation of erosion control measures.

BMP-3 (Equipment Storage and Fueling): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will ensure that equipment storage and staging will occur in the development footprint only (not sited in any existing on-site Preserve, planned on-site Preserve, Preserve Setback, Stream Setback, or aquatic land cover type). Fuel storage and equipment fueling will occur away from waterways, stream channels, stream banks, and other environmentally sensitive areas within the development footprint.

However, certain equipment storage and fueling activities can be allowed on Preserves within habitat re-establishment/establishment sites (refer to Section 5.2.7) if no location outside of the site is available. If a Covered Activity results in a spill of fuel, hydraulic fluid, lubricants, or other petroleum products, the spill will be absorbed and waste disposed of in a manner to prevent pollutants from entering a waterway, Preserve, Preserve Setback, or Stream Setback.

BMP-4 (Erodible Materials): Plan Permittees and Third-Party Project Proponents implementing Covered Activities must not deposit erodible materials into waterways. Vegetation clippings, brush, loose soils, or other debris material will not be stockpiled within stream channels or on adjacent banks. Erodible material must be disposed of such that it cannot enter a waterway, Preserve, Preserve Setback, Stream Setback, or aquatic land cover type. If water and sludge must be pumped from a subdrain or other structure, the material will be conveyed to a temporary settling basin to prevent sediment from entering a waterway.

BMP-5 (Dust Control): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will water active construction sites regularly, if warranted, to avoid or minimize impacts from construction dust on adjacent vegetation and wildlife habitats. No surface water will be used from aquatic land covers; water will be obtained from a municipal source or existing groundwater well.

BMP-6 (Construction Lighting): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will direct all temporary construction lighting (e.g., lighting used for security or nighttime equipment maintenance) away from adjacent natural habitats, and particularly Riparian and Wetland habitats and wildlife movement areas.

BMP-7 (Biological Monitor): If a Covered Activity includes ground disturbance within Covered Species modeled habitat, an approved biologist will be on site during the period of ground disturbance, and may need to be on site during other construction activities depending on the Covered Species affected. After ground-disturbing project activities are complete, the approved biologist will train an individual to act as the on-site construction monitor for the remainder of construction, with the concurrence of the Permitting Agencies. The on-site monitor will attend the training described in BMP-8. The approved biologist and the on-site monitor will have oversight over implementation of Avoidance and Minimization Measures, and will have the authority to stop activities if any of the requirements associated with those measures are not met. If the monitor requests that work be stopped, the Wildlife Agencies will be notified within one working day by email. The approved biologist and/or on-site monitor will record all observations of listed species on California Natural Diversity Database field sheets and submit them to the California Department of Fish and Wildlife. The approved biologist or on-site monitor will be the contact source for any employee or contractor who might inadvertently kill or injure a Covered Species or who finds a dead, injured or entrapped individual. The approved biologist and on-site monitor's names and telephone numbers will be provided to the Wildlife Agencies prior to the initiation of ground-disturbing activities. Refer to species-specific measures for details on requirements for biological monitors.

BMP-8 (Training of Construction Staff): A mandatory Worker Environmental Awareness Program will be conducted by an approved biologist for all construction workers, including contractors, prior to the commencement of construction activities. The training will include how to identify Covered Species that might enter the construction site, relevant life history information and habitats, SSHCP and

statutory requirements and the consequences of non-compliance, the boundaries of the construction area and permitted disturbance zones, litter control training (SPECIES-2), and appropriate protocols if a Covered Species is encountered. Supporting materials containing training information will be prepared and distributed by the approved biologist. When necessary, training and supporting materials will also be provided in Spanish. Upon completion of training, construction personnel will sign a form stating that they attended the training and understand all of the Avoidance and Minimization Measures. Written documentation of the training must be submitted to the Implementing Entity within 30 days of completion of the training, and the Implementing Entity will provide this information to the Wildlife Agencies.

BMP-9 (Soil Compaction): After construction is complete, all temporarily disturbed areas will be restored similar to pre-project conditions, including impacts relating to soil compaction, water infiltration capacity, and soil hydrologic characteristics.

BMP-10 (Revegetation): Plan Permittees and Third-Party Project Proponents implementing ground-disturbing Covered Activities will revegetate any cut-and-fill slopes with native or existing non-invasive, non-native plants (e.g., non-native grasses) suitable for the altered soil conditions and in compliance with EDGE-2 and EDGE-8, if applicable.

BMP-11 (Speed Limit): Project-related vehicles will observe the posted speed limits on paved roads and a 10-mile-per-hour speed limit on unpaved roads and during travel in project areas. Construction crews will be given weekly tailgate instruction to travel only on designated and marked existing, cross-country, and project-only roads.

Condition 4. Avoid and Minimize Impacts that May Result from Implementation of Covered Transportation Projects

Urban Development transportation project and Rural Transportation Project Covered Activities, including bridge projects, can affect Covered Species. AMMs included for Condition 4 seek to avoid or minimize direct and indirect impacts that may result from construction of roadways or roadway improvements. Condition 4 applies to all transportation-related Covered Activities (see Sections 5.2.1 and 5.2.3).

Plan Permittees and Third-Party Project Proponents implementing Urban Development transportation or Rural Transportation Project Covered Activities must comply with the roadway siting, design, and construction AMMs described below.

ROAD-1 (Road Project Location): Road projects will be located in the least environmentally sensitive area to avoid, to the maximum extent practicable, impacts on Covered Species, Covered Species habitat, and waters of the United States. Road project alignments will follow existing roads, road easements, and rights-of-way, or be sited in disturbed areas to minimize habitat loss and additional habitat fragmentation.

ROAD-2 (Wildlife Crossing Structures): Road projects that are Urban Development Covered Activities (see Section 5.2.1) (including the Capital Southeast Connector, see Section 5.2.1.1) or are Rural Transportation Covered Activities (see Section 5.2.3) will include an adequate number of wildlife crossing structures, as depicted in Figure 5-10. An adequate number of wildlife crossing structures within the Urban Development Area (UDA) and outside the UDA will provide for continued dispersal and movement of native wildlife throughout the SSHCP Plan Area, as required by the SSHCP Biological Goals and Objectives (see Chapter 7).

The Plan defines "wildlife crossing structure" as a physical structure specifically designed or retrofitted to facilitate undercrossing for target wildlife species. The Plan further classifies wildlife crossings as hydrologic crossings and dry crossings. Hydrologic crossings are built where there is an existing stream, creek, or intermittent drainage to maintain existing hydrologic connectivity within the Plan Area. As described below, hydrologic crossings require specialized features to be built into the crossing structure, such as elevated platforms to allow wildlife to pass under a crossing structure when it is inundated with water. Dry wildlife crossings are built where there is no hydrologic feature but where a crossing is needed to provide for overland connectivity. SSHCP wildlife crossing structures may include structures such as bridges, arches, or box and pipe culverts.

Plan Permittees expect that future wildlife movement and dispersal within the UDA will occur almost entirely within the boundaries of the future interconnected SSHCP Preserve System (see Section 7.5). Therefore, wildlife crossings are needed wherever a roadway crosses (bisects) the conceptual SSHCP Preserve System (see Figure 5-10). Wildlife crossing structures inside the UDA will be sized to accommodate movement of a highly mobile native indicator species (i.e., coyote (*Canis latrans*)). By designing UDA wildlife crossing structures to meet the movement and dispersal requirements of coyote, the Plan Permittees anticipate that the crossing structure will also accommodate most native wildlife species that currently occupy the UDA (see Chapter 3).

The Plan Permittees expect that most of the Plan Area outside of the UDA will remain as Open Space over the 50-year Permit Term (see Chapter 4). Therefore,

the Plan Permittees expect that the Rural Transportation Project Covered Activities proposed outside the UDA will have a relatively small effect on the movement and dispersal of larger or more mobile native wildlife species, including coyote. Consequently, the Plan Permittees anticipate that the design of Rural Transportation Project Covered Activities outside the UDA will need to include wildlife crossing structures primarily where the Rural Transportation Project Covered Activities occur within California tiger salamander modeled habitat (see CTS-3 and also Chapter 3, Figure 3-16).

The design and location of wildlife crossing structures both inside the UDA and outside the UDA will be determined by collaboration between the Third-Party Project Proponent, the Land Use Authority, and the Implementing Entity. Crossing design will use the best available scientific and commercial information for the target species. The design of crossing structures will be based on demonstrated effectiveness of design for the target species when such information is available, or will be designed with a high level of certainty of success based on studies of similar taxa in similar environmental settings. The proposed wildlife crossing structures designs will be reviewed and approved by the Implementing Entity prior to final design.

The Implementing Entity will develop a Wildlife Crossing Maintenance Manual to be provided to the entity responsible for maintaining the wildlife crossing. The Wildlife Crossing Maintenance Manual will identify vegetation management, clearing of obstructions, and other techniques to maintain the desired movement and hydrologic connectivity, and to avoid effects to adjacent Preserves.

All SSHCP wildlife crossing structures in the UDA will include the following design elements:

- Open-bottom bridges or arches where the roadway crosses a river or stream. Where an open-bottom bridge or arch is used, the span of the crossing will be at least 1.2 times the bankfull width of the stream and span the banks to allow for dry wildlife passage along each side of the stream and to avoid or minimize piers or footings within the stream. (Bankfull width refers to the width of a stream channel at the point where over-bank flow begins during a flood event.)
- Any wildlife crossing structure that also maintains hydrologic connectivity will be designed to maintain pre-construction water capacity, depth, and velocity. The crossing structure will not restrict or impede normal flows or flood flows, unless a primary purpose of the structure is to manage such

flow(s). Wildlife crossing structures must be designed to provide a dry passage (e.g., a platform ledge) higher than flows for a 10-year storm event to allow wildlife to pass through an inundated crossing structure.

- Wildlife crossing structures in the UDA will be designed and sized to accommodate movement of at least medium-sized mammals (e.g., coyote). The opening must be at least 3 feet high and the crossing structure must have a minimum openness ratio of at least 0.4.
- Vegetation leading up to the entrance of a crossing structure and the substrate leading into and within the crossing structure will be natural and appropriate to provide for continuity of habitat, attract the target animal species for which the crossing is designed, and facilitate use of the crossing structure.
- A wildlife crossing under six-lane roads or larger will be designed to provide ambient light and temperature in the longer crossing structures (e.g., either by providing a larger opening or a grate at the top of the structure to improve the attractiveness of the crossing to certain Covered Species and wildlife that may hesitate to cross through dark, confined structures or one with a temperature gradient (Jackson and Griffin 2000)). If a road is less than six lanes in width, these designs will be optional.
- Lighting will not be placed at or near the entrance of a wildlife crossing structure to maintain natural ambient light conditions at night and to increase chances of wildlife use. However, a Land Use Authority Permittees may allow lighting if necessary for human health or safety.

Outside the UDA, wildlife crossing structures may be required for California tiger salamander (refer to CTS-1), and could also be required for other native species.

ROAD-3 (Roadside Pesticide Use[20]): If pesticide use is necessary along roadsides, the appropriate SSHCP Permittee will ensure that the pesticide application strictly complies with the pesticide label and all other applicable federal, state, and local authorities pertaining to the use, safety, storage, disposal, and reporting of the pesticide. Where roadside weed infestations have reached a critical control point, the Implementing Entity or a Land Use Authority Permittee will apply the appropriate manual, mechanical, or chemical treatment. In addition, the Implementing Entity or appropriate Land Use Authority Permittee will post signs along road shoulders adjacent to sensitive areas that are within the SSHCP

[20] Use of pesticides (including rodenticides and herbicides) is not an SSHCP Covered Activity. However, pesticide use specified in Section 5.3 is an allowed land management tool, provided the pesticide application is otherwise legal and conforms to all conditions in Section 5.4.

Preserve System (e.g., California tiger salamander breeding ponds, endemic plant populations, vertebrates that rely on insects for part of their diet). The signs will identify pesticide use restrictions or other roadside maintenance restrictions.

Condition 5. Avoid and Minimize Impacts that Result from Public Use of Low-Impact Nature Trails in Preserves

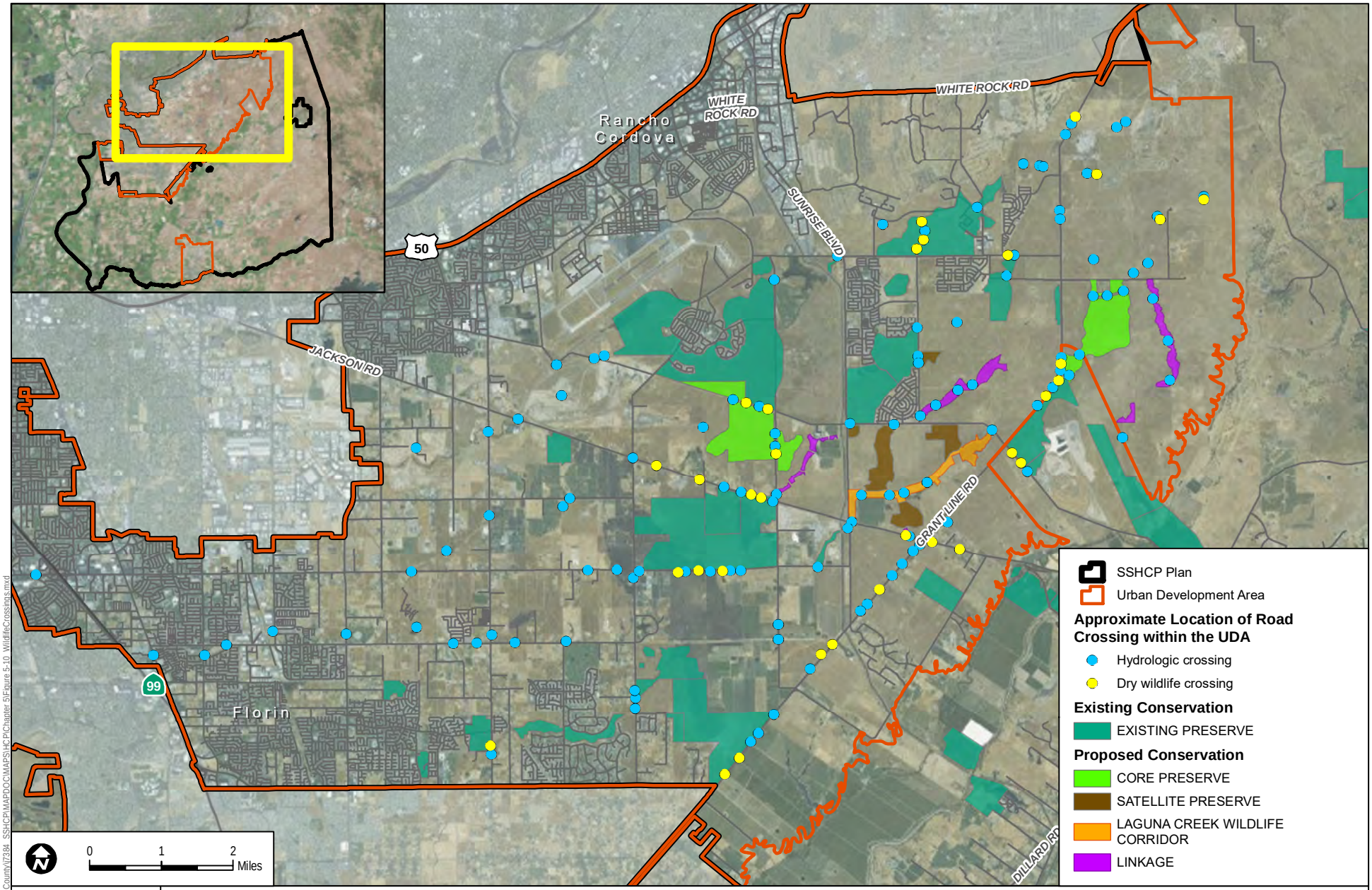
Preserves within the UDA are likely to be surrounded by urban development. As discussed in Section 5.2.7, allowing limited use of SSHCP Preserves will help to foster a sense of community ownership and will provide an opportunity to educate the community about the natural resources to be protected within the SSHCP Preserve System.

Low-impact nature trails will be designed following the AMMs outlined below.

NATURE TRAIL-1 (Nature Trail Plan): A nature trail plan must be prepared for each Preserve where a trail is allowed by the Preserve Management Plan. Nature trails will be unpaved trails that vary in width depending on terrain and existing constraints, but will never exceed 4 feet in width. Where a trail crosses a swale, wooden walkways elevated to a height no greater than 2 feet will be installed. Trail improvements may include mowing vegetation to create or maintain a trail, minor grading to remove trip hazards, and signs providing directional and educational information. Public access to land acquired for preservation will be prohibited until a trail plan can be prepared by the Implementing Entity and approved by the Permitting Agencies. A trail plan will include the following:

- Maps identifying areas that contain sensitive habitats or species occurrences.
- Maps that show the location and footprint of proposed trails.
- Methods used to control public access.
- Trail and use monitoring methods, schedules, and responsibilities.
- Trail operation and maintenance guidelines and responsibilities.
- Clear triggers for use restrictions or closure based on sensitive biological indicators (e.g., seasonal closures of some trails on the basis of activity periods of Covered Species or sensitive species).

NATURE TRAIL-2 (Nature Trail Protection of Duripan): Nature trails will be sited and constructed so as not to interfere with existing soil duripan and the perched aquifer that support the existing hydrologic regime of the Vernal Pool–Grassland, and will not interfere with existing pool hydrology. Trails within Preserves will not be paved.



Path: Z:\Projects\Sacramento_County\v7384_SSHCP\MAPDOC\MAPS\HCP\Chapter 5\Figure 5-10_WildlifeCrossings.mxd

SOURCE: ESRI, County of Sacramento 2014, USFWS 2015

FIGURE 5-10

Wildlife Crossings

SOUTH SACRAMENTO HABITAT CONSERVATION PLAN

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NATURE TRAIL-3 (Nature Trail Location): Nature trails will be located away from sensitive natural resources (e.g., vernal pools, riparian habitat, woodland habitat, Covered Species occurrences, raptor nesting sites, tricolored blackbird (*Agelaius tricolor*) colony sites). The Wildlife Agencies will determine the distance necessary to avoid impacts to sensitive natural resources.

NATURE TRAIL-4 (Biological Studies Prior to Nature Trail Design): Biological studies will be conducted within the area being considered for nature trail construction prior to project design. The studies will include land cover type mapping and focused species surveys and/or wetland delineations. The biological studies will include assessments of potential effects of trail construction on Preserve System resources, and recommendations for avoidance and minimization that may be incorporated into project siting, design, construction, and operation.

NATURE TRAIL-5 (Monitoring of Nature Trail Impacts): Impacts that could result from use of a nature trail within a Preserve will be monitored according to the Preserve Management Plan (Chapter 8) to ensure that uses do not conflict with the individual Preserve Management Plan. If use of a trail is found to conflict with the individual Preserve Management Plan, use of that trail will be discontinued until adjustments in the use can be made to reduce or eliminate conflicts. The Implementing Entity will make decisions about discontinuing or modifying use of a trail in consultation with the Preserve Manager or other applicable Preserve management agency or organization.

Condition 6. Avoid and Minimize Impacts When Re-Establishing or Establishing Wetlands

As discussed in Chapter 7, the Plan Permittees anticipate that 389 acres of Vernal Pool habitat will be re-established or established[21] within the Plan Area as part of the SSHCP Conservation Strategy. Although re-establishment or establishment of vernal pools is a Measurable Objective under this Plan, if not done correctly, the action could have an adverse impact on existing vernal pools.

RE-ESTABLISHMENT/ESTABLISHMENT-1 (Vernal Pool): Re-establish or establish Vernal Pool Wetland according to the following guidelines:

- Re-establishment will always take priority over establishment of vernal pools. Establishment will be permitted only after it has been determined that sites with the potential to re-establish vernal pools no longer exist in the Plan Area or cannot be acquired through a willing seller/buyer agreement.

[21] In the context of this Plan, "establish" is synonymous with "create."

- When possible, re-established or established sites will be located adjacent to an existing Preserve(s) to maximize connectivity and Preserve area.
- Re-establishment or establishment will not result in direct or indirect adverse impacts to the hydrologic regime of existing vernal pools. Vernal pool re-establishment or establishment actions will not remove more than 10% of any existing vernal pool watershed, as defined by the SSHCP LIDAR analysis (see Section 3.3 and Conservation Action VPI1.2 in Table 7.1).
- Vernal pool re-establishment will attempt to restore the historical density and range of vernal pool sizes to the maximum extent feasible using historical aerial photography of the site, if available. Where aerial photography of the site's historical conditions is not available, vernal pool re-establishment will include a range of pool sizes (area and depth) to accommodate the different habitat needs and life history characteristics of the vernal pool invertebrate Covered Species.
- Established vernal pools must be located on sites with vernal pool soils, defined as any Plan Area soil type where vernal pools currently exist.
- Established vernal pool sites will include a range of pool sizes to accommodate the different habitat needs and life history characteristics of the three vernal pool invertebrate Covered Species.
- The total density of vernal pools will not exceed 10% of the suitable soil areas in any vernal pool re-establishment and/or establishment site, unless it can be shown that the suitable areas of that site historically supported greater densities.
- Re-establishment or establishment may include inoculation when it is likely that no seed or cyst bank of vernal pool species remains at a site. Vernal Pool inocula will come from nearby vernal pools that are on the same geologic formation and soil type.

RE-ESTABLISHMENT/ESTABLISHMENT-2 (Vernal Pool Inocula Bank): Vernal pool re-establishment or establishment may include "soil inoculation" when it is likely that no seed or cyst bank of vernal pool species remains at a re-establishment or establishment site.

- During conversion of Urban Development Area vernal pools to a developed land cover type, project proponents will excavate and retain soil from vernal pools following protocols developed by the SSHCP Technical Advisory Committee (Chapter 9).

- Inocula applied in re-established or established vernal pools must be harvested from a vernal pool that is on the same geologic formation and soil type shown on the County General Soil Map as the re-establishment/establishment site. Geologic formations and soil types will follow U.S. Department of Agriculture Soil Conservation Service's 1993 Soil Survey of Sacramento County, California. Proposed off-site inocula sources must be approved by the Wildlife Agencies.

RE-ESTABLISHMENT/ESTABLISHMENT-3 (Re-Establishment/Establishment of Freshwater Marsh or Open Water Near Airports): During review of proposed re-establishment/establishment projects for freshwater marsh or open water on SSHCP Preserves, the Implementing Entity shall consider the potential for the location of the re-establishment/establishment projects to increase the risk of wildlife strikes or generation of ground fog at airports. If a re-establishment/establishment project would result in (1) a net increase in open water or freshwater marsh acreage over baseline conditions[22] within 5 miles of Mather Field, Sacramento Executive Airport, or Franklin Field; or (2) replacement of open water/freshwater marsh habitat that is located 2 or more miles from Mather Field or Sacramento Executive Airport with open water/freshwater marsh habitat that is located less than 2 miles from those airports, a qualified biologist shall prepare a concise letter report. The letter report shall summarize the biologist's findings regarding (1) the species likely to use the re-established/established habitat, (2) a rough order of magnitude estimate on the peak number of birds that might use the re-established/established habitat, and (3) potential movement patterns for birds using the re-established/established habitat and whether they might cross through the airport safety zones (e.g., to reach foraging habitat or another wildlife attractant). The letter report will also provide recommendations to the Implementing Entity on how they could reduce any of the identified wildlife hazards if there are any feasible means to do so that would not conflict with the biological goals and measurable objectives of the Conservation Plan.

Condition 7. Avoid and Minimize Impacts to Streams and Creeks

AMMs associated with Condition 7 must be applied to all Covered Activities where a stream or creek is located within a project footprint.

[22] For purposes of establishing baseline conditions, Freshwater Marsh and Open Water acreages will be calculated using that version of the SSHCP Land Cover Type Map in existence as of the date that the SSHCP permit was issued to the Plan Permittees by the USFWS.

STREAM-1 (Laguna Creek Wildlife Corridor): A 150-foot setback measured from the top of the bank on both sides of the stream will be applied to Laguna Creek within the Urban Development Area (minimum 300-foot corridor width). If trails are located within the Laguna Creek Wildlife Corridor, the nearest edge of the trail will be located at least 80 feet from the top of the bank.

STREAM-2 (UDA Stream Setbacks): A 100-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all streams listed in Table 5-1 (see also Figure 2-4). If a stream reach supports woody riparian vegetation, the setback will be equal to the riparian edge plus 25 feet or will be the setback defined above, whichever is greater. If trails are located within the Stream Setback, the nearest edge of the trail will be located at least 50 feet from the top of the bank.

Table 5-1
Stream Setback Minimum Requirements in the Urban Development Area

Stream	Minimum Setback (from the Top of Bank Measured in Aerial Perspective) on Both Sides of the Stream
Elder Creek	100 feet
Frye Creek	100 feet or as depicted as part of the NewBridge development project hardline Preserve (see Appendix K)
Gerber Creek	100 feet
Morrison Creek	100 feet
Central Paseo	100 feet or as depicted as part of the Cordova Hills development project hardline Preserve (Appendix K)
Sun Creek	100 feet or as depicted as part of the Sun Creek development project hardline Preserve (see Appendix K)

STREAM-3 (Minor Tributaries to UDA Streams): A 25-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all avoided first and second order tributaries to the streams listed in Table 5-1 and Laguna Creek. Refer to Objective W6 in Chapter 7 (Table 7-1) regarding avoided first and second order tributaries. Trails are not permitted within headwater ephemeral Stream Setbacks.

STREAM-4 (Minimize Effects from Temporary Channel Re-Routing): When an Urban Development Covered Activity temporarily re-routes a stream, creek, or drainage, the re-routing will be completed in a manner that minimizes impacts to beneficial uses and habitat. The following measures will be employed to minimize disturbances that will adversely impact water quality:

- No equipment will be operated in areas of flowing or standing water.
- Construction materials and heavy equipment must be stored outside of the active flow of any waters.

- When work within waters is necessary, the entire stream flow will be diverted around the work area.
- In the event of rain, the disturbed in-water work area will be temporarily stabilized before water body flow exceeds the capacity of the diversion structure. The disturbed water body will be stabilized so that the disturbed areas will not come in contact with the flow.
- Once construction is complete, all project-introduced material (e.g., pipes, gravel, cofferdam, sandbags) must be removed, leaving the water as it was before construction. Excess materials will be disposed of at an appropriate disposal site.
- All work areas will be effectively isolated from stream flows using suitable control measures before commencement of any in-water work. The diverted stream flow will not be contaminated by construction activities. Structures for isolating the in-water work area and/or diverting the stream flow (e.g., cofferdam, geo-textile silt curtain) will not be removed until all disturbed areas are cleaned and stabilized.
- Any flow diversion used during construction will be designed in a manner to prevent pollution and minimize siltation, and will provide flows to downstream reaches. Flows will be maintained to support existing aquatic life, riparian wetlands, and habitat that may be located upstream and downstream from any temporary diversion.
- All surface waters, including ponded waters, will be diverted away from areas undergoing grading, construction, excavation, vegetation removal, and/or any other activity that may result in a discharge to waters.
- All temporary dewatering methods will be designed to have the minimum necessary impacts to waters to isolate the immediate work area. All dewatering methods will be installed such that natural flow is maintained upstream and downstream of the diversion area. Any temporary dams and diversions will be installed such that the diversion does not cause sedimentation, siltation, or erosion upstream or downstream of the diversion area. All dewatering methods will be removed immediately upon completion of diversion activities.
- A method of containment must be used below any bridge, boardwalk, and/or temporary crossing to prevent debris from falling into the waters through the entire duration of a project.

- If temporary surface water diversions and/or dewatering are anticipated, the Third-Party Project Proponent will develop and maintain on site a surface water diversion and/or dewatering plan. The plan(s) must be developed prior to initiation of any water diversions and will include the proposed method and duration of diversion activities. The plan(s) must be made available to Central Valley Water Board staff upon request.
- When work in a flowing stream is unavoidable and any dam or other artificial obstruction is being constructed, maintained, or placed in operation, sufficient water will be allowed at all times to pass downstream to maintain beneficial uses of waters below the dam. Construction, dewatering, and removal of temporary cofferdams will not violate the turbidity, settle-able matter, pH, temperature, or dissolved oxygen requirements of any Water Quality Control Plan.
- Any temporary dam or other artificial obstruction will only be built from clean materials such as sandbags, gravel bags, water dams, or clean/washed gravel that will cause little or no siltation. Stream flow will be temporarily diverted using gravity flow through temporary culverts or pipes, or pumped around the work site with the use of hoses.

STREAM-5 (Design for Stream Channel Re-Routing, Widening, or Deepening): When an Urban Development Covered Activity alters a stream, creek, or drainage by re-routing, widening, or deepening a channel, the project design will include the following:

- The main channel of a re-routed channel will be free to migrate laterally over its active and terrace floodplain.
- Channel geometry (plan, profile, and cross-section) of the site will be appropriate for the watershed location and physical/hydrologic condition.
- Local, native materials will be used as fill material to the extent practicable.
- Bioengineering techniques will be used for construction and maintenance of bank stabilization. Bioengineered bank stabilization structures will use vegetation in combination with bank reshaping; biodegradeable geotextile materials; and, in some cases, a minimal amount of rock or wood to the extent practicable to dissipate erosive energy. Third-Party Project Proponents will consult a professional engineer when considering using bioengineering techniques.
- All re-routed, widened, or deepened streams are required to establish Stream Setbacks with minimum widths required under STREAM-1, STREAM-2, or STREAM-3. All re-routed, widened, or deepened streams must re-establish/

establish and maintain native Woody Riparian land cover and/or native Grassland Riparian land cover in the entire Stream Setback.

Condition 8. Avoid and Minimize Impacts to Covered Species from Utility and Utility Maintenance Covered Activities

AMMs associated with Condition 8 must be applied to all Covered Activities associated with construction and maintenance of infrastructure projects.

UTILITY-1 (Avian Collision Avoidance): Installation of new, or relocation of existing, utility poles, lines, and cell towers located within the Preserve System or within 1,000 feet of a Preserve boundary will be coordinated with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. The applicant or relevant utility/service provider will install utility poles, lines, and cell towers in conformance with Avian Powerline Interaction Committee (APLIC) standards for collision-reducing techniques, as outlined in Reducing Avian Collisions with Power Lines: State of the Art in 2012 (APLIC 2012), or any superseding document issued by the APLIC.

UTILITY-2 (Utility Maintenance on Preserves): Utility maintenance inside SSHCP Preserves and SSHCP Preserve Setbacks containing vernal pools will occur only when vernal pools have been dry for 30 days, except in emergency situations related to human health and safety.

UTILITY-3 (Trenchless Construction Methods): Where a pipeline or conduit crosses an existing or planned Preserve or will be located between adjacent Preserves (e.g., under a roadway that has a Preserve on both sides), trenchless construction methods will be used to minimize impacts to the existing soil profile (including impacts to a hardpan or duripan) to maintain the perched aquifer in Vernal Pool Grassland land cover type.

UTILITY-4 (Siting of Entry and Exit Location): The entry and exit locations for the trenchless construction method (see Utility-3) will be sited to avoid impacts to vernal pools and Riparian Woodland, and to avoid direct take of SSHCP Covered Species.

Condition 9. Avoid and Minimize Impacts That Might Result From Removing or Breaching Levees to Establish or Re-establish Riparian Habitat

LEVEE-1 (Preparation of Hydrologic Analysis): Prior to approving a draft Preserve Management Plan that includes (1) modifying or breaching an existing levee, or (2) would place a potential impedance to high-water event flood-flows on the water side of an existing levee (including new riparian vegetation plantings or

other new Preserve facilities), a hydrologic analysis will be conducted. The Preserve activity will only be implemented if the hydrologic analysis concludes that the activity will not result in a substantial increase in flood stage elevations or flood risk on lands outside the Preserve.

Condition 10. Avoid and Minimize Impacts That Might Result From Potential Residual Contamination of Preserves and Related Exposure of People to Such Hazardous Materials

HAZARDOUS MATERIALS-1 (Preparation of Phase I Environmental Site Assessment): Prior to the acquisition of a preserve site or implementation of a stream or riparian restoration project, a Phase I Environmental Site Assessment shall be conducted in general accordance with the American Society for Testing and Materials Standard Practice E1527-05. The purpose of this Environmental Site Assessment is to identify, to the extent feasible pursuant to the American Society for Testing and Materials Standard, recognized environmental conditions in connection with the potential site. The term "recognized environmental condition" means the presence or likely presence of hazardous substances or petroleum products on the property under conditions that may indicate an existing release, a past release, or a material threat of release of these substances to the property. If the Phase 1 Environmental Site Assessment indicates the presence of a recognized environmental condition, the Implementing Entity shall consider the following options.

- Determine that the acquisition/project can proceed on the basis that the Habitat Plan goals and objectives can be met on the site even with the presence of a recognized environmental condition.
- Conduct a Phase II Environmental Site Assessment, including soil and groundwater testing, to further study the potential for contamination to limit the Implementing Entity's management activities.
- If the results of the Phase I (or Phase II) Environmental Site Assessment indicate that the Habitat Plan goals and objectives cannot be met on the site, the Implementing Entity should not acquire the site.

HAZARDOUS MATERIALS-2 (Contingency Plan): As part of each Preserve Management Plan or site restoration plan, a Contingency Plan shall be prepared to address the actions that would be taken during construction in the event that unexpected contaminated soil or groundwater is discovered. The Contingency Plan shall include health and safety considerations, handling and disposal of wastes, reporting requirements, and emergency procedures. The Contingency Plan shall include a requirement that if evidence of contaminated materials is encountered

during construction, construction would cease immediately and applicable requirements of the Comprehensive Environmental Release Compensation and Liability Act and the California Code of Regulations Title 22 regarding the disposal of waste would be implemented.

5.4.2 Covered Species Take Avoidance and Minimization Measures

The following section describes measures to avoid or minimize effects of Covered Activities on specific SSHCP Covered Species. Species-specific AMMs include species surveys, pre-construction surveys, and construction monitoring. Most species-specific AMMs require that species surveys be conducted if Covered Species modeled habitat is within the proposed Covered Activity footprint or within a specified distance of the proposed Covered Activity. Section 3.4 provides maps and descriptions of modeled habitat for each Covered Species. The AMMs described below apply to Covered Activities when Covered Species modeled habitat or a Covered Species occurrence are at a project site. The Implementing Entity and Wildlife Agencies may update specific SSHCP AMMs over the Permit Term to provide the best and most appropriate protective measures for a Covered Species.

General Covered Species Take Avoidance and Minimization Measures

The following AMMs will apply to all Covered Activities that are required to implement Covered Species take AMMs.

SPECIES-1 (Litter Removal Program): A litter control program will be instituted for the entire project site. All workers will ensure that their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. All garbage will be removed from the project site at the end of each work day, and construction personnel will not feed or otherwise attract wildlife to the area where construction activities are taking place.

SPECIES-2 (No Pets in Construction Areas): To avoid harm and harassment of native species, workers and visitors will not bring pets onto a project site.

SPECIES-3 (Take Report): If accidental injury or death of any Covered Species occurs, workers will immediately inform the approved biologist or on-site monitor and site supervisor. The approved biologist or on-site monitor will phone the appropriate contact person at the Implementing Entity. The Implementing Entity will immediately contact the Wildlife Agencies by telephone. A memorandum will be provided to the Implementing Entity and Wildlife Agencies within 1 working day of the incident. The report will provide the date and location of the incident, number of individuals taken,

the circumstances resulting in the take, and any corrective measures taken to prevent additional take.

SPECIES-4 (Post-Construction Compliance Report): A post-construction compliance report will be submitted to the SSHCP Implementing Entity within 30 calendar days of completion of construction activities or within 30 calendar days of any break in construction activity that lasts more than 30 days. The report will detail the construction start and completion dates, any information about meeting or failing to meet species take Avoidance and Minimization Measures (AMM), effectiveness of each AMM that was applied at the project site, and any known project effects to Covered Species.

Rare Plants

PLANT-1 (Rare Plant Surveys): If a Covered Activity project site contains modeled habitat for Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii)*, Bogg's Lake hedge-hyssop (*Gratiola heterosepala)*, dwarf downingia (*Downingia pusilla),* Legenere (*Legenere limosa*), pincushion navarretia (*Navarretia myersii),* or Sanford's arrowhead (*Sagittaria sanfordii*), the Covered Activity project site will be surveyed for the rare plant by an approved biologist and following the California Department of Fish and Wildlife (CDFW) rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See Chapter 10 for the process to submit survey information to the Plan Permittee and the Permitting Agencies.

PLANT-2 (Rare Plant Protection): If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs a the project site.

Sacramento and Slender Orcutt Grass

Sacramento Orcutt grass (*Orcuttia viscida*) is a federally and state endangered species and is ranked by the California Native Plant Society as a California Rare Plant Rank 1B.1 species. Slender Orcutt grass (*Orcuttia tenuis*) is a federally threatened and state endangered species and is ranked by the California Native Plant Society as a California Rare Plant Rank 1B.1 species. Both Orcutt grasses are very rare, and the likelihood of finding new occurrences within the Plan Area is low. Due to their rarity, take of either of these species is not permitted under the SSHCP, with the exception of take related to Preserve management and monitoring (see Section 5.2.7, SSHCP Preserve System Covered Activities).

ORCUTT-1 (Orcutt Grass Surveys): If a Covered Activity project site is located within 1 mile of the Mather Core Recovery Area and contains the Vernal Pool land cover type, the project site will be surveyed for Sacramento and slender Orcutt grass by an approved biologist following California Department of Fish and Wildlife (CDFW) rare plant survey protocols (CDFG 2009) or most recent CDFW guidelines to determine if Sacramento and/or slender Orcutt grass is present. An approved biologist will conduct the field investigation to identify and map occurrences. See Chapter 10 for the process to conduct and submit survey information.

ORCUTT-2 (Orcutt Grass Protection): Where known or new Sacramento or slender Orcutt grass occurrences are found, they will be protected within an SSHCP Preserve that is at least 50 acres. The occurrence will be located interior to the Preserve at a distance of no less than 300 feet from the edge of the Preserve boundary. If a Third-Party Project Proponent encounters a previously undiscovered occurrence of Sacramento or slender Orcutt grass on a Covered Activity project site, the Third-Party Project Proponent will contact the Implementing Entity or Land Use Authority Permittee with authority over the project, who will coordinate with the Wildlife Agencies for written concurrence of avoidance to ensure that the project does not cause take of the species.

California Tiger Salamander

To avoid direct and indirect effects of Covered Activities on California tiger salamander (*Ambystoma californiense*), the following AMMs will be implemented.

CTS-1 (California Tiger Salamander Daily Construction Schedule): Ground-disturbing Covered Activities within California tiger salamander modeled habitat (Figure 3-16) will occur outside the breeding and dispersal season (occur after July 31 and before October 15), to the maximum extent practicable. If Covered Activities must be implemented in modeled habitat (Figure 3-16) during the breeding and dispersal season (after October 15 and before July 31), construction activities will not start until 30 minutes after sunrise and must be complete 30 minutes prior to sunset.

CTS-2 (California Tiger Salamander Exclusion Fencing): If a Covered Activity must be implemented in modeled habitat (Figure 3-16) during the breeding and dispersal season (after October 15 and before July 31), exclusion fencing will be installed around the project footprint before October 15. Temporary high-visibility construction fencing will be installed along the edge of work areas, and exclusion fencing will be installed immediately outside of the temporary high-visibility construction fencing to exclude California tiger salamanders from entering the construction area or becoming entangled in the construction fencing. Exclusion fencing will be at least 1 foot tall and be buried

at least 6 inches below the ground to prevent salamanders from going under the fencing. Fencing will remain in place until all construction activities within the construction area are complete. No project activities will occur outside the delineated project footprint. An approved biologist must inspect the exclusion fencing and project site every morning before 7:00 a.m. for integrity and for any entrapped California tiger salamanders. If a California tiger salamander is encountered, refer to CTS-5, below. (However, the Implementing Entity may, with approval of the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), determine that it is appropriate for a Covered Activity project to not implement CTS-2 for certain long and linear roadway Covered Activity projects if it appears that the exclusion fencing will likely trap individuals or cause more take of California tiger salamander than it would prevent.)

CTS-3 (California Tiger Salamander Monitoring): If Covered Activities must be implemented in modeled habitat (Figure 3-16), an approved biologist experienced with California tiger salamander identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place, and will inspect the project site for California tiger salamander every morning before 7:00 a.m., or prior to construction activities. As required by BMP-8 (Training of Construction Staff), the approved biologist will also train construction personnel on the required California tiger salamander avoidance procedures, exclusion fencing, and correct protocols in the event that a California tiger salamander enters an active construction zone. If a California tiger salamander is encountered, refer to CTS-5, below.

CTS-4 (Avoid California Tiger Salamander Entrapment): If Covered Activities must be implemented in modeled habitat, all excavated steep-walled holes or trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes or trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within California tiger salamander modeled habitat will be inspected for California tiger salamanders by the approved biologist prior to being moved. If a California tiger salamander is encountered, refer to CTS-5, below.

CTS-5 (California Tiger Salamander Encounter Protocol): If a California tiger salamander is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately (California Department of Fish and Wildlife (CDFW)

and U.S. Fish and Wildlife Service (USFWS)). Construction activities will be suspended in a 100-foot radius of the animal until the animal is relocated by an approved biologist with appropriate handling permits from the Wildlife Agencies. Prior to relocation, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the salamander, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to USFWS and CDFW immediately. Any worker who inadvertently injures or kills a California tiger salamander or who finds dead, injured, or entrapped California tiger salamander(s) must immediately report the incident to the approved biologist.

CTS-6 (Erosion Control Materials in California Tiger Salamander Habitat): If erosion control (BMP-2) is implemented within California tiger salamander modeled habitat (Figure 3-16), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that salamanders are not trapped (no monofilament). Coconut coir matting and fiber rolls with burlap are examples of acceptable erosion control materials. This limitation will be communicated to the contractor through use of special provisions included in the bid solicitation package.

CTS-7 (Rodent Control): CTS-7 only applies to projects that are within California tiger salamander modeled habitat (Figure 3-16) and on Covered Activities. Rodent control will be allowed only in developed portions of a Covered Activity project site. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.

Western Spadefoot

To avoid direct and indirect effects of Covered Activities on western spadefoot (*Spea hammondii*), the following AMMs will be implemented.

WS-1 (Western Spadefoot Work Window): Ground-disturbing Covered Activities within western spadefoot modeled habitat (Figure 3-17) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.

WS-2 (Western Spadefoot Exclusion Fencing): If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing

will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high-visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below.

WS-3 (Western Spadefoot Monitoring): If Covered Activities must be implemented in modeled habitat (Figure 3-17) in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below.

WS-4 (Avoid Western Spadefoot Entrapment): If a Covered Activity occurs in western spadefoot modeled habitat (Figure 3-17), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6, below.

WS-5 (Erosion Control Materials in Western Spadefoot Habitat): If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

WS-6 (Western Spadefoot Encounter Protocol): If Covered Activities must be implemented in modeled habitat (Figure 3-17) during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist.

Giant Gartersnake

To avoid direct and indirect effects of Covered Activities on giant gartersnake (*Thamnophis gigas*), the following AMMs will be implemented.

GGS-1 (Giant Gartersnake Surveys): If the SSHCP giant gartersnake modeled habitat maps (Figure 3-18) show that modeled habitat for giant gartersnake is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate giant gartersnake aquatic habitat within the project footprint and adjacent areas within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-18, giant gartersnake aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water, freshwater marsh, agricultural ditches, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide these maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated giant gartersnake habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as giant gartersnake habitat is identified and fully avoided. Otherwise, Covered Activities must comply with GGS-2 through GGS-8, below. See Chapter 10 for the process to conduct and submit survey information.

GGS-2 (Giant Gartersnake Work Window): Covered Activities that do not fully avoid giant gartersnake modeled habitat (Figure 3-18) will be conducted during the snake's active

season. Construction and ground-disturbing activities will be initiated after May 1 and will end prior to September 15. If it appears that construction activities may go beyond September 15, the Third-Party Project Proponent or Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1. The Local Land Use Permittee and the Implementing Entity will discuss with the Wildlife Agencies additional measures necessary to minimize take.

GGS-3 (Giant Gartersnake Monitoring): If a Covered Activity is occurring in giant gartersnake modeled habitat (Figure 3-18), an approved biologist experienced with giant gartersnake identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for giant gartersnake prior to construction activities. If a giant gartersnake is encountered, refer to GGS-7. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a giant gartersnake enters an active construction zone (i.e., outside the buffer zone).

GGS-4 (Giant Gartersnake Habitat Dewatering and Exclusion): If construction activities will occur in giant gartersnake aquatic habitat, aquatic habitat will be dewatered and then remain dry and absent of aquatic prey (e.g., fish and tadpoles) for 15 days prior to initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to giant gartersnake. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent snakes from attempting to move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify the construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Giant gartersnake habitat outside construction fencing will be avoided by all construction personnel. The fencing and the work area will be inspected by the approved biologist to ensure that the fencing is intact and that no snakes have entered the work area before the start of each work day. The fencing will be maintained by the contractor until completion of the project. If giant gartersnake is encountered, refer to GGS-7, below.

GGS-5 (Avoid Giant Gartersnake Entrapment): If a Covered Activity occurs in giant gartersnake modeled habitat (Figure 3-18), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or

provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within giant gartersnake modeled habitat will be inspected for giant gartersnake by the approved biologist prior to being moved. If a giant gartersnake is encountered, refer to GGS-7.

GGS-6 (Erosion Control Materials in Giant Gartersnake Habitat): If erosion control (BMP-2) is implemented within giant gartersnake modeled habitat (Figure 3-18), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure snakes are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

GGS-7 (Giant Gartersnake Encounter Protocol): If a giant gartersnake is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the giant gartersnake within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a giant gartersnake or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist.

GGS-8 (Giant Gartersnake Post-Construction Restoration): After completion of ground-disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation. Refer to the U.S. Fish and Wildlife Service's (USFWS) Guidelines for the Restoration and/or Replacement of Giant Gartersnake Habitat (USFWS 1997), or the most current USFWS guidelines at the time of the

activity. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.

Western Pond Turtle

To avoid direct and indirect effects of Covered Activities on western pond turtle (*Actinemys marmorata*), the following AMMs will be implemented.

WPT-1 (Western Pond Turtle Surveys): If the SSHCP western pond turtle modeled habitat maps (Figure 3-19) show that modeled habitat for western pond turtle is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate western pond turtle aquatic habitat within the project footprint and within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-19, western pond turtle aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water, freshwater marsh, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide those maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated western pond turtle habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as western pond turtle habitat is identified and fully avoided. Otherwise, Covered Activities must comply with WPT-2 through WPT-9. See Chapter 10 for the process to conduct and submit survey information.

WPT-2 (Western Pond Turtle Work Window): Maintenance and improvements to existing structures may occur throughout the year as long as western pond turtle habitat is identified and avoided, and movement of equipment is confined to existing roads. Otherwise, construction and ground-disturbing Covered Activities must be conducted outside of western pond turtle's active season. Construction and ground-disturbing activities will be initiated after May 1 and will commence prior to September 15. If it appears that construction activities may go beyond September 15, the appropriate Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1, to determine if additional measures are necessary to minimize take.

WPT-3 (Western Pond Turtle Monitoring): If a Covered Activity is occurring in western pond turtle modeled habitat (Figure 3-19), an approved biologist experienced with western pond turtle identification and behavior will monitor the project site, including the

integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for western pond turtle prior to construction activities. The approved biologist will also training construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western pond turtle enters an active construction zone (i.e., outside the buffer zone).

WPT-4 (Western Pond Turtle Habitat Dewatering and Exclusion): If construction activities will occur in western pond turtle aquatic habitat, aquatic habitat for the turtle will be dewatered and then remain dry and absent of aquatic prey (e.g., crustaceans and other aquatic invertebrates) for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to western pond turtle. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent turtles from attempting to burrow or move under the fence into the construction area. In addition, high-visibility fencing will be erected to identify construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Western pond turtle habitat outside construction fencing will be avoided by all construction personnel. The fencing and work area will be inspected by the approved biologist to ensure that the fencing is intact and that no turtles have entered the work area before the start of each work day. Fencing will be maintained by the contractor until completion of the project. If, after exclusion fencing and dewatering, western pond turtles are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will discuss the next best steps with the Implementing Entity and Wildlife Agencies.

WPT-5 (Avoid Western Pond Turtle Entrapment): If a Covered Activity occurs within western pond turtle modeled habitat (Figure 3-19), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western pond turtle modeled habitat will be inspected for western pond turtle by the approved biologist prior to being moved.

WPT-6 (Erosion Control Materials in Western Pond Turtle Habitat): If erosion control (BMP-2) is implemented within western pond turtle modeled habitat (Figure 3-19), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that turtles are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.

WPT-7 (Western Pond Turtle Modeled Habitat Speed Limit): Covered Activity construction and maintenance vehicles will observe a 20-mile-per-hour speed limit within western pond turtle modeled upland habitat (Figure 3-19).

WPT-8 (Western Pond Turtle Encounter Protocol): If a western pond turtle is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the turtle, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a western pond turtle or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist.

WPT-9 (Western Pond Turtle Post-Construction Restoration): After completion of ground-disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation and placing appropriate artificial or natural basking areas in waterways and wetlands. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.

Tricolored Blackbird

To avoid direct and indirect effects of Covered Activities on tricolored blackbird (*Agelaius tricolor*), the following AMMs will be implemented.

TCB-1 (Tricolored Blackbird Surveys): If modeled habitat for tricolored blackbird is present within a Covered Activity's project footprint or within 500 feet of a project footprint, then an approved biologist will conduct a field investigation to determine if existing or potential nesting or foraging sites are present within the project footprint and adjacent areas within 500 feet of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Within the Plan Area, potential tricolor blackbird nest sites are often associated with freshwater marsh and seasonal wetlands, or in thickets of willow, blackberry, wild rose, thistle, and other thorny vegetation. Tricolored blackbirds are also known to nest in crops associated with dairy farms. Foraging habitat is associated with annual grasslands, wet and dry vernal pools and other seasonal wetlands, agricultural fields (such as large tracts of alfalfa and pastures with continuous haying schedules and recently tilled fields), cattle feedlots, and dairies. The Third-Party Project Proponent will map all existing or potential nesting or foraging sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.

TCB-2 (Tricolored Blackbird Pre-Construction Surveys): Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys will be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

TCB-3 (Tricolored Blackbird Nest Buffer): If active nests are found within the project footprint or within 500 feet of any project-related Covered Activity, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.

TCB-4 (Tricolored Blackbird Nest Buffer Monitoring): If nesting tricolored blackbirds are present within the project footprint or within 500 feet of any project-related Covered

Activity, then an approved biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone).

TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves): On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.

Swainson's Hawk

To avoid direct and indirect effects of Covered Activities on Swainson's hawk (*Buteo swainsoni*), the following AMMs will be implemented.

SWHA-1 (Swainson's Hawk Surveys): If modeled habitat for Swainson's hawk (Figure 3-25) is present within a Covered Activity's project footprint or within 0.25 mile of a project footprint, then an approved biologist will conduct a survey to determine if existing or potential nesting sites are present within the project footprint and adjacent areas within 0.25 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Nest sites are often associated with Riparian land cover, but also include lone trees in fields, trees along roadways, and trees around structures. Nest trees may include, but are not limited to, Fremont's cottonwood (*Populus fremontii*), oaks (*Quercus* spp.), willows (*Salix* spp.), walnuts (*Juglans* spp.), eucalyptus (*Eucalyptus* spp.), pines (*Pinus* spp.), and Deodar cedar (*Cedrus deodara*). The Third-Party Project Proponent will map all existing and potential nesting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.

SWHA-2 (Swainson's Hawk Pre-Construction Surveys): Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

SWHA-3 (Swainson's Hawk Nest Buffer): If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.

SWHA-4 (Swainson's Hawk Nest Buffer Monitoring): If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).

Greater Sandhill Crane

To avoid direct and indirect effects of Covered Activities on greater sandhill crane (*Grus canadensis*), the following AMMs will be implemented.

GSC-1 (Greater Sandhill Crane Surveys): If modeled habitat for greater sandhill crane (Figure 3-22) is present within a Covered Activity's project footprint or within 0.5 mile of a project footprint, then an approved biologist will conduct a field investigation to determine if existing or potential roosting sites are present within the project footprint and adjacent areas within 0.5 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. Roosting sites within the Plan Area are often associated with flooded fields, seasonal wetlands, and freshwater marsh. The Third-Party Project Proponent will map all existing or potential roosting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Roosting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.

GSC-2 (Greater Sandhill Crane Pre-Construction Surveys): Pre-construction surveys will be required to determine if active roosting sites are present within a project footprint or within 0.5 mile of a project footprint if existing or potential roosting sites were found during initial surveys and construction activities will occur when wintering flocks are present within the Plan Area (September 1 through March 15). An approved biologist will conduct pre-construction surveys within 15 days of ground-disturbing activities, and within 0.5 mile of a project footprint, to determine presence of roosting greater sandhill cranes. Pre-construction surveys will be conducted September 1 through March 15, when wintering flocks are present within the Plan Area. If birds are present, then GSC-3, GSC-4, and GSC-5 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

GSC-3 (Greater Sandhill Crane Roosting Buffer): If active roosting sites are found within the project footprint or within 0.5 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.5 mile temporary roosting disturbance buffer around the roosting site until the cranes have left.

GSC-4 (Greater Sandhill Crane Visual Barrier): Greater sandhill cranes have low tolerance for human disturbance, and such disturbance has caused cranes to abandon foraging and roosting sites. Repeat disturbance affects their ability to feed and store energy needed for survival. If project-related activities occur within 0.5 mile of a known roosting site as identified by surveys conducted during implementation of GSC-1 or GSC-2, a visual barrier will be constructed.

GSC-5 (Greater Sandhill Crane Roosting Buffer Monitoring): If roosting sites are found within the project footprint or within 0.50 mile of any project-related Covered Activity, an

approved biologist experienced with greater sandhill crane behavior will be retained by the Third-Party Project Proponent to monitor the roosting site throughout the roosting season and to determine when the birds have left. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary disturbance buffer can only occur with the written permission of the Implementing Entity and Wildlife Agencies. If greater sandhill cranes are abandoning their roosting and/or forage sites, the approved biologist will have the authority to shut down construction activities. If roost abandonment occurs, the approved biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid harm and harassment of individuals. The approved biologist will also train construction personnel on the avoidance procedures, buffer zones, and protocols in the event that greater sandhill cranes move into an active construction zone (i.e., outside the buffer zone).

Western Burrowing Owl

To avoid direct and indirect effects of Covered Activities on western burrowing owl (*Athene cunicularia*), the following AMMs will be implemented.

WBO-1 (Western Burrowing Owl Surveys): Surveys within modeled habitat are required for both the breeding and non-breeding season. If the project site falls within modeled habitat, an approved biologist will survey the project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping will be conducted by the approved biologist while walking transects throughout the entire project site plus all accessible areas within a 250-foot radius from the project site. The centerline of these transects will be no more than 50 feet apart and will vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects will be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the project does not fully avoid the habitat, pre-construction surveys will be required. Burrowing owl habitat is fully avoided if project-related activities do not impinge on a 250-foot buffer established by the approved biologist around suitable burrows. See Chapter 10 for the process to conduct and submit survey information.

WBO-2 (Western Burrowing Owl Pre-Construction Surveys): Prior to any Covered Activity ground disturbance, an approved biologist will conduct pre-construction surveys in all areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey will last a minimum of 3 hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped. Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction.

WBO-3 (Burrowing Owl Avoidance): If western burrowing owl or evidence of western burrowing owl is observed on the project site or within 250 feet of the project site during pre-construction surveys, then the following will occur:

During Breeding Season: If the approved biologist finds evidence of western burrowing owls within a project site during the breeding season (February 1 through August 31), all project-related activities will avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 250-foot buffer zone. Construction and other project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity and Wildlife Agencies prior to project construction based on the following criteria:

- The Implementing Entity and Wildlife Agencies approve of the avoidance and minimization plan provided by the project applicant.

- An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).
- The same approved biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.

If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies.

If monitoring by the approved biologist indicates that the nest is abandoned prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The approved biologist will excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies.

The Implementing Entity and Wildlife Agencies will respond to a request from the Third-Party Project Proponent to review the proposed construction monitoring plan within 21 days.

During Non-Breeding Season: During the non-breeding season (September 1 through January 31), the approved biologist will establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer will be allowed. Construction activities within the non-disturbance buffer will be allowed if the following criteria are met to prevent owls from abandoning over-wintering sites:

- An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).
- The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.
- If there is any change in owl foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer.
- If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity and Wildlife Agencies that an approved biologist excavate usable burrows and install one-way exclusionary

devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will be removed and construction may continue.

Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.

WBO-4 (Burrowing Owl Construction Monitoring): During construction of Covered Activities, 250-foot construction buffer zones will be established and maintained around any occupied burrow. An approved biologist will monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist will also train construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.

WBO-5 (Burrowing Owl Passive Relocation): Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures described in this condition preclude work from continuing. Passive relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation will only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors will be in place for 48 hours to ensure that owls have left the burrow, and then the biologist will excavate the burrow to prevent reoccupation. Burrows will be excavated using hand tools only. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term.

WBO-6 (Burrowing Owl Timing of Maintenance Activities): All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas will be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.

WBO-7 (Rodent Control): Rodent control will be allowed only in developed portions of a Covered Activity project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control will comply with the methods of

rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.

Covered Raptor Species

To avoid direct and indirect effects of Covered Activities on covered raptor species, the following AMMs will be implemented. This measure applies to Cooper's hawk (*Accipiter cooperii*), loggerhead shrike (*Lanius ludovicianus*), northern harrier (*Circus cyaneus*), and white-tailed kite (*Elanus leucurus*). The following AMMs do not apply to ferruginous hawk (*Buteo regalis*), as they do not nest in the Plan Area. The following AMMs also do not apply to Swainson's hawk or burrowing owl, as specific AMMs have been developed for these covered raptor species.

RAPTOR-1 (Raptor Surveys): If modeled habitat for a covered raptor species (Figures 3-20, 3-23, 3-24, or 3-28) is present within a Covered Activity's project footprint or within 0.25 mile of a project footprint, then an approved biologist will conduct a field investigation to determine if existing or potential nesting sites are present within the project footprint and adjacent areas within 0.25 mile of the project footprint. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential nesting sites and provide these maps to the Local Land Use Permittees and Implementing Entity. Nesting sites must also be noted on plans that are submitted to a Local Land Use Permittee. See Chapter 10 for the process to conduct and submit survey information.

RAPTOR-2 (Raptor Pre-Construction Surveys): Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre-construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

RAPTOR-3 (Raptor Nest/Roost Buffer): If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project

Proponent will establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged.

RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring): If project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).

Western Red Bat

To avoid direct and indirect effects of Covered Activities on western red bat (*Lasiurus blossevillii*), the following AMMs will be implemented.

BAT-1 (Winter Hibernaculum Surveys): If modeled habitat (Figure 3-30) for western red bat is present within 300 feet of a Covered Activity's project footprint, then an approved biologist will conduct a field investigation of the project footprint and adjacent areas within 300 feet of a project footprint to determine if a potential winter hibernaculum is present, and to identify and map potential hibernaculum sites. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. If potential hibernaculum sites are found, the Third-Party Project Proponent will note their locations on project designs and will design the project to avoid all areas within a 300-foot buffer around the potential hibernaculum sites. Winter hibernaculum habitat is fully avoided if project-related activities do not impinge on a 300-foot buffer established by the approved biologist around an existing or potential winter hibernaculum site. See Chapter 10 for the process to conduct and submit survey information.

BAT-2 (Winter Hibernaculum Pre-Construction Surveys): If the Third-Party Project Proponent elects not to avoid potential winter hibernaculum sites within the project footprint plus a 300-foot buffer, additional surveys are required. Prior to any ground disturbance related to Covered Activities, an approved biologist will conduct a pre-construction survey within 3 days of ground-disturbing activities within the project footprint and 300 feet of the project footprint to determine the presence of winter hibernaculum sites. Pre-construction surveys will be conducted during the winter hibernaculum season (November 1 through March 31). If a winter hibernaculum is present, then BAT-3 and BAT-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.

BAT-3 (Winter Hibernaculum Buffer): If active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will establish a 300-foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Implementing Entity and Wildlife Agencies concur.

BAT-4 (Bat Eviction Methods): An approved biologist will determine if non-maternity and non-hibernaculum day and night roosts are present on the project site. If necessary, an approved biologist will use safe eviction methods to remove bats if direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided. If a winter hibernaculum site is present, Covered Activities will not occur until the hibernaculum is vacated, or, if necessary, safely evicted using methods acceptable to the Wildlife Agencies.

5.5 How Conditions on Covered Activities are Applied to Various Urban Development Permit Types Approved by the Land Use Authority Permittees

Covered Activities can be approved by Land Use Authority Permittees at different scales. For example, master plans (including specific plans, comprehensive plans, and special planning areas) generally include large areas of land, and other permit types (conditional use permits, grading permits, and building permits) can apply over a range of project footprints. The process that Land Use Authority Permittees will use to approve Covered Activities in these planning documents is described in Chapter 10. See Table 5-2 for a list of projects and activities that are considered Covered Activities.

Appendix E

CONFIDENTIAL

Cultural Resources Inventory Report

The Preserve Project

Rancho Cordova, Sacramento County, California

Prepared For:

George M. Carpenter
Winn Communities, Inc.
3001 I Street, Suite 300
Sacramento, California 95816

Prepared By:

Megan Webb and Roger Mason
ECORP Consulting, Inc.
2525 Warren Drive
Rocklin, California 95677

Under the direction of Principal Investigator:

Theadora Fuerstenberg, RPA

February 5, 2019

The information included in this report is confidential. Please send all requests to view the full Cultural Resources Inventory Report to the following address:

Darcy Goulart, Principal Planner
City of Rancho Cordova
Community Development Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670
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Appendix F

Geology and Soils
For
The Preserve

Grant Line Road and Raymer Way
Rancho Cordova, California

Project No. E17440.001
June 2019

YOUNGDAHL
CONSULTING GROUP, INC.

Building Innovative Solutions

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35 YEARS

Project E17440.001
26 June 2019

Winn Communities
3001 I Street, Suite 300
Sacramento, CA 95816

Attention: Mr. George Carpenter

Subject: **THE PRESERVE, GRANT LINE ROAD AND RAYMER WAY**
Rancho Cordova, California
Geology and Soils for Environmental Impact Report

References: (at end of document)

Dear Mr. Carpenter:

With your authorization of 25 April 2019, Youngdahl Consulting Group, Inc. has completed an evaluation of potential impacts detailed on the Geology and Soils section of the California Environmental Quality Act Appendix G Environmental Checklist Form. Section VI of this forms starts with the statement "Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving" and then lists categories ranging from fault rupture to soils inadequate for septic systems. This document addresses each item on this list pertaining to geology and soils as well as mineral resources. This report does not address paleontological resources.

If you have any questions regarding this information, please contact us.

Very truly yours,
Youngdahl Consulting Group, Inc.

CERTIFIED ENGINEERING GEOLOGIST
DAVID C. SEDERQUIST
NO. 2133
EXPIRATION DATE
9-30-20
STATE OF CALIFORNIA

David C. Sederquist, C.E.G., C.HG., QSD/QSP
Senior Engineering Geologist/Hydrogeologist

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Geology and Soils
For
The Preserve
Grant Line Road and Raymer Way
Rancho Cordova, California

1.0 Geology and Soils

This report identifies existing soil and geologic conditions and analyzes the potential for the proposed project to affect these resources. Information presented in the discussion and subsequent analysis was primarily drawn from the following sources:

- Geotechnical Engineering Report, Grantline Properties, (Wallace-Kuhl & Associates, Inc. 2004).
- Regional geologic maps and fault maps prepared by the California Department of Conservation's California Geological Survey (formerly the Division of Mines and Geology), the United States Geological Survey, and the California Department of Water Resources.
- Soil maps and information provided by the United States Department of Agriculture, Natural Resources Conservation Service.

Specific reference information is provided in Section 3 of this report.

1.1 Regional Geologic Framework

The Preserve is located within the northern portion of the Sacramento Valley, which, together with the San Joaquin Valley, comprises the Great Valley geomorphic province (California Geological Survey, 2002). The Great Valley is a forearc basin composed of thousands of feet of sedimentary deposits that has undergone periods of subsidence and uplift over millions of years (USGS, 1990). The Great Valley basin began to form during the Jurassic period as the Pacific oceanic plate was subducted underneath the adjacent North American continental plate (Howard, 1979). The subduction zone and associated trench shifted 80 miles seaward to the present location of the Coast Ranges, and a new trench formed offshore; buckling at the edge of the new continent creating a forearc basin. In the western portion of the Great Valley, Upper Jurassic to Upper Cretaceous rock sequences rest on Upper Jurassic oceanic crust sequences (USGS, 1990). In contrast, the eastern portion of the Great Valley is composed of shallow Pleistocene nonmarine deposits. These deposits overly Cenozoic deposits that cover a layer of Cretaceous marine/deltaic deposits, which in turn rests on the metamorphic and igneous rocks of the Sierra Nevada—the western edge of the continental margin (California Geological Survey, 1987).

During the Jurassic and Cretaceous periods of the Mesozoic era, the area of the Great Valley existed as a marine depositional environment. By the end of the Mesozoic, the northern portion of the Great Valley began to fill with considerable granitic debris as tectonic forces caused uplift of the basin (Howard, 1979).

The following formations were deposited in the Cenozoic Era:

The Ione Formation was deposited in the Eocene Age at the edge of an inland sea. In the Micoene, depositions of the Mehrten Formation (mostly dark andesitic sands, occasional conglomerate lenses, and reworked ash beds) occurred in the Sacramento Valley. Deposition of the Mehrten Formation continued into the early Pliocene era (Howard, 1979).

The Laguna Formation was deposited in the Sacramento Valley starting in the Pliocene era, continuing into the early Pleistocene era (Howard, 1979). The Laguna is composed of tan to brown, volcanic rich sediments, with grain sizes ranging from clay to silt and sand; with minor granitic and metamorphic input. The Fair Oaks Formation is composed of light brown granitic sands rich in quartz and biotite with some silt and clay present north of the American River, deposited from Pliocene into the early Pleistocene eras, on top of the Laguna Formation.

The Arroyo Seco Gravels are rounded gravels with a red matrix derived from granite, and with clasts that are mainly metamorphic and andesitic pebbles and cobbles; this unit was deposited in the Pleistocene era and forms a caprock in the Sacramento area (Department of Water Resources, 1974). The California Geological Survey classifies these materials as Turlock Lake Formation. The Victor Formation, unconsolidated gravel, sand, silt and clay from a granitic source was deposited (DWR, 1974). The Modesto Formation, consisting of unconsolidated gravels, sand, silt, and clay from a granitic source was deposited largely near stream channels in the late Pleistocene Era (Association of Engineering Geologists, 2001).

In the Holocene era, after the last glaciation, stream flows dropped and streams became undersized compared to the valleys, with alluvium consisting of unconsolidated gravel, sand, silt, and clay, deposited along stream channels (Shlemon, et al, 2000).

Most of the surface of the Great Valley is covered with Holocene and Pleistocene-age alluvium. This alluvium is composed of sediments from the Sierra Nevada to the east and the Coast Range to the west, which were carried by water and deposited on the valley floor. Siltstone, claystone, and sandstone are the primary types of sedimentary deposits.

1.2 Geologic Setting

The California Geological Survey has the Preserve area mapped as being underlain by the Pliocene Age Laguna Formation and some Quaternary Age Alluvium (California Geological Survey, 2011).

1.3 Project Area Topography

The topography of the Preserve is generally flat with elevations ranging from approximately 220 feet above mean sea level, where Morrison Creek leaves the property, to approximately 255 feet at the high point along the north boundary.

1.4 Project Area Geology

The Preserve is underlain by the aforementioned Cretaceous Period marine/deltaic deposits, the Ione Formation, the Mehrten Formation, and the Laguna Formation, with some alluvium. The Department of Water Resources (DWR, 1974) provides a geologic cross section just south of the Preserve presenting the aforementioned formations and water bearing zones, with Arroyo Seco Gravels indicated in the topmost 20 to 50 feet. The Arroyo Seco Gravels are not shown on the California Geological Survey Map of 2011.

1.5 Soils

1.5.1 Surface Soils

The soils in the area have been mapped by the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) and are described in their online web-based database (websoilsurvey.sc.egov.usda.gov) accessed on 7 June 2019. Soils in the Preserve are shown on the soil map in Appendix A, which contains the Custom Soil Resource Report. These soil characteristics are summarized on Table 1.

According to the Soil Resource Report, there are four individual soil map units within the Preserve area. These include the Hicksville gravely loam, 0-2 percent slopes comprising approximately 21.4 percent of the project area; the Red Bluff loam, 2 to 5 percent slopes and comprises approximately 7.2 percent of the project area; the Red Bluff-Redding complex, 0 to 5 percent slopes and comprises about 38.3 percent of the project area,; and the Redding gravely loam, 0 to 8 percent slopes and comprises approximately 33.1 percent of the project area.

The Hicksville gravelly loam, 0 to 2 percent slopes, extends to a depth of approximately 65 inches and is moderately well drained. Its parent material is alluvium. Typically, the surface layer is gravely loam about 13 inches thick. The subsoil is gravely clay loam from 13 to 43 inches, and stratified very gravely sandy loam to clay loam, from 43 to 65 inches.

The Red Bluff loam, 2 to 5 percent slopes, extends to a depth of approximately 68 inches and is well drained. Its parent material is alluvium. Typically, the surface layer is loam about 8 inches thick. The subsoil is clay loam from 8 to 43 inches and gravely clay loam from about 43 to 68 inches.

The Red Bluff-Redding complex, 0 to 5 percent slopes, extends to a depth of approximately 68 inches and is well drained. Typically, the surface layer is loam about 8 inches thick. The subsoil is clay loam from approximately 8 to 43 inches, and is gravelly clay loam from about 43 to 68 inches.

The Redding gravelly loam, 0 to 8 percent slopes, extends to a depth of approximately 35 inches and is moderately well drained. The surface layer is typically gravelly loam about 8 inches in thickness. The subsoil is gravelly loam from about 8 to 19 inches, clay from approximately 19 to 22 inches, and cemented gravelly material from around 22 to 35 inches.

Table 1 – Soil Characteristics

Soil Map Unit	Map Unit Symbol	Shrink-Swell Potential[1]	Permeability[2]	Water Erosion Hazard (Factor K)[3]	Wind Erosion Hazard[4]	Runoff Rating[5]	Concrete Corrosivity	Steel Corrosivity	Limitations for buildings and Roads
Hicksville gravely loam, 0 – 2 percent slopes	159	0.31	Moderately High	0.17	7	C/D	Low	High	Very limited, flooding, shrink-swell
Red Bluff Loam, 2 to 5 percent slopes	192	0.50	Moderately High	0.37	6	C	Moderate	High	Somewhat limited, shrink-swell
Red Bluff-Redding complex, 0 to 5 percent slopes	193	0.50	Moderately High	0.37	6	C	Moderate	High	Somewhat limited, shrink-swell
Redding gravelly loam, 0 to 8 percent slopes	198	0.99	Moderately High	0.28	6	D	Moderate	High	Somewhat limited, depth to saturated zone

[1] The NRCS online soil database uses 0 – 1 values to describe factors such as shrink-swell potential with 0 being very low and 1.0 being very high.
[2] NRCS Saturated hydraulic conductivity (Ksat) refers to the ease with which pores in a saturated soil transmit water based on NRCS class limits.
[3] Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.
[4]A wind erodibility group (WEG) consists of soils that have similar properties affecting their susceptibility to wind erosion in cultivated areas. The soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible.
[5] Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms. The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows: Group A soils have a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission. Group B soils have a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission. Group C soils have a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission. Group D soils have a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high-water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission. If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

1.5.2 Subsurface Conditions

Based on a subsurface exploration program conducted by Wallace-Kuhl & Associates (2004), subsurface soil conditions in the Preserve area consisted of a heterogenous mixture of materials. Soils were observed to consist of clayey silty sands, clayey sands, clayey sandy silts, and silty sandy clays (as categorized using the Unified Soil Classification versus the United States Department of Agriculture Classification used by the NRCS) containing varying amounts of gravel from the surface to a depth of about two to four feet below the existing ground surface. In some areas, these soils extended to depths of as much as 10 feet. Underlying these relatively fine-grained soils were clayey and silty, gravel and cobbles to maximum 11-foot depth of exploration.

According to the California Department of Water Resources Water Data Library Web Site, the ground elevation in Well 385707N1211868W001 located approximately ½-mile southeast of the Preserve area was at an elevation of approximately 76 feet above mean sea level, about 185 below the ground surface, in April of 2019.

1.5.3 Soil Corrosion Potential

Wallace-Kuhl & Associates (2004) submitted two soil samples for corrosivity analyses that included determination of the soil pH, minimum resistivity, and chloride and sulfate concentrations. Their findings were that the native soils are not unusually corrosive to steel reinforcement properly embedded within Portland cement concrete but may be potential corrosive to buried metal pipe. They concluded that, based upon the chloride and sulfate concentrations, ordinary Type I/II Portland cement is considered to be suitable for use on this project, assuming minimum concrete cover is maintained over steel reinforcement.

1.5.4 Naturally Occurring Asbestos

The California Code of Regulations, Section 93105, regulates construction and mining in materials containing naturally occurring asbestos. The Sacramento Metropolitan Air Quality Management District has designated parcels in Eastern Sacramento County to be in a zone subject to this regulation based upon geologic mapping by the California Geological Survey. The Preserve area is **not** within one of these mapped zones and is therefore not subject to regulations regarding naturally occurring asbestos.

1.6 Seismicity and Faults

Primary Seismic Hazards

Surface Rupture and Faulting

The purpose of the Alquist-Priolo Earthquake Fault Zoning Act (Alquist-Priolo Act) is to regulate development near active faults to mitigate the hazard of surface rupture. Faults in an Alquist-Priolo Zone are typically active faults. The Alquist-Act defines an active fault as one that has exhibited surface displacement within the Holocene epoch (the last 11,000 years; a late Quaternary fault as one that has had surface displacement within the past 700,000 years, a Quaternary fault (age undifferentiated) is a fault that has shown surface displacement at some point during quaternary time (the past 1.6 million years); and pre-Quaternary fault is one that has had surface displacement before the Quaternary period (California Geological Survey, 2018).

According to the California Geological Survey (2010), there are no mapped faults within or near the Preserve area. Wallace-Kuhl & Associates, Inc. (2004) did not address the seismicity of the Preserve area.

The nearest mapped potentially active and active faults pertinent to the site are summarized in the following table.

Table 2: Local Active and Potentially Active Faults within a 100-Kilometer Radius of the Preserve Area

Status	Fault Name	Distance, Direction	
Active	Dunnigan Hills	62 km	NW
Active	Green Valley Fault	95 km	W
Active	Cordelia Fault	92 km	W
Late Quaternary	Bear Mountains Fault Zone - West	15 km	E
Late Quaternary	Bear Mountains Fault Zone - East	23 km	E
Quaternary (age undifferentiated)	Maidu Fault	28 km	NE
Late Quaternary	Melones - West	28 km	E
Late Quaternary	Melones - East	31 km	E

km = kilometer, W = west, E = east, NE = northeast

A total of eight faults and/or fault zones were identified as potential seismic sources within a 100-kilometer (km) radius of the Preserve area. The ones expected to have the greatest impact due to their proximity to the Preserve area are faults associated with the Foothills fault system. The foothills Fault System is located along the western flank of the Sierra Nevada. The most recent event on the Foothills fault system was the 1975 Oroville earthquake (magnitude 5.6 on the moment magnitude scale).

1.6.1 Ground Shaking Hazard

The intensity of ground shaking resulting from an earthquake is a function of the size (energy release) of the earthquake, the duration of the energy release, the distance from the subject location, and the ability of the geologic materials to transmit the energy. In general, the greater the energy release and the closer the center of release (epicenter) to the site, the greater the intensity of the ground shaking. Different soils will respond differently ground shaking; with strong enough ground shaking, buildings can be damaged, slopes can fail, and when saturated sands are present, liquefaction can occur.

Earthquake magnitude is generally expressed as Richter Magnitude for earthquakes less than 4.0 magnitude and Moment Magnitude for earthquakes greater than 4.0 magnitude. Earthquake size, as measured by the Richter Scale is a well-known, but not well understood, concept (USGS website, accessed 11 June 2019). The idea of a logarithmic earthquake magnitude scale was first developed by Charles Richter in the 1930's for measuring the size of earthquakes occurring in southern California using relatively high-frequency data from nearby seismograph stations. This magnitude scale was referred to as ML, with the L standing for local. This is what was to eventually become known as the Richter magnitude.

As more seismograph stations were installed around the world, it became apparent that the method developed by Richter was strictly valid only for certain frequency and distance ranges. In order to take advantage of the growing number of globally distributed seismograph stations, new magnitude scales that are an extension of Richter's original idea were developed. These include body wave magnitude (Mb) and surface wave magnitude (Ms). Each is valid for a particular frequency range and type of seismic signal. In its range of validity, each is equivalent to the Richter magnitude.

Because of the limitations of all three magnitude scales (ML, Mb, and Ms), a new, more uniformly applicable extension of the magnitude scale, known as moment magnitude, or Mw, was developed. In particular, for very large earthquakes, moment magnitude gives the most reliable estimate of earthquake size.

Moment is a physical quantity proportional to the slip on the fault multiplied by the area of the fault surface that slips; it is related to the total energy released in the earthquake. The moment can be estimated from seismograms (and also from geodetic measurements). The moment is then converted into a number similar to other earthquake magnitudes by a standard formula. The result is called the moment magnitude. The moment magnitude provides an estimate of earthquake size that is valid over the complete range of magnitudes, a characteristic that was lacking in other magnitude scales.

Ground shaking is described using two methods: ground acceleration as a fraction of the acceleration of gravity, expressed in units of “g”, and the Modified Mercalli scale, which is a descriptive method using 12 levels of intensity denoted by Roman Numerals. Modified Mercalli intensities range from I (shaking that is not felt), to XII (total damage).

The Preserve area is in a region of California characterized by low historical seismic activity and a low ground-shaking hazard. The 2017 amended County of Sacramento General Plan Safety element shows the project to be in an area of nearly the lowest ground shaking potential. The California Office of Statewide Planning and Health Development (OSHPD) online calculator accesses Unite States Geological Survey data to estimate ground motions and provided an estimated maximum credible earthquake (MCE) ground acceleration of 0.161 g for the Preserve area assuming a site class of D for stiff soils (Appendix B).

Secondary Seismic Hazards

Liquefaction and Associated Hazards

Liquefaction is the sudden loss of soil shear strength and sudden increase in porewater pressure caused by shear strains, as could result from an earthquake. Research has shown that saturated, loose to medium-dense sands with a silt content less than about 25 percent and located within the top 40 feet are most susceptible to liquefaction and surface rupture/lateral spreading.

The Preserve area is not in a mapped liquefaction zone. The 2017 Amended County of Sacramento General Plan Safety Element (County of Sacramento, 2017) shows the Preserve to be in an area with a medium to high potential for subsidence, but this includes impacts from groundwater extraction as well as from shaking.

Due to the absence of permanently elevated groundwater table and the relatively low seismicity of the area, the potential for seismically induced damage due to liquefaction, surface ruptures, and settlement is considered minimal.

Seismically induced and Static Slope Failures
The topography of the Preserve Area is gently rolling to flat. The project is not in a mapped landslide zone. There are no significant slopes that could fail.

Other Hazards
Other geologic hazards (volcanic activity, tsunami, seiche, and mudflow) that could be experienced in the larger region are not likely to affect the Preserve.

1.7 Minerals

Under the Surface Mining and Reclamation Act (SMARA), the State Mining and Geology Board may designate certain mineral deposits as being regionally significant to satisfy future needs. The Board's decision to designate an area is based on a classification report prepared by CGS and on input from agencies and the public. The Preserve lies within the designated Sacramento-Fairfield Production-Consumption Region for Portland cement concrete aggregate, which includes all designated lands within the marketing area of the active aggregate operations supplying the Sacramento-Fairfield urban center.

In compliance with SMARA, the California Division of Mines and Geology (CDMG, 1988, 1999) has established the classification system shown in Table 3 to denote both the location and significance of key extractive resources.

Table 3 - California Division of Mines and Geology
Mineral Land Classification System

Classification	Description
MRZ-1	Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.
MRZ-2	Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.
MRZ-3	Areas containing mineral deposits, the significance of which cannot be evaluated from existing data
MRZ-4	Areas where available data are inadequate for placement in any other mineral resource zone
Note: MRZ = Mineral Resource Zone Source: Dupras 1988	

The Preserve area is classified as MRZ-3 for Portland Cement-grade aggregate—an area where the significance of mineral deposits cannot be evaluated from existing data. The California Division of Mines and Geology (1984, 1988, 1999) indicates that the Preserve is classified as either MRZ-3 or MRZ-4 for Placer gold, copper, zinc, and industrial minerals (i.e., carbonate rock, clay, sand, lignite, talc, asbestos). The Preserve is zoned MRZ-1 (no known deposits) for chromite. According to the City of Rancho Cordova General Plan (2006) the Preserve area is not listed as a locally-important mineral resource recovery site.

2.0 Environmental Impacts

Methods of Analysis - Geology, Soils, and Seismicity
Impacts related to geology, soils, and seismicity were evaluated based available data (maps, soil surveys, reports), and professional judgement. This analysis focuses on the proposed project's potential to result in the risk of personal injury, loss of life, and damage to property as a result of existing geologic and geotechnical conditions within the project area.

This analysis of impacts assumes that the project applicant would conform to the latest stormwater pollution prevention requirements, County and other plan policies, standards, and ordinances. This analysis also assumes that geotechnical investigations would be performed to evaluate the potential for the presence of soft and/or loose soils, unstable slopes, surface fault rupture, ground shaking, liquefaction hazard, slope stability, and expansive soils. Additional site-specific analysis would occur prior to final design.

Methods of Analysis - Minerals
The proposed projects potential to affect mineral resources was evaluated by examining the project footprint in comparison to resource locations mapped by the California Geological Survey.

2.1 Thresholds of Significance

In accordance with Appendix G of the State of California's CEQA Guidelines, the proposed project would be considered to have a significant effect if it would result in any of the following conditions:

1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: (1) rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42.
2) Result in substantial soil erosion or the loss of topsoil?
3) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?
4) Be located on expansive soil, as defined in Chapter 18 of the California Building Code (2016), creating substantial risks to life and property?
5) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?
6) Result in the loss of availability of a known mineral resource that would be of value to regions and the residents of the state?
7) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

2.2 Impacts and Mitigation Measures

Impact GEO-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: (1) rupture of a known

earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. Refer to Division of Mines and Geology Special Publication 42; (2) Strong seismic ground shaking; (3) seismic-related ground failure, including liquefaction; and (4) Landslides (less than significant).

The project area is not identified as being within an Alquist-Priolo Zone. There is no evidence of recent (i.e., Holocene) faulting with the project area and no active faults are mapped at or near the project area (California Geological Survey 2010). This impact would be less than significant.

The project area is an area of low ground shaking hazard. However, a large earthquake on a nearby fault could cause minor ground shaking in the vicinity of the project, potentially resulting in an increased risk of structural loss, injury, or death. Liquefaction and related hazards such as lateral spreading and differential settlement have the potential to compromise the structural integrity of proposed new facilities and cause injury. The construction of the project will fall under the requirements of the California Building Code and any additional requirements of the City of Rancho Cordova. A preliminary geotechnical engineering evaluation has been completed (Wallace-Kuhl & Associates, Inc., 2004) but does not meet the requirements of Chapter 18 of the California Building Code for geotechnical investigations. Detailed geotechnical investigations meeting the requirements of the California Building Code will be required. The investigations will provide foundation design recommendations that will mitigate these impacts. Additionally, the design of structures must consider projected ground accelerations due to earthquakes and must follow California Building Code requirements. Therefore, the impact for ground shaking hazard to result in loss, injury, or death due to liquefaction, dynamic compaction, seismically induced settlement, or lateral spreading is considered to be less than significant.

There are no significant natural slopes in the project area. Slopes may be constructed (i.e. stormwater basins). Slopes will be designed according to California Building Code requirements so the potential for seismically induced slope instability is considered to be negligible. This impact would be less than significant.

To summarize, due to the relatively low seismicity of the area, the requirement to design foundations, structures, and embankments according to California Building Code requirements, which takes into account the projected seismicity, and the lack of significant natural slopes, the potential for seismically induced damage is considered negligible.

Impact GEO-2: Result in substantial soil erosion or the loss of topsoil (less than significant).

Grading, excavation, removal of vegetation cover and loading activities associated with construction could temporarily increase erosion, runoff, and sedimentation. Construction activities could also result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

However, requirements under Section 402 of the Federal Clean Water Act, the Construction Activities Storm Water Construction General Permit (Order No. 2009-009-DWQ as amended by 2010-0014-DWQ and 2012-006-DWQ), a Stormwater Pollution Prevention Plan (SWPPP) would be developed by qualified stormwater developers and

practitioners and implemented during construction. The SWPPP would be kept onsite during construction activity and made available upon request to representatives of the City or Rancho Cordova, the County of Sacramento, and the Central Valley Regional Water Quality Control Board. The SWPPP would identify pollutant sources that may affect the quality of stormwater associated with construction activity, and identify stormwater pollution prevention measures to be implemented to reduce pollutants in stormwater discharges during and after construction. Therefore, the SWPPP would also include a description of potential pollutants and hazardous materials present on site during construction (including vehicle and equipment fuels). The SWPPP would include details of how the sediment and erosion control practices (best management practices or BMPs) would be implemented. Implementation of the SWPPP would comply with county, state, and federal water quality requirements.

In addition to the SWPPP, adherence to the Sacramento Stormwater Quality Partnership Municipal Stormwater Permit (MS4) would minimize any effects from erosion, runoff, and sedimentation. Accordingly, this impact would be less than significant.

Impact GEO-3: Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse (less than significant).

The topography of the project area is gentle, with no significant slopes. The potential for lateral spreading, subsidence, liquefaction, or collapse will be evaluated by geotechnical studies; these studies will make recommendations for engineering design to mitigate these potential conditions. This impact would be less than significant.

Impact GEO-4: Be located on expansive soil, as defined in Chapter 18 of the California Building Code, creating substantial risks to life or property (less than significant).

The preliminary geotechnical evaluation (Wallace-Kuhl & Associates, Inc., 2004), reported the presence of clay with a moderately high expansion potential and recommend that the proper handling of clay soils will be an important aspect of site development. The NRCS reports soil shrink-swell potentials for the project area to range from 0.31 to 0.99 using a scale of 0 to 1.0 where 1.0 represents a high potential. Expansive soils have the potential to compromise the structural integrity of project features, which could be a significant impact. However, in order to meet California Building Code Chapter 18 requirements, the project applicant's geotechnical engineer will be responsible for conducting final geotechnical evaluations of the on-site soils to further determine the extent of soils with adverse-shrink swell properties prior to grading and construction activities. Based on subsurface conditions, the project applicant's geotechnical engineers will make recommendations for project elements designs to accommodate for the effects of expansive soils. Corrective actions may include excavation of potentially problematic soils during construction and replacement with engineered backfill, ground treatment processes, and direction of surface water away from foundation soils. The projected applicants will select one or more of these measures in consultation with qualified engineers before grading activities begin, ensuring that this impact would be less than significant.

Impact GEO-5: Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater (no impact).

The project would be connected to sewer lines of the local wastewater systems, not septic systems. Therefore, there would be no impact. No mitigation is required.

Impact GEO-6: Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state (less than significant).

The Preserve area is classified as MRZ-3 for Portland Cement-grade aggregate—an area where the significance of mineral deposits cannot be evaluated from existing data. The California Division of Mines and Geology (1984, 1988, 1999) indicates that the Preserve is classified as either MRZ-3 or MRZ-4 for Placer gold, copper, zinc, and industrial minerals (i.e., carbonate rock, clay, sand, lignite, talc, asbestos). The Preserve is zoned MRZ-1 (no known deposits) of chromite. According to the City of Rancho Cordova General Plan (2006) the Preserve area is not listed as a locally-important mineral resource recovery site. There are no existing or potential mineral resources identified that would be of value to the region or the residents of the state, and the impact would be less than significant.

Impact GEO-7: Result in the loss of availability of a locally important mineral resource site delineated on a local general plan, specific plan, or other land use plan (no impact).

The City of Rancho Cordova General Plan does not identify any locally important mineral resources within the Preserve area. Also, the project area does not contain any mineral resources that have not been considered in the City of Rancho Cordova General Plan. Since there are no locally important mineral resources or recovery sites identified in this plan there would be no impact.

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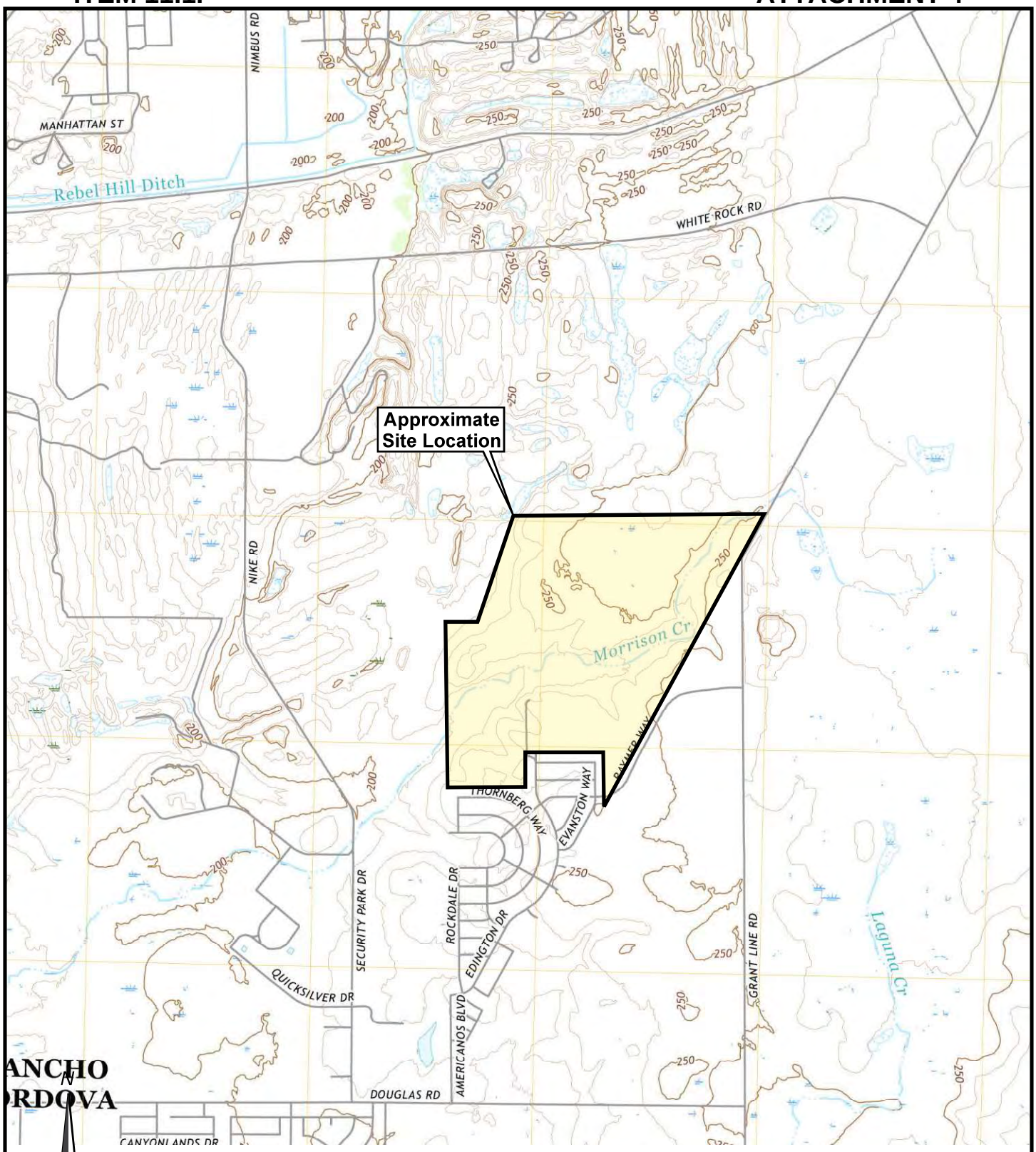
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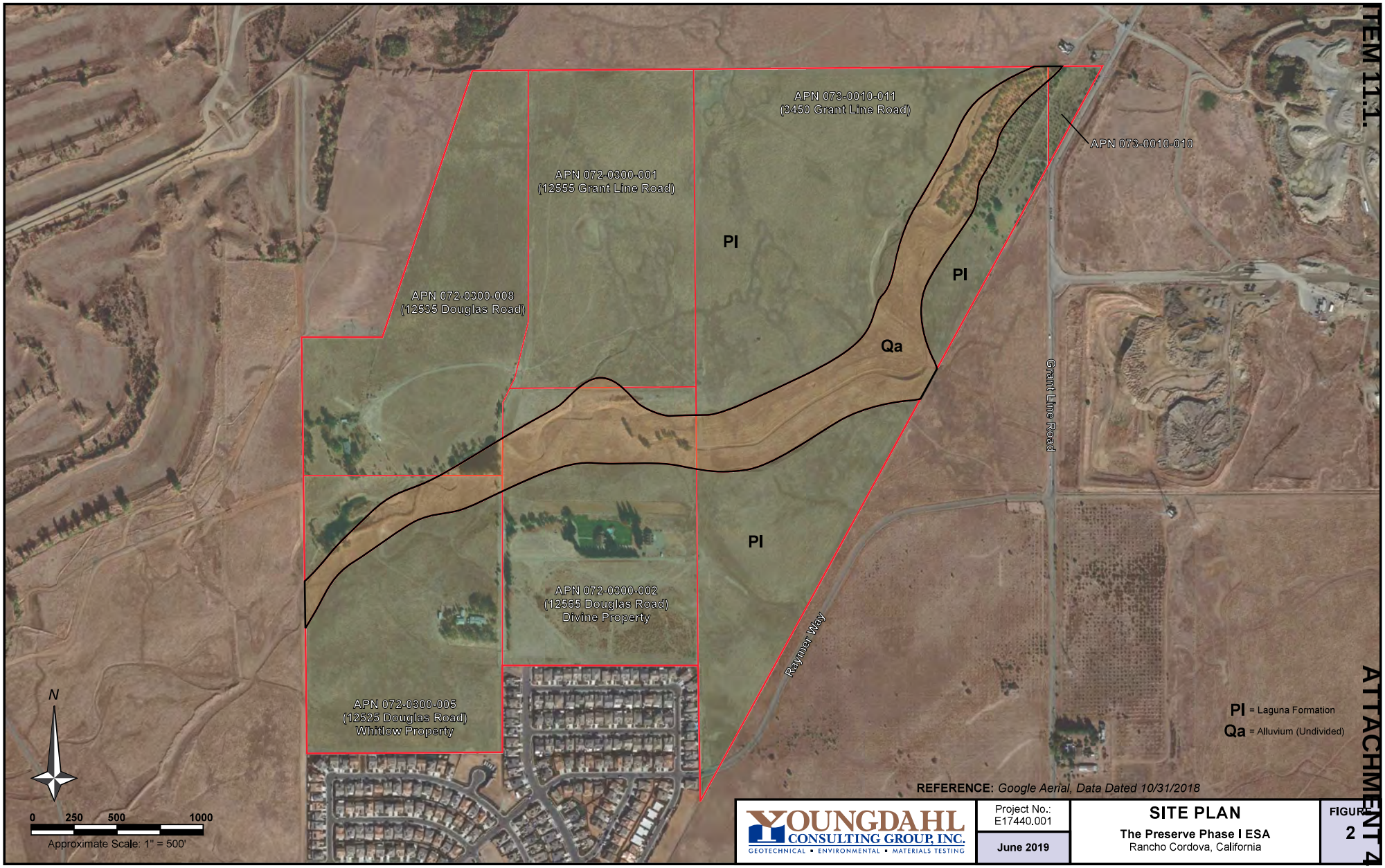
Figures



Scale: 1:24,000

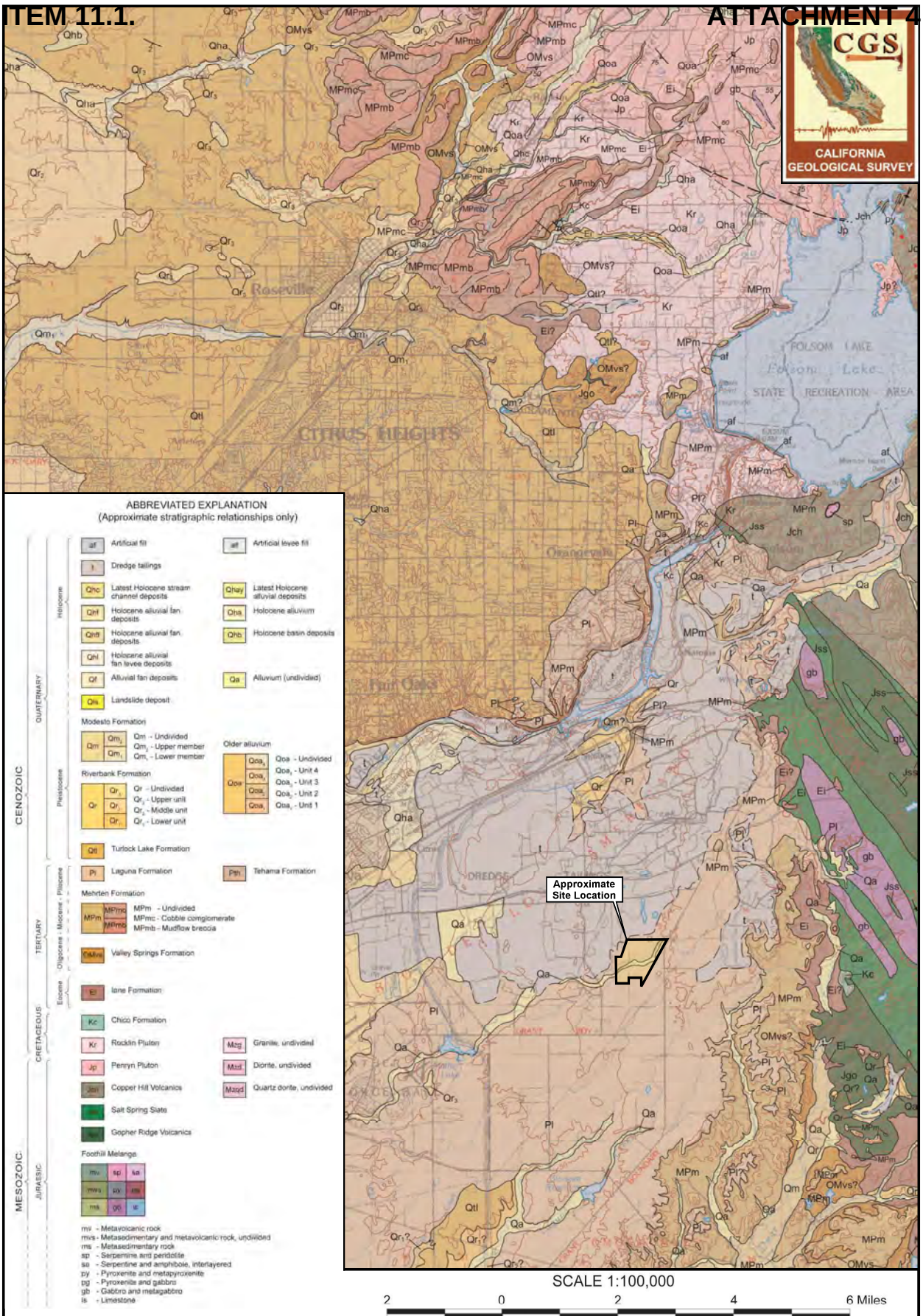
BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Buffalo Circle Quadrangle, Dated 2018*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.001 **June 2019**	**VICINITY MAP** **The Preserve Phase I ESA** Rancho Cordova, California	**FIGURE 1**



REFERENCE: *Google Aerial, Data Dated 10/31/2018*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.001	**SITE PLAN** The Preserve Phase I ESA Rancho Cordova, California	FIGURE 2
	June 2019		



REFERENCE: *Preliminary Geological Map of the Sacramento Quadrangle, California, California Department of Conservation, Carlos I. Gutierrez, Dated 2011*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING	Project No.: E17440.001	**REGIONAL GEOLOGY MAP** The Preserve Phase I ESA Rancho Cordova, California	**FIGURE 3**
	June 2019		

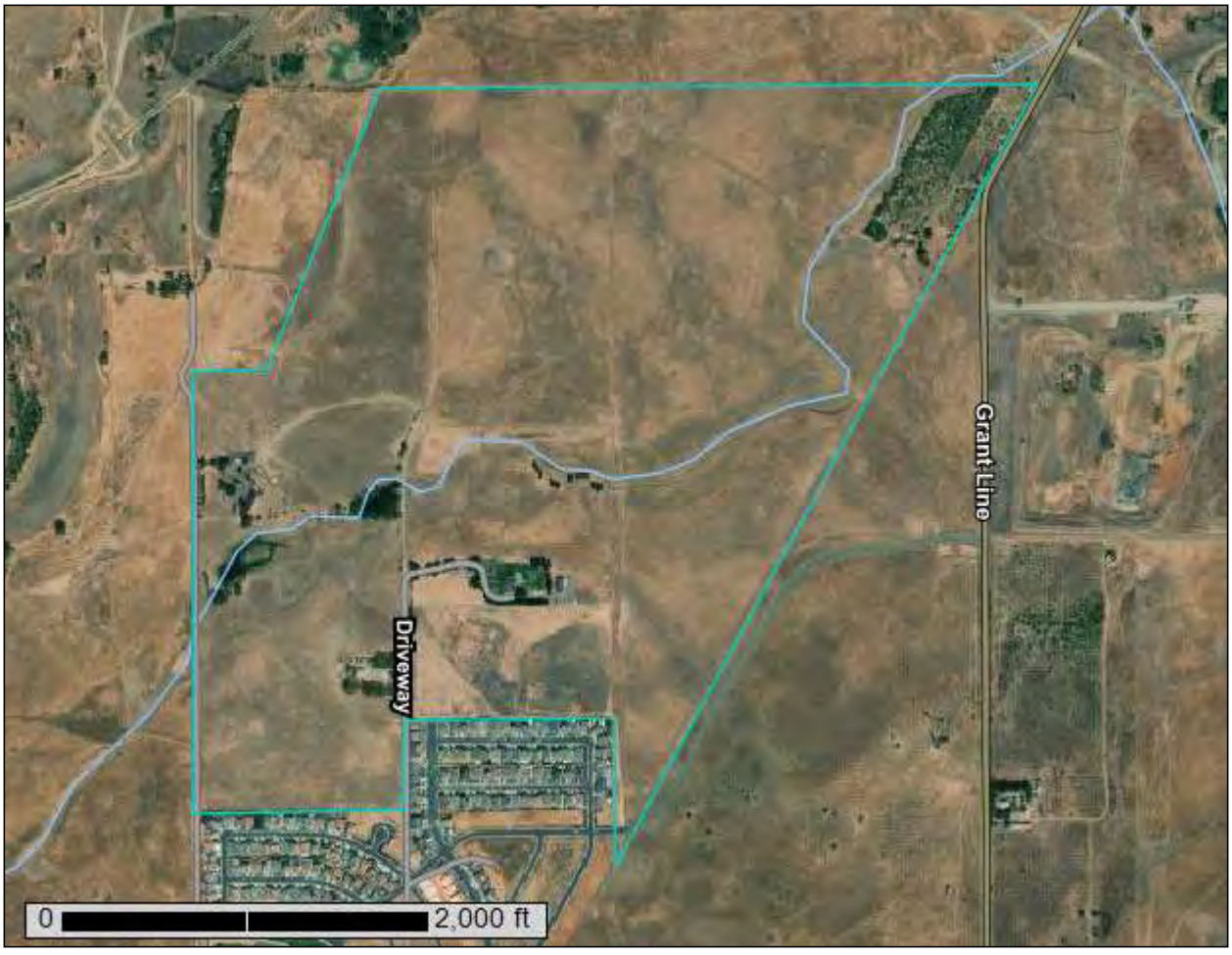
Appendix A
Custom Soil Resources Report for Sacramento County, California

United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Sacramento County, California



Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


Custom Soil Resource Report
Soil Map
Grant Line Rd
Grant Line
Driveway
Morrison Creek
193
159
198
192
Soil Map may not be valid at this scale.
Map Scale: 1:11,000 if printed on A landscape (11" x 8.5") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 10N WGS84
N
38° 35' 2" N
38° 34' 11" N
121° 10' 50" W
121° 12' 29" W
427100
427900
427700
427500
427300
427100
427090
427070
658400
658200
658000
657800
657600
657400
657200
657000
656800
656600
656400
656200

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sacramento County, California
Survey Area Data: Version 17, Sep 14, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Dec 31, 2009—Aug 8, 2017

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
159	Hicksville gravelly loam, 0 to 2 percent slopes, occasionally flooded	60.4	21.4%
192	Red Bluff loam, 2 to 5 percent slopes	20.4	7.2%
193	Red Bluff-Redding complex, 0 to 5 percent slopes	108.0	38.3%
198	Redding gravelly loam, 0 to 8 percent slopes, MLRA 17	93.4	33.1%
Totals for Area of Interest		**282.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Sacramento County, California

159—Hicksville gravelly loam, 0 to 2 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: hhn3
Elevation: 80 to 230 feet
Mean annual precipitation: 17 inches
Mean annual air temperature: 61 degrees F
Frost-free period: 250 to 275 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Hicksville and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hicksville

Setting

Landform: Terraces, terraces, hills
Landform position (two-dimensional): Toeslope, summit
Landform position (three-dimensional): Crest, tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 13 inches: gravelly loam
H2 - 13 to 43 inches: gravelly clay loam
H3 - 43 to 65 inches: stratified very gravelly sandy loam to clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): 2w
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: LOAM STREAM TERRACE (R017XD081CA)
Hydric soil rating: No

Minor Components

Corning

Percent of map unit: 3 percent

Hydric soil rating: No

Creviscreek
Percent of map unit: 3 percent
Hydric soil rating: No

Columbia
Percent of map unit: 2 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Hydric soil rating: Yes

Cosumnes
Percent of map unit: 2 percent
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Hydric soil rating: Yes

Pentz
Percent of map unit: 2 percent
Hydric soil rating: No

Redding
Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, hardpan deeper depths
Percent of map unit: 1 percent
Hydric soil rating: No

192—Red Bluff loam, 2 to 5 percent slopes

Map Unit Setting
National map unit symbol: hhp5
Elevation: 200 to 800 feet
Mean annual precipitation: 30 inches
Mean annual air temperature: 63 degrees F
Frost-free period: 250 to 280 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition
Red bluff and similar soils: 80 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Red Bluff

Setting
Landform: Terraces
Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 25 inches: clay loam
H3 - 25 to 43 inches: clay loam
H4 - 43 to 68 inches: gravelly clay loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: LOAMY (R017XD045CA)
Hydric soil rating: No

Minor Components

Redding

Percent of map unit: 7 percent
Hydric soil rating: No

Xerorthents

Percent of map unit: 7 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 2 percent
Landform: Depressions
Hydric soil rating: Yes

Unnamed, hardpan soil

Percent of map unit: 2 percent
Hydric soil rating: No

Unnamed, steeper slopes

Percent of map unit: 2 percent
Hydric soil rating: No

193—Red Bluff-Redding complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: hhp6
Elevation: 100 to 1,500 feet
Mean annual precipitation: 14 to 30 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 230 to 320 days
Farmland classification: Not prime farmland

Map Unit Composition

Red bluff and similar soils: 45 percent
Redding and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Red Bluff

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium

Typical profile

H1 - 0 to 8 inches: loam
H2 - 8 to 25 inches: clay loam
H3 - 25 to 43 inches: clay loam
H4 - 43 to 68 inches: gravelly clay loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 7.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C
Ecological site: LOAMY (R017XD045CA)
Hydric soil rating: No

Description of Redding

Setting

Landform: Terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Gravelly alluvium

Typical profile

H1 - 0 to 7 inches: gravelly loam
H2 - 7 to 20 inches: gravelly loam
H3 - 20 to 28 inches: gravelly clay loam
H4 - 28 to 66 inches: indurated

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: About 20 inches to abrupt textural change; 28 to 66 inches to duripan
Natural drainage class: Moderately well drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very low (about 2.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4s
Hydrologic Soil Group: C
Ecological site: GRAVELLY LOAMY (R017XD090CA)
Hydric soil rating: No

Minor Components

Corning

Percent of map unit: 5 percent
Hydric soil rating: No

Hicksville

Percent of map unit: 4 percent
Hydric soil rating: No

Xerorthents

Percent of map unit: 4 percent
Hydric soil rating: No

Unnamed

Percent of map unit: 1 percent
Landform: Depressions
Hydric soil rating: Yes

Unnamed, hardpan below 40 inches

Percent of map unit: 1 percent
Hydric soil rating: No

198—Redding gravelly loam, 0 to 8 percent slopes, MLRA 17

Map Unit Setting

National map unit symbol: 2w8bl
Elevation: 20 to 420 feet
Mean annual precipitation: 19 to 28 inches
Mean annual air temperature: 61 to 63 degrees F
Frost-free period: 230 to 320 days
Farmland classification: Not prime farmland

Map Unit Composition

Redding and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Redding

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread, riser
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium derived from igneous, metamorphic and sedimentary rock over clayey alluvium derived from igneous, metamorphic and sedimentary rock over cemented alluvium derived from igneous, metamorphic and sedimentary rock

Typical profile

A1 - 0 to 8 inches: gravelly loam
A2 - 8 to 15 inches: gravelly loam
A3 - 15 to 19 inches: gravelly loam
Bt - 19 to 22 inches: clay
2Bqm1 - 22 to 24 inches: cemented gravelly material
2Bqm2 - 24 to 35 inches: cemented gravelly material

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: About 19 inches to abrupt textural change; 20 to 39 inches to duripan
Natural drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: About 15 to 39 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline (0.2 to 0.5 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 2.0

Available water storage in profile: Very low (about 2.7 inches)

Interpretive groups

Land capability classification (irrigated): 4e
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: D
Ecological site: GRAVELLY LOAM (R015XD090CA)
Hydric soil rating: No

Minor Components

Keyes

Percent of map unit: 10 percent
Landform: Depressions
Hydric soil rating: No

Corning

Percent of map unit: 3 percent
Hydric soil rating: No

Unnamed, ponded

Percent of map unit: 2 percent
Landform: Fan remnants
Microfeatures of landform position: Vernal pools
Hydric soil rating: Yes

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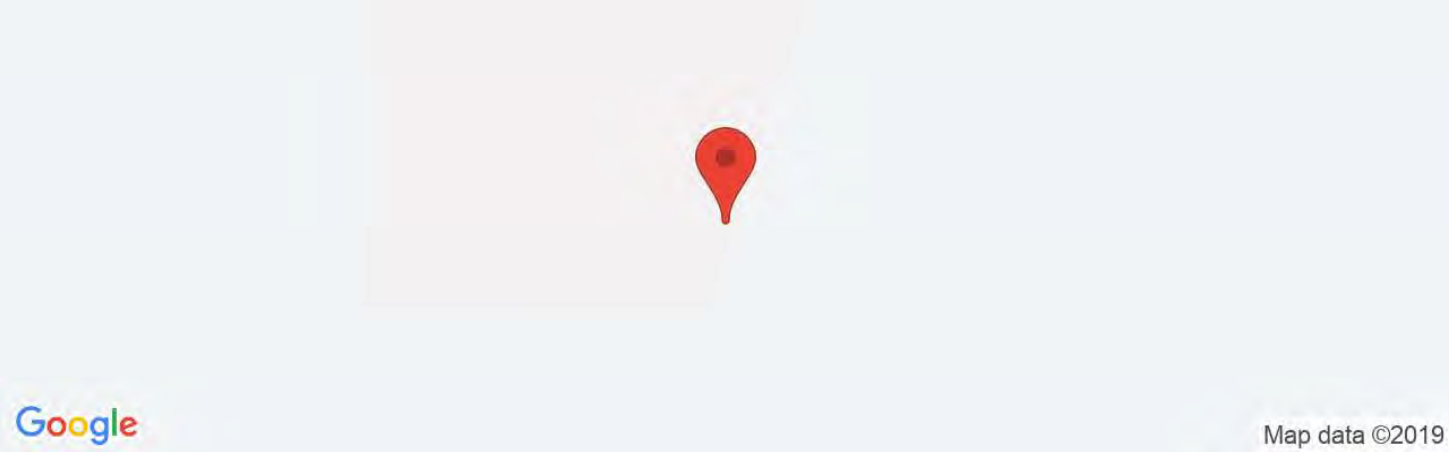
Appendix B
Seismic Ground Motion for the Preserve
From USGS Seismic Design Maps accessed 11 June 2019

ITEM 11.1.

ATTACHMENT 4

The Preserve

Latitude, Longitude: 38.579129, -121.194832

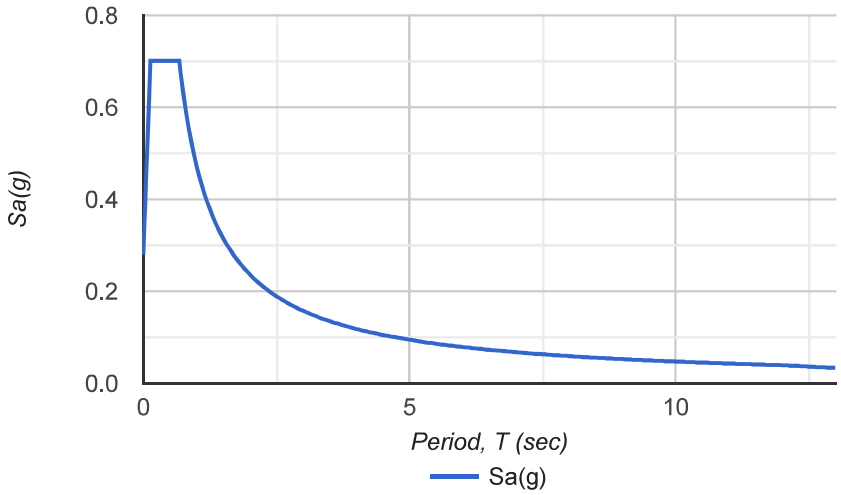


Date	6/11/2019, 1:59:19 PM
Design Code Reference Document	ASCE7-10
Risk Category	II
Site Class	D - Stiff Soil

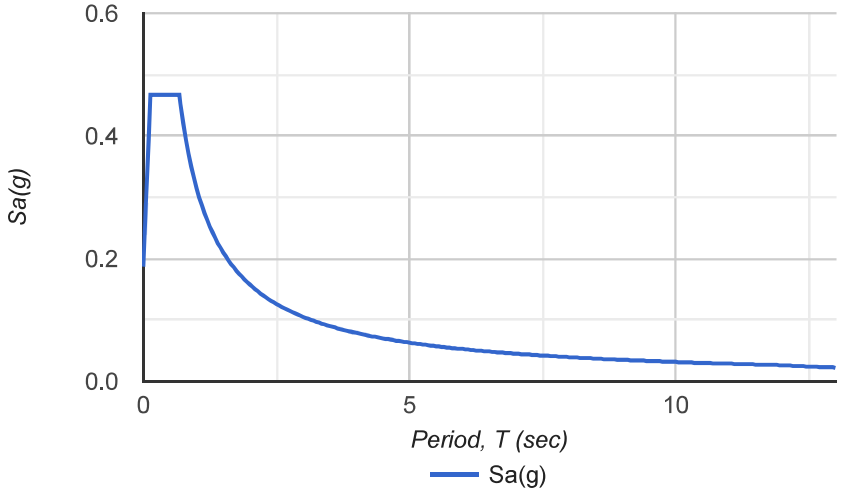
Type	Value	Description
S_S	0.501	MCE_R ground motion. (for 0.2 second period)
S_1	0.249	MCE_R ground motion. (for 1.0s period)
S_{MS}	0.701	Site-modified spectral acceleration value
S_{M1}	0.473	Site-modified spectral acceleration value
S_{DS}	0.467	Numeric seismic design value at 0.2 second SA
S_{D1}	0.315	Numeric seismic design value at 1.0 second SA

Type	Value	Description
SDC	D	Seismic design category
F_a	1.399	Site amplification factor at 0.2 second
F_v	1.903	Site amplification factor at 1.0 second
PGA	0.161	MCE_G peak ground acceleration
F_{PGA}	1.479	Site amplification factor at PGA
PGA_M	0.238	Site modified peak ground acceleration
T_L	12	Long-period transition period in seconds
SsRT	0.501	Probabilistic risk-targeted ground motion. (0.2 second)
SsUH	0.426	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration
SsD	1.5	Factored deterministic acceleration value. (0.2 second)
S1RT	0.249	Probabilistic risk-targeted ground motion. (1.0 second)
S1UH	0.217	Factored uniform-hazard (2% probability of exceedance in 50 years) spectral acceleration.
S1D	0.6	Factored deterministic acceleration value. (1.0 second)
PGAd	0.5	Factored deterministic acceleration value. (Peak Ground Acceleration)
C_{RS}	1.175	Mapped value of the risk coefficient at short periods
C_{R1}	1.146	Mapped value of the risk coefficient at a period of 1 s

MCER Response Spectrum



Design Response Spectrum



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Project No. E9150-04-01
March 24, 2020

Raney Planning & Management, Inc.
1501 Sports Drive, Suite A
Sacramento, California 95834

Attention: Mr. Rod Stinson

Subject: THE PRESERVE
GRANT LINE ROAD AND RAYMER WAY
RANCHO CORDOVA, CALIFORNIA
GEOTECHNICAL PEER REVIEW

References: *Geology and Soils for The Preserve, Grant Line Road and Raymer Way, Rancho Cordova, California,* prepared by Youngdahl Consulting Group, Inc., dated June 2019 (YCG Project No. E17440.001).

Dear Mr. Stinson:

In accordance with your authorization of our proposal dated April 8, 2019, we have prepared this correspondence to present the results of our geotechnical peer review for the subject residential development in Rancho Cordova.

Our peer review was performed to provide a professional opinion on the appropriateness and adequacy of the referenced geotechnical report with respect to project conditions, regulatory requirements, and industry standards of practice. Our scope of geotechnical services consisted of:

- Performing a site visit to observe current site conditions.
- Reviewing the referenced geotechnical report and published documents, geologic maps and other geological and geotechnical literature pertaining to the site to aid in evaluating soil and geologic conditions.
- Preparing the correspondence.

SITE AND PROJECT DESCRIPTION

The site is comprised of six adjacent parcels (Sacramento County APN 072-0300-001, -002, -005, -008, -010 and -011) totaling approximately 285 acres on the western side of Raymer Way and Grant Line Road. The irregularly shaped site abuts the north and northeastern sides of the Somerset Ranch residential development. WGS 84 (Google Earth) site coordinates are N 38.5766°, W -121.1956°. Site topography generally consists of rolling hills and seasonal drainages. Morrison Creek enters near the northeast corner of the site and flows offsite near the middle of the western boundary. Three residences with associated ancillary structures are present in the southwest portion of the site – two on the southern side of Morrison Creek and one on the northern side.

Geologic mapping by the California Geological Survey (CGS) and United States Geological Survey (USGS) indicates the site is underlain by Tertiary age Laguna formation, an older consolidated alluvial deposit, and is located outside of the mapped area of dredge tailings that covers much of Rancho Cordova. The Morrison Creek drainage is mapped as Quaternary age alluvium. Artificial fills related to development of the existing residential properties, roadways and small stock ponds are also present.

We understand the project will rezone the property from agricultural and industrial land use to residential. The planned development will include 434 single-family lots, parks, 180 acres of nature preserve, and all related infrastructure including a municipal sanitary sewer system. The nature preserve will ultimately be transferred to a third-party conservation entity.

DISCUSSION

The referenced report was prepared to evaluate potential soils and geologic impacts from the planned project, as outlined in the Environmental Checklist Form in California Environmental Quality Act (CEQA) Appendix G for initial studies. The report also evaluates the potential loss of mineral resources based on mapping by the California Division of Mines and Geology (now CGS) and the City of Rancho Cordova General Plan.

We have reviewed the referenced report and conducted a site reconnaissance. Our observations at the site generally supported the above-described geologic conditions and those outlined in the referenced report. Based on our observations at the site and our subsequent review, it is our opinion that the report adequately addresses the soils, geologic and mineral resources items in the Environmental Checklist Form.

LIMITATIONS AND CLOSURE

Our professional services were performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering principles and practices used in the site area at this time. No warranty is provided, express or implied.

Should you have any questions regarding this correspondence, or if we may be of further service, please contact the undersigned at your convenience.

Sincerely,

GEOCON CONSULTANTS, INC.

DRAFT

Shane Rodacker, GE
Senior Engineer

(1/e-mail) Addressee

Appendix G

PHASE I ENVIRONMENTAL SITE ASSESSMENT
THE PRESERVE
SACRAMENTO COUNTY APNS 072-0300-001, -002, -005, -008, -010 and 073-0010-011
RANCHO CORDOVA, CALIFORNIA

Prepared For

Winn Communities
1130 Iron Point Road, Suite 150
Folsom, California 95630

Prepared By

Youngdahl Consulting Group, Inc.
1234 Glenhaven Court
El Dorado Hills, California 95762

Project No. E17440.002
June 2019

YOUNGDAHL
CONSULTING GROUP, INC.
Building Innovative Solutions

Winn Communities
1130 Iron Point Road, Suite 150
Folsom, CA 95630

Project No. E17440.002
5 June 2019

Attn: Mr. Daron Anderson

Subject: **THE PRESERVE**
Grant Line Road & Raymer Way, Rancho Cordova, California
Phase I Environmental Site Assessment

As requested, Youngdahl Consulting Group, Inc. (Youngdahl) has performed a Phase I Environmental Site Assessment (ESA) for the Preserve project, located west of Grant Line Road and north of Raymer Way in Rancho Cordova, California (Subject Property). Youngdahl identified recognized environmental conditions in connection with the subject property.

The trichloroethylene contamination plume from the Aerojet General Corporation Superfund site located north of the subject property encroaches onto some of the northern parcels of the subject property at a groundwater concentration above maximum contaminant levels creating a potential soil vapor intrusion scenario, which is considered a REC. Two steel pipes were observed protruding out of the ground within parcel 073-0010-011 (3450 Grant Line Road) and have a potential to be connected to an underground storage tank (UST), which is considered a REC. The residence and outbuildings within APN 072-0300-008 (12535 Douglas Road) were built sometime between 1975 and 1980, and the structures and soils adjacent to these structures have potential for containing lead-based paint; this has been identified to be a REC. Also, within APN 072-0300-008, an unknown underground system is present north-adjacent to an old shed which is considered a REC. All residences and major outbuildings of wood construction on the subject property besides within APN 072-0300-002 (12565 Douglas Road, Divine Property) have the potential for termiticides present in adjacent soils and are considered RECs. Furthermore, no historic RECs (HRECs) or controlled RECs (CRECs) were identified in connection with the property.

This Phase I Environmental Site Assessment has been completed in accordance to the ASTM Practice E 1527-13. Youngdahl Consulting Group, Inc. declares that, to the best of our professional knowledge and belief, we meet the definition of Environmental Professional as defined in §312.10. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Very truly yours,
Youngdahl Consulting Group, Inc.

Dennis S. Eck
Staff Geologist

Reviewed by:

David C. Sederquist, C.E.G, C.H.G.
Senior Engineering Geologist/Hydrogeologist



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Privileged & Confidential

THE PRESERVE
SACRAMENTO COUNTY APNS
072-0300-001, -002, -005, -008, -010 and 073-0010-011
RANCHO CORDOVA, CALIFORNIA 95742

EXECUTIVE SUMMARY

The property description referred to herein is based on a Sacramento Assessor's Parcel Map and on a site reconnaissance performed by representatives of Youngdahl Consulting Group, Inc. (Youngdahl). These were also the basis for the "Vicinity Map" - Figure 1. The subject site is irregular in shape, consists of 283.5 acres of land, and is assigned the following Sacramento County Assessor's Parcel Numbers (APNs):

- 072-0300-001 (12555 Grant Line Road)
- 072-0300-002 (12565 Douglas Road, Divine Property)
- 072-0300-005 (12525 Douglas Road, Whitlow Property)
- 072-0300-008 (12535 Douglas Road)
- 072-0300-010 (No Address)
- 073-0010-011 (3450 Grant Line Road)

The subject property is primarily used for grazing land and residential homes with associated outbuildings within parcels 072-0300-002, -005, -008 and 073-0010-011. An orchard was observed in the northeastern corner of the subject site. The site is also located near known contamination areas associated with the Aerojet General Corporation National Priorities List Superfund Site (Aerojet General Corp.), and a monitoring well associated with the Superfund site was observed within subject property boundaries.

Adjacent Properties
North: Vacant land currently being mined for aggregate.
East: Grant Line Road and Teichert Aggregate Plant.
South: Residential Subdivision.
West: Vacant land.

Site Assessor
A site reconnaissance visit was conducted on 9 May 2019 by Mr. Dennis S. Eck, Youngdahl Consulting Group, Inc., (916) 933-0633, dse@youngdahl.net.

EP Certification
An environmental professional (EP) is defined as a person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). We declare that, to the best of our professional knowledge and opinion, we meet the definition of EP as defined in 40 CFR § 312.10 and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property.

AAI Certification
This Phase I Environmental Site Assessment (ESA) was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-13 standard is consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10).

Data Gaps
According to § 3.3.20 of ASTM Standard E 1527-13 a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather same. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. It is our opinion that no significant data gaps were identified.

Summary and Opinion
Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment."

A contaminant plume of trichloroethylene (TCE) was discovered to encroach within some of the northern parcels. The 5 parts per billion (ppb) contour of TCE (the maximum contaminant level) extends to onsite and adjacent monitoring wells, but does not extend to any domestic wells identified on the subject property. **Although existing domestic wells aren't necessarily impacted, the presence of TCE within subject property boundaries has potential to create a soil vapor intrusion scenario and is considered a REC.**

Two steel pipes were observed protruding out of the ground within parcel 073-0010-011 (3450 Grant Line Road). An inactive well was also observed, and we understand that is currently permitted as inactive. **It is our opinion that the two protruding pipes have potential to be connected to an underground storage tank (UST), which is considered a REC**. The orchard that occupies a portion of this parcel and parcel 073-0010-010 was planted sometime between 1980 and 1984, as indicated by the historical aerial photography and topographic maps, which means that lead arsenate and organochlorine pesticides were not likely used.

The residence and outbuildings within APN 072-0300-008 (12535 Douglas Road) were built sometime between 1975 and 1980, and **the structures and soils adjacent to these structures have potential for containing lead-based paint; this has been identified to be a REC. Within APN 072-0300-008 is an unknown underground system found adjacent to the shed located north of the residence and a 55-gallon drum northeast from the residence with an unknown liquid inside; these are considered RECs if these vessels were used for fuel storage.**

All residences and major outbuildings of wood construction on the subject property besides within APN 072-0300-002 (12565 Douglas Road, Divine Property) have the potential for termiticides present in adjacent soils and are considered RECs.

Historic recognized environmental conditions (HRECs) is a term used to state that the property only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions. **No HRECs were identified.** The term controlled REC (CREC) describes closed RECs that are managed under an activity and use limitation (AUL). **No CRECs were identified.**

Recommendations
It is the opinion of the Youngdahl Consulting Group Inc. that the following recommended actions be conducted for the identified RECs:

APN & Address	Identified REC	Recommendation
072-0300-001 (12555 Grant Line Road)	TCE groundwater plume identified by on-site monitoring well.	We recommend that a soil vapor investigation consisting of soil vapor sampling be conducted on the subject property.
072-0300-002 (12565 Douglas Road, Divine Property)	No RECs identified.	No recommendations.
072-0300-005 (12525 Douglas Road, Whitlow Property)	Potential termiticides within soils adjacent to the residence.	We recommend soil sampling near the footprint of the home at a depth of approximately 1 foot to be analyzed for termite pesticides.
072-0300-008 (12535 Douglas Road)	Lead based paint and termiticides in soils adjacent to all buildings. ACBM within all buildings. 55-gallon drum with unknown liquid. Potential underground tank/sump adjacent to shed north of residence. Potential vapor intrusion scenario from the TCE groundwater plume.	We recommend investigation of the potential underground system. Soils adjacent to the buildings should be sampled for total lead in surface soils and termite pesticides at a depth of approximately 1 foot. ACBM should be investigated at the main residence and shed northwest of the residence by a licensed asbestos contractor. Soil vapor sampling as part of a soil vapor intrusion investigation should be conducted.
072-0300-010 (No Address)	No RECs identified.	No recommendations.
073-0010-011 (3450 Grant Line Road)	Two pipes observed protruding from the ground south of the orchard and west from the former residence. Potential vapor intrusion scenario from the TCE groundwater plume.	The pipes are potentially connected to a UST and should be investigated. Soil vapor sampling as part of a soil vapor intrusion investigation should be conducted.

Additionally, all inactive wells that are not planned for future use should be destroyed per Sacramento County requirements. Domestic wells were observed to be within parcels 073-0010-011 (permitted inactive), 072-0300-002, 072-0300-005, and 072-0300-008.

1.0 INTRODUCTION

1.1 Purpose

This Phase I ESA was conducted according to the American Society for Testing and Materials (ASTM) Designation E1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM Phase I Standards). The ASTM E1527-13 standards are consistent with the requirement of the All Appropriate Inquiry (AAI) rule in Title 40 of the Code of Federal Regulations (40 C.F.R. § 312.10).

The significant changes included in ASTM 1527-13 (approved December 2013) are as follows:

a) The definition of a recognized environmental condition (REC) has been narrowed to exclude a release inside a building from a source inside a building;
b) The term historic recognized environmental condition (HREC) has been clarified to state that it only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions;
c) The term controlled REC (CREC) for closed RECs that are managed under an activity and use limitation (AUL) has been added;
d) If the target property or any of the adjoining properties is identified on one or more of the standard environmental record sources, pertinent regulatory files and/or records associated with the listing should be reviewed. Language has been added to Section 8.2.2 Regulatory File Reviews with the intent of having the environmental professional explain in greater detail their rational for when a regulatory file review is not warranted rather than simply stating that it is not a concern. "…the environmental professional must explain within the report the justification for not conducting a regulatory file review."
e) Language has been added to include soil vapor as one of the pathways of contamination to the subject property, along with ground water and soil. The soil vapor contaminant pathway needs to be considered in evaluation of RECs or other environmental concerns.

The ASTM practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability. The purpose of this Phase I ESA was to identify recognized environmental conditions which may affect the property. Recognized environmental conditions are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment". The term "recognized environmental condition" is not intended to include de minimis conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. De minimis conditions are not recognized environmental conditions.

Controlled substances (i.e. illegal drugs) are not included within the scope of this standard. Petroleum products are included within the scope of this practice because they are of concern with respect to many parcels of commercial real estate and current custom and usage is to include an inquiry into the presence of petroleum products when doing an ESA of commercial real estate. This practice does not address requirements of any state or local laws or of any federal laws other than the appropriate inquiry provisions of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)'s landowner liability protection. Users are cautioned that federal, state, and local laws may impose environmental assessment obligations that are beyond the scope of this practice. Users should also be aware that there are likely to be other legal obligations with regard to hazardous substances or petroleum products discovered on the property that are not addressed in this practice and that may pose risks of civil and/or criminal sanctions for non-compliance. The scope of this practice includes research and reporting requirements that support the user's ability to qualify for landowner liability protection. As such, sufficient documentation of all sources, records, and resources utilized in conducting the inquiry required by this practice must be provided in the written report.

1.2 Detailed Scope of Services

This scope of services is site specific in that it relates to assessment of environmental conditions on a specific parcel of commercial real estate. The Phase I ESA will be performed by

an environmental professional. An environmental professional (EP) is defined as a person meeting the education, training, and experience requirements set forth in 40 CFR § 312.10(b). The scope of services for this Phase I ESA is as follows:

Government Records Review: Standard environmental record sources, including Federal, Tribal, and State lists as well as local sources of environmental records were reviewed. We authorized Environmental Data Resources (EDR) to conduct a search of specified government databases and produce a map-based radius search report which would identify sites within the approximate minimum distances pursuant to the ASTM E1527-13 Standard.

Review of Historical Sources: Historical records that may have been reviewed include, but are not limited to, aerial photographs, fire insurance (Sanborn®) maps, building department records, chain-of-title documents, city directory abstracts, land use records, and USGS Topographic Maps. The AAI rule requires that historical documents be reviewed as far back in time as the property contained structures or the property was used for agricultural, residential, commercial, industrial, or governmental purposes. Under the AAI rule, historical sources of information must be reviewed as far back as 1940. The AAI rule does not specify a research interval for reviewing historical records.

Site Reconnaissance: A site reconnaissance visit was conducted on 9 May 2019 by Mr. Dennis S. Eck, dse@youngdahl.net.

Interviews: Prior to the site visit, the Client was asked to identify a person with good knowledge of the property (the key site manager). A Phase I ESA Questionnaire completed by the Owner's representative to facilitate the collection of information is provided in Appendix A. The AAI rule requires interviews be conducted with the current owner(s) and occupant(s) of the subject property. The AAI rule also requires that additional interviews be conducted with current and past facility managers, past owners, operators or occupants of the property, and past employees, as necessary to meet the objectives of the AAI rule. The AAI rule allows the environmental professional to determine whether such interviews are necessary.

Identify Data Gaps: If a data failure is encountered, the report shall document the failure and, if any of the standard historical sources were excluded, the environmental professional will give the reasons for their exclusion. If data failure represents a significant data gap, the report shall comment on the impact of the data gap on the ability of the environmental professional to identify recognized environmental conditions. If the data gaps are found, the environmental professional can and does not warrant nor guarantee that no significant events, releases, or conditions arose during the periods of such data gaps.

Evaluation and Report Preparation: The findings, opinions, and conclusions in the Phase I ESA report are supported by documentation. The report: (1) describes all services performed; (2) has a findings section which summarizes known or suspect environmental conditions associated with the property, and which may include recognized environmental conditions, historical recognized environmental conditions, and de minimis conditions; (3) includes Youngdahl Consulting Group Inc.'s opinion(s) of the impact on the property of the known or suspect environmental conditions identified in the findings section as well as the logic and reasoning used in evaluating information collected during the course of the investigation; and (4) includes a conclusions and recommendations section that summarizes the recognized environmental conditions connected with the property and presents recommendations to address those conditions. The report will include an analysis of the relationship of the purchase price of the subject property to the fair market value of the property, if it were not contaminated.

Report Shelf Life: Under the AAI rule, a prospective property owner may use a Phase I ESA Report without having to update any information collected as part of the inquiry: (1) if the all appropriate inquiries investigation was completed less than 180 days prior to the date of acquisition of the property or (2) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation and was completed less than 180 days prior to the date of acquisition of the property. A prospective property owner may use a previously conducted Phase I ESA Report: (1) if the Phase I ESA report was prepared as part of a previous all appropriate inquiries investigation for the same property; and (2) if the information was collected or updated within one year prior to the date of acquisition of the property; and (3) certain aspects of the previously conducted report are conducted or updated within 180 days prior to the date of acquisition of the property. These aspects include the interviews, on-site visual inspection, the historical records review, the search for environmental liens, and the declaration by the environmental professional responsible for the assessment or update.

1.3 Significant Assumptions, Limitations, and Exceptions

This report and review of the subject property is limited in scope. All appropriate inquiry does not mean an exhaustive assessment of a clean property. There is a point at which the cost of information obtained or the time required to gather it outweighs the usefulness of the information and, in fact, may be a material detriment to the orderly completion of transactions. One of the purposes of the ASTM 1527-13 practice is to identify a balance between the competing goals of limiting the costs and time demands inherent in performing an ESA and the reduction of uncertainty about unknown conditions resulting from additional information. The appropriate level of inquiry will be guided by the type of property subject to assessment, the expertise and risk tolerance of the user, and the information developed in the course of the inquiry. This type of investigation is undertaken with the risk that the presence, full nature, and extent of contamination would not be revealed by visual observation and review of available data alone. The findings presented in this report were based on field observations and review of available data. Therefore, the data obtained is clear and accurate only to the degree implied by the sources and methods used. The information presented herewith was based on professional interpretation and on the data obtained. A review of regional radon values was performed as part of this study. A general discussion of the potential for asbestos-containing building material or lead-based paint to be present on the subject property is also included as part of this study.

1.4 Special Terms and Conditions and/or Additional Services

A Phase I ESA meeting or exceeding the ASTM 1527-13 practice and completed less than 180 days prior to the date of acquisition (the date on which a person acquires title to the subject property) or the date of the intended transaction is presumed to be valid. If within this period the assessment will be used by a different user than the user for whom the assessment was originally prepared, the subsequent user must also satisfy the User's Responsibilities set forth in Section 1.5. Users and environmental professionals may use information in prior environmental site assessments provided such information was generated as a result of procedures that meet or exceed the requirements of ASTM 1527-13.

1.5 User Responsibilities

The user should provide reasonably ascertainable land title records and judicial records for review for the existence of environmental liens or activity and use limitations (AUL), if any, that are currently recorded against the property. AULs are an explicit recognition by a federal, tribal, state, or local regulatory agency that residual levels of hazardous substances or petroleum products may be present on a property, and that unrestricted use of the property may not be acceptable. If the user is aware of any specialized knowledge or experience that is material to recognized environmental conditions in connection with the property, it is the user's

responsibility to communicate any information based on such specialized knowledge or experience to the environmental professional, and before the site reconnaissance is conducted.

In a transaction involving the purchase of a parcel of commercial real estate, the user shall consider the relationship of the purchase price of the property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products. The user should try to identify an explanation for a lower price which does not reasonably reflect fair market value if the property were not contaminated, and make a written record of such explanation. If the user is aware of any commonly known or reasonable ascertainable information within the local community about the property that is material to recognized environmental conditions in connection with the property, it is the user's responsibility to communicate such information to the environmental professional before the site reconnaissance is conducted.

1.6 Reliance

This Phase I ESA has been prepared for and is intended for the use of Winn Communities and their consultants. This report is valid as of the date stated on the document; the report should not be relied upon for information concerning changes in the condition of the property after the report was prepared.

2.0 SITE INFORMATION

2.1 Site Description

The property description referred to herein is based on a Sacramento Assessor's Parcel Map and on a site reconnaissance performed by representatives of Youngdahl Consulting Group, Inc. (Youngdahl). These were also the basis for the "Vicinity Map" - Figure 1. The subject site is irregular in shape, consists of 283.5 acres of land, and is assigned the following Sacramento County Assessor's Parcel Numbers (APNs):

- 072-0300-001 (12555 Grant Line Road)
- 072-0300-002 (12565 Douglas Road, Divine Property)
- 072-0300-005 (12525 Douglas Road, Whitlow Property)
- 072-0300-008 (12535 Douglas Road)
- 072-0300-010 (No Address)
- 073-0010-011 (3450 Grant Line Road)

The subject property is primarily used for grazing land and residential homes with associated outbuildings are within parcels 072-0300-002, -005, -008 and 073-0010-011. An orchard was observed in the northeastern corner of the subject site. The site is also located near known contamination areas associated with the Aerojet General Corporation National Priorities List Superfund Site (Aerojet General Corp.), and a monitoring well associated with the Superfund site was observed within subject property boundaries.

2.2 Legal Description

This report presents the results of the Phase I Environmental Site Assessment (ESA) performed on Sacramento County APNs 072-0300-001, -002, -005, -008, -010 and 073-0010-011.

2.3 Environmental Liens or Activity and Use Limitations

A review of the title reports for each parcel and the completed environmental questionnaires (Appendix A) showed no indication of environmental liens or activity and use limitations for the properties (Appendix A).

2.4 Specialized Knowledge and Commonly Known or Reasonably Ascertainable Information

Mr. Whitlow and Mr. Divine indicated specialized knowledge of their respective properties on the completed questionnaires (Appendix A); Mr. Carpenter did not indicate specialized knowledge of the remaining parcels on his completed questionnaire (Appendix A).

2.5 Valuation Reduction for Environmental Issues

Mr. Divine marked "Unknown" for his parcel to the question regarding valuation reduction on the completed questionnaire (Appendix A). Mr. Whitlow and Mr. Carpenter marked "No" for the remaining parcels on the completed questionnaires (Appendix A).

2.6 Reasons for Performing the Phase I ESA

The user, Winn Communities, requested the completion of the Phase I ESA per ASTM E1527-13.

3.0 INTERVIEWS

3.1 Interviews with Past and Present Owners, Key Site Manager, and/or Occupant

072-0300-005 (12525 Douglas Road, Whitlow Property)
Mr. David Whitlow, property owner, was contacted by phone regarding this parcel. He informed us that they are currently in Missouri and are not full-time residents. A rancher who uses the property for grazing is the only individual currently taking care of the property. He also informed us that no other changes have occurred since the last site reconnaissance by Youngdahl in 2018.

072-0300-002 (12565 Douglas Road, Divine Property)
Mr. David Divine, property owner, was contacted by phone regarding this parcel. Mr. Divine is the current property owner and had mentioned that no changes have occurred since the last site visit by Youngdahl. When asked about the stained soils near the east garage, Mr. Divine mentioned that any staining may be from washing the lawnmower, which occurs near the east garage. Mr. Divine also informed us that the property at 072-0300-008 (12535 Douglas Road) was owned by a Mr. Tony Fagundes until approximately 2009. Mr. Divine mentioned that he helped Mr. Fagundes with some of the buildings on his property and that any 55-gallon drums may have been used for diesel fuel for a tractor. A number for Mr. Fagundes was provided to us.

072-0300-008 (12535 Douglas Road)
Mr. Tony Fagundes, past owner, was contacted by phone regarding this parcel. Mr. Fagundes informed us that he had lived at the property for 27 years prior to moving to the Auburn, CA area. He primarily used the property for raising farm animals and minor agriculture as dry crop wheat near the existing home. The west building was a workshop and garage. He also mentioned having a chicken coop and a stable building, located north of the residence. He had no information about the potential holding tank adjacent to the stable building. The domestic well located east of the home was fitted with a pressure system and filter which was also sampled monthly while Mr. Fagundes resided at the property. This was due to the potential encroachment of the Aerojet property contamination plume. Mr. Fagundes also mentioned that any 55-gallon drums he had on-site would have been used for mineral oil which is used in animal feed.

Mr. George Carpenter, Vice President, Winn Communities
Mr. Carpenter was contacted by phone regarding the remaining parcels. He mentioned that the inactive water well on 3450 Grant Line Road is planned to be destroyed as part of pre-

construction activities once the project is approved; also, the building was demolished due to a problem with vagrants trespassing and dumping at the property. He also was unaware of any activity and use limitations (AULs) for any of the properties regarding the contamination plume from Aerojet General Corp.

4.0 PHYSICAL AND GEOLOGICAL DESCRIPTION

4.1 Physical Setting Source(s)

Geologic maps and a current United States Geologic Society (USGS) 7.5 Minute Topographic Series Map of the Buffalo Creek Quadrangle, as well as observations made during our site reconnaissance were used to make interpretations regarding the physical setting of the subject property and the surrounding area. The elevation at the subject property ranges from approximately 210 to 260 feet above mean sea level and is located in Township 8 North, Range 7 East, Section 3, Mount Diablo Base & Meridian.

4.2 Regional Geology and Soil Description

The site is located in Rancho Cordova, California, which is found within the Great Valley geomorphic province. This province is an alluvial plain that drains via the Sacramento and San Joaquin Rivers into the San Francisco Bay area. According to the Preliminary Geologic Map of the Sacramento 30' x 60' Quadrangle, California (Gutierrez, 2011), the subject property and vicinity are underlain by the Laguna Formation and a thin strip of Quaternary Alluvium along the central drainage. The Laguna Formation consists of Tertiary age fluvial granitic sands and silts (Schlemon, 2000).

According to the Spring 2017 Department of Water Resources (DWR) well records, one irrigation well is located approximately ½ mile to the southeast. The most recent data obtained from the well on 11 October 2018 shows a groundwater depth of 183 feet below the ground surface (bgs). The sitewide groundwater elevation contour maps produced in 2018 by Geosyntec Consultants show each groundwater layer flowing towards the southwest in the vicinity of the subject property.

The United States Department of Agriculture Natural Resources Conservation Service's Web Soil Survey was accessed on 25 April 2019. Soils present on the site include:

- **7.5 Red Bluff Loam, 2 to 5 percent slopes (Map Unit Symbol 192)**
  Parent Material is alluvium, the unit is well drained, has a medium runoff class, and is prime farmland if irrigated.
- **37.8% Red Bluff-Redding Complex, 0 to 5 percent slopes (Map Unit Symbol 193)** Parent material is alluvium, the unit is well drained, has a medium runoff class, and is not prime farmland.
- **21.5% Hicksville Gravelly Loam, 0 to 2 percent slopes, Occasionally Flooded (Map Unit Symbol 159)** Parent material is alluvium, the unit is moderately well drained, has a medium runoff class, and is considered prime farmland if irrigated.
- **33.2% Redding Gravelly Loam, 0 to 8 percent slopes, MLRA 17 (Map Unit Symbol 198)**
  Parent material is Loamy alluvium over clayey alluvium over cemented alluvium all derived from igneous, metamorphic, and sedimentary rock; the unit is moderately well drained; has a very high runoff class; and is not considered prime farmland.

The Department of Conservation Division of Oil, Gas, and Geothermal Resources' Well Finder was accessed and identified no wells within the vicinity of the subject property.

4.3 Regional Radon Values

Elevated radon gas levels in indoor air are a result of radon moving into buildings from the soil, either by diffusion or flow due to air pressure differences. The ultimate source of radon gas in buildings is the uranium naturally present in rock, water, and soil. Some rock types are known to contain more uranium than others. In California, most uranium deposits are relatively small in aerial extent and are located in rural areas. Consequently, the chance of severe radon levels (>200 pCi/L) occurring in buildings in California should be very low. The following rock units in California contain uranium in concentrations above the crustal average: the Monterey Formation, asphaltic rocks, marine phosphatic rocks, granitic rocks, felsic volcanic rocks, and certain metamorphic rocks. According to EPA publication 402-R-93-025, entitled EPA's Map of Radon Zones, California, dated September 1993, Sacramento County is shown to be in Zone 3. Zone 3 has a predicted average radon screening level of less than 2 Pico Curies per Liter, this is considered to be a low value of geologic radon potential.

The California Department of Health Services, California Indoor Radon Levels Sorted by Zip Code was last updated February 2016. The number of tests does not necessarily represent the number of houses tested. A single house may have had several tests conducted. The table contains both long-term and short-term indoor radon measurements. The California Department of Health Services recommends that you take action to reduce radon levels in your house if they are 4pCi/L or greater. Of the 10 tests conducted for Zip Code 95742, 2 were equal to or greater than 4pCi/L.

4.4 Asbestos Containing Building Materials

Asbestos is a set of six naturally occurring silicate minerals used commercially for their desirable physical properties. They all have in common their eponymous, asbestiform habit: long, thin fibrous crystals. The prolonged inhalation of asbestos fibers can cause serious illnesses including malignant lung cancer, mesothelioma, and asbestosis. Asbestos became increasingly popular among manufacturers and builders in the late 19th century because of its sound absorption, average tensile strength, its resistance to fire, heat, electrical and chemical damage, and affordability. It was used in such applications as electrical insulation for hotplate wiring and in building insulation. When asbestos is used for its resistance to fire or heat, the fibers are often mixed with cement (resulting in fiber cement) or woven into fabric or mats.

Most products manufactured today do not contain asbestos. In the industrialized world, asbestos was phased out of building products mostly in the 1970s with most of the remainder phased out by the 1980s. Asbestos containing building materials in residences includes a variety of products, such as: stipple used in textured walls and ceilings; drywall joint filler compound; asbestos contaminated vermiculite, vinyl floor tile; vinyl sheet flooring; window putty; mastic; cement board; furnace tape; and stucco. Asbestos was used a lot in roofing materials, mainly corrugated asbestos cement roof sheets and asbestos shingles. Other sources of asbestos containing materials include fireproofing and acoustic materials. On July 12, 1989, EPA issued a final rule banning most asbestos-containing products. In 1991, this regulation was overturned by the Fifth Circuit Court of Appeals in New Orleans. As a result of the Court's decision, the following specific asbestos-containing products remain banned: flooring felt, roll board, and corrugated commercial, or specialty paper. In addition, the regulation continues to ban the use of asbestos in products that have not historically contained asbestos, otherwise referred to as "new uses" of asbestos. For buildings constructed prior to 1980 (Code of Federal Regulations 29 CFR 1926.11) all thermal system insulation and surface materials must be designated as presumed asbestos-containing building materials (ACBM) unless proved otherwise through sampling. The residences and associated outbuildings within APN 072-0300-008 (12535 Douglas Road) were built sometime between 1975 and 1980; therefore, there is risk that ACBM is present at these structures. All other structures on the subject property were found to have been built after 1980 and are unlikely to contain ACBM.

4.6 Lead-based Paint

Lead is considered to be a harmful environmental pollutant. In late 1991, the Secretary of the Department of Health and Human Services called lead the "number one environmental threat to the health of children in the United States." Humans are exposed to lead through the air, drinking water, food, contaminated soil, deteriorating paint, and dust. Airborne lead enters the body by breathing or swallowing lead particles or dust once it has settled. Old lead-based paint is the most significant source of lead exposure in the U.S. Lead-based paint in the United States resulted in a court case against the Lead Industries Association. Due in great part to studies carried out by Philip J. Landrigan, paint containing more than 0.06% (by weight of dried product) lead was banned for residential use in the United States in 1978 by the U.S. Consumer Product Safety Commission (16 Code of Federal Regulations CFR 1303). Most homes and other buildings built before 1960 contain heavily leaded paint. Some homes built as recently as 1978 may also contain lead paint. The residence and outbuildings within APN 072-0300-008 (12535 Douglas Road) were built sometime between 1975 and 1980 and potentially contain lead-based paint. The Whitlow property (APN 072-0300-005, 12525 Douglas Road) has a residence and associated outbuildings built sometime between 1980 and 1984; and the Divine property (APN 072-0300-002, 12565 Douglas Road) has a residence that was built in 1994; therefore, there is a low potential risk for lead-based paint.

4.7 Termiticides

Termiticides - organochlorine termiticides (OC termiticides) are a group of persistent pesticides that were formerly used for termite control in and around wooden structures from the mid-1940s to the late 1980s. These OC termiticides used in the past include chlordane, aldrin, dieldrin, heptachlor, and DDT. Chlordane and other organochlorine pesticides (OCPs) were commonly used as termiticides around structures until 1988. Above-ground use of chlordane was phased out between 1978 and 1983 by the United States Environmental Protection Agency (USEPA); although chlordane was used as a termiticide for wooden structures until it was prohibited in 1988. In 2004, the California Department of Toxic Substances Control (DTSC) evaluated OCPs in soil for proposed school sites on residential properties; finding chlordane in 98 percent of the samples, DDT in 95 percent, dieldrin in 71 percent, and heptachlor in 17 percent. DTSC implemented an “Interim Guidance Evaluation of School Sites with Potential Soil Contamination as a Result of Lead from Lead-Based Paint, Organochlorine Pesticides from Termiticides, and Polychlorinated Biphenyls from Electrical Transformers” in 2006. Due to the dates of construction, all wooden structures within the subject property except for the Divine Property (APN 072-0300-002, 12565 Douglas Road) are at risk of having termiticides present.

4.8 Pesticides

Prior to 1950, the use of arsenical pesticides and herbicides as lead arsenate (LA) was the most extensively used of the arsenal insecticides. The search for substitutes for LA began when it was discovered in 1919 that contemporary practices for washing produce were failing to adequately remove As residues (Shepard, 1939). Unfortunately, all of the tested alternative materials were found to provide less effective insect control or were more toxic to plants and animals. No adequate substitutes were found until 1947, when the synthetic organic insecticide dichlorodiphenyltrichloroethane (DDT) was introduced. Lead arsenate use in Washington State, USA, effectively terminated in 1948, when DDT became widely available to the public (Benson et al., 1968). Veneman et al. (1983) stated that LA use ceased in Massachusetts, USA, in the early 1950s. All insecticidal uses of LA in the USA were officially banned on 1 August 1988 (USEPA, 1988), with a comment that all registrations for insecticidal use had lapsed before that date.

Organochlorine pesticides (OCPs) were commonly used in the United States between the 1940s and 1970s for public health vector control, agricultural crop production, and pest control around structures. Although most OCPs were banned or withdrawn from use in the 1970s (including DDT), the compounds remain in the environment where surface soils associated with historical agricultural and termite control pesticides are present (DTSC, 2010).

An orchard is visible starting in the 1984 historical aerial photo at the northeast corner of the subject site within APNs 073-0010-011 (3450 Grant Line Road) and 073-0010-010. The orchard is not shown in the 1980 topographic map. Due to the date in which this orchard was created, it is unlikely that lead arsenate pesticides or OCPs are present.

5.0 HISTORICAL SOURCES REVIEW

All obvious uses of the property shall be identified from the present, back to the property's first developed use, or back to 1940, whichever is earlier. The term "developed use" includes agricultural uses and placement of fill dirt. Standard historical sources shall be reviewed at approximately five-year intervals. In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to provide the following standard historical sources: aerial photographs, USGS topographic maps, local city directories, and fire insurance maps (Sanborn Maps). Standard historical sources may also include: property tax files, recorded land title records, building department records, and zoning/land use records.

5.1 Aerial Photographic Review

Aerial photographs for the years 1937, 1952, 1957, 1964, 1966, 1972, 1984, 1993, 1998, 2006, 2009, 2012, and 2016 were provided in the EDR Aerial Photo Decade Package (Appendix B). Interpretations were made in an effort to evaluate former uses of the subject property and adjacent areas, and to determine if any significant topographic or cultural changes have occurred. All photographs were provided at a scale of 1" = 500'. A summary of the photographs reviewed is provided below.

Date	Source	Comments
1937	USDA	The entire subject property consists of vacant land with natural vegetation growth, a creek/drainage (Morrison Creek) is observed to be flowing through the center of the site trending generally northeast-southwest. Grant Line Road is adjacent the northeast corner and continues to the south. The north adjacent property appears to have not been cleared or disced and has more vegetation. The south, west, and east adjacent properties are observed to be vacant.
1952	USGS	Portions of land within the property boundary that are not within major drainages and ephemeral ponds are observed to have been disced. Dredge tailings are visible to the northwest of the subject property.
1957	USDA	No significant changes to the subject property are visible. The southeast adjacent property is observed to be transitioning to be used as an orchard.
1964	USDA	No significant changes to the subject property are visible apart from additional discing. The southeast adjacent property is now a large orchard.
1966	USGS	No changes apart from additional discing of the general area is apparent.
1972	USDA	No changes apart from additional discing of the general area is apparent.

Date	Source	Comments	
1984	USDA	072-0300-002 12565 Douglas Rd (Divine Property)	This parcel is vacant with a section of the south observed to be disced. A residence is observed in the south adjacent parcel.
		072-0300-005 12525 Douglas Rd (Whitlow Property)	A residence, at least two outbuildings, and unknown objects are observed in the east-center of this parcel. Standing water is also visible in the northwest corner. An access road trending north-south is visible to the east of the parcel and continues to the north adjacent parcel.
		072-0300-008 12535 Douglas Rd	A residence is observed in the southwest corner of this parcel. A pond with standing water is observed in the north adjacent property of this parcel.
		073-0010-011 3450 Grant Line Rd	A residence with an outbuilding to its west and other smaller objects are observed in the northeast corner of this parcel. An orchard occupies the area north of the residence, east of Morrison Creek.
		072-0300-010 No Address	The orchard within the west adjacent parcel continues into this parcel.
		072-0300-001 12555 Grant Line Rd	This parcel is vacant with an ephemeral pool in the approximate center.
1993	USDA	072-0300-002 12565 Douglas Rd (Divine Property)	No significant changes observed.
		072-0300-005 12525 Douglas Rd (Whitlow Property)	No significant changes observed.
		072-0300-008 12535 Douglas Rd	One residence and an outbuilding to its north are visible. Several smaller structures, possibly sheds, are visible to the northeast of the residence. Two areas to the southeast and southwest of the residence are observed to have a few rows of unknown crop. The southeast corner of the parcel has standing water within the section of drainage.
		073-0010-011 3450 Grant Line Rd	No significant changes observed.
		072-0300-010 No Address	No significant changes observed. A small structure/object is visible in the north adjacent property.
		072-0300-001 12555 Grant Line Rd	No significant changes observed.
1998	USGS/DOQQ	072-0300-002 12565 Douglas Rd (Divine Property)	A single home surrounded by landscaping is now visible in the center of the parcel. Unimproved access roads and trails are visible running throughout the parcel.

Date	Source	Comments	
		072-0300-005 12525 Douglas Rd (Whitlow Property)	No significant changes observed.
		072-0300-008 12535 Douglas Rd	A building is now visible just northwest from the main residence.
		073-0010-011 3450 Grant Line Rd	No significant changes observed.
		072-0300-010 No Address	No significant changes observed. Two structures are now visible in the north adjacent property.
		072-0300-001 12555 Grant Line Rd	No significant changes observed.
2006	USDA/NAIP	072-0300-002 12565 Douglas Rd (Divine Property)	A fire break has been cleared just north of the residence. An additional structure is visible to the east of the residence. The south adjacent parcel is now partially graded.
		072-0300-005 12525 Douglas Rd (Whitlow Property)	No significant changes observed. The south adjacent parcel is now partially graded.
		072-0300-008 12535 Douglas Rd	No significant changes observed.
		073-0010-011 3450 Grant Line Rd	No significant changes observed.
		072-0300-010 No Address	No significant changes observed.
		072-0300-001 12555 Grant Line Rd	No significant changes observed.
2009	USDA/NAIP	072-0300-002 12565 Douglas Rd (Divine Property)	The terrain is observed to be discolored south of the residence within this parcel. The adjacent southern property has been graded into building pads with paved access roads for a future subdivision.
		072-0300-005 12525 Douglas Rd (Whitlow Property)	No significant changes observed. The adjacent southern property has been graded into building pads with paved access roads for a future subdivision.
		072-0300-008 12535 Douglas Rd	No significant changes observed.
		073-0010-011 3450 Grant Line Rd	No significant changes observed.
		072-0300-010 No Address	No significant changes observed.
		072-0300-001 12555 Grant Line Rd	No significant changes observed.
2012	USDA/NAIP	No significant changes to the parcels within the subject property are observed.	
2016	USDA/NAIP	No significant changes to the parcels within the subject property are observed. The south adjacent property now has residential homes within the partially complete subdivision.	

5.2 Review of Historical and Current USGS Topographic Maps

A topographic map is a color-coded line-and-symbol representation of natural and selected artificial features plotted to a scale. Topographic maps show the shape, elevation, and development of the terrain in precise detail by using contour lines and color-coded symbols. The EDR Historical Topographic Map Report (Appendix B) provided maps dated 1891 to 2012. Interpretations were made in an effort to evaluate former uses of the subject property and adjacent areas, and determine if any significant topographic or cultural changes have occurred.

Date	Map Name	Series	Comments
1891	Sacramento, CA	30 Minute	No features are shown within the subject property boundary. Roads and some drainage features are shown in the north and south portions of the map.
1892-1893	Sacramento, CA	30 Minute	No significant changes to the subject and adjacent properties are shown.
1908	Buffalo Creek, CA	7.5 Minute	Topographic information only extends to the area just west of the subject property and does not include the site. A highway in the south is shown trending east-west.
1916	Buffalo Creek, CA	15 Minute	Another topographic map appears to be stitched to the east and does not appear to match this region. The subject site sill lies within areas with no topographic data.
1941	Folsom, CA	15 Minute	Morrison Creek is shown in the central portion of the subject site trending roughly northeast-southwest. Unimproved and light duty roads are shown throughout the area. A boundary or tract depicting a land grant, mining claim, or donation land claim is shown along the east property boundary, trending northeast-southwest. Mine tailings are shown to the west, north, and east from the subject site. A cluster of buildings is shown in the north portion of the map.
1944	Folsom, CA	15 Minute	No significant changes to the subject and adjacent properties are shown.
1954	Buffalo Creek, CA	7.5 Minute	No significant changes to the subject property are shown. Tailings to the north and west appear more extensive.
1967	Buffalo Creek, CA	7.5 Minute	No significant changes to the subject property are shown. Grant Line Road is shown at the northeast property boundary. Douglas Road is shown south of the subject property. A cluster of large buildings is shown at the intersection of Nimbus Road (shown as private) and Douglas Road, southwest from the subject property.
1975	Buffalo Creek, CA	7.5 Minute	No significant changes to the subject and adjacent properties are shown.
1980	Buffalo Creek, CA	7.5 Minute	An unimproved road and single building are shown in the west side of the subject property within 12535 Douglas Road (072-0300-008). Another building is shown near the northeast corner of the subject property (073-0010-011).

Date	Map Name	Series	Comments
2012	Buffalo Creek, CA	7.5 Minute	Only major roadways, topography, and water features are depicted in this map. Roadways within a small subdivision are shown south of the subject site. An additional subdivision is shown in the southwest corner of the map.

5.3 Historical City Directory Abstract Review

EDR provided the EDR-City Directory Image Report for review and a copy is provided in Appendix B. Building directories including city, cross reference and telephone directories were reviewed, if available, at approximately five-year intervals for the years spanning 1970 through 2013.

Date	Address	Directory Listing
2014	12535 Douglas Road (Subject Property)	Antonio V Fagundes
2014	12565 Douglas Road (Subject Property)	Occupant Unknown
2014	3417 Grant Line Road	Teichert & Son Inc.
2014	3450 Grant Line Road (Subject Property)	Tamra Harper
2010	12525 Douglas Road (Subject Property)	Marcie A. Whitlow
2010	12535 Douglas Road (Subject Property)	Kelly Hogge
2010	12565 Douglas Rd (Subject Property)	3213 Fitzgerald LLC, Scott S. McMullen, Rockford Family Properties LLC.
2010	3417 Grant Line Road (Subject Property)	Teichert & Son Inc.
2010	3450 Grant Line Road (Subject Property)	Tamra Harper
2005	12525 Douglas Road (Subject Property)	Occupant Unknown
2005	12353 Douglas Road (Subject Property)	Lynne M Fagundes
2005	12565 Douglas Road (Subject Property)	David R Divine
2005	3417 Grant Line Road	Teichert Aggregates Corp
2005	3450 Grant Line Road (Subject Property)	Occupant Unknown
2000	12525 Douglas Road (Subject Property)	Daniel L Lehman
2000	12535 Douglas Road (Subject Property)	B Weisker
2000	12565 Douglas Road (Subject Property)	Occupant Unknown
2000	3417 Grant Line Road	American River Aggregates
2000	3450 Grant Line Road (Subject Property)	Jackie L Hussman
1994	12525 Douglas Road (Subject Property)	Danl L Lehman

Date	Address	Directory Listing
1994	3417 Grant Line Road	American River Aggregates, American River Asphalt
1989	11505 Douglas Road	Aerojet Invstmt LTD, Eaton Drilling Co, Primary Electr Cnst, Sac Heat Treat
1989	12525 Douglas Road (Subject Property)	Danl L Lehman
1989	3450 Grant Line Road (Subject Property)	Orville Clark
1985	11505 Douglas Road	Amer Rvr MGF, Cal Mod Inc., Primary Elect Cnst, Sac Heat Treat
1985	12525 Douglas Road (Subject Property)	Danl L Lehman
1985	3450 Grant Line Road (Subject Property)	John Lash
1980	11505 Douglas Road	Building: Acrylic Products, Amer Waste Containr, Amer Waste LQD, American Waste Cont, B&E Iron & Steel, Cal Mod Inc, Cal Rel Able Elec, Carlson Almnm Prdct, Classic Coachworks, Drawers Are Us, EKA Wreckers USA, Engineering Resrch, Extensa Systems, Formula Products, Genrl Elec Med Sts, Haulaway Containers, Instru Spec, Interstate Contrs, J&W Scientific Inc, Keystone Contr Co, Magnum Towers Inc., McDonnell Douglas, Newbel Industries, Peerless Instrument, Reliable Elec Wrks, Security Park, Sloan & Assoc, Trophy Wood Product
1980	12525 Douglas Road (Subject Property)	Danl L Lehman
1980	12535 Douglas Road (Subject Property)	Larry McKenna

5.4 Certified Sanborn Map Report

No Sanborn Map coverage was identified for the subject property.

5.5 Previously Completed Environmental Assessments

Phase I Environmental Site Assessment of 12565 Douglas Road, prepared by EMG Corp., September 2015

This report included the barn structure and green waste disposal areas in the north and south, but did not include the single-family residence. The report identifies the adjacent Aerojet contamination plume, but notes that the project site would not be investigated as a source of the contamination. They concluded that contamination does not pose immediate health risk to future occupants due to the project building not being serviced by potable water. Additionally, it is mentioned that the plume does not extend to the private well located near the residence adjacent to the west. No further action or investigation was recommended regarding the off-site regulatory review.

Phase I Environmental Site Assessment for Divine Property, prepared by Youngdahl Consulting Group Inc., December 2017

This environmental site assessment was conducted on the Divine property at 12565 Douglas Road (APN 072-0300-002) located at the south-center portion of the subject property of this 2019 report. The conclusions of this report were as follows:

"Buried green waste can generate methane gas that can subsequently become a soil gas intrusion hazard when explosive amounts can accumulate. The observed green waste is not buried and is able to vent methane directly to the atmosphere.

Also, a contaminant plume of trichloroethylene (TCE) was discovered near the subject site. The United States Environmental Protection Agency's (USEPA) maximum contaminant level (MCL) for TCE in drinking water is 5 ppb. Although the 5 ppb contour of TCE is present near the northwest corner of the project site, it does not extend to the private well located west of the existing property; therefore, it is our opinion that it does not pose a human health risk. ***No RECs were identified in connection with the subject property.****"*

Unfinalized Phase I Environmental Site Assessment for Douglas 98, prepared by Youngdahl Consulting Group, Inc., May 2018

This assessment was conducted on the Whitlow property located at 12525 Douglas Road (APN 072-0300-005) which is the southwest corner parcel of the subject property of this 2019 report. The RECs discovered for this assessment included the potential presence of lead-based paint and termiticides to be present near the residence, well house, cattle shed, and shed/shop building. Also, there was potential for ACBM within the residence, shop/shed building, and well house which were also considered RECs. Chromated Copper Arsenate within soils adjacent to wood poles observed on this site were considered to be de minimis. The RECs were concluded based off the historic aerial photography and topographic map data provided during preparation of the 2018 report. RECs identified for this current report differ from the conclusions of the former report due to additional data provided by EDR.

6.0 REGULATORY RECORDS REVIEW

The records review consisted of a review of reasonably ascertainable environmental record sources, physical setting sources, and historical use information that will help identify recognized environmental conditions in connection with the property. Reasonably ascertainable record information must be publicly available, obtainable from its source within reasonable time and cost constraints, and be practically reviewable.

6.1 Commercial Database Search Review

In an effort to fulfill due diligence requirements, Youngdahl Consulting Group, Inc. employed the services of Environmental Data Resources, Inc. (EDR) to identify sites listed on regulatory agency databases within approximate minimum search distances from the subject property with potential of existing environmental problems. The term "approximate minimum search distances" means the distances within the area which government records must be reviewed pursuant to ASTM Phase I Standards. The term "minimum search distance" is used in lieu of radius as to include irregularly shaped properties. A current EDR Radius Map with GeoCheck® (EDR Report) was provided by EDR on 1 May 2019 (Appendix C). Included in the report are the dates the original government sources were updated and the dates the sources were last updated by EDR, as well as a list of acronyms used by EDR.

The EDR Radius Map with GeoCheck® (EDR Report) identified seven (7) sites within minimum search distances listed in multiple databases:

- **Aerojet General Corporation**; Highway 50 and Aerojet Road; within subject property. The Aerojet Site is listed in the following databases:

- NPL
- SEMS
- CORRACTS
- RCRA-TSDF
- RCRA-LQG
- US ENG CONTROLS
- USINST CONTROL
- ENVIROSTOR
- SWEEPS UST
- HIST UST
- CA FID UST
- US FIN ASSUR
- ROD
- PRP
- PADS
- CONSENT

- **North Douglas**; NE of Douglas Road; subject property. Listed in the CIWQS database (stormwater plan permits for construction).
- **American River Asphalt**; 3417 Grant Line Road; 333 feet ENE. Listed in the following databases:
  - AST
  - CERZ HAZ WASTE
  - CERS TANKS
  - EMI
  - ENF
  - Sacramento Co. ML
  - NPDES
  - WDS
  - CIWQS
  - CERS
- **Grantline Plant**; 3417 Grant Line Road; 333 feet ENE. Listed in the AST database.
- **Inactive Rancho Cordova Test Site (IRCT);** Nimbus Road; 2246 feet W. This site is listed in the CSP-SLIC database.
- **Automotive Importing MFG Inc.**; 3920 Security Park Drive; 4256 feet SSW. Listed in the following databases:
  - SEMS-ARCHIVE
  - CORRACTS
  - RCRA-TSDF
  - RCRA-SQG
  - HAZNET
  - FINDS
  - ECHO
- **General Electric Medical Systems**; 3920 Security Park Drive; 4256 feet SSW. Listed in the ENVIROSTOR, HWP, and CERS databases.

According to the EDR Report, the subject property contains several small areas that are designated as a wetland, per the National Wetlands Inventory (1994).

Due to poor or inadequate information, EDR is unable to map certain sites. These sites are referred to by EDR as Orphans. No Orphan sites were identified in the EDR Report.
The Aerojet Corporation site boundary encroaches into the subject property in the north-center area and is visible in the EDR Radius Map as a National Priority List Site.

6.2 Review of State and/or Local Government Records

The Sacramento County NextRequest system was used to request any records pertaining to hazardous materials or well records at each individual parcel within the subject property. Records pertaining to the septic system and private well on the subject site were provided for 12525 Douglas Road (Whitlow property), 12535 Douglas Road, and 12565 Douglas Road (Divine property). Records showing a domestic well at 3450 Grant Line Road (073-0010-011) were provided. The well was permitted to be inactive in February 2015. Past sampling of the well for the Aerojet contamination plume showed that the well had trace level hits of N-Nitrosodimethylamine (NDMA) and no volatile organic compounds or perchlorate. The well was sealed in October 2014 and destruction of the well was mentioned in an email correspondent with a deadline of 26 December 2014; the well has yet to be destroyed.

Records were also provided for the Teichert Aggregates plant located at 3417 Grantline Road. Records show that a number of above-ground storage tank (ASTs) are present at the facility and hold a number of different fuels, oils, and lubricants. Past inspection reports were reviewed and no significant violations were discovered; any spills or violations were found to have been corrected to the satisfaction of Sacramento County.

The State of California Water Resources Control Board's GeoTracker database was researched to identify if sites with groundwater contamination exist within the minimum search distances to the subject property (www.geotracker.swrcb.ca.gov). Also, the Department of Toxic Substance Control's (DTSC) Envirostor database was researched for sites of environmental concern near or at the subject property (https://www.envirostor.dtsc.ca.gov/public/). The subject property was not identified on the GeoTracker or Envirostor web sites.

The Fall 2018 iso-Concentration maps by Geosyntec Consultants depicting the extent of contamination of the Aerojet area for trichloroethylene, perchlorate, and N-Nitroso-dimethylamine (NDMA) were reviewed. The NDMA contours do not intersect the subject property. The maps show that the 5 ppb (parts per billion) contour for TCE in groundwater Layers C and D reach monitoring wells OS-10C1/OS-10C2 located in the southwest of parcel 072-0300-001 (12555 Grant Line Road), partially encroaches into parcel 072-0010-011, and continues west through parcel 072-0300-008 to the west adjacent parcel where extraction well 4757 is located. The 50 ppb contour for Layer C encroaches near the northern part of parcel 072-0300-001, near a monitoring well just outside the north property boundary (well OS-5C). The 4 ppb contour for perchlorate in Layer C intersects the subject property at the northeast corner of the site within parcels 072-0010-010 and -011. The maximum contaminant level (MCL) for groundwater and drinking water established by the Environmental Protection Agency (EPA) is 5 ppb for TCE and 6 ppb for perchlorate. Perchlorate is found to be below the MCL at the subject property. Perchlorate and perchlorate anions do not volatilize from water or soil surfaces to air according to the Agency for Toxic Substances and Disease Registry (ATSDR) "Toxicological Profile for Perchlorates," 2008, and was not found to have values for soil vapor or ambient air in screening level criteria tables produced by the EPA and DTSC; perchlorate does not pose a soil vapor intrusion risk. The 5 ppb TCE contour does not intersect any domestic wells within the subject property, but has potential to create a soil vapor intrusion scenario for future development.

According to the Geotracker Website, two Inactive Rancho Cordova Test Sites associated with the past Aerojet Rocketdyne and Boeing activities are located west of the subject property: The Sigma Debris Area and the Antenna Station. Both sites are currently in remediation stages. The Antenna Station Site, located to the northwest, has been designated that No Further Action is necessary as of February 2005, although monitoring and in situ bioremediation continues. The Sigma Debris Area was designated as a No Further Action site in a Remedial Action Plan

and was investigated for soil vapor and contaminated groundwater between 1992 and 2002. Investigation data shows that the site is not a threat to human health and the environment. Monitoring continues as part of the IRCTS as a whole.

The 3920 Security Park Drive site was listed on the Envirostor database. The former General Electric Company Facility was once known as the Administration Area within the Inactive Rancho Cordova Test Site. GE Medical Systems were given authorization to operate a wastewater treatment system and discharge treated wastewater to the facility's septic system and leach field. The treatment system was moved to the neighboring address adjacent to a hazardous waste storage area. An approval of the Closure Certification for the GE facility was issued on June 28, 1991. A Termination of Corrective Action was also issued in July 2009 which was relied almost entirely upon data in a report titled "Remedial Action Plan for the Unsaturated Zone Administration Area IRCTS" dated August 2000 by ENSR.

6.3 Vapor Encroachment Screening

Vapor intrusion is the term used to describe the migration of volatile organic compounds (VOCs) via soil vapor from the sub-surface soil and/or groundwater upward into buildings, potentially causing unacceptable chemical exposure for building occupants. The vapor intrusion pathway is evaluated using the Conceptual Site Model (CSM) and vapor intrusion pathway screening. Volatilization of petroleum products in the subsurface occurs via the volatilization of constituents that are in the dissolved phase (in pore water or groundwater), volatilization from light nonaqueous phase liquid (LNAPL) (either mobile or residual) directly, and volatilization from impacted soil. Once the individual constituents are in the vapor phase, they can continue to migrate in the vadose zone (soil zone between first groundwater and ground surface). Transport will occur through diffusion caused by concentration gradients. The greatest movement will take place in the most permeable materials. If the soil-moisture content in the vadose zone is high, then relatively soluble compounds such as ethanol and MTBE will tend not to stay in the vapor phase, but rather will stay in the soil moisture.

Soil vapor is one of the pathways of contamination to the subject property, along with ground water and soil. ASTM E1527-13 requires that vapor migration be treated no differently than contaminated groundwater. The soil vapor contaminant pathway needs to be considered in evaluation of RECs or other environmental concerns. The ASTM Standard Guide for Vapor Encroachment Screening (VES) on Property Involved in Real Estate Transactions (ASTM E2600-10) is the industry-accepted guidance for using Phase I ESA information to determine if a vapor encroachment condition (VEC) exists at the subject property. EDR's Vapor Encroachment Worksheet was designed to assist parties seeking to meet the search requirements of the ASTM E 2600-10. **The Aerojet Rocketdyne, Inc. site was identified during our VES on the property to have a potential to create a soil vapor intrusion scenario.** A copy of the EDR VES is provided in Appendix D.

7.0 SITE RECONNAISSANCE

7.1 Purpose

A reconnaissance of the subject property and a windshield survey of the surrounding area were conducted by Youngdahl Consulting Group, Inc. on 9 May 2019. Views of the subject property at the time of the reconnaissance visit are presented as Figures 3 - 28.

7.2 Subject Property

Some features discussed in this section are shown on the Site Plan – Figure 2.

APNs 073-0010-011 & -010 (3450 Grant Line Road)
These parcels are adjoining with 073-0010-010 being a small parcel northeast from 073-0010-011. Collectively, they comprise the east portion of the subject site and together are triangular in shape (Figure 2). The majority of 073-0010-011 is vacant grazing land (Fig. 3), but an orchard of olive trees was observed in the northeastern corner of the parcel (Fig. 4, Photo 3). The orchard also occupies the entirety of APN 073-0010-010. Just south of the orchard is an area once occupied by a residence and was observed to have miscellaneous building debris (Fig. 4, Photo 4); no remnant of the building foundation was observed. Wood poles were also observed near the former residence (Fig. 5, Photo 5). More debris and a dilapidated shed were observed west of the location of the former residence (Fig. 5, Photo 6). A standing wood pole was observed just north of the dilapidated shed (Fig. 6, Photo 7). Near the southwest corner of the orchard, a shallow, rectangular pit (Fig 6, Photo 8) and stockpiled material (Fig. 7, Photo 9) was observed near Morrison Creek. More miscellaneous debris was observed within the orchard (Fig. 7, Photos 10 & 11). An inactive domestic well was observed southwest of the former residence location (Fig. 9, Photo 12). Two steel pipes were seen protruding from the ground to the northwest from the dilapidated shed (Fig. 8, Photo 13).

APN 072-0300-002 (12565 Douglas Road, Divine Property)
This parcel occupies the south-center portion of the subject property (Figure 2) and consists of an existing single-family home, a separate garage structure located east of the home (Fig. 9, Photo 14), a small shed just south of the garage outbuilding (Fig. 9, Photo 15), and vacant grazing land to the north and south of the home (Figure 10). Morrison Creek runs through the northern portion of the property, trends generally east-west, and was observed to be dry at the time of our reconnaissance. A fire break was observed north of the home. Oil staining was observed on the graveled area in the vicinity of the east garage building and near stored farm equipment (Figure 11). No large quantities of chemicals and/or fuel were observed in or around the east garage outbuilding. A drastic vegetation change was observed in the southern grazing land, potentially from the previously identified (Youngdahl, 2017) areas where organics were being dumped (Fig. 12, Photo 21). The existing residence is supplied by a well located west of the home; a propane tank was also observed in this area (Fig. 12, Photo 22).

APN 072-0300-005 (12525 Douglas Road, Whitlow Property)
This property comprises the southwest section of the subject property and is primarily grazing land (Fig. 13, Photo 23) with a residence along the east-center property line (Fig. 13, Photo 24). Near the residence is an associated well house to the west and a shop/shed building to the south of the well house. A corrugated metal cattle shed is just west of the residence and associated outbuildings (Fig. 14, Photo 25). The well house is northwest from the home (Fig. 15, Photo 26) and the interior is used as storage and to contain the water well (Fig. 15, Photo 27). A wood pole, concrete pad with concrete-filled steel drums, and remnant concrete foundation for a pole were observed north of the residence in the grazing field (Fig. 15, Photos 28 & 29). Additional wood poles are located in the north-center portion of the subject site at Morrison Creek (Fig. 16, Photo 30). The portion of Morrison Creek was observed to be artificially leveed and dammed (Fig. 16, Photo 31).

APN 072-0300-001 (12555 Grant Line Road)
This parcel is at the north-center portion of the subject site and consists of vacant grazing land (Figure 17). Standing water in a vernal pool was observed in the approximate center of the parcel. A monitoring well was observed near the southwest corner of the parcel (Figure 18).

APN 072-0300-008 (12535 Douglas Road)
This parcel is primarily vacant grazing land in the north (Fig. 19) with a residence and associated outbuildings in the southwest corner and a pond in the southeast corner.

Miscellaneous debris was found to be dumped inside, around, and to the north of the outbuildings. 55-gallon drums observed among the waste to the north of the buildings were found to be primarily used for trash or empty (Fig. 20, Photo 36) except for one drum which was sealed and contained an unknown liquid (Fig. 20, Photo 37). All automotive tanks and parts were observed to be empty (Fig. 21, Photo 38). A small stockpile with discarded tires was also found in the field (Fig. 21, Photo 39). The interior and exterior of the shed located near the debris in the field was filled with more trash and other solid waste; any fuel or chemical containers were empty (Fig. 22). Several sheds and a chicken coop were observed near the residential home which all contained miscellaneous debris and were in late stages of deterioration (Figs. 23, 24, & 25). The western shed had a storage room with miscellaneous items inside (Fig. 25, Photo 47). Underground utilities were observed around the outside walls of the northmost outbuilding including a storage tank of unknown use (Fig. 26). The residence was observed to be vacant and the windows and doors have been boarded up (Fig. 27, Photo 50). A domestic water well was observed just east of the home; a pressure system and filter were in place as a precaution for the contamination plume from the Aerojet General Corp. site (Fig. 27, Photo 51). A pond is created from a section of Morrison Creek being dammed at the southeast corner of the parcel (Fig. 28).

Reconnaissance Item	Observed	Reconnaissance Observations (9 May 2019)
Structures	Yes	**072-0300-001 (12555 Grant Line Road)** None observed. **072-0300-002 (12565 Douglas Road, Divine Property)** Residential home, garage building, & shed. **072-0300-005 (12525 Douglas Road, Whitlow Property)** Residential home, shop/shed, well house, & cattle shed. **072-0300-008 (12535 Douglas Road)** Residential building and multiple outbuildings. **072-0300-010 (No Address)** None observed. **073-0010-011 (3450 Grant Line Road)** Dilapidated shed.
Liquid Storage Systems (UST/AST)	Yes	**072-0300-001 (12555 Grant Line Road)** None observed. **072-0300-002 (12565 Douglas Road, Divine Property)** Tank associated with domestic well. **072-0300-005 (12525 Douglas Road, Whitlow Property)** Tank associated with domestic well **072-0300-008 (12535 Douglas Road)** Underground tank adjacent to shed north of the residence. **072-0300-010 (No Address)** None observed. **073-0010-011 (3450 Grant Line Road)** Pipes coming out of the ground near dilapidated shed are potentially connected to a UST.

Reconnaissance Item	Observed	Reconnaissance Observations (9 May 2019)
Drums	No	**072-0300-001 (12555 Grant Line Road)** None observed. **072-0300-002 (12565 Douglas Road, Divine Property)** None observed. **072-0300-005 (12525 Douglas Road, Whitlow Property)** Concrete filled drums. **072-0300-008 (12535 Douglas Road)** Drums filled with trash and one 55-gallon drum filled with unknown liquid. **072-0300-010 (No Address)** None observed. **073-0010-011 (3450 Grant Line Road)** None observed.
Other Containers	Yes	Miscellaneous containers throughout subject property observed to be of no concern.
PCBs	No.	All existing pole-mounted transformers observed throughout the property were in good shape with no signs of leaks.
Pits/Ponds/Ditches/Caves/Streams/ Lagoons	Yes	Ephemeral ponds throughout the subject property. Morrison Creek is dammed in 072-0300-008 (12535 Douglas Road) and 072-0300-005 (12525 Douglas Road, Whitlow Property), creating ponds.
Stained Soil/Pavement	No	**072-0300-002 (12565 Douglas Road, Divine Property)** Stained soils (de minimis) near east garage building.
Stressed Vegetation	No	None observed.
Solid Waste (Mounds or depressions)	Yes	**072-0300-001 (12555 Grant Line Road)** None observed. **072-0300-002 (12565 Douglas Road, Divine Property)** None observed. **072-0300-005 (12525 Douglas Road, Whitlow Property)** None observed. **072-0300-008 (12535 Douglas Road)** Stockpile of soil with tires in the field northeast from residence. **072-0300-010 (No Address)** None observed. **073-0010-011 (3450 Grant Line Road)** Stockpiles of soil near southwest corner of the orchard.
Waste Water (Discharge into drain/ditch/injection system/stream/adjacent property)	No	None Observed.

Reconnaissance Item	Observed	Reconnaissance Observations (9 May 2019)
Wells (Dry/irrigation/injection/abandoned)	Yes	**072-0300-001 (12555 Grant Line Road)** A monitoring well associated with Aerojet General Corporation. **072-0300-002 (12565 Douglas Road, Divine Property)** Domestic well west of the residence. **072-0300-005 (12525 Douglas Road, Whitlow Property)** Domestic well in well house northwest from the residence. **072-0300-008 (12535 Douglas Road)** Domestic well east of the residence. **072-0300-010 (No Address)** None observed. **073-0010-011 (3450 Grant Line Road)** Domestic well south of the former residence.
Other underground systems	No	**072-0300-001 (12555 Grant Line Road)** None observed. **072-0300-002 (12565 Douglas Road, Divine Property)** None observed. **072-0300-005 (12525 Douglas Road, Whitlow Property)** None observed. **072-0300-008 (12535 Douglas Road)** PVC lines adjacent to the sheds. **072-0300-010 (No Address)** None observed. **073-0010-011 (3450 Grant Line Road)** Two steel pipes protruding from the ground located west of the dilapidated shed.
Septic Systems	Yes	**072-0300-001 (12555 Grant Line Road)** None observed. **072-0300-002 (12565 Douglas Road, Divine Property)** Septic system in lawn north of the residence. **072-0300-005 (12525 Douglas Road, Whitlow Property)** None observed. **072-0300-008 (12535 Douglas Road)** Possible septic tank adjacent to north shed. **072-0300-010 (No Address)** None observed. **073-0010-011 (3450 Grant Line Road)** None observed.

7.3 Adjacent Properties

North: Vacant land currently being mined for aggregate.
East: Grant Line Road and Teichert Aggregate Plant.
South: Residential Subdivision.
West: Vacant land.

8.0 CONCLUSIONS, OPINION, AND RECOMMENDATIONS

This Phase I Environmental Site Assessment (ESA) was performed for the Preserve, which comprises the following Sacramento County Assessor's Parcel Numbers (APNs):

- 072-0300-001 (12555 Grant Line Road)
- 072-0300-002 (12565 Douglas Road, Divine Property)
- 072-0300-005 (12525 Douglas Road, Whitlow Property)
- 072-0300-008 (12535 Douglas Road)
- 072-0300-010 (No Address)
- 073-0010-011 (3450 Grant Line Road)

This Phase I ESA was conducted for the Winn Communities. Our study consisted of a review of environmental record sources, physical setting sources, review of site related documents, historical use information, and a site reconnaissance. We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitation of ASTM Standard Practice E 1527-13. Any exceptions to, or deletions from, this practice are described in Section 1.0 of this report.

8.1 Summary of Historical Subject Property Use Information

Date	Source	Subject Property Observations
1891-2016	Topographic Maps and Aerial Photos	The property had been primarily vacant grazing land with several residences that were constructed starting sometime between 1980 and 1984 with the last residence being built sometime between 1993 and 1998.

8.2 Recognized Environmental Conditions (RECs)

Recognized environmental conditions (RECs) are defined in the ASTM Phase I Standards to mean "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that post a material threat of a future release to the environment."

A contaminant plume of trichloroethylene (TCE) was discovered to encroach within some of the northern parcels. The 5 parts per billion (ppb) contour of TCE (the maximum contaminant level) extends to onsite and adjacent monitoring wells, but does not extend to any domestic wells identified on the subject property. **Although existing domestic wells aren't necessarily impacted, the presence of TCE within subject property boundaries has potential to create a soil vapor intrusion scenario and is considered a REC.**

Two steel pipes were observed protruding out of the ground within parcel 073-0010-011 (3450 Grant Line Road). An inactive well was also observed, and we understand that is currently permitted as inactive. **It is our opinion that the two protruding pipes have potential to be connected to an underground storage tank (UST), which is considered a REC**. The orchard that occupies a portion of this parcel and parcel 073-0010-010 was planted sometime between 1980 and 1984, as indicated by the historical aerial photography and topographic maps, which means that lead arsenate and organochlorine pesticides were not likely used.

The residence and outbuildings within APN 072-0300-008 (12535 Douglas Road) were built sometime between 1975 and 1980, and **the structures and soils adjacent to these structures have potential for containing lead-based paint; this has been identified to be a REC. Within APN 072-0300-008 is an unknown underground system found adjacent to the shed located north of the residence and a 55-gallon drum northeast from the residence with an unknown liquid inside; these are considered RECs if these vessels were used for fuel storage.**

All residences and major outbuildings of wood construction on the subject property besides within APN 072-0300-002 (12565 Douglas Road, Divine Property) have the potential for termiticides present in adjacent soils and are considered RECs.

8.3 Historic Recognized Environmental Conditions (HRECs)

Historic recognized environmental conditions (HRECs) is a term used to state that the property only includes a resolved or closed out REC that has been completely resolved ("clean closure") with no restrictions. **This assessment did not identify any HRECs in connection with the subject property.**

8.4 Controlled Recognized Environmental Conditions (CRECs)

The new term controlled REC (CREC) describes closed RECs that are managed under an activity and use limitation (AUL). **This assessment did not identify any CRECs in connection with the subject property.**

8.5 Recommendations

It is the opinion of the Youngdahl Consulting Group Inc. that the following recommended actions be conducted for the identified RECs:

APN & Address	Identified REC	Recommendation
072-0300-001 (12555 Grant Line Road)	TCE groundwater plume identified by on-site monitoring well.	We recommend that a soil vapor investigation consisting of soil vapor sampling be conducted on the subject property.
072-0300-002 (12565 Douglas Road, Divine Property)	No RECs identified.	No recommendations.
072-0300-005 (12525 Douglas Road, Whitlow Property)	Potential termiticides within soils adjacent to the residence.	We recommend soil sampling near the footprint of the home at a depth of approximately 1 foot to be analyzed for termite pesticides.
072-0300-008 (12535 Douglas Road)	Lead based paint and termiticides in soils adjacent to all buildings. ACBM within all buildings. 55-gallon drum with unknown liquid. Potential underground tank/sump adjacent to shed north of residence. Potential vapor intrusion scenario from the TCE groundwater plume.	We recommend investigation of the potential underground system. Soils adjacent to the buildings should be sampled for total lead in surface soils and termite pesticides at a depth of approximately 1 foot. ACBM should be investigated at the main residence and shed northwest of the residence by a licensed asbestos contractor. Soil vapor sampling as part of a soil vapor intrusion investigation should be conducted.
072-0300-010 (No Address)	No RECs identified.	No recommendations.

073-0010-011 (3450 Grant Line Road)	Two pipes observed protruding from the ground south of the orchard and west from the former residence. Potential vapor intrusion scenario from the TCE groundwater plume	The pipes are potentially connected to a UST and should be investigated. Soil vapor sampling as part of a soil vapor intrusion investigation should be conducted.

Additionally, all inactive wells that are not planned for future use should be destroyed per Sacramento County requirements. Domestic wells were observed to be within parcels 073-0010-011 (permitted inactive), 072-0300-002, 072-0300-005, and 072-0300-008.

8.6 Data Gaps

According to § 3.3.20 of ASTM Standard E 1527-13 a data gap is a lack of or inability to obtain information required by the ASTM Standard despite good faith efforts to gather same. Data gaps may result from incompleteness in any of the activities required by the ASTM Standard. It is our opinion that no significant data gaps were identified.

9.0 SELECTED REFERENCES

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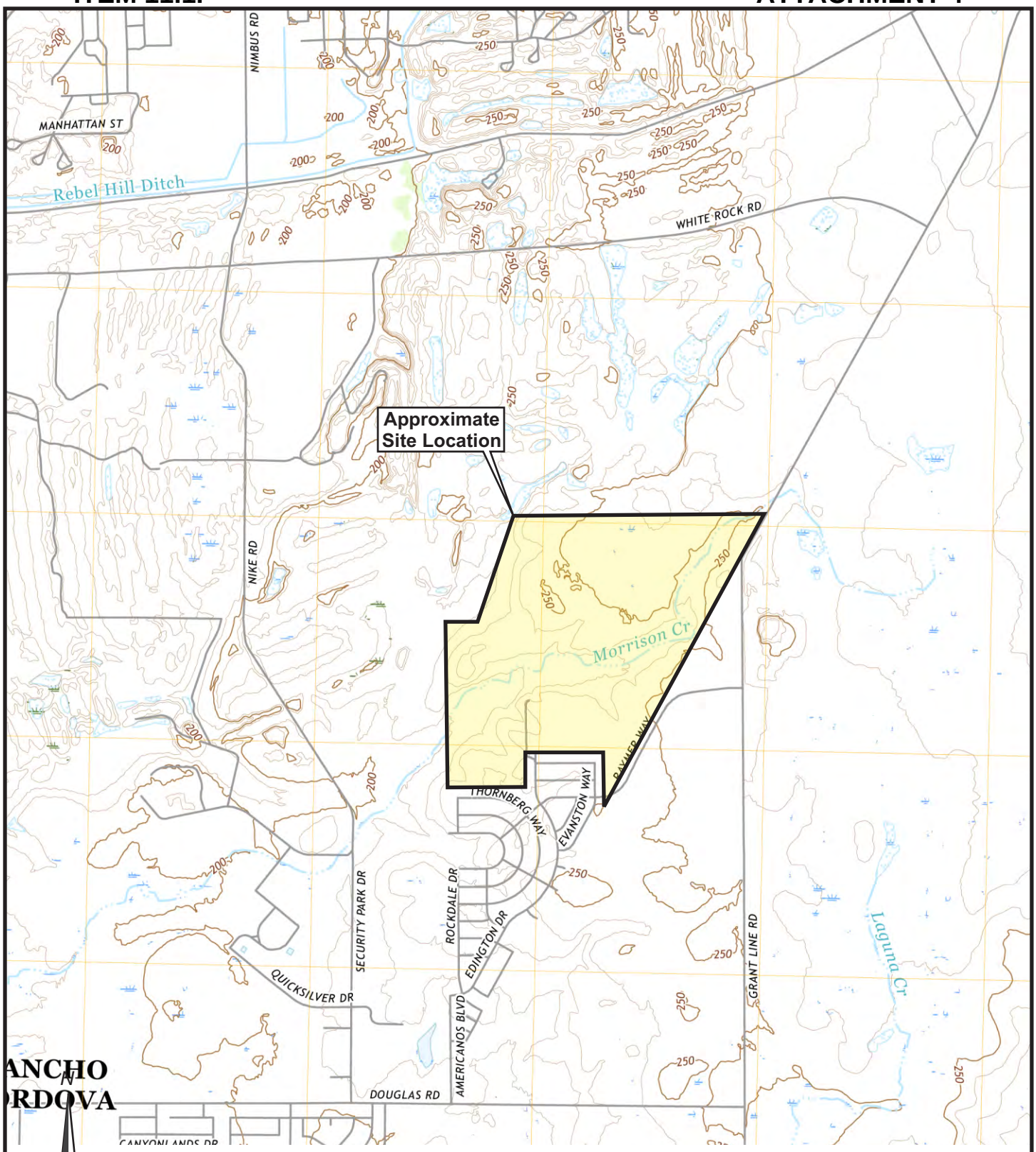
10.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

David C. Sederquist, C.E.G., C. HG.

Professional Geologist - California No. 4715; Certified Engineering Geologist, California No. 2133; Certified Hydrogeologist; California No. 619
Bachelor of Arts in Geology; California State University, Sacramento, 1980

Mr. Sederquist has performed Phase I and Phase II Environmental Site Assessments for commercial, residential, public utility and school projects since 1990. He has assessed, monitored, and closed soil and groundwater contamination sites. He is experienced in working closely with both regulatory officials and property owners/purchasers.

FIGURES



Scale: 1:24,000

BASE MAP REFERENCE: *U.S.G.S. 7.5 Minute Topographic Series, Buffalo Circle Quadrangle, Dated 2018*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002 **May 2019**	**VICINITY MAP** **The Preserve Phase I ESA** Rancho Cordova, California	**FIGURE 1**



REFERENCE: *Google Aerial, Data Dated 10/31/2018*

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GEOTECHNICAL • ENVIRONMENTAL • MATERIALS TESTING

Project No.: E17440.002

May 2019

SITE PLAN

The Preserve Phase I ESA
Rancho Cordova, California

FIGURE 2

APN: 073-0010-011 & -010 (3450 Grant Line Road)



Photo 1: *Photo of the south portion of parcel 073-0010-011 from Raymer Way.*



Photo 2: *Photo of the south west area of parcel 073-0010-011 from the Divine property viewing east.*

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Photo 3: *Photo from the northeast corner of parcel 073-0010-011. The olive orchard is visible to the left. A Siemens pump station and substation in the north adjacent property are visible to the left.*



Photo 4: *Debris was observed in the area where a residence once stood.*

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Photo 5: *Wood poles dumped near the former residence.*



Photo 6: *A dilapidated shed and more miscellaneous debris found west of location of the former residence. Remnant irrigation line and piping was present in the subsurface and on the ground.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002	**SITE PHOTOGRAPHS**	FIGURE
	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**5**



Photo 7: *A standing pole was observed just north of the dilapidated shed.*



Photo 8: *A shallow, rectangular pit found at the southwest corner of the olive orchard.*

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Photo 9: *Stockpiled material was observed near the rectangular pit.*





Photo 10 & 11: *Residential debris was observed within the orchard.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002	**SITE PHOTOGRAPHS**	FIGURE
	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**7**



Photo 12: *Inactive domestic well observed to be just Southwest from the former residence location.*



Photo 13: *Two steel pipes protruding from the ground NW from the dilapidated shed.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002	**SITE PHOTOGRAPHS**	FIGURE
	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**8**

APN: 072-0300-002 (12565 Douglas Road, Divine Property)



Photo 14: *Garage outbuilding located east of the existing residence.*



Photo 15: *Small shed just southwest of the garage outbuilding.*

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Photo 16: *Vacant grazing land located north of the existing residence. A fire line is visible in the foreground.*



Photo 17: *Vacant grazing land located in the south portion of the parcel.*

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	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**10**







Photo 18, 19, & 20: *Oil staining on the gravel parking area around the garage outbuilding where stored farm equipment was observed.*

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	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**11**



Photo 21: *A drastic vegetation change within the southern field.*



Photo 22: *A water well and propane tank found west of the residence.*

APN: 072-0300-005 (12525 Douglas Road, Whitlow Property)



Photo 23: *View of this parcel from near the southwest corner.*



Photo 24: *Vacant residence within a fenced area at the east-center portion of the parcel.*

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	May 2019		



Photo 25: *Corrugated metal cattle shed west of the existing residence.*





Photo 26 & 27: *The well house northwest from the existing home and a view of the inside.*





Photo 28 & 29: *A standing pole, former pole foundation, concrete pad, and concrete-filled drums found in the grazing area north of the residence.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002 May 2019	**SITE PHOTOGRAPHS** **The Preserve Phase I ESA** Rancho Cordova, California	FIGURE 15



Photo 30: *Poles near Morrison Creek. Two have a makeshift zipline attached.*



Photo 31: *View from atop the levee on the south bank of Morrison Creek.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002	**SITE PHOTOGRAPHS**	FIGURE
	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	16

APN: 072-0300-001 (12555 Grant Line Road)



Photo 32: *View of the parcel from the northwest corner.*



Photo 33: *View of the parcel from the southwest corner.*

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Photo 34: *A monitoring well for the Aerojet-General Corporation site was observed in the southwest portion of this parcel.*

APN: 072-0300-008 (12535 Douglas Road)



Photo 35: *View of the parcel from the northeast corner. The north portion of the parcel is vacant grazing land.*

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	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**19**





Photo 36 & 37: *A row of drums was observed in the field northeast from the existing residence. One drum was filled with an unknown liquid and sealed.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002	**SITE PHOTOGRAPHS**	FIGURE
	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**20**



Photo 38: *Empty automotive gas tanks (empty) and other parts among the debris in the field.*



Photo 39: *A small stockpile of soil and tires among the debris in the field.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002	**SITE PHOTOGRAPHS**	FIGURE
	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**21**





Photo 40 & 41: *Dumped debris on the interior and exterior of the small shed in the field.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002 May 2019	**SITE PHOTOGRAPHS** **The Preserve Phase I ESA** Rancho Cordova, California	FIGURE 22



Photo 42: *A shed located north of the existing residence.*



Photo 43: *A collapsed shed west of the north shed.*



Photo 44: *Old chicken coop west of the north shed.*



Photo 45: *A collapsed shed with glass windows.*



Photo 46: *A western shed with an area for animals and storage room.*



Photo 47: *Inside the storage area of the western shed.*





Photo 48 & 49: *Utilities outside the north shed and an underground tank of unknown use.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002	**SITE PHOTOGRAPHS**	**FIGURE**
	May 2019	**The Preserve Phase I ESA** Rancho Cordova, California	**26**



Photo 50: *The existing residence on the parcel has been boarded up and is vacant.*



Photo 51: *A domestic water well is located east of the residence.*

YOUNGDAHL CONSULTING GROUP, INC. GEOTECHNICAL ▪ ENVIRONMENTAL ▪ MATERIALS TESTING	Project No.: E17440.002 May 2019	**SITE PHOTOGRAPHS** **The Preserve Phase I ESA** Rancho Cordova, California	FIGURE 27



Photo 52: *A dammed section of Morrison Creek creates a pond in the southeast corner of the parcel.*

APPENDICES

APPENDIX A
Phase I ESA Questionnaires

YOUNGDAHL CONSULTING GROUP, INC.
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35 YEARS

Project: **Site Name:** **The Preserve Phase I ESA**
Location: **12555 Grant Line Road, Rancho Cordova, CA**
Sacramento County APN 072-0300-001

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to David Sederquist at dcs@youngdahl.net

1.	Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use?	(Yes)	No	Unknown
2.	Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes	No	(Unknown)
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*?	Yes	No	(Unknown)
4.	Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property?	Yes	No	(Unknown)
5.	Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin?	Yes	No	(Unknown)

6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	**No**	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*?	Yes	No	**Unknown**
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	**Unknown**
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	No	**Unknown**
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	No	**Unknown**
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	No	**Unknown**
12.	Are you aware of any floor drains or sumps on the property?	Yes	No	**Unknown**
13.	Have any *hazardous substances* or *petroleum products,* unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes	No	**Unknown**
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	No	**Unknown**
15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	**No**	Unknown

16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	(No)	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*?	(Yes)	No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	(No)	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	(No)	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT): George Carpenter	**(SIGNATURE):**
TITLE: Vice President	**ADDRESS:** 3001 I Street, Suite 300, Sacramento, CA 95816
FIRM: Winn Communities	**DATE:** 5/9/19
PHONE NUMBER: 916-930-0925	**FAX NUMBER:** 916-930-0927
RELATIONSHIP TO SITE: Owner X	**or Owner's Representative** ____

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www.youngdahl.net

35 YEARS

Project: **Site Name:** The Preserve Phase I ESA
Location: 12565 Douglas Road, Rancho Cordova, CA
Sacramento County APN 072-0300-002

4-26-2019

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to David Sederquist at dcs@youngdahl.net

1.	Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use?	Yes	(No)	Unknown
2.	Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes	(No)	Unknown
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*?	Yes	(No)	Unknown
4.	Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property?	Yes	(No)	Unknown
5.	Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin?	Yes	(No)	Unknown

6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	**No**	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*? Currently NO!, Previously a Soil stain where the Tractor was water washed off after use.	**Yes**	No	Unknown
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*? Currently NO!, 11 years ago above ground deisel Tank Removal in 2008.	**Yes**	No	Unknown
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	**No**	Unknown
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	**No**	Unknown
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	**No**	Unknown
12.	Are you aware of any floor drains or sumps on the property?	Yes	**No**	Unknown
13.	Have any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes	**No**	Unknown
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	**No**	Unknown
15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	**No**	Unknown

16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	(No)	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*? EMG Corp 2015, ECorp 2017, Phase I Reports. Winn has Copies	(Yes)	No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	(No)	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	(No)	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT):	Dave Divine	**(SIGNATURE):**	Dave Divine
TITLE:	Land Owner	**ADDRESS:**	
FIRM:		**DATE:**	4-26-2019
PHONE NUMBER:	(916) 812-3368	**FAX NUMBER:**	
RELATIONSHIP TO SITE: Owner	_____	**or Owner's Representative**	_____

DocuSign Envelope ID: 6276F32C-79FF-4D56-843C-2C1D4E13275F

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www.youngdahl.net
35 YEARS

Project: **Site Name:** **The Preserve Phase I ESA**
Location: **12525 Douglas Road, Rancho Cordova, CA**
Sacramento County APN 072-0300-005

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to David Sederquist at dcs@youngdahl.net

1.	Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use?	Yes	(No)	Unknown
2.	Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes	(No)	Unknown
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*?	Yes	(No)	Unknown
4.	Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property?	Yes	(No)	Unknown
5.	Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin?	Yes	(No)	Unknown

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6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	(No)	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*?	Yes	(No)	Unknown
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	(No)	Unknown
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	(No)	Unknown
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	(No)	Unknown
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	(No)	Unknown
12.	Are you aware of any floor drains or sumps on the property?	Yes	(No)	Unknown
13.	Have any *hazardous substances* or *petroleum products,* unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes	(No)	Unknown
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	(No)	Unknown
15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	(No)	Unknown

DocuSign Envelope ID: 6276F32C-79FF-4D56-843C-2C1D4E13275F

16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	No	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*?	Yes	No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	No	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	No	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT): David Whitlow	**(SIGNATURE):** DocuSigned by: Dave Whitlow 0A481BD8028047B...
TITLE: Partner	**ADDRESS:** PO Box 186 Rancho Cordova CA
FIRM: N/A	**DATE:** Apr-28-2019
PHONE NUMBER: 916-743-0408	**FAX NUMBER:**
RELATIONSHIP TO SITE: Owner _____	**or Owner's Representative** _____

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www.youngdahl.net
35 YEARS

Project: **Site Name:** **The Preserve Phase I ESA**
Location: **12535 Douglas Road, Rancho Cordova, CA**
Sacramento County APN 072-0300-008

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to David Sederquist at dcs@youngdahl.net

1.	Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use?	(Yes)	No	Unknown
2.	Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes	No	(Unknown)
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*?	Yes	No	(Unknown)
4.	Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property?	Yes	No	(Unknown)
5.	Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin?	Yes	No	(Unknown)

6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	(No)	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*?	Yes	No	(Unknown)
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	(Unknown)
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	No	(Unknown)
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	No	(Unknown)
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	No	(Unknown)
12.	Are you aware of any floor drains or sumps on the property?	Yes	No	(Unknown)
13.	Have any *hazardous substances* or *petroleum products*, unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes	No	(Unknown)
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	No	(Unknown)
15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	(No)	Unknown

16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	(No)	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*?	(Yes)	No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	(No)	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	(No)	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT): George Carpenter	**(SIGNATURE):**
TITLE: Vice President	**ADDRESS:** 3001 I Street, Suite 300, Sacramento, CA 95816
FIRM: Winn Communities	**DATE:** 5/9/19
PHONE NUMBER: 916-930-0925	**FAX NUMBER:** 916-930-0927
RELATIONSHIP TO SITE: Owner X	**or Owner's Representative** _____

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www.youngdahl.net
35 YEARS

Project: **Site Name:** **The Preserve Phase I ESA**
Location: **Grant Line Road, Rancho Cordova, CA**
Sacramento County APN 072-0300-010

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to David Sederquist at dcs@youngdahl.net

1.	Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use?	(Yes)	No	Unknown
2.	Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes	No	(Unknown)
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*?	Yes	No	(Unknown)
4.	Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property?	Yes	No	(Unknown)
5.	Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin?	Yes	No	(Unknown)

6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	(No)	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*?	Yes	No	(Unknown)
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	(Unknown)
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	No	(Unknown)
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	No	(Unknown)
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	No	(Unknown)
12.	Are you aware of any floor drains or sumps on the property?	Yes	No	(Unknown)
13.	Have any *hazardous substances* or *petroleum products,* unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes	No	(Unknown)
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	No	(Unknown)
15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	(No)	Unknown

16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	(No)	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*?	(Yes)	No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	(No)	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	(No)	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT): George Carpenter	**(SIGNATURE):**
TITLE: Vice President	**ADDRESS:** 3001 I Street, Suite 300, Sacramento, CA 95816
FIRM: Winn Communities	**DATE:** 5/9/19
PHONE NUMBER: 916-930-0925	**FAX NUMBER:** 916-930-0927
RELATIONSHIP TO SITE: Owner X	**or Owner's Representative** _____

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www.youngdahl.net
35 YEARS

Project: **Site Name:** **The Preserve Phase I ESA**
Location: **3450 Grant Line Road, Rancho Cordova, CA**
Sacramento County APN 072-0300-011

The ASTM Standards require that you, or your representative who is knowledgeable regarding the use and condition of the property, answer the questions found on the following site assessment questionnaire.

Please answer these questions in good faith and to the extent of your actual knowledge. Circle the appropriate answer. For yes answers please provide additional explanation. We would appreciate it if you would FAX the completed questionnaire as soon as possible to Youngdahl Consulting Group, Inc. FAX: 916-933-6482 or email it to David Sederquist at dcs@youngdahl.net

1.	Currently is, or in the past has, the *property* or any *adjoining* property been used for an industrial use?	**Yes**	No	Unknown
2.	Currently is, or in the past has, the *property* or any *adjoining* property been used as a gasoline station, motor repair facility, commercial printing facility, dry cleaners, photo developing laboratory, junkyard or landfill, or as a waste treatment, storage, disposal, processing, or recycling facility?	Yes	No	**Unknown**
3.	Are there currently, or have there been previously, any damaged or discarded automotive or industrial batteries, or pesticides, paints, or other chemicals in individual containers of greater than 5 gal (19 L) in volume or 50 gal (208 L) in the aggregate, stored on or used at the *property*?	Yes	No	**Unknown**
4.	Are there currently, or have there been previously, any industrial *drums* (typically 55 gal (208 L)) or sacks of chemicals located on the property?	Yes	No	**Unknown**
5.	Has *fill dirt* been brought on to the property that originated from a contaminated site or that is of an unknown origin?	Yes	No	**Unknown**

6.	Are there currently, or have there been previously, any *pits, ponds, or lagoons* located on the *property* in connection with waste treatment or waste disposal?	Yes	(No)	Unknown
7.	Is there currently, or has there been previously, any stained soil on the *property*?	Yes	No	(Unknown)
8.	Are there currently, or have there been previously, any registered or unregistered storage tanks (above or underground) located on the *property*?	Yes	No	(Unknown)
9.	Are there currently, or have there been previously, any vent pipes, fill pipes, or access ways indicating a fill pipe protruding from the ground on the *property*?	Yes	No	(Unknown)
10.	Are there currently, or have there been previously, any flooring, drains, or walls located within the facility that are stained by substances other than water or are emitting unusual odors?	Yes	No	(Unknown)
11.	If the *property* is served by a private well or non-public water system, have contaminants been identified in the well or system that exceed guidelines applicable to the water system or has the well been designated as contaminated by any government environmental/health agency?	Yes	No	(Unknown)
12.	Are you aware of any floor drains or sumps on the property?	Yes	No	(Unknown)
13.	Have any *hazardous substances* or *petroleum products,* unidentified waste materials, tires, automotive or industrial batteries or any other waste materials been dumped above grade, buried and/or burned on the *property*?	Yes	No	(Unknown)
14.	Are there any transformers, capacitors, or hydraulic equipment on the property which may contain PCBs?	Yes	No	(Unknown)
15.	Do you have any knowledge of *environmental liens* with respect to the *property*?	Yes	(No)	Unknown

16.	Have you been informed of the past or current existence of environmental violations with respect to the *property*?	Yes	(No)	Unknown
17.	Do you have any knowledge of any *environmental site assessments* of the *property*?	(Yes)	No	Unknown
18.	Do you know of any past, threatened, or pending lawsuits or administrative proceedings concerning a release or threatened release of any *hazardous substance* or *petroleum products* involving the *property*?	Yes	(No)	Unknown
19.	Is the purchase price or appraised value of the property significantly less than comparable properties in the vicinity?	Yes	(No)	Unknown

To the best of the undersigned knowledge, the above statements and facts are true and correct and to the best of the undersigned's actual knowledge no material facts have been suppressed or misstated.

This questionnaire was completed by:

NAME (PRINT): George Carpenter	**(SIGNATURE):**
TITLE: Vice President	**ADDRESS:** 3001 I Street, Suite 300, Sacramento, CA 95816
FIRM: Winn Communities	**DATE:** 5/9/19
PHONE NUMBER: 916-930-0925	**FAX NUMBER:** 916-930-0927
RELATIONSHIP TO SITE: Owner X	**or Owner's Representative** _____

APPENDIX B
EDR Aerial Photo Decade Package
EDR Historical Topographic Map Report
EDR–City Directory Abstract
Certified Sanborn® Map Report (No Coverage)

The Preserve Phase I ESA

12525 Douglas Road

Rancho Cordova, CA 95742

Inquiry Number: 5633265.8

April 26, 2019

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Site Name:

The Preserve Phase I ESA
12525 Douglas Road
Rancho Cordova, CA 95742
EDR Inquiry # 5633265.8

Client Name:

Youngdahl Consulting Group
1234 Glenhaven Court
El Dorado Hills, CA 95762
Contact: Dennis Eck

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	Scale	Details	Source
2016	1"=750'	Flight Year: 2016	USDA/NAIP
2012	1"=750'	Flight Year: 2012	USDA/NAIP
2009	1"=750'	Flight Year: 2009	USDA/NAIP
2006	1"=750'	Flight Year: 2006	USDA/NAIP
1998	1"=750'	Acquisition Date: August 16, 1998	USGS/DOQQ
1993	1"=750'	Flight Date: May 22, 1993	USDA
1984	1"=750'	Flight Date: June 08, 1984	USDA
1972	1"=750'	Flight Date: June 28, 1972	USDA
1966	1"=750'	Flight Date: August 05, 1966	USGS
1964	1"=750'	Flight Date: May 29, 1964	USDA
1957	1"=750'	Flight Date: August 24, 1957	USDA
1952	1"=750'	Flight Date: July 22, 1952	USGS
1937	1"=750'	Flight Date: August 16, 1937	USDA

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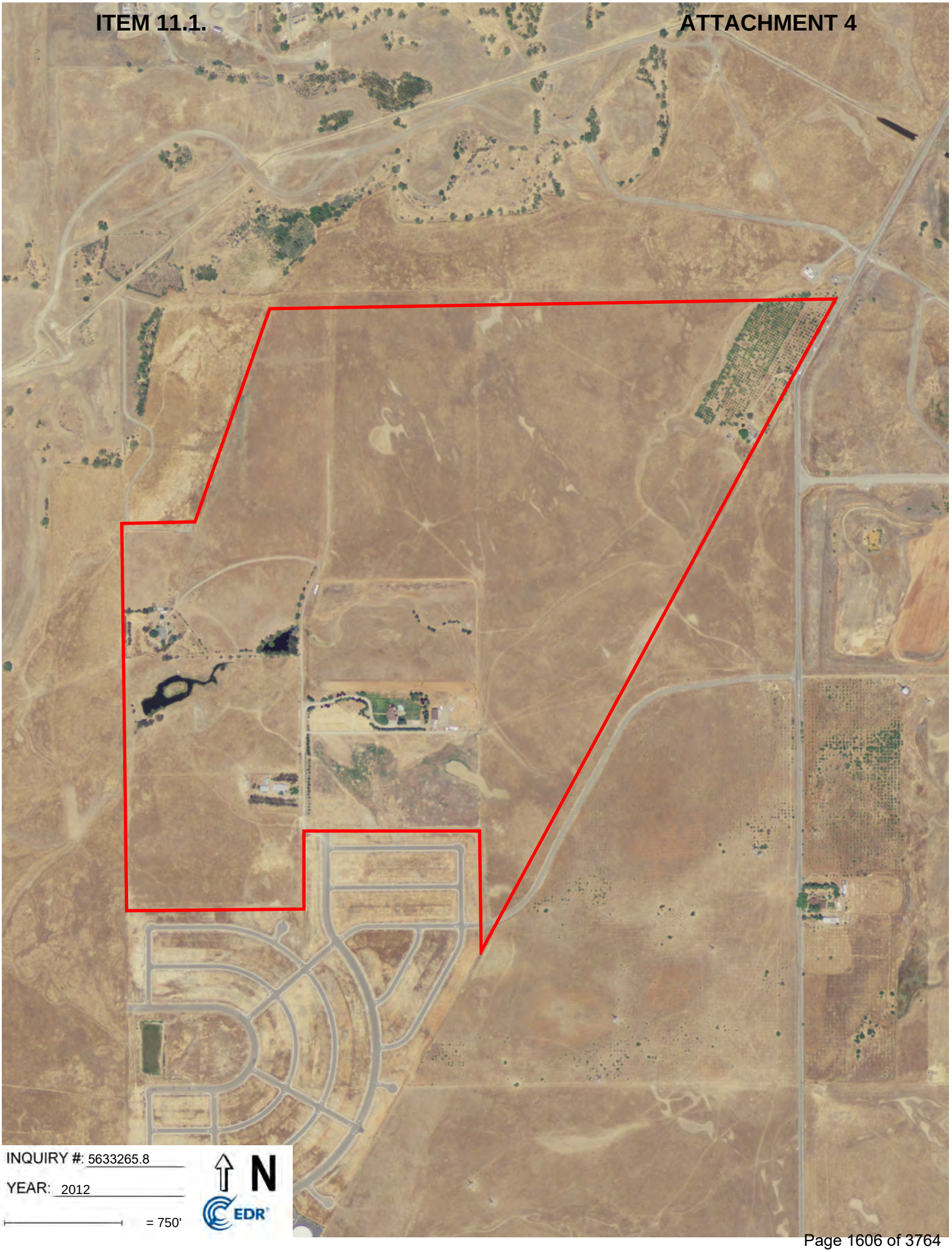
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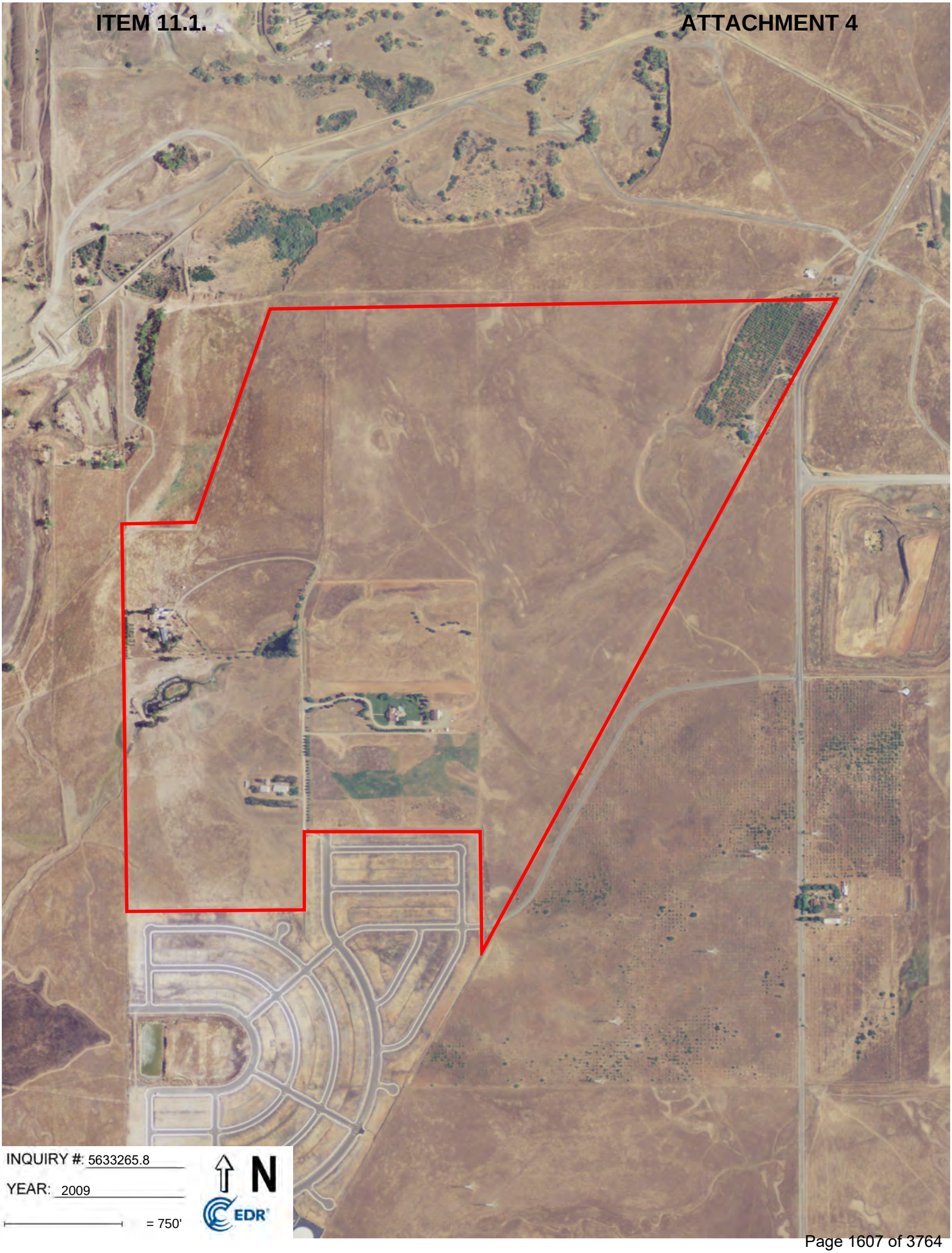
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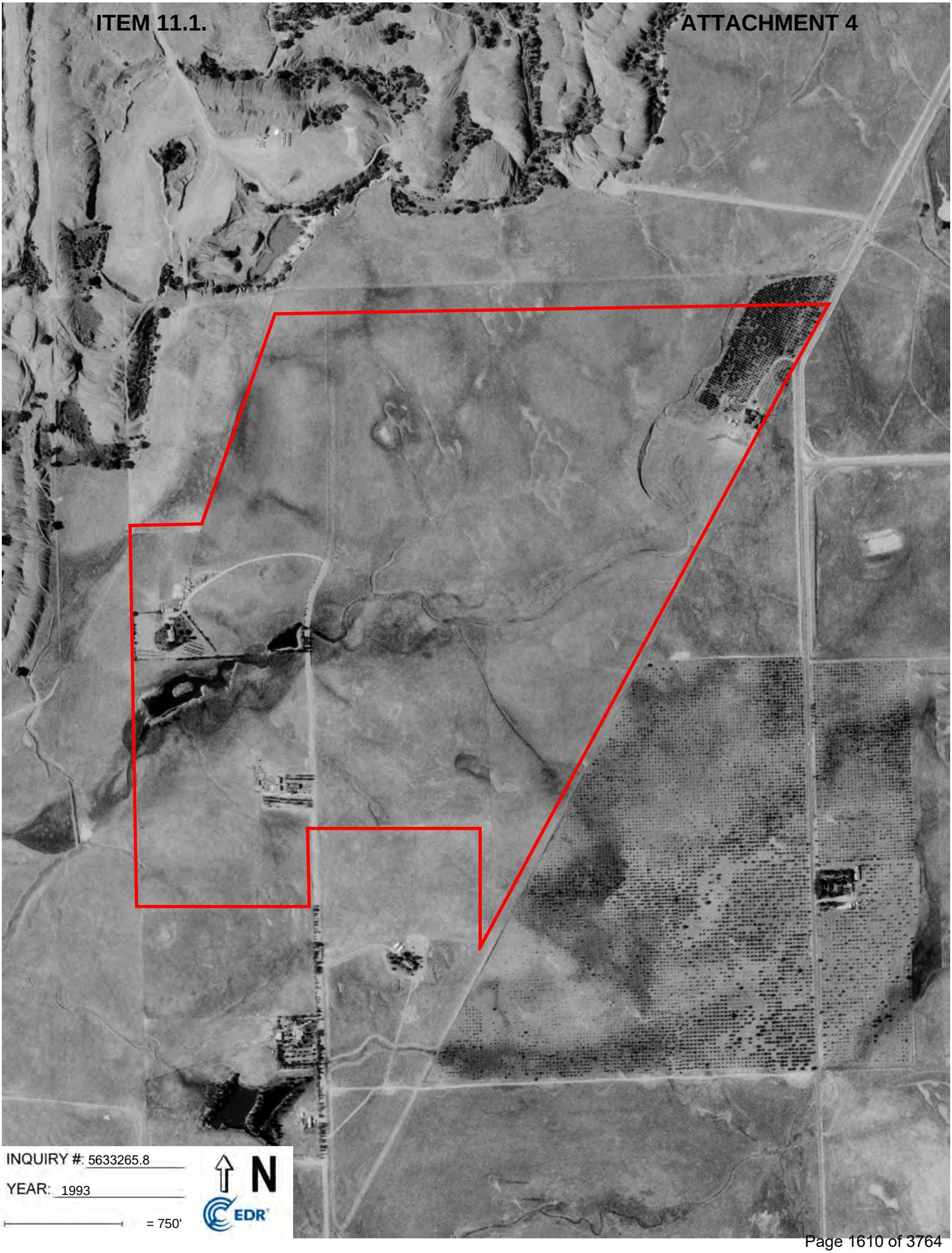

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EDR

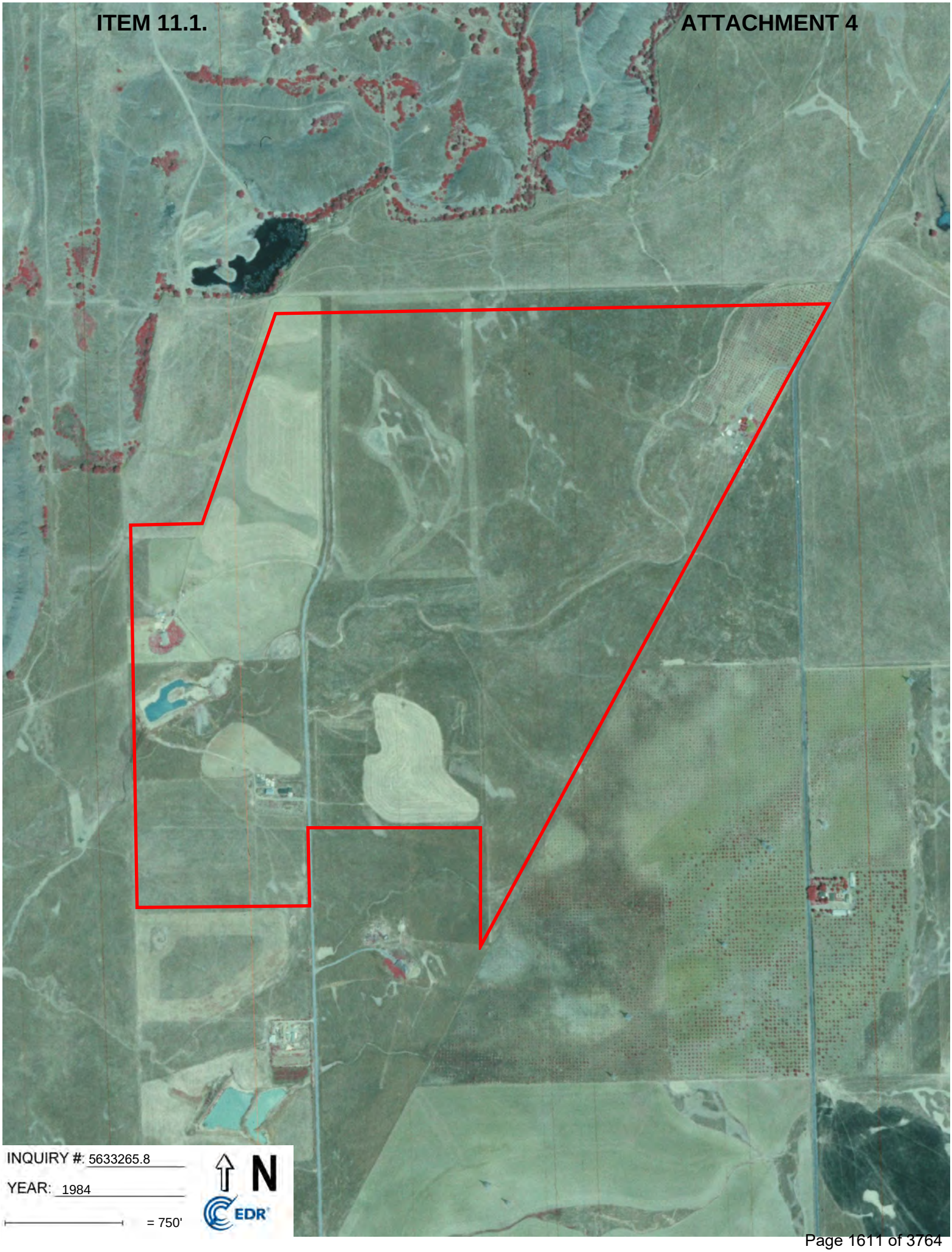

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YEAR: 2012
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EDR


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YEAR: 2009
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EDR


INQUIRY #: 5633265.8
YEAR: 2006
= 750'
N
EDR


INQUIRY #: 5633265.8
YEAR: 1998
= 750'
N
EDR


INQUIRY #: 5633265.8
YEAR: 1993
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EDR


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YEAR: 1984
= 750'
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EDR



INQUIRY #: 5633265.8

YEAR: 1972

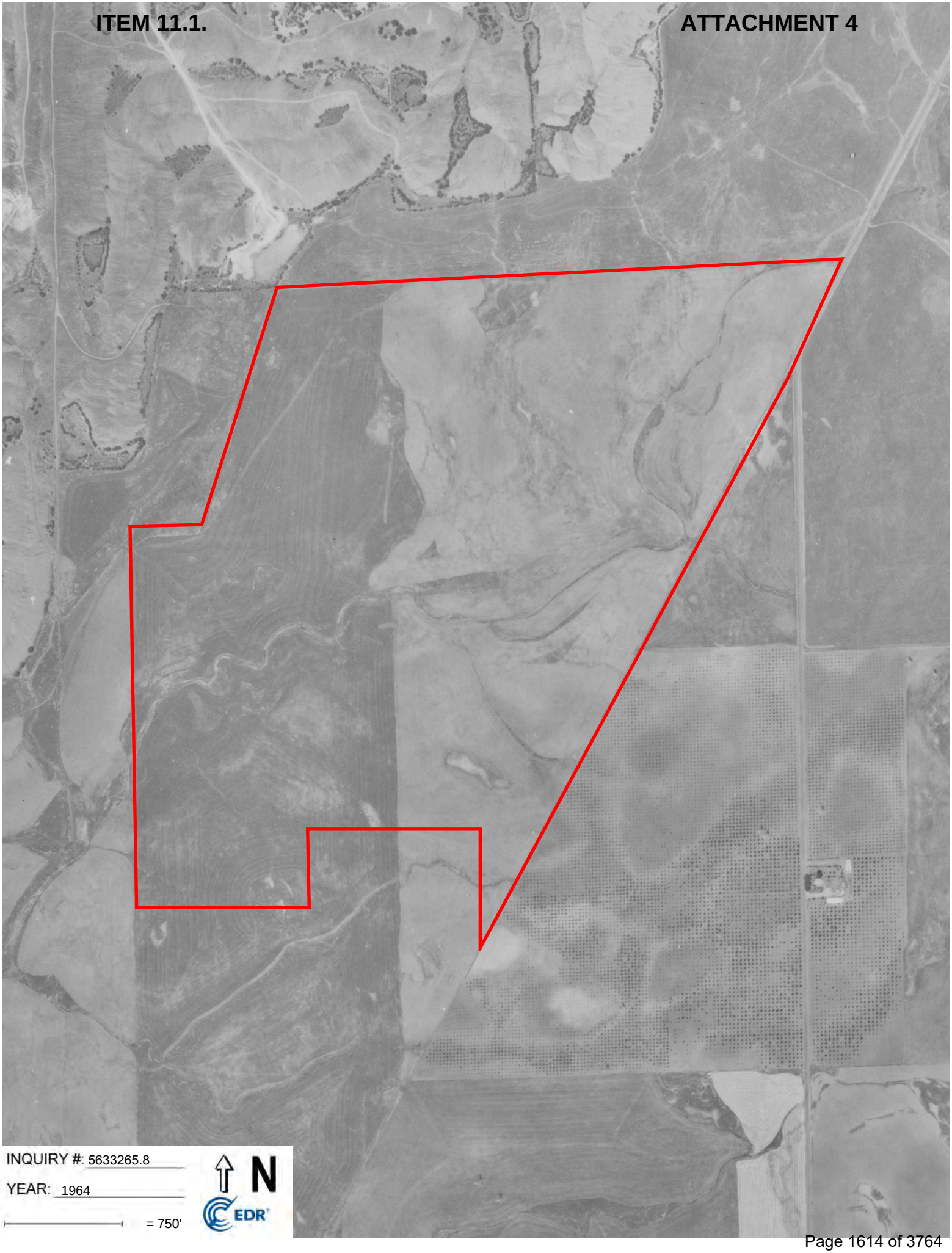
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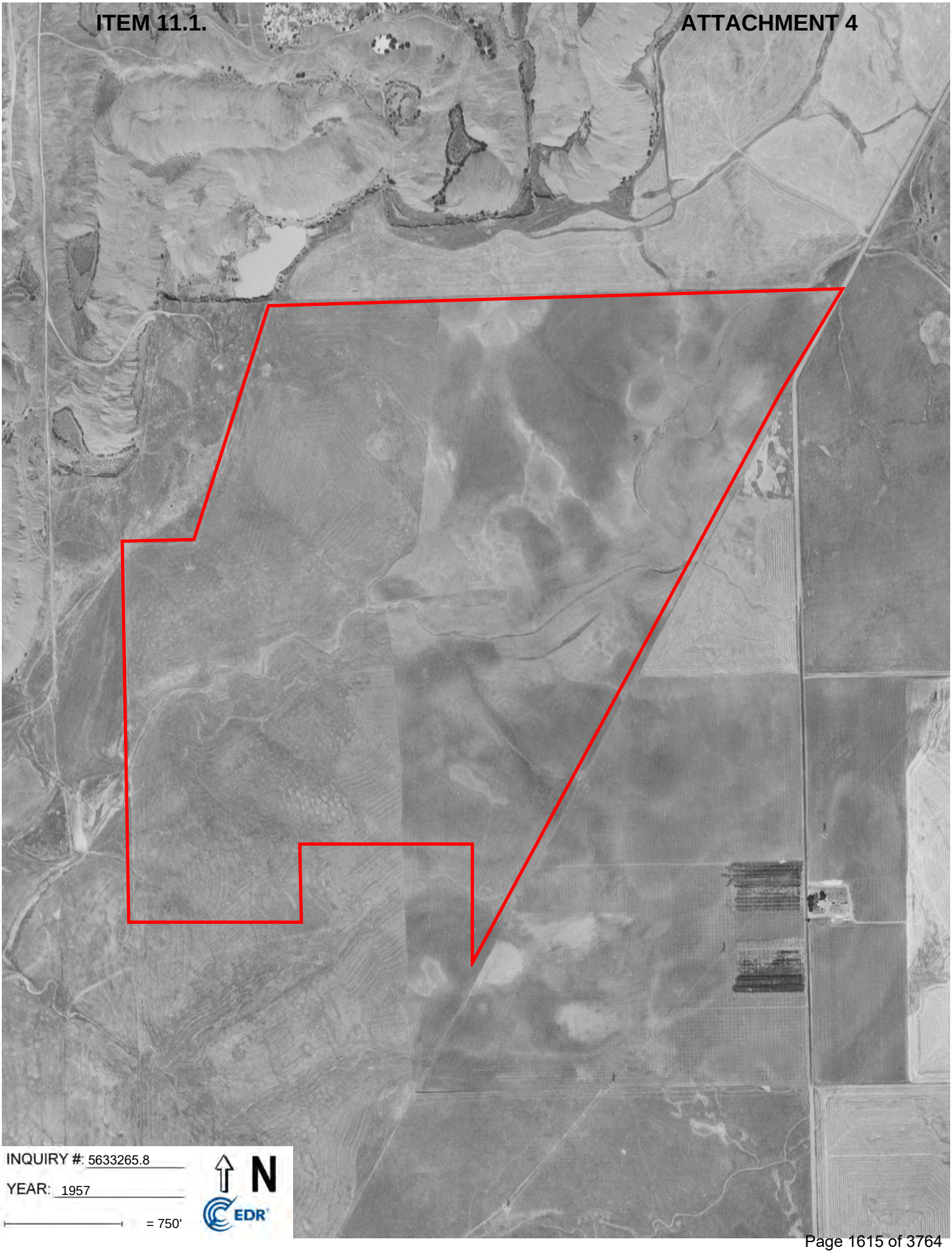
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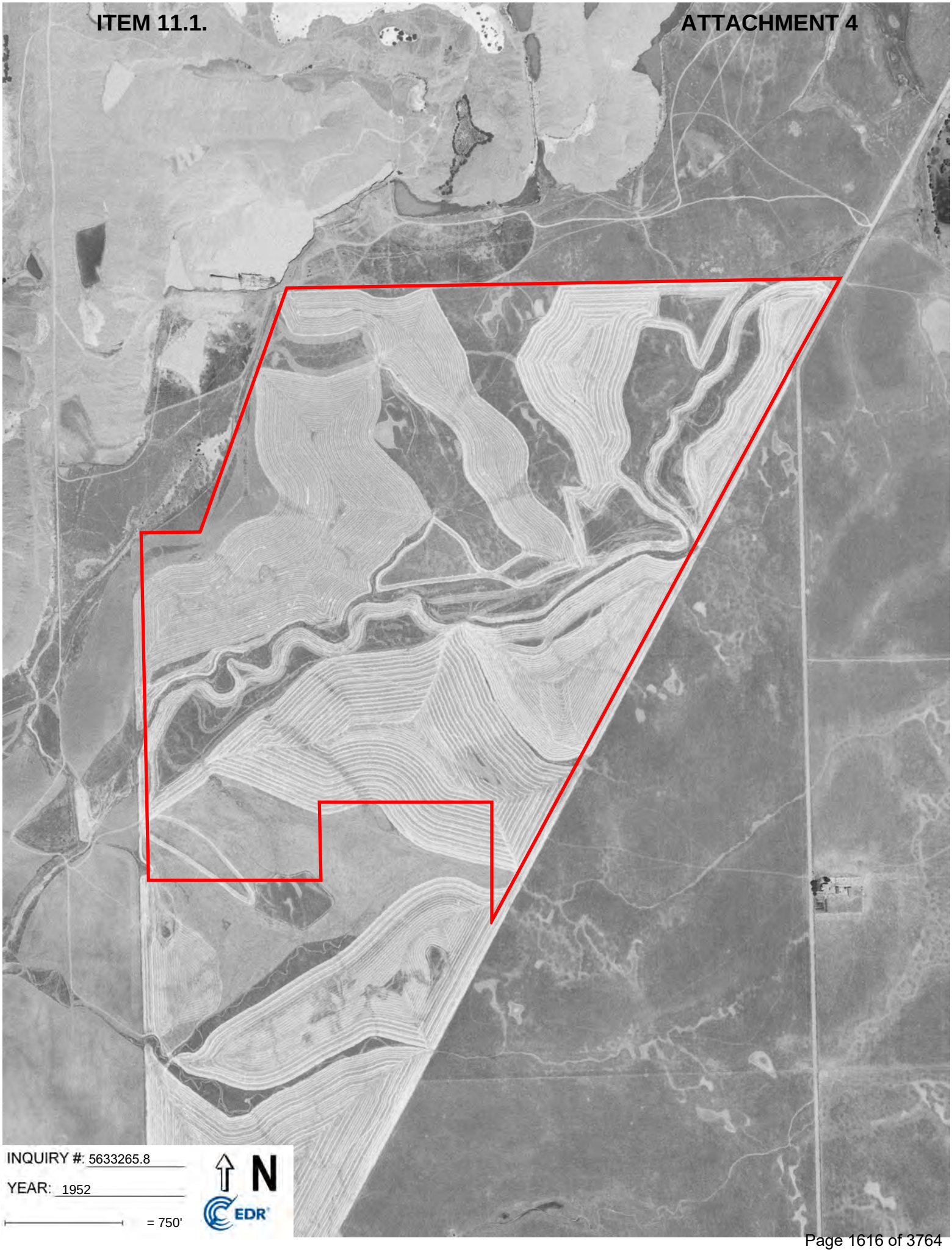
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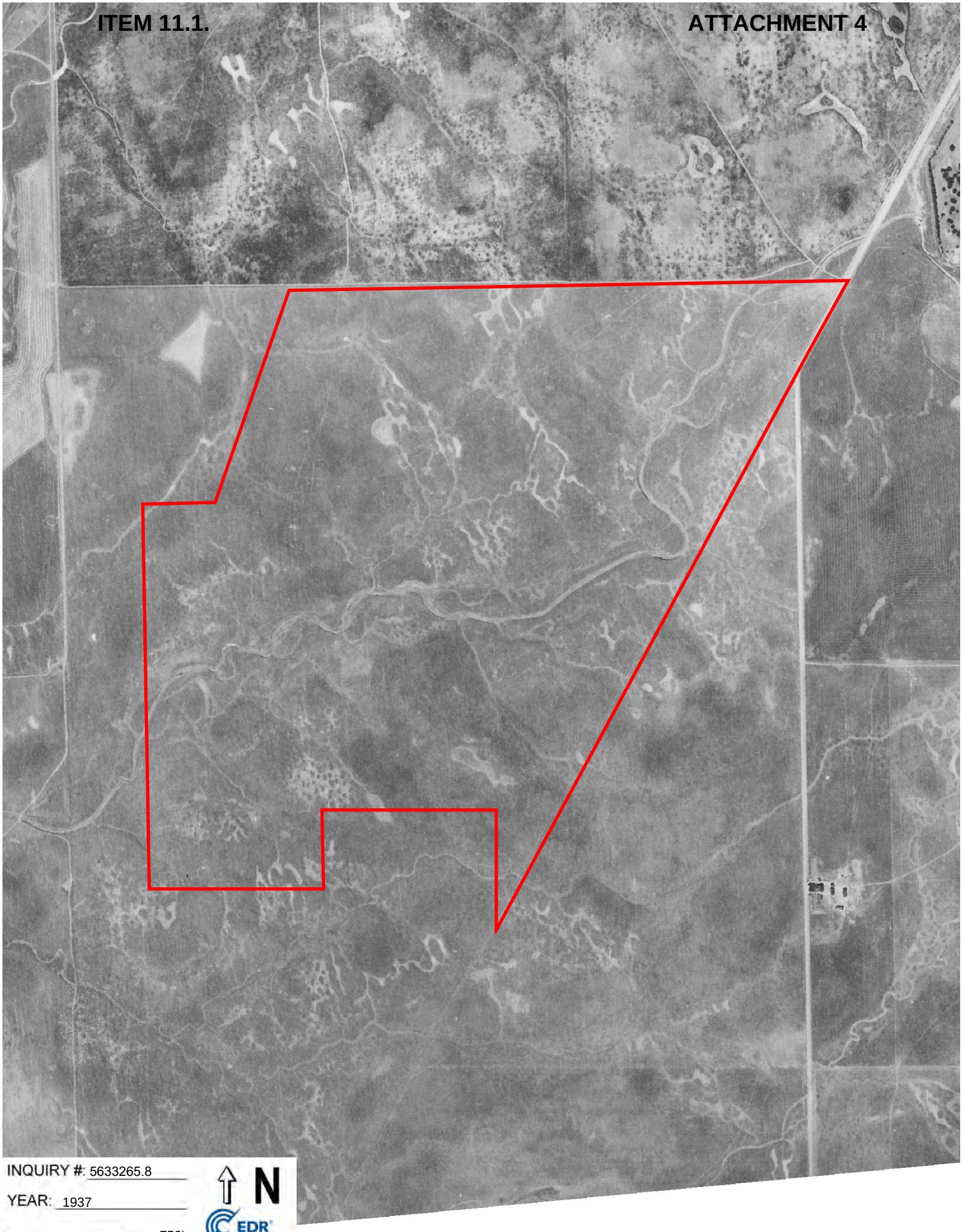
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EDR


INQUIRY #: 5633265.8
YEAR: 1964
= 750'
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EDR


INQUIRY #: 5633265.8
YEAR: 1957
= 750'
N
EDR


INQUIRY #: 5633265.8
YEAR: 1952
= 750'
N
EDR



INQUIRY #: 5633265.8

YEAR: 1937

= 750'

N

EDR

The Preserve Phase I ESA
12525 Douglas Road
Rancho Cordova, CA 95742

Inquiry Number: 5633265.4
April 26, 2019

EDR Historical Topo Map Report

with QuadMatch™

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

Site Name:	Client Name:
The Preserve Phase I ESA	Youngdahl Consulting Group
12525 Douglas Road	1234 Glenhaven Court
Rancho Cordova, CA 95742	El Dorado Hills, CA 95762
EDR Inquiry # 5633265.4	Contact: Dennis Eck

EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Youngdahl Consulting Group were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDRs Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:		*Coordinates:*	
P.O.#	PE19-200	**Latitude:**	38.575586 38° 34' 32" North
Project:	The Preserve Phase I ESA	**Longitude:**	-121.196464 -121° 11' 47" West
		UTM Zone:	Zone 10 North
		UTM X Meters:	657105.85
		UTM Y Meters:	4271222.73
		Elevation:	243.33' above sea level

Maps Provided:

2012	1908
1980	1893
1975	1892
1967	1891
1954	
1944	
1941	
1916	

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Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2012 Source Sheets



Buffalo Creek
2012
7.5-minute, 24000

1980 Source Sheets



Buffalo Creek
1980
7.5-minute, 24000
Aerial Photo Revised 1978

1975 Source Sheets



Buffalo Creek
1975
7.5-minute, 24000
Aerial Photo Revised 1975

1967 Source Sheets

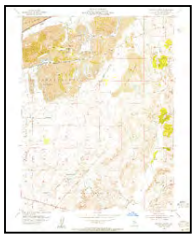


Buffalo Creek
1967
7.5-minute, 24000
Aerial Photo Revised 1966

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1954 Source Sheets



Buffalo Creek
1954
7.5-minute, 24000
Aerial Photo Revised 1952

1944 Source Sheets



Folsom
1944
15-minute, 62500

1941 Source Sheets



Folsom
1941
15-minute, 62500

1916 Source Sheets



Buffalo Creek
1916
7.5-minute, 31680

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

1908 Source Sheets



Buffalo Creek
1908
7.5-minute, 31680

1893 Source Sheets



Sacramento
1893
30-minute, 125000

1892 Source Sheets



Sacramento
1892
30-minute, 125000

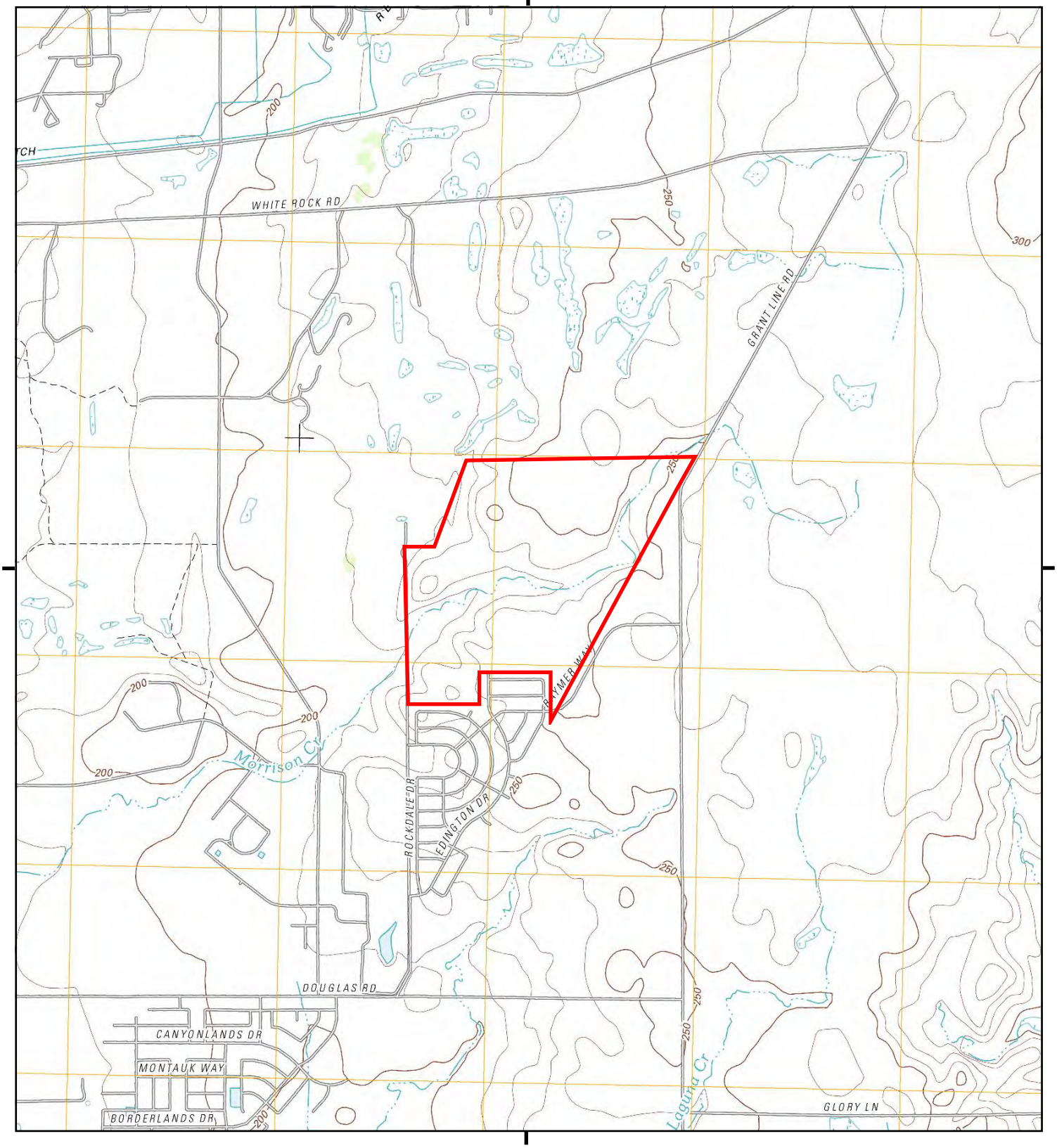
1891 Source Sheets



Sacramento
1891
30-minute, 125000

Historical Topo Map

2012



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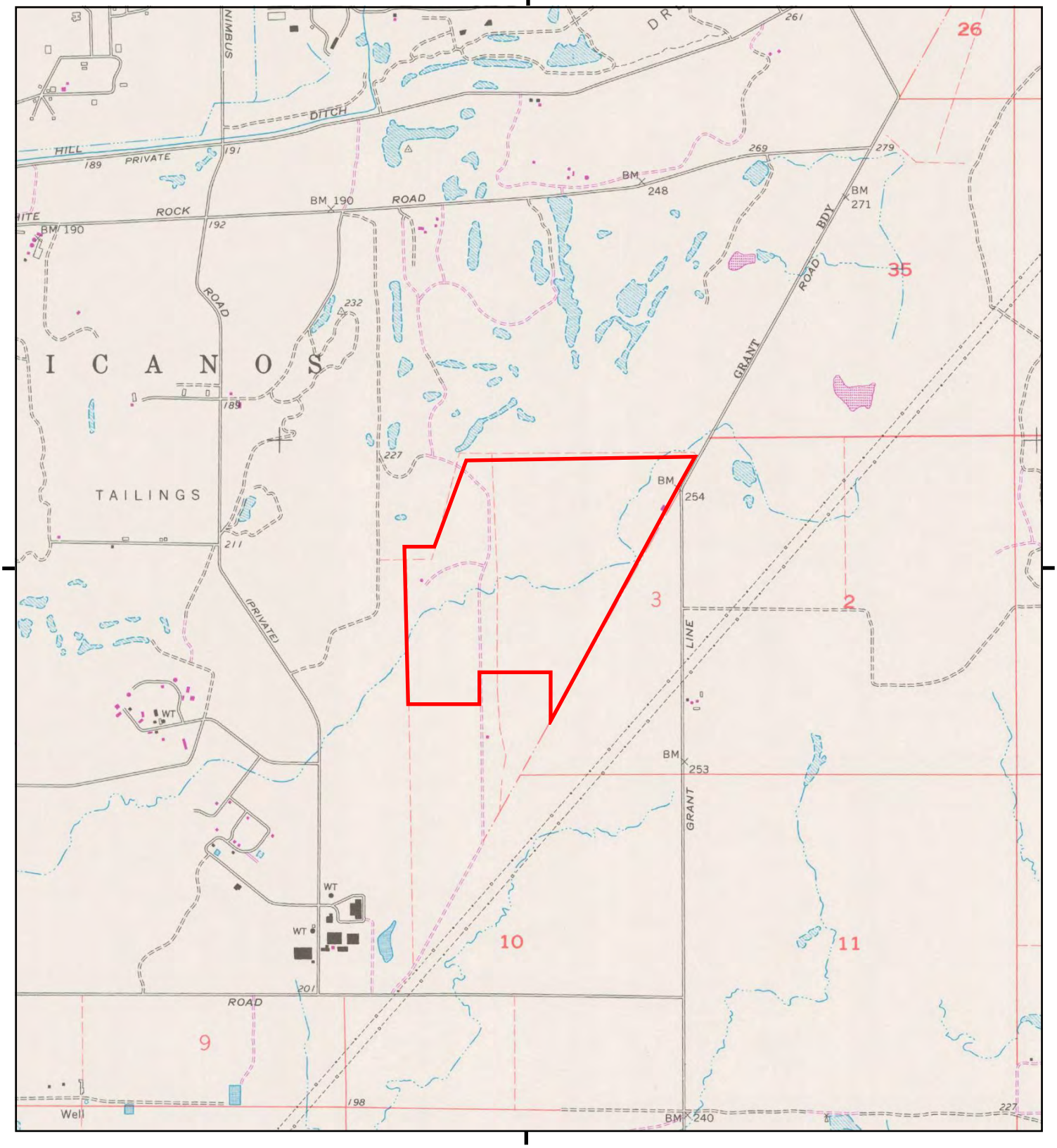
NW N NE
W E
SW S SE

TP, Buffalo Creek, 2012, 7.5-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N

1980



This report includes information from the following map sheet(s).

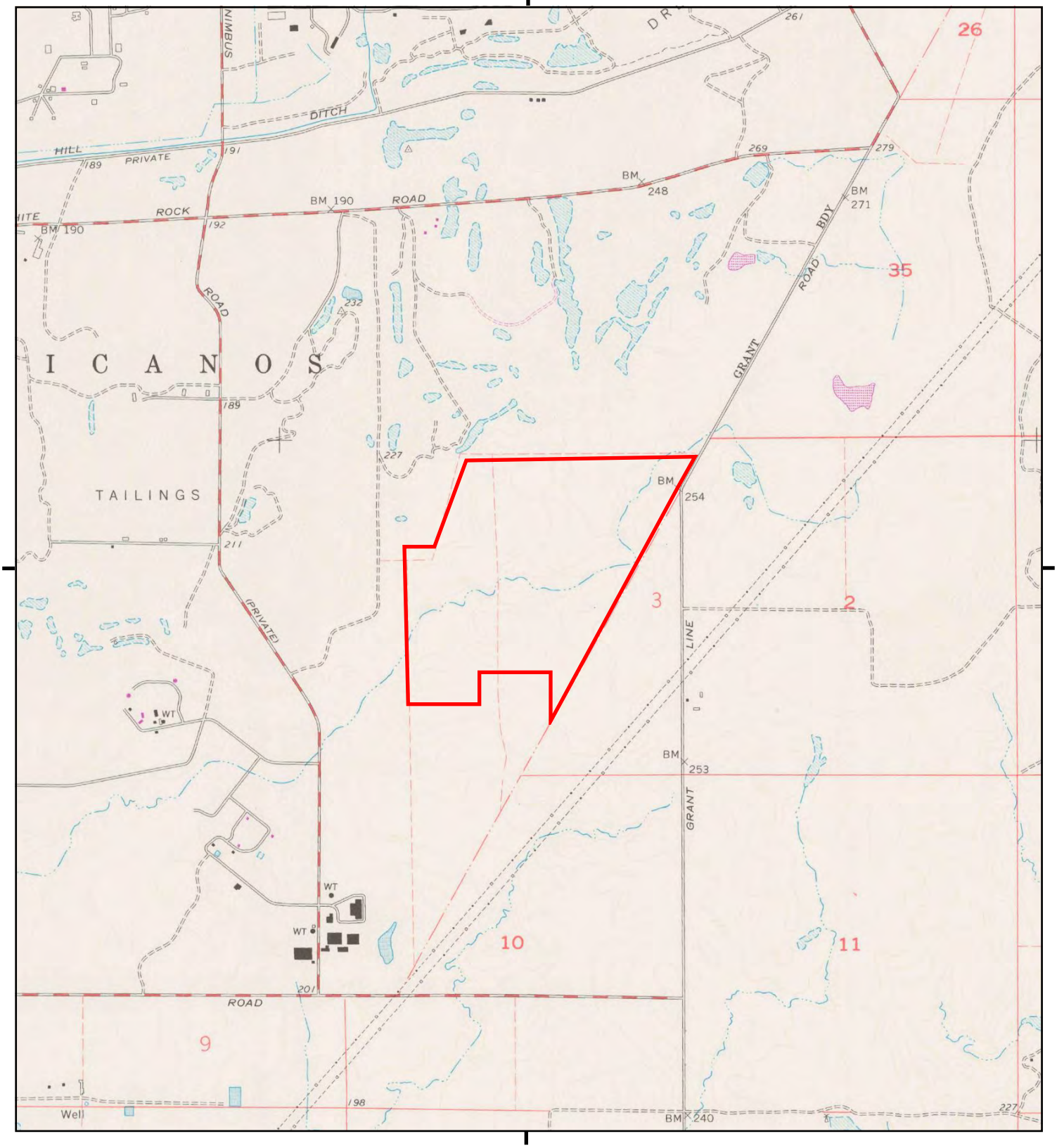
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Buffalo Creek, 1980, 7.5-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N



This report includes information from the following map sheet(s).

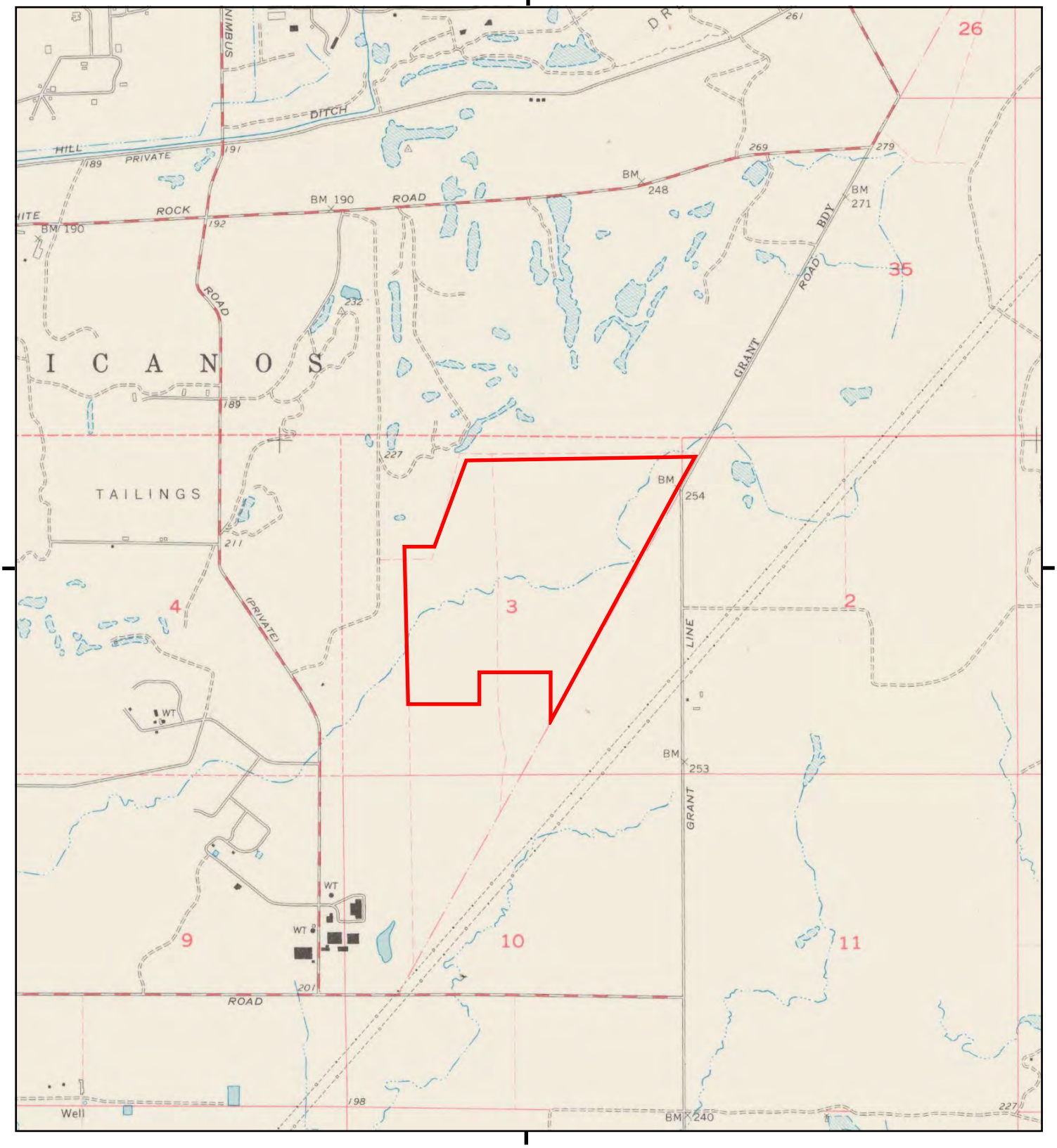
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Buffalo Creek, 1975, 7.5-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N



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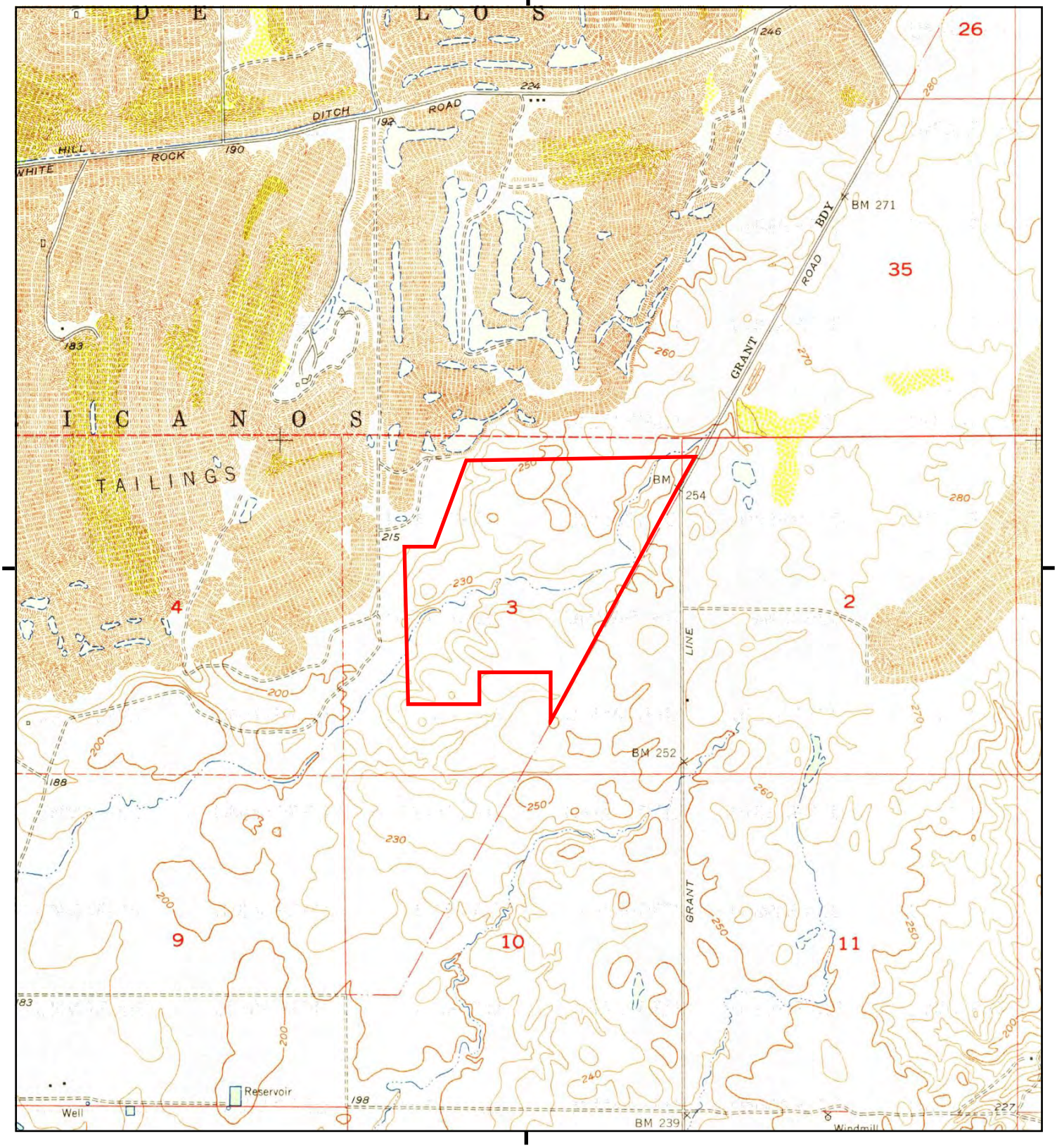
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Buffalo Creek, 1967, 7.5-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N



This report includes information from the following map sheet(s).

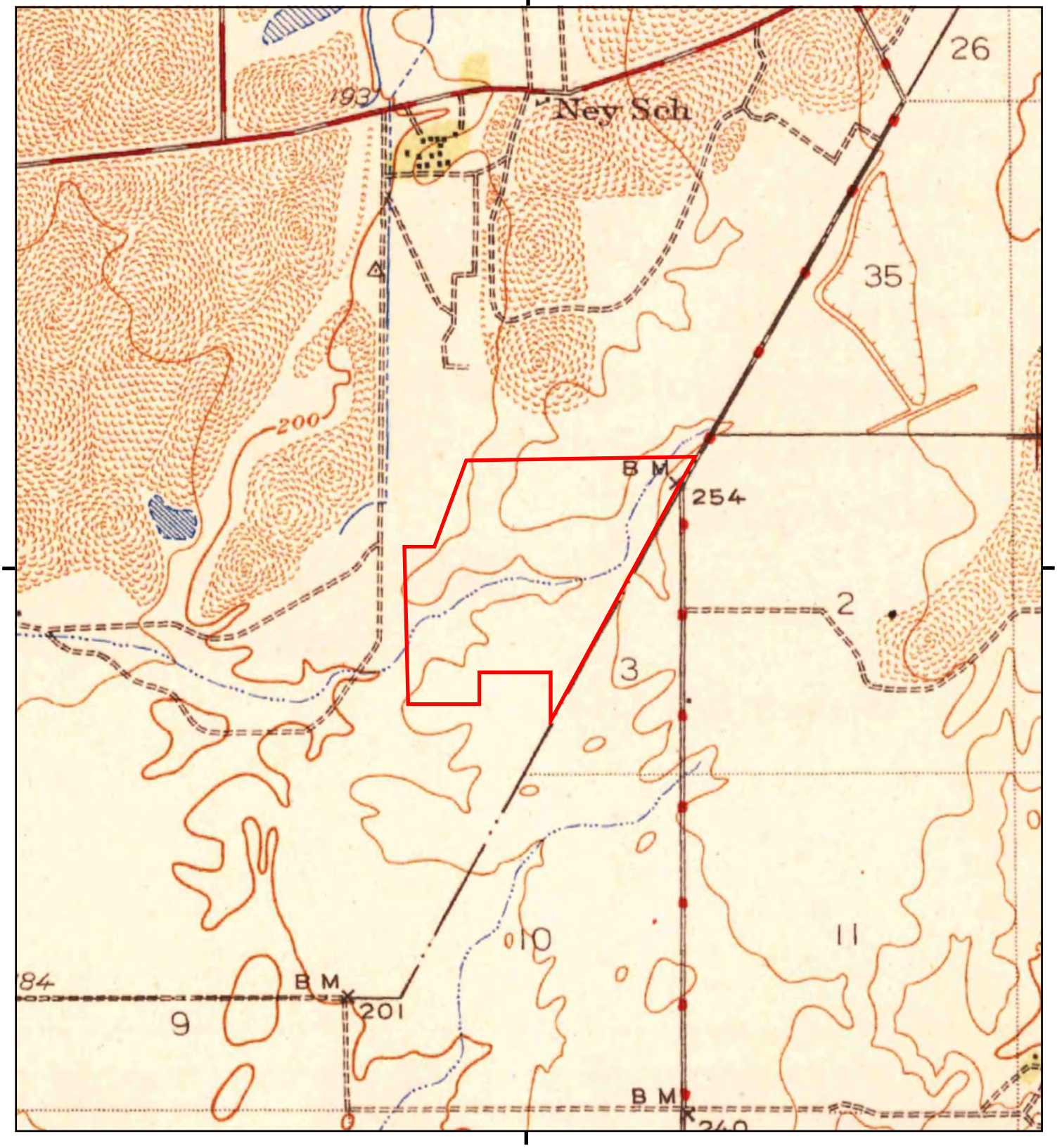
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NW N NE
W E
SW S SE

TP, Buffalo Creek, 1954, 7.5-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N



This report includes information from the following map sheet(s).

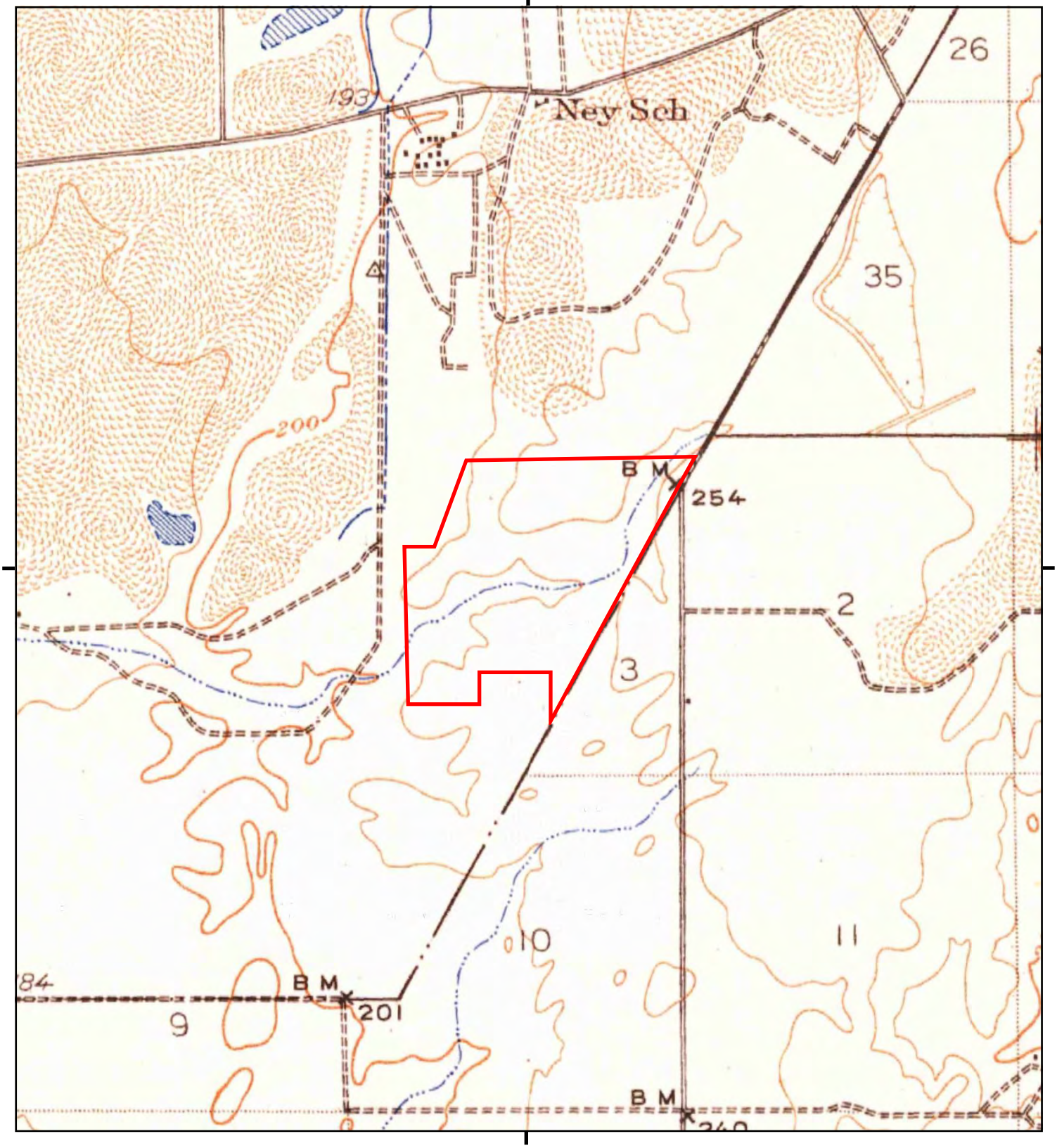
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Folsom, 1944, 15-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N



This report includes information from the following map sheet(s).

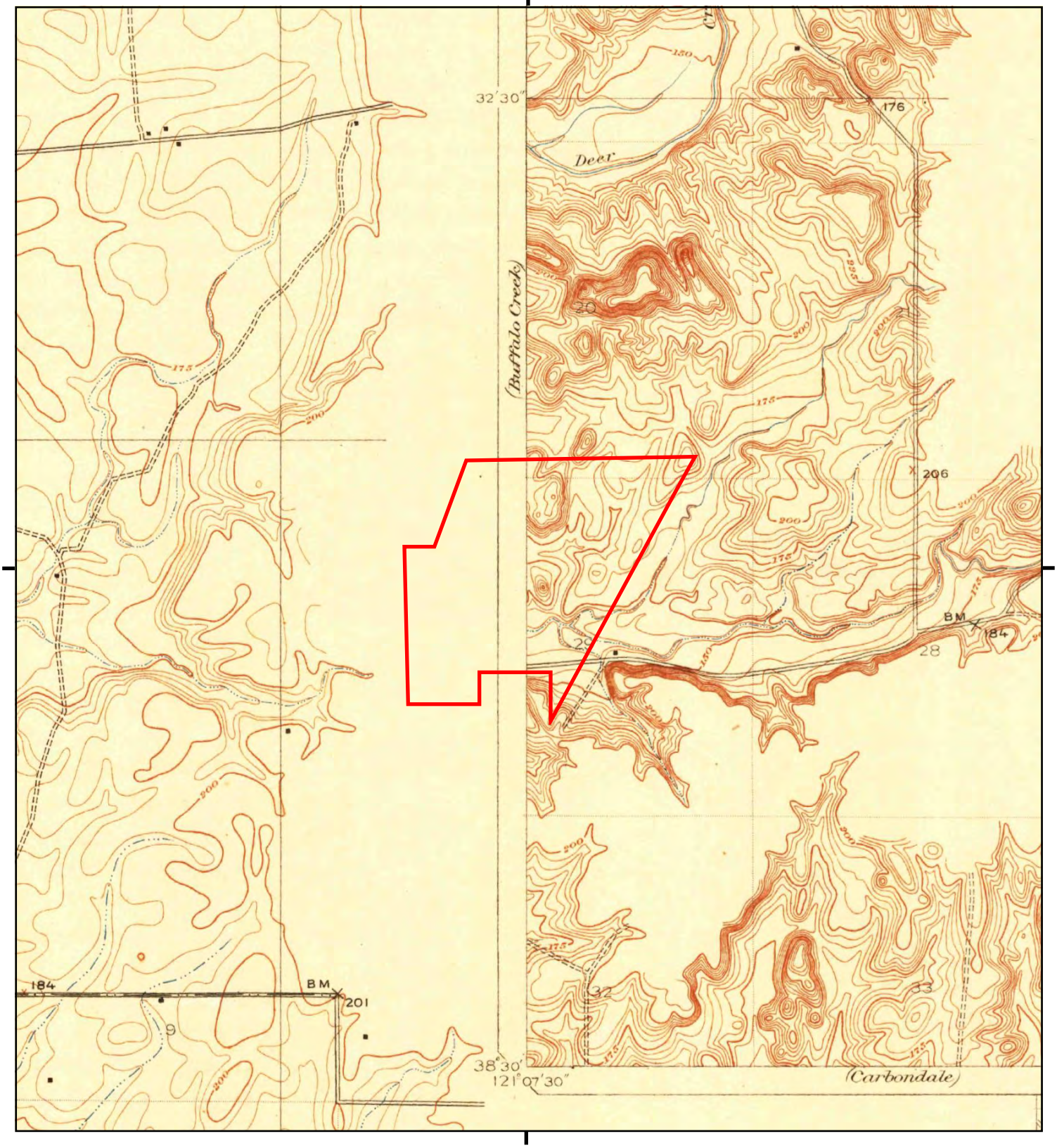
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Folsom, 1941, 15-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N



This report includes information from the following map sheet(s).

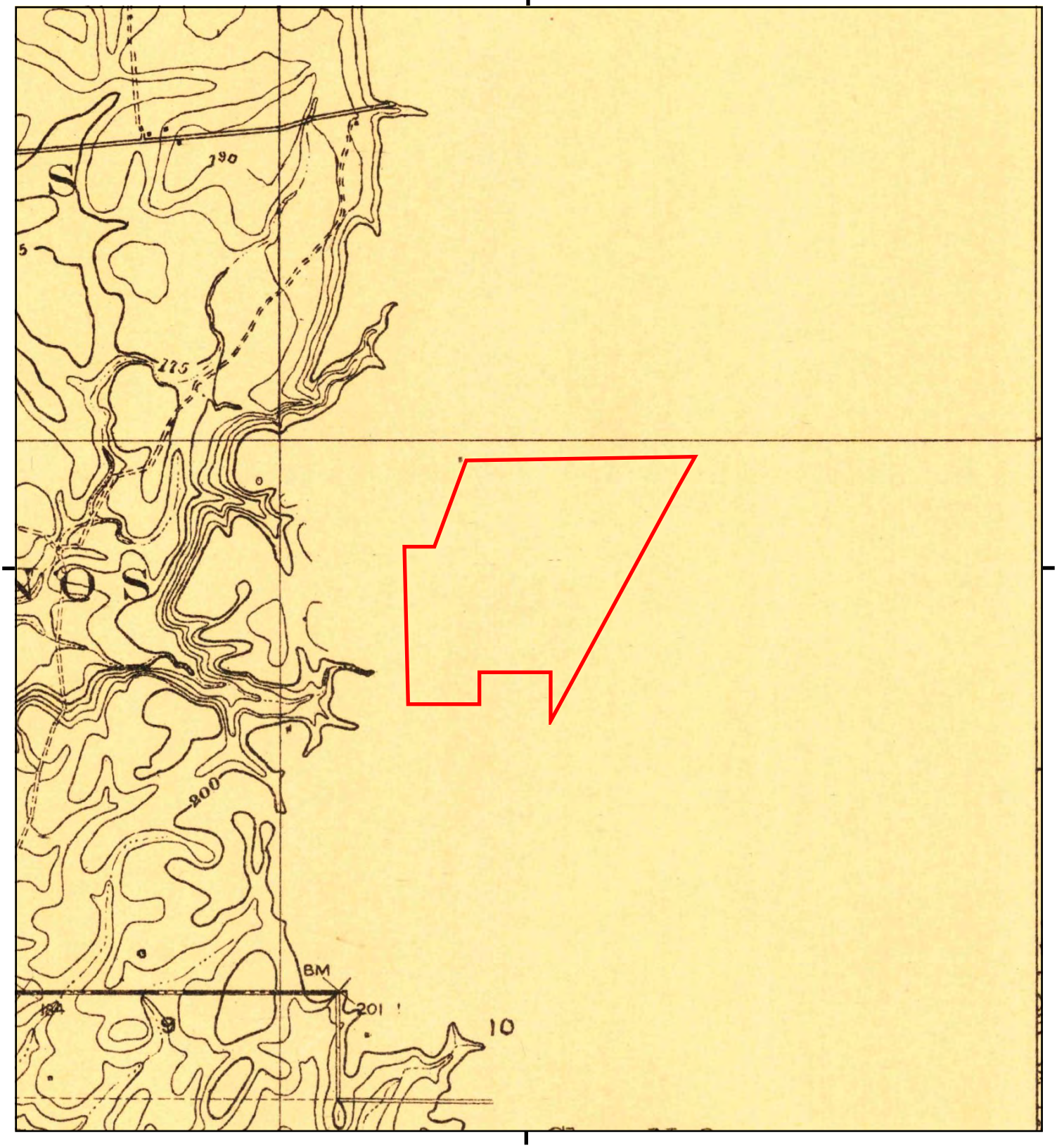
0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Buffalo Creek, 1916, 7.5-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N



This report includes information from the following map sheet(s).

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W E
SW S SE

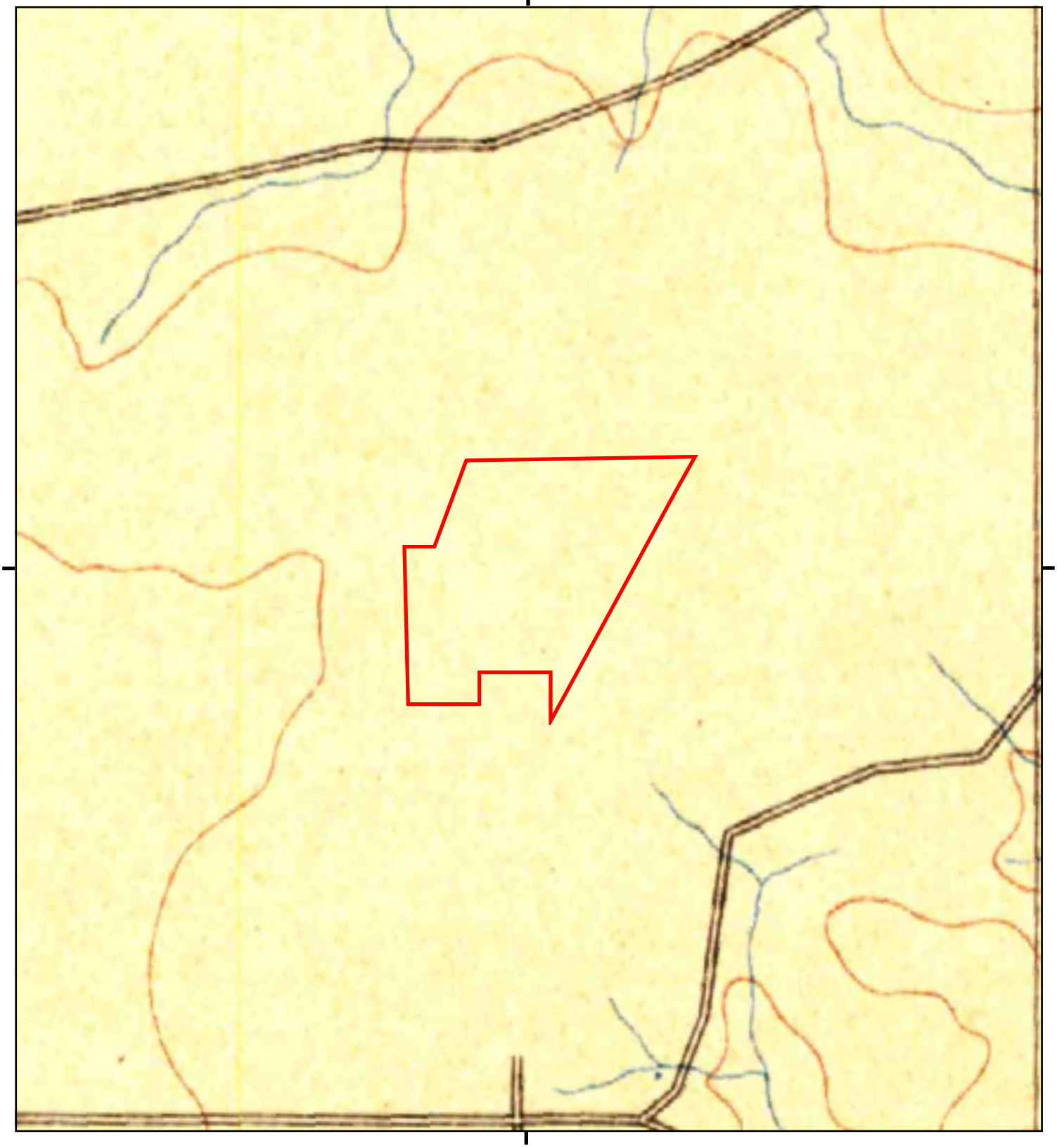
TP, Buffalo Creek, 1908, 7.5-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

1893



This report includes information from the following map sheet(s).

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NW N NE
W E
SW S SE

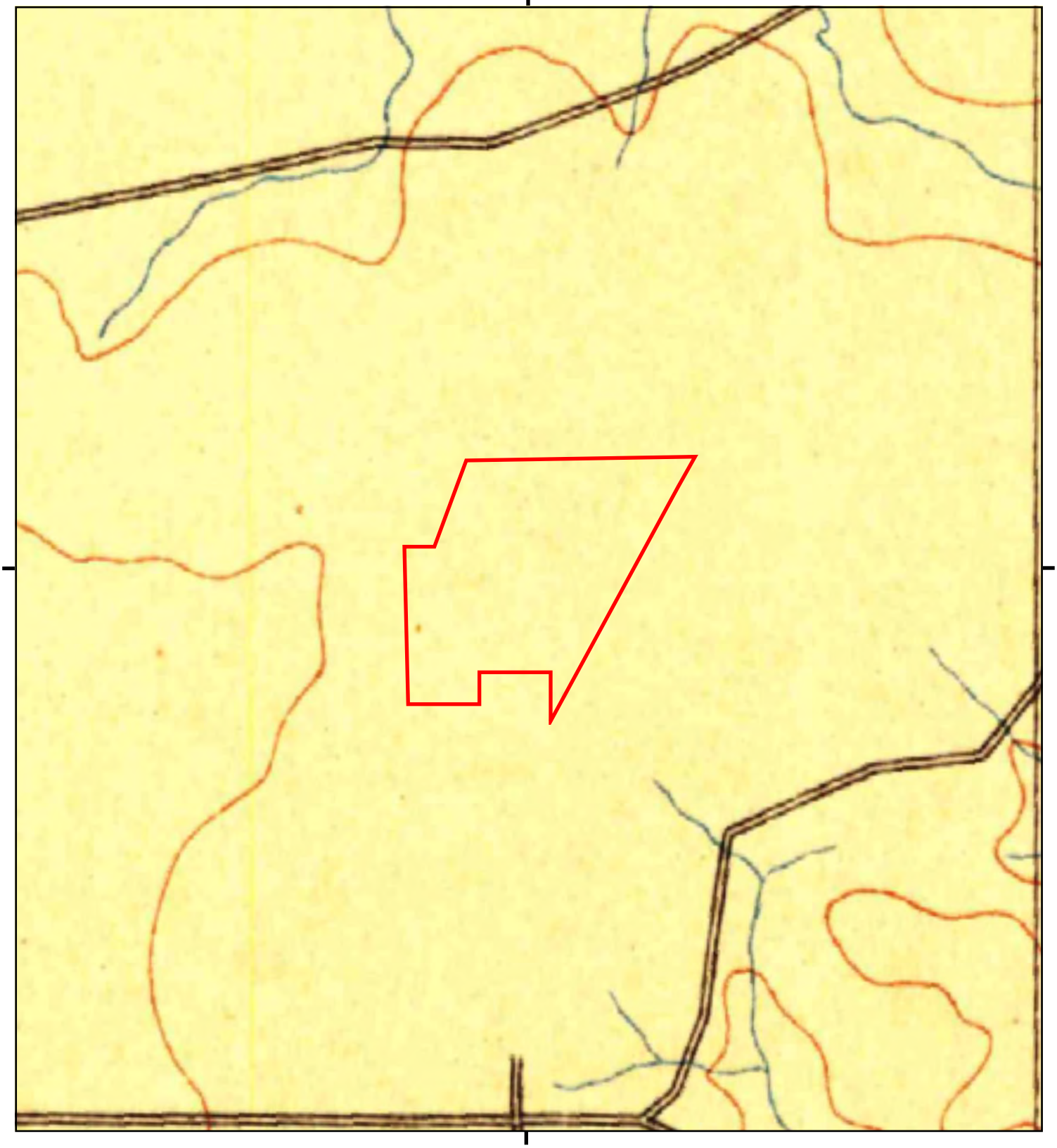
TP, Sacramento, 1893, 30-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map

1892



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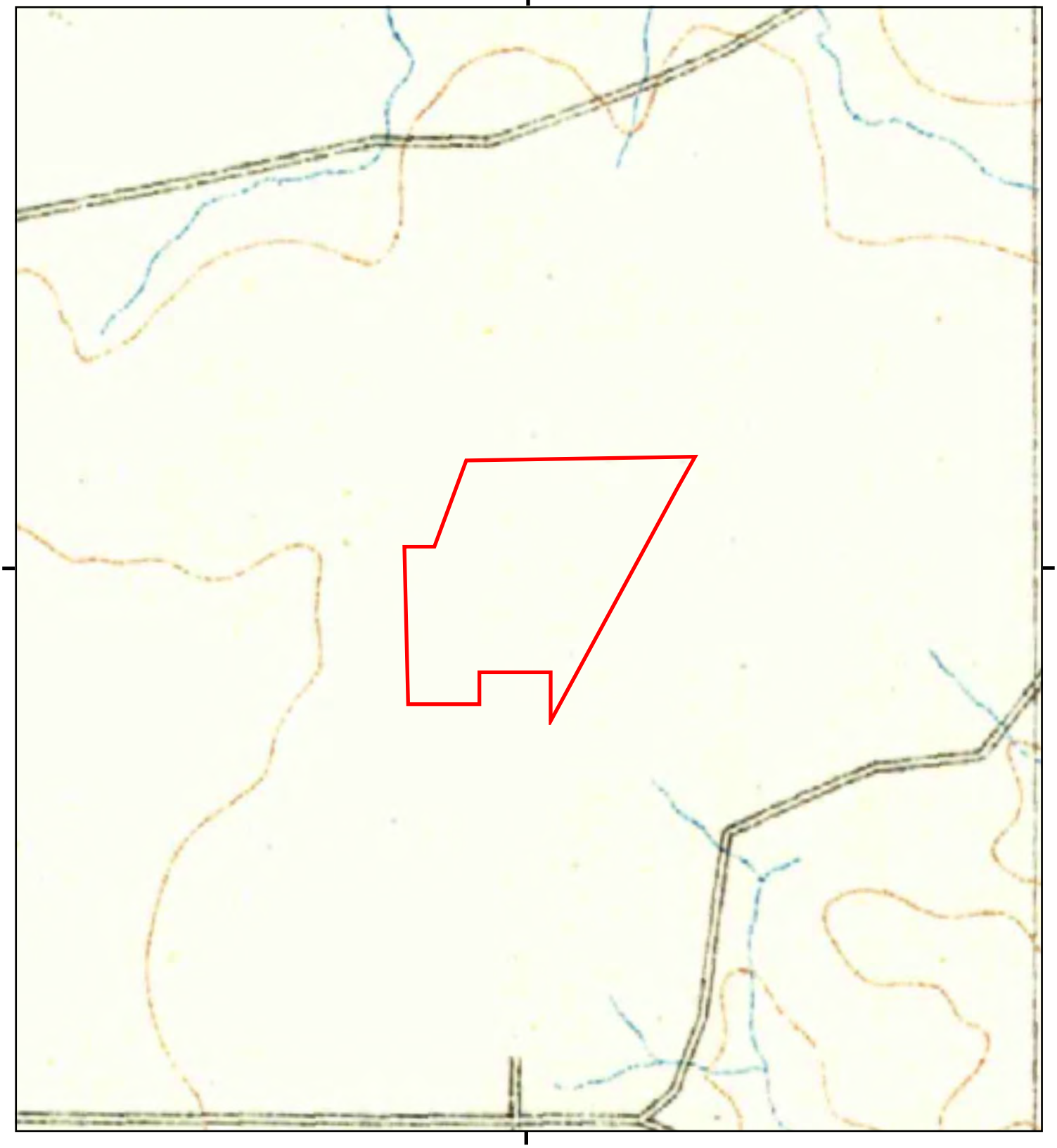
NW N NE
W E
SW S SE

TP, Sacramento, 1892, 30-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N

Historical Topo Map



This report includes information from the following map sheet(s).

0 Miles 0.25 0.5 1 1.5

NW N NE
W E
SW S SE

TP, Sacramento, 1891, 30-minute

SITE NAME: The Preserve Phase I ESA
ADDRESS: 12525 Douglas Road
Rancho Cordova, CA 95742
CLIENT: Youngdahl Consulting Group

N

The Preserve Phase I ESA
12525 Douglas Road
Rancho Cordova, CA 95742

Inquiry Number: 5633265.5
April 29, 2019

The EDR-City Directory Image Report

Environmental Data Resources Inc
6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION

Executive Summary

Findings

City Directory Images

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with any questions or comments.

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EXECUTIVE SUMMARY

DESCRIPTION

Environmental Data Resources, Inc.'s (EDR) City Directory Report is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's City Directory Report includes a search of available city directory data at 5 year intervals.

RECORD SOURCES

EDR's Digital Archive combines historical directory listings from sources such as Cole Information and Dun & Bradstreet. These standard sources of property information complement and enhance each other to provide a more comprehensive report.

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Data by infoUSA®

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RESEARCH SUMMARY

The following research sources were consulted in the preparation of this report. A check mark indicates where information was identified in the source and provided in this report.

Year	Target Street	Cross Street	Source
2014	☑	☑	EDR Digital Archive
2010	☑	☑	EDR Digital Archive
2005	☑	☑	EDR Digital Archive
2000	☑	☑	EDR Digital Archive
1994	☑	☑	Haines Criss-Cross Directory
1989	☑	☑	Haines Criss-Cross Directory
1985	☑	☑	Haines Criss-Cross Directory
1980	☑	☑	Haines Criss-Cross Directory
1977	☐	☐	HAINES AND COMPANY
1971	☐	☐	HAINES AND COMPANY

FINDINGS

TARGET PROPERTY STREET

12525 Douglas Road
Rancho Cordova, CA 95742

Year	CD Image	Source	
DOUGLAS RD			
2014	pg A1	EDR Digital Archive	
2010	pg A3	EDR Digital Archive	
2005	pg A5	EDR Digital Archive	
2000	pg A7	EDR Digital Archive	
1994	pg A9	Haines Criss-Cross Directory	
1989	pg A11	Haines Criss-Cross Directory	
1985	pg A13	Haines Criss-Cross Directory	
1980	pg A15	Haines Criss-Cross Directory	
1977	-	HAINES AND COMPANY	Target and Adjoining not listed in Source
1971	-	HAINES AND COMPANY	Target and Adjoining not listed in Source

FINDINGS

CROSS STREETS

Year	*CD Image*	*Source*	
GRANT LINE RD			
2014	pg. A2	EDR Digital Archive	
2010	pg. A4	EDR Digital Archive	
2005	pg. A6	EDR Digital Archive	
2000	pg. A8	EDR Digital Archive	
1994	pg. A10	Haines Criss-Cross Directory	
1989	pg. A12	Haines Criss-Cross Directory	
1985	pg. A14	Haines Criss-Cross Directory	
1980	pg. A16	Haines Criss-Cross Directory	
GRANTLINE RD			
1977	-	HAINES AND COMPANY	Street not listed in Source
1971	-	HAINES AND COMPANY	Street not listed in Source

City Directory Images

DOUGLAS RD 2014

11499	INSURANCE AUTO AUCTIONS INC
	WEST COAST AUTO AUCTIONS INC
11551	ADVANCED SECURITY INSTITUTE
	MARKSMANSHIP CONSULTANTS INC
12535	FAGUNDES, ANTONIO V
12565	OCCUPANT UNKNOWN,

GRANT LINE RD 2014

3417	A TEICHERT & SON INC
3450	TAMRA HARPER
3601	RANCH, TRACY
4232	OCCUPANT UNKNOWN,

DOUGLAS RD 2010

11430 SUNRISE VALLEY RANCH
11499 INSURANCE AUTO AUCTIONS INC
K & S AUTO TRUCK & TRACTOR
11551 ADVANCED SECURITY INSTITUTE
MARKSMANSHIP CONSULTANTS INC
12525 WHITLOW, MARCIE A
12535 HOGGE, KELLY
12565 3213 FITZGERALD LLC
MCMULLEN, SCOTT S
ROCKFORD FAMILY PROPERTIES LLC

GRANT LINE RD 2010

3417	A TEICHERT & SON INC
3450	TAMRA HARPER
3601	TRACY, JOHN J
4232	OCCUPANT UNKNOWN,

DOUGLAS RD 2005

11430	JONES, BRENT G
	SUNRISE VALLEY RANCH
11485	HEALEY BRIAN R ENTERPRISES
11499	GILBERT ROSSMAN SECURITY
	INSURANCE AUTO AUCTIONS INC
11505	SACRAMENTO HEAT TREATING
11551	MARKSMANSHIP CONSULTANTS INC
12515	CUPP, ARCHEL C
12525	OCCUPANT UNKNOWN,
12535	FAGUNDES, LYNNE M
12565	DIVINE, DAVID R
12575	GRIFFIN CAPITAL ASHWOOD SOUTHF
	WEIDINGER, JIM D

GRANT LINE RD 2005

3417 TEICHERT AGGREGATES CORP
3450 OCCUPANT UNKNOWN,
3601 TRACY, JOHN J
4232 OCCUPANT UNKNOWN,
PAUPERS PALACE ANTIQUES
VALHALLA VALLEY VINEYARDS INC
4234 WARD, CHRIS

DOUGLAS RD 2000

11430	RUSSELL, SHAWNA
	SUNRISE VALLEY RANCH
11485	HEALEY BRIAN R ENTERPRISES
11499	HEALEY AUTOMOTIVE INC
	INSURANCE AUTO AUCTIONS INC
	STATEWIDE AUTO TRANSPORT
	UNITED ROAD SERVICES INC
11505	SACRAMENTO HEAT TREATING
11535	ALLSTATE INSURANCE COMPANY
11551	MARKSMANSHIP CONSULTANTS INC
12525	LEHMAN, DANIEL L
12535	WEISKER, B
12565	OCCUPANT UNKNOWN,
12575	JAMES, D W
	WEIDINGER, JIM
	WESTERN CMPT & COMM SYSTEMS

GRANT LINE RD 2000

3417	AMERICAN RIVER AGGREGATES
3450	HUSSMAN, JACKIE L
3601	TRACY, JOHN J
4232	WARD, CHRIS

DOUGLAS RD 1994

DOUGLAS RD 95742
RANCHO CORDOVA

WEALTH CODE 5

11430	*GROESBECK TRAINING	351-0855 +4
11499	*CHEVRONWEST	635-1756 1
	*SAC SALVAGE POOL	635-4271
	*SALVAGE POOL	635-4271
11505	XXXX	00
11551	*CORDOVA SHOOTING	351-0205
12515	XXXX	00
12525	LEHMAN Danl L	985-4185
12535	XXXX	00
12575	XXXX	00

* 5 BUS 5 RES 1 NEW

GRANT LINE RD 1994

GRANT LINE RD 95742
RANCHO CORDOVA

WEALTH CODE 5

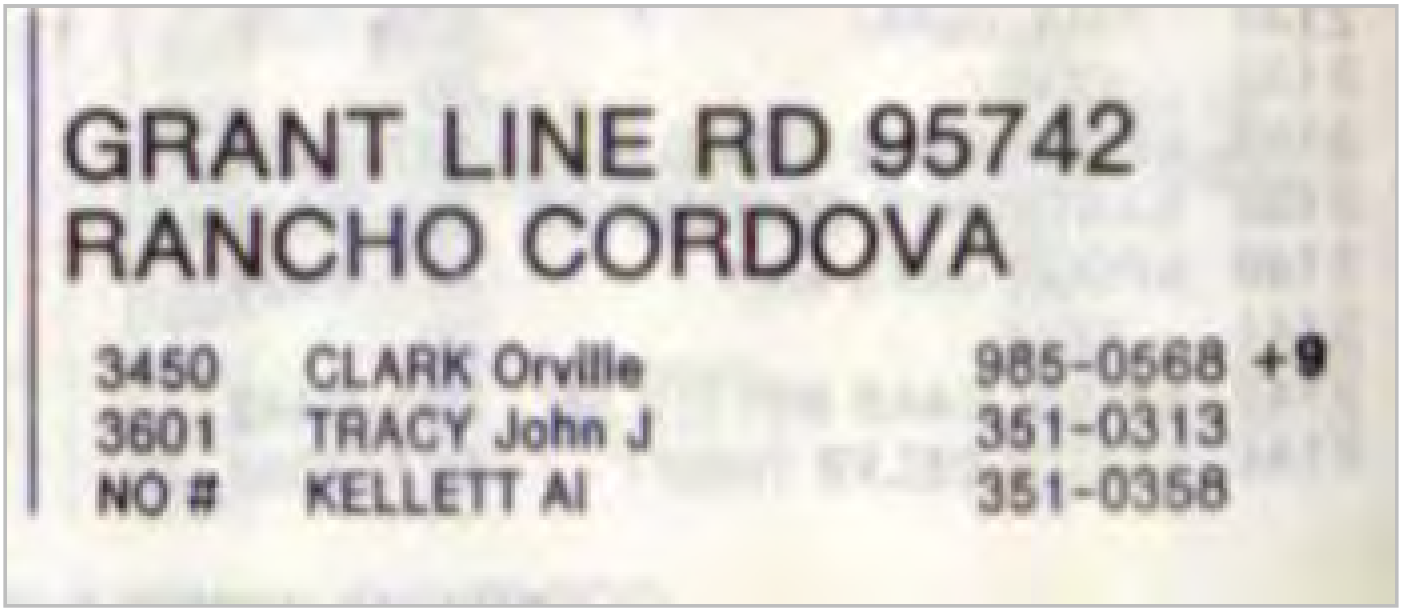
3417	*AMER RVR AGGREGATES	351-0123 +4
	*AMER RVR ASPHALT	985-0795 +4
	*AMER RVR ASPHALT	985-6370 +4
3450	XXXX	00
3601	MORIN Andy	351-1406 0
	TRACY John J	351-0313
4232	*CONSLDTD SCRTY FIRE	351-0501 2
	*SAC PLANT COMPANY	351-0866 3
*	5 BUS 3 RES	3 NEW

DOUGLAS RD 1989

DOUGLAS RD 95742
RANCHO CORDOVA

11430	HAMPTON Dave	985-2094	+9
	KLEEMANN Bernhardt	351-9919	
	KLEEMANN Bernhardt	351-0422	
11499	XXXX	00	
11505	*AEROJET INVSTMT LTD	355-1000	7
	*EATON DRILLING CO	351-1408	6
	*PRIMARY ELECTR CNST	985-7244	5
	*SAC HEAT TREAT	351-0534	1
11551	*CORDOVA SHOOTING	351-0205	
	RUSSELL Craig	351-1665	+9
12525	LEHMAN Danl L	985-4185	0
12535	XXXX	00	
12575	XXXX	00	
*	5 BUS 8 RES	2 NEW	

GRANT LINE RD 1989



GRANT LINE RD 95742
RANCHO CORDOVA

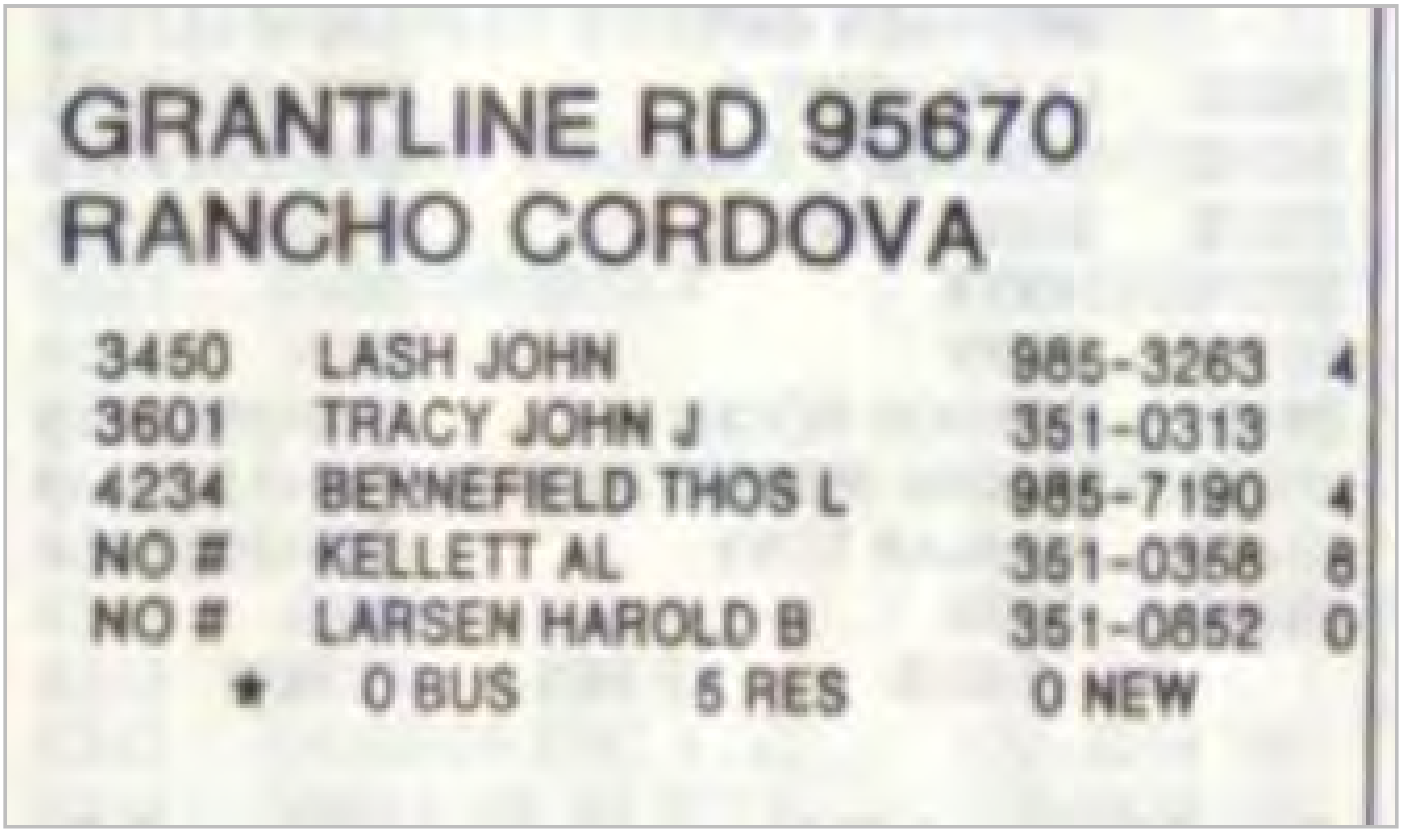
3450	CLARK Orville	985-0568 +9
3601	TRACY John J	351-0313
NO #	KELLETT Al	351-0358

DOUGLAS RD 1985

DOUGLAS RD 95670
RANCHO CORDOVA

11430	KLEEMANN BERNHARDT	351-9919	8
	KLEEMANN BERNHARDT	351-0422	9
11505	AMER RVR MFG	351-0436	3
	CAL MOD INC	351-0745	8
	PRIMARY ELECTR CNST	985-7244	+5
	SAC HEAT TREAT	351-0534	1
11551	CORDOVA SHOOTING	351-0205	6
12525	LEHMAN DANL L	985-4185	0
12535	XXXX	00	
12575	XXXX	00	
	* 5 BUS 5 RES	1 NEW	

GRANT LINE RD 1985



GRANTLINE RD 95670
RANCHO CORDOVA

3450	LASH JOHN	985-3263	4
3601	TRACY JOHN J	351-0313	
4234	BENNEFIELD THOS L	985-7190	4
NO #	KELLETT AL	351-0358	8
NO #	LARSEN HAROLD B	351-0852	0

* 0 BUS 5 RES 0 NEW

DOUGLAS RD 1980

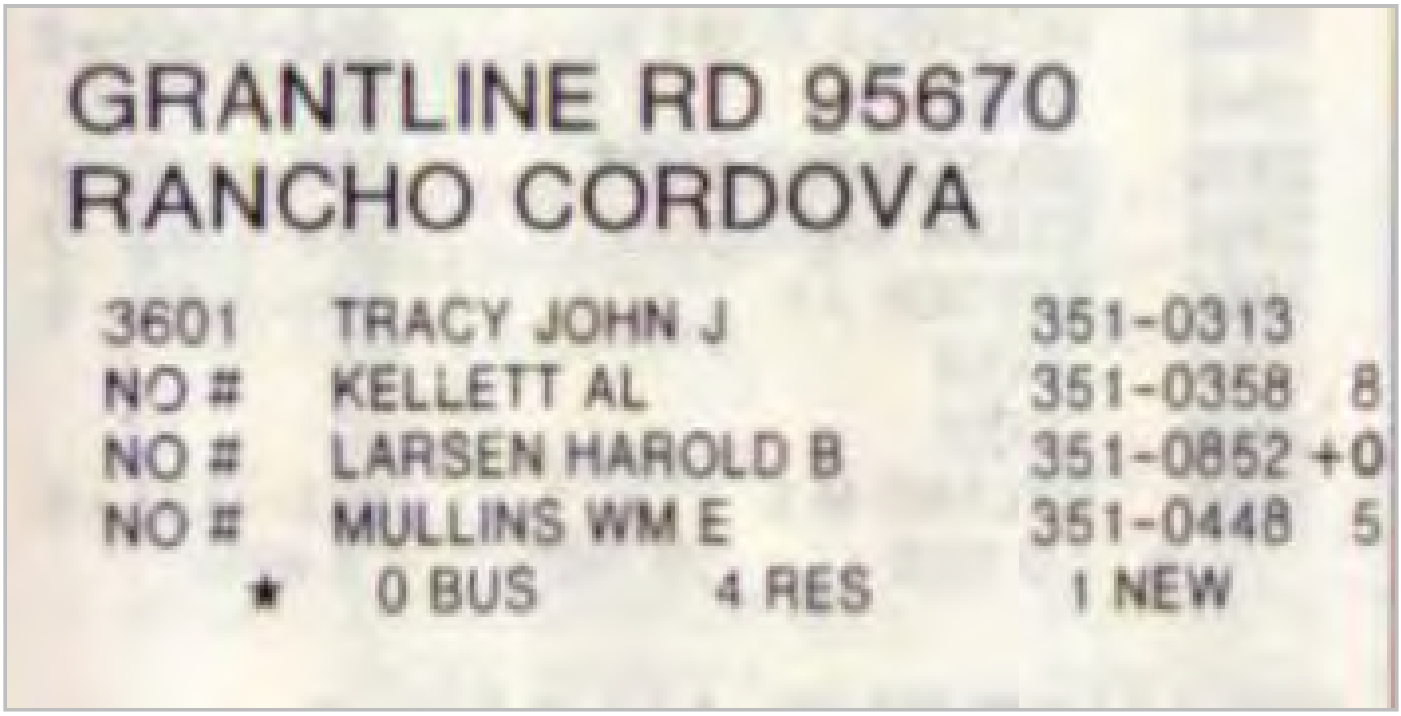
DOUGLAS RD 95670
RANCHO CORDOVA

11430	KLEEMANN BERNHARDT	351-0422	9
	KLEEMANN BERNHARDT	351-9919	8
11505	BUILDING		
	ACRYLIC PRODUCTS	351-0721	9
	AMER WASTE CONTAINR	635-8000	8
	AMER WASTE LOD	635-8000	+0
	AMERICAN WASTE CONT	635-8000	9
	B&E IRON&STEEL	985-7925	7
	CAL MOD INC	351-0745	8
	CAL REL ABLE ELEC	985-7600	+0
	CARLSON ALMNM PRDCT	351-0655	7
	CLASSIC COACHWORKS	985-2137	9
	DRAWERS ARE US	985-3598	+0
	EKA WRECKERS USA	351-0561	+0
	ENGINEERNG RESRCH	351-0247	9
	EXTENSA SYSTEMS	351-0331	8
	FORMULA PRODUCTS	351-0534	8
	GENRL ELEC MED STS	361-4200	+0
	HAULAWAY CONTAINERS	351-0679	8
	INSTRU SPEC	351-0231	6
	INTERSTATE CONTRS	351-0622	7
	J&W SCIENTIFIC INC	351-0387	7
	KEYSTONE CONSTR CO	351-0474	9
	MAGNUM TOWERS INC	985-7727	7
	MCDONNELL DOUGLAS	351-0550	
	NEWBEL INDUSTRIES	985-3461	+0
	PEERLESS INSTRUMENT	351-0464	6
	RELIABLE ELEC WRKS	985-7600	+0
	SECURITY PARK	351-0550	8
	SLOAN & ASSOC	351-0180	+0
	TROPHY WOOD PRODUCT	351-0410	7
11505			
11551	CORDOVA REC RANGE	351-0205	5
	CORDOVA SHOOTING	351-0205	6
12525	LEHMAN DANL L	985-4185	+0
12535	MCKENNA LARRY	985-4215	+0
	MCKENNA LARRY	985-7990	+0
12575	DELTA TILE	985-7959	+0
	MURPHY VICTOR	985-4267	+0

★ 31 BUS 6 RES 13 NEW

Target Street	Cross Street	Source
-	✓	Haines Criss-Cross Directory

GRANT LINE RD 1980



GRANTLINE RD 95670
RANCHO CORDOVA

3601	TRACY JOHN J	351-0313
NO #	KELLETT AL	351-0358 8
NO #	LARSEN HAROLD B	351-0852 +0
NO #	MULLINS WM E	351-0448 5

* 0 BUS 4 RES 1 NEW

The Preserve Phase I ESA
12525 Douglas Road
Rancho Cordova, CA 95742

Inquiry Number: 5633265.3
April 26, 2019

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

04/26/19

Site Name:

The Preserve Phase I ESA
12525 Douglas Road
Rancho Cordova, CA 95742
EDR Inquiry # 5633265.3

Client Name:

Youngdahl Consulting Group
1234 Glenhaven Court
El Dorado Hills, CA 95762
Contact: Dennis Eck

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Youngdahl Consulting Group were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 2A02-4450-BA3E

PO # PE19-200

Project The Preserve Phase I ESA

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: 2A02-4450-BA3E

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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APPENDIX C
EDR Radius Map Report with GeoCheck®

The Preserve Phase I ESA
12525 Douglas Road
Rancho Cordova, CA 95742

Inquiry Number: 5633265.2s
May 01, 2019

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

FORM LBC-CHM

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Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	8
Orphan Summary	220
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-11
Physical Setting Source Records Searched	PSGR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13), the ASTM Standard Practice for Environmental Site Assessments for Forestland or Rural Property (E 2247-16), the ASTM Standard Practice for Limited Environmental Due Diligence: Transaction Screen Process (E 1528-14) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

12525 DOUGLAS ROAD
RANCHO CORDOVA, CA 95742

COORDINATES

Latitude (North):	38.5755860 - 38˚ 34' 32.10''
Longitude (West):	121.1964640 - 121˚ 11' 47.27''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	657109.8
UTM Y (Meters):	4271015.5
Elevation:	243 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5619686 BUFFALO CREEK, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140621
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
12525 DOUGLAS ROAD
RANCHO CORDOVA, CA 95742

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
Reg	AEROJET ROCKETDYNE I	US HWY 50 AND AEROJE	NPL, SEMS, CORRACTS, RCRA-TSDF, RCRA-LQG, US ENG..	Same	1 ft.
1	NORTH DOUGLAS	NORTHEAST OF DOUGLAS	CIWQS	Lower	1 ft.
A2	AMERICAN RIVER ASPHA	3417 GRANTLINE RD	AST, CERS HAZ WASTE, CERS TANKS, EMI, ENF,...	Higher	333, 0.063, ENE
A3	GRANTLINE PLANT	3417 GRANT LINE RD	AST	Higher	333, 0.063, ENE
4	INACTIVE RANCHO CORD	NIMBUS ROAD	CPS-SLIC	Lower	2246, 0.425, West
B5	GENERAL ELECTRIC MED	3920 SECURITY PARK	ENVIROSTOR	Lower	4256, 0.806, SSW
B6	AUTOMOTIVE IMPORTING	3920 SECURITY PARK D	SEMS-ARCHIVE, CORRACTS, RCRA-TSDF, RCRA-SQG,...	Lower	4256, 0.806, SSW
B7	GENERAL ELECTRIC MED	3920 SECURITY PARK	HWP, CERS	Lower	4256, 0.806, SSW

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA generators list

RCRA-SQG ---------- RCRA - Small Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

EXECUTIVE SUMMARY

State and tribal leaking storage tank lists

LUST ---------- Geotracker's Leaking Underground Fuel Tank Report
INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
Sacramento Co. CS ---------- Toxic Site Clean-Up List

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
UST ---------- Active UST Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Properties
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---------- Waste Management Unit Database
SWRCY ---------- Recycler Database
HAULERS ---------- Registered Waste Tire Haulers Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory
IHS OPEN DUMPS ---------- Open Dumps on Indian Land

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register
HIST Cal-Sites ---------- Historical Calsites Database
SCH ---------- School Property Evaluation Program
CDL ---------- Clandestine Drug Labs
Toxic Pits ---------- Toxic Pits Cleanup Act Sites
US CDL ---------- National Clandestine Laboratory Register
PFAS ---------- PFAS Contamination Site Location Listing

Local Land Records

LIENS ---------- Environmental Liens Listing
LIENS 2 ---------- CERCLA Lien Information
DEED ---------- Deed Restriction Listing

Records of Emergency Release Reports

HMIRS ---------- Hazardous Materials Information Reporting System

EXECUTIVE SUMMARY

CHMIRS	California Hazardous Material Incident Report System
LDS	Land Disposal Sites Listing
MCS	Military Cleanup Sites Listing
SPILLS 90	SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
FUDS	Formerly Used Defense Sites
DOD	Department of Defense Sites
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
EPA WATCH LIST	EPA WATCH LIST
2020 COR ACTION	2020 Corrective Action Program List
TSCA	Toxic Substances Control Act
TRIS	Toxic Chemical Release Inventory System
SSTS	Section 7 Tracking Systems
RMP	Risk Management Plans
RAATS	RCRA Administrative Action Tracking System
ICIS	Integrated Compliance Information System
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS	Material Licensing Tracking System
COAL ASH DOE	Steam-Electric Plant Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database
RADINFO	Radiation Information Database
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS	Incident and Accident Data
INDIAN RESERV	Indian Reservations
FUSRAP	Formerly Utilized Sites Remedial Action Program
UMTRA	Uranium Mill Tailings Sites
LEAD SMELTERS	Lead Smelter Sites
US AIRS	Aerometric Information Retrieval System Facility Subsystem
US MINES	Mines Master Index File
ABANDONED MINES	Abandoned Mines
FINDS	Facility Index System/Facility Registry System
ECHO	Enforcement & Compliance History Information
UXO	Unexploded Ordnance Sites
DOCKET HWC	Hazardous Waste Compliance Docket Listing
FUELS PROGRAM	EPA Fuels Program Registered Listing
CA BOND EXP. PLAN	Bond Expenditure Plan
Cortese	"Cortese" Hazardous Waste & Substances Sites List
CUPA Listings	CUPA Resources List
DRYCLEANERS	Cleaner Facilities
EMI	Emissions Inventory Data
ENF	Enforcement Action Listing
Financial Assurance	Financial Assurance Information Listing
HAZNET	Facility and Manifest Data
ICE	ICE
HIST CORTESE	Hazardous Waste & Substance Site List
HWT	Registered Hazardous Waste Transporter Database
MINES	Mines Site Location Listing
MWMP	Medical Waste Management Program Listing
NPDES	NPDES Permits Listing
PEST LIC	Pesticide Regulation Licenses Listing

EXECUTIVE SUMMARY

PROC Certified Processors Database
Notify 65 Proposition 65 Records
UIC UIC Listing
UIC GEO UIC GEO (GEOTRACKER)
WASTEWATER PITS Oil Wastewater Pits Listing
WDS Waste Discharge System
MILITARY PRIV SITES MILITARY PRIV SITES (GEOTRACKER)
PROJECT PROJECT (GEOTRACKER)
WDR Waste Discharge Requirements Listing
CERS CERS
NON-CASE INFO NON-CASE INFO (GEOTRACKER)
WIP Well Investigation Program Case List
OTHER OIL GAS OTHER OIL & GAS (GEOTRACKER)
PROD WATER PONDS PROD WATER PONDS (GEOTRACKER)
SAMPLING POINT SAMPLING POINT (GEOTRACKER)
WELL STIM PROJ Well Stimulation Project (GEOTRACKER)

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP EDR Proprietary Manufactured Gas Plants
EDR Hist Auto EDR Exclusive Historical Auto Stations
EDR Hist Cleaner EDR Exclusive Historical Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF Recovered Government Archive Solid Waste Facilities List
RGA LUST Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and

identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 03/11/2019 has revealed that there is 1 NPL site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
Cerclis ID:: 901718				
EPA Id: CAD980358832				

Federal CERCLIS list

SEMS: SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the SEMS list, as provided by EDR, and dated 03/11/2019 has revealed that there is 1 SEMS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
Site ID: 0901718				
EPA Id: CAD980358832				

Federal RCRA CORRACTS facilities list

CORRACTS: CORRACTS is a list of handlers with RCRA Corrective Action Activity. This report shows which nationally-defined corrective action core events have occurred for every handler that has had corrective action activity.

A review of the CORRACTS list, as provided by EDR, and dated 03/25/2019 has revealed that there are 2 CORRACTS sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
EPA ID:: CAD000030494				

Lower Elevation	Address	Direction / Distance	Map ID	Page
AUTOMOTIVE IMPORTING	***3920 SECURITY PARK D***	***SSW 1/2 - 1 (0.806 mi.)***	***B6***	***208***
EPA ID:: CAD000819680				

EXECUTIVE SUMMARY

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

A review of the RCRA-TSDF list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA-TSDF site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
EPA ID:: CAD000030494				

Federal RCRA generators list

RCRA-LQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

A review of the RCRA-LQG list, as provided by EDR, and dated 03/25/2019 has revealed that there is 1 RCRA-LQG site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
EPA ID:: CAD000030494				

Federal institutional controls / engineering controls registries

US ENG CONTROLS: A listing of sites with engineering controls in place.

A review of the US ENG CONTROLS list, as provided by EDR, and dated 01/31/2019 has revealed that there is 1 US ENG CONTROLS site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
EPA ID:: CAD980358832				
EPA ID:: CAD980358832				

EXECUTIVE SUMMARY

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 01/31/2019 has revealed that there is 1 US INST CONTROL site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
EPA ID:: CAD000030494				
EPA ID:: CAD980358832				

State- and tribal - equivalent CERCLIS

ENVIROSTOR: The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

A review of the ENVIROSTOR list, as provided by EDR, and dated 01/28/2019 has revealed that there are 2 ENVIROSTOR sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
Facility Id: 80001284				
Status: Refer: SMBRP				

Lower Elevation	Address	Direction / Distance	Map ID	Page
GENERAL ELECTRIC MED	3920 SECURITY PARK	SSW 1/2 - 1 (0.806 mi.)	B5	207
Facility Id: 80001343				
Status: No Action Required				

State and tribal leaking storage tank lists

CPS-SLIC: Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

A review of the CPS-SLIC list, as provided by EDR, has revealed that there is 1 CPS-SLIC site within approximately 0.5 miles of the target property.

EXECUTIVE SUMMARY

Lower Elevation	Address	Direction / Distance	Map ID	Page
INACTIVE RANCHO CORD	NIMBUS ROAD	W 1/4 - 1/2 (0.425 mi.)	4	206
Database: CPS-SLIC, Date of Government Version: 12/10/2018				
Global Id: T10000003290				
Facility Status: Open - Remediation				

State and tribal registered storage tank lists

AST: A listing of aboveground storage tank petroleum storage tank locations.

A review of the AST list, as provided by EDR, has revealed that there are 2 AST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERICAN RIVER ASPHA	***3417 GRANTLINE RD***	***ENE 0 - 1/8 (0.063 mi.)***	***A2***	***178***
Database: AST, Date of Government Version: 07/06/2016				
GRANTLINE PLANT	3417 GRANT LINE RD	ENE 0 - 1/8 (0.063 mi.)	A3	205
Database: AST, Date of Government Version: 07/06/2016				

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

CERS HAZ WASTE: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

A review of the CERS HAZ WASTE list, as provided by EDR, and dated 10/22/2018 has revealed that there is 1 CERS HAZ WASTE site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERICAN RIVER ASPHA	***3417 GRANTLINE RD***	***ENE 0 - 1/8 (0.063 mi.)***	***A2***	***178***

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there is 1 SWEEPS UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

EXECUTIVE SUMMARY

Status: A
Tank Status: A
Comp Number: 35377

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there is 1 HIST UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
Facility Id: 00000019591				

CERS TANKS: List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

A review of the CERS TANKS list, as provided by EDR, and dated 10/22/2018 has revealed that there is 1 CERS TANKS site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERICAN RIVER ASPHA	***3417 GRANTLINE RD***	***ENE 0 - 1/8 (0.063 mi.)***	***A2***	***178***

CA FID UST: The Facility Inventory Database contains active and inactive underground storage tank locations. The source is the State Water Resource Control Board.

A review of the CA FID UST list, as provided by EDR, and dated 10/31/1994 has revealed that there is 1 CA FID UST site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
Facility Id: 34006488				
Status: A				
Status: I				

Other Ascertainable Records

US FIN ASSUR: All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

A review of the US FIN ASSUR list, as provided by EDR, and dated 01/31/2019 has revealed that there is 1 US FIN ASSUR site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***
EPA ID: CAD000030494				

EXECUTIVE SUMMARY

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 03/11/2019 has revealed that there is 1 ROD site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I EPA ID:: CAD980358832	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

PRP: A listing of verified Potentially Responsible Parties

A review of the PRP list, as provided by EDR, and dated 03/11/2019 has revealed that there is 1 PRP site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

PADS: The PCB Activity Database identifies generators, transporters, commercial storers and/or brokers and disposers of PCBs who are required to notify the United States Environmental Protection Agency of such activities. The source of this database is the U.S. EPA.

A review of the PADS list, as provided by EDR, and dated 09/14/2018 has revealed that there is 1 PADS site within approximately 0.001 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I EPAID:: CAD000030494	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

CONSENT: Major Legal settlements that establish responsibility and standards for cleanup at NPL (superfund) sites. Released periodically by U.S. District Courts after settlement by parties to litigation matters.

A review of the CONSENT list, as provided by EDR, and dated 12/31/2018 has revealed that there is 1 CONSENT site within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AEROJET ROCKETDYNE I	***US HWY 50 AND AEROJE***	***0 - 1/8 (0.000 mi.)***	***0***	***8***

HWP: Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

A review of the HWP list, as provided by EDR, and dated 02/19/2019 has revealed that there is 1 HWP site within approximately 1 mile of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
GENERAL ELECTRIC MED EPA Id: CAD000819680	***3920 SECURITY PARK***	***SSW 1/2 - 1 (0.806 mi.)***	***B7***	***217***

EXECUTIVE SUMMARY

Cleanup Status: CLOSED

Sacramento Co. ML: Sacramento County Master List. Any business that has hazardous materials on site - hazardous materials storage sites, underground storage tanks, waste generators.

A review of the Sacramento Co. ML list, as provided by EDR, and dated 11/07/2018 has revealed that there is 1 Sacramento Co. ML site within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
AMERICAN RIVER ASPHA	***3417 GRANTLINE RD***	***ENE 0 - 1/8 (0.063 mi.)***	***A2***	***178***

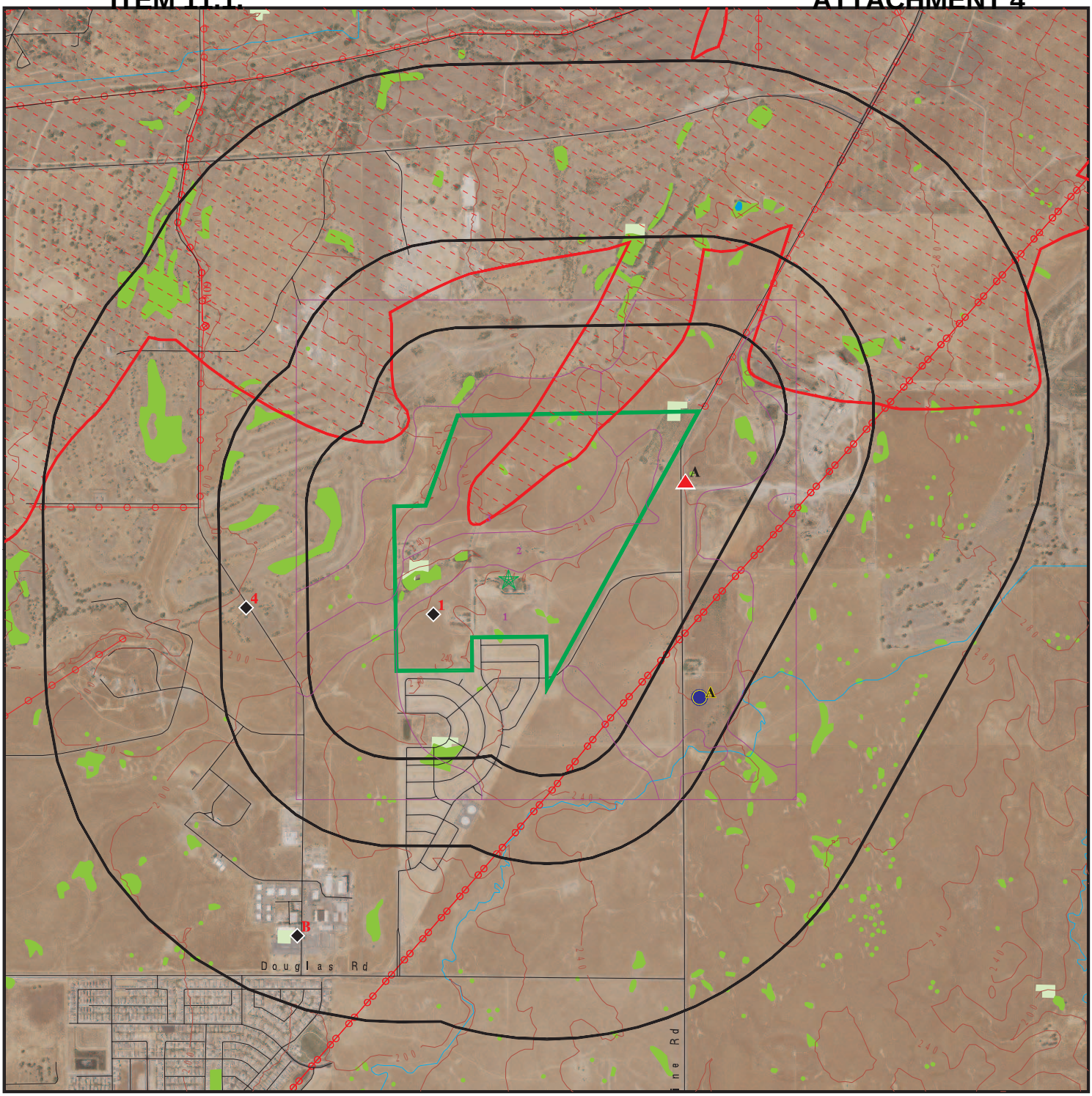
CIWQS: The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

A review of the CIWQS list, as provided by EDR, and dated 03/05/2019 has revealed that there is 1 CIWQS site within approximately 0.001 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
NORTH DOUGLAS	NORTHEAST OF DOUGLAS	0 - 1/8 (0.000 mi.)	1	177

EXECUTIVE SUMMARY

There were no unmapped sites in this report.



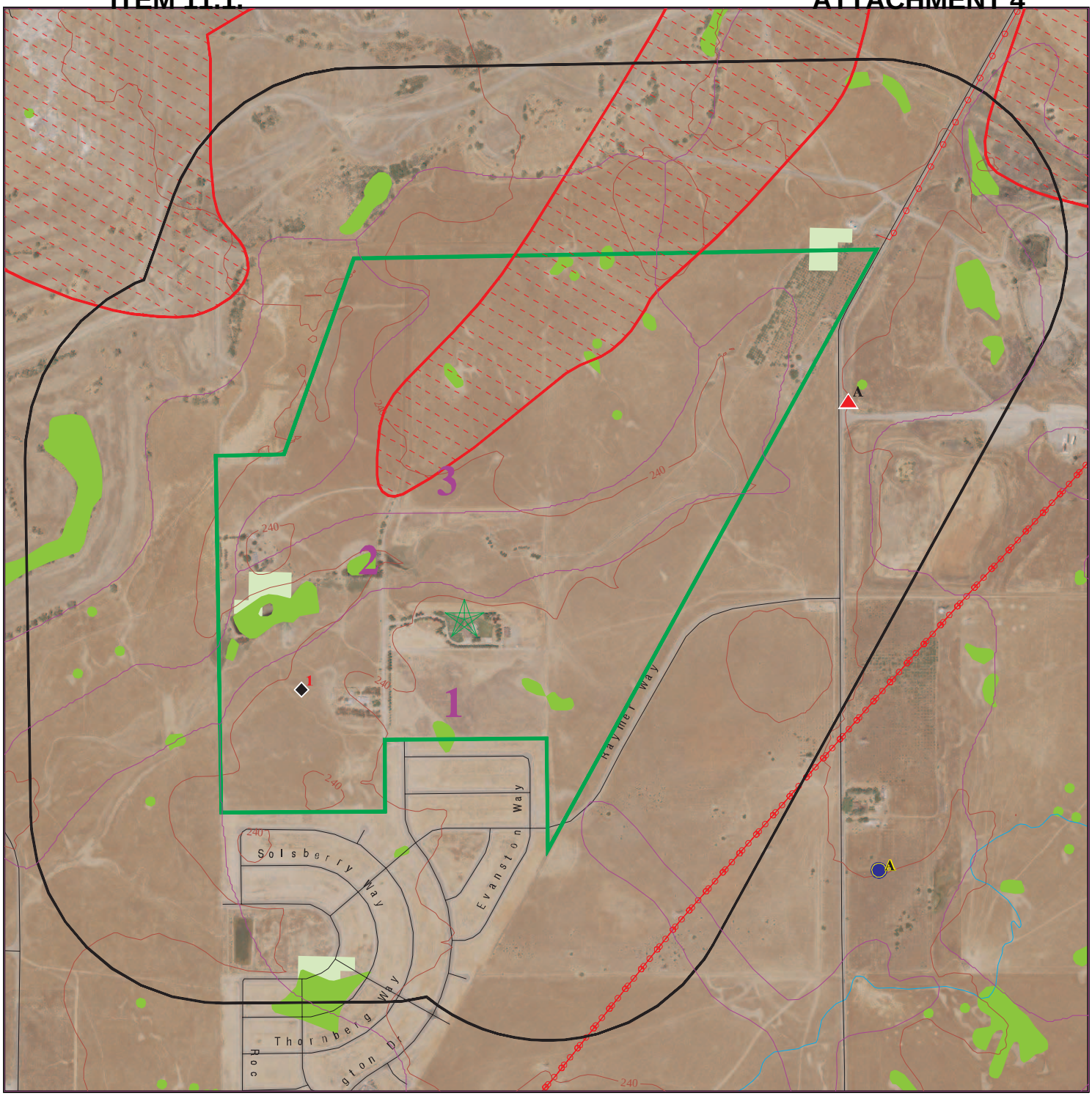
- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	The Preserve Phase I ESA	CLIENT:	Youngdahl Consulting Group
ADDRESS:	12525 Douglas Road Rancho Cordova CA 95742	CONTACT:	Dennis Eck
LAT/LONG:	38.575586 / 121.196464	INQUIRY #:	5633265.2s
		DATE:	May 01, 2019 10:30 am

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DETAIL MAP - 5633265.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

0 1/8 1/4 1/2 Miles

N

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	The Preserve Phase I ESA	CLIENT:	Youngdahl Consulting Group
ADDRESS:	12525 Douglas Road Rancho Cordova CA 95742	CONTACT:	Dennis Eck
LAT/LONG:	38.575586 / 121.196464	INQUIRY #:	5633265.2s
		DATE:	May 01, 2019 10:31 am

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MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		1	0	0	0	NR	1
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	0.001		0	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		1	0	0	NR	NR	1
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		1	0	0	1	NR	2
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		1	0	0	NR	NR	1
Federal RCRA generators list								
RCRA-LQG	0.250		1	0	NR	NR	NR	1
RCRA-SQG	0.250		0	0	NR	NR	NR	0
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		1	0	0	NR	NR	1
US INST CONTROL	0.500		1	0	0	NR	NR	1
Federal ERNS list								
ERNS	0.001		0	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		1	0	0	1	NR	2
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
CPS-SLIC	0.500		0	0	1	NR	NR	1
Sacramento Co. CS	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		2	0	NR	NR	NR	2
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	0.001		0	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
IHS OPEN DUMPS	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	0.001		0	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	0.001		0	NR	NR	NR	NR	0
CERS HAZ WASTE	0.250		1	0	NR	NR	NR	1
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	0.001		0	NR	NR	NR	NR	0
PFAS	0.001		0	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		1	0	NR	NR	NR	1
HIST UST	0.250		1	0	NR	NR	NR	1
CERS TANKS	0.250		1	0	NR	NR	NR	1
CA FID UST	0.250		1	0	NR	NR	NR	1
Local Land Records								
LIENS	0.001		0	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
LIENS 2	0.001		0	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	0.001		0	NR	NR	NR	NR	0
CHMIRS	0.001		0	NR	NR	NR	NR	0
LDS	0.001		0	NR	NR	NR	NR	0
MCS	0.001		0	NR	NR	NR	NR	0
SPILLS 90	0.001		0	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	0.001		1	NR	NR	NR	NR	1
EPA WATCH LIST	0.001		0	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	0.001		0	NR	NR	NR	NR	0
TRIS	0.001		0	NR	NR	NR	NR	0
SSTS	0.001		0	NR	NR	NR	NR	0
ROD	1.000		1	0	0	0	NR	1
RMP	0.001		0	NR	NR	NR	NR	0
RAATS	0.001		0	NR	NR	NR	NR	0
PRP	0.001		1	NR	NR	NR	NR	1
PADS	0.001		1	NR	NR	NR	NR	1
ICIS	0.001		0	NR	NR	NR	NR	0
FTTS	0.001		0	NR	NR	NR	NR	0
MLTS	0.001		0	NR	NR	NR	NR	0
COAL ASH DOE	0.001		0	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	0.001		0	NR	NR	NR	NR	0
RADINFO	0.001		0	NR	NR	NR	NR	0
HIST FTTS	0.001		0	NR	NR	NR	NR	0
DOT OPS	0.001		0	NR	NR	NR	NR	0
CONSENT	1.000		1	0	0	0	NR	1
INDIAN RESERV	0.001		0	NR	NR	NR	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	0.001		0	NR	NR	NR	NR	0
US AIRS	0.001		0	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
ABANDONED MINES	0.001		0	NR	NR	NR	NR	0
FINDS	0.001		0	NR	NR	NR	NR	0
ECHO	0.001		0	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	0.001		0	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	0	NR	NR	0
CUPA Listings	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	0.001		0	NR	NR	NR	NR	0
ENF	0.001		0	NR	NR	NR	NR	0
Financial Assurance	0.001		0	NR	NR	NR	NR	0
HAZNET	0.001		0	NR	NR	NR	NR	0
ICE	0.001		0	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	0	0	NR	NR	0
HWP	1.000		0	0	0	1	NR	1
HWT	0.250		0	0	NR	NR	NR	0
MINES	0.001		0	NR	NR	NR	NR	0
Sacramento Co. ML	0.250		1	0	NR	NR	NR	1
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	0.001		0	NR	NR	NR	NR	0
PEST LIC	0.001		0	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	0	NR	0
UIC	0.001		0	NR	NR	NR	NR	0
UIC GEO	0.001		0	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	0.001		0	NR	NR	NR	NR	0
MILITARY PRIV SITES	0.001		0	NR	NR	NR	NR	0
PROJECT	0.001		0	NR	NR	NR	NR	0
WDR	0.001		0	NR	NR	NR	NR	0
CIWQS	0.001		1	NR	NR	NR	NR	1
CERS	0.001		0	NR	NR	NR	NR	0
NON-CASE INFO	0.001		0	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
OTHER OIL GAS	0.001		0	NR	NR	NR	NR	0
PROD WATER PONDS	0.001		0	NR	NR	NR	NR	0
SAMPLING POINT	0.001		0	NR	NR	NR	NR	0
WELL STIM PROJ	0.001		0	NR	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	0.001		0	NR	NR	NR	NR	0
RGA LUST	0.001		0	NR	NR	NR	NR	0
- Totals --		0	22	0	1	3	0	26

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number
NPL	**AEROJET ROCKETDYNE INC**	**NPL**	**1000333003**
Region	**US HWY 50 AND AEROJET RD**	**SEMS**	**CAD000030494**
	RANCHO CORDOVA, CA	**CORRACTS**	
< 1/8		**RCRA-TSDF**	
1 ft.		**RCRA-LQG**	
		US ENG CONTROLS	
		US INST CONTROL	
		ENVIROSTOR	
		SWEEPS UST	
		HIST UST	
		CA FID UST	
		US FIN ASSUR	
		ROD	
		PRP	
		PADS	
		CONSENT	

NPL:

EPA ID:	CAD980358832
Cerclis ID:	901718
EPA Region:	9
Federal:	N
Final Date:	1983-09-08 00:00:00
Site Score:	54.630000000000003
Latitude:	38.608331
Longitude:	-121.2

Category Details:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-> 50 And <= 100 Feet
Category Value:	80

NPL Status:	Currently on the Final NPL
Category Description:	Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value:	10

Site Details:

Site Name:	AEROJET GENERAL CORP.
Site Status:	Final
Site Zip:	95670
Site City:	RANCHO CORDOVA
Site State:	CA
Federal Site:	No
Site County:	SACRAMENTO
EPA Region:	09
Date Proposed:	12/30/82
Date Deleted:	Not reported
Date Finalized:	09/08/83

Substance Details:

NPL Status:	Currently on the Final NPL
Substance ID:	Not reported
Substance:	Not reported
CAS #:	Not reported
Pathway:	Not reported
Scoring:	Not reported

NPL Status:	Currently on the Final NPL

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Substance ID: A046
Substance: POLYCHLORINATED BIPHENYLS
CAS #: 1336-36-3
Pathway: GROUND WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: A046
Substance: POLYCHLORINATED BIPHENYLS
CAS #: 1336-36-3
Pathway: SURFACE WATER PATHWAY
Scoring: 3

NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: GROUND WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U210
Substance: TETRACHLOROETHENE
CAS #: 127-18-4
Pathway: SURFACE WATER PATHWAY
Scoring: 2

NPL Status: Currently on the Final NPL
Substance ID: U228
Substance: TRICHLOROETHYLENE (TCE)
CAS #: 79-01-6
Pathway: NO PATHWAY INDICATED
Scoring: 1

Summary Details:

Conditions at listing October 1981): The Aerojet General Corp. Site covers 8,500 acres in the eastern portion of Sacramento County, California, adjacent to the Rancho Cordova area population 40,000). The northeast edge of the site is approximately 0.5 mile from the American River. Underlying the site are extensive 50-foot deep) gold dredge tailings, a remnant of past mining operations. The upper aquifer is 80 feet below the surface. Ground water is used extensively throughoutthe Rancho Cordova area to supply municipal, domestic, and industrial water. Since 1953, Aerojet and its subsidiaries have disposed of, on-site, unknown quantities of ha ardous waste, including trichloroethylene, tetrachloroethylene, chloroform, Freon and other chemicals associated with rocket propellants, and various chemical processing wastes. Soil on-site is contaminated. Monitoring data show extensive ground water contamination on- and off-site, primarily with trichloroethylene. In April 1979, Aerojet and its subsidiaries started ground water studies to examine the impact of past disposal practices and to determine the requirements for cleanup. In December 1979, the State filed suit against Aerojet and a subsidiary, Cordova Chemical. Status July 1983): EPA has worked with the State since 1979, providing technical assistance through the Emergency Response Team, the Las Vegas lab, and Region IX. In March 1982, the State requested EPA s assistance in evaluating Aerojet s Proposal for a Ground Water Quality Control Program. EPA found major technical problems in Aerojet s proposal. In the past, a confidentiality

AEROJET ROCKETDYNE INC (Continued) **1000333003**

agreement between Aerojet and the State limited EPA access to the documents that would allow EPA to independently assess the company s progress toward cleanup. The agreement is no longer in effect. On February 25, 1983, Region IX requested information from Aerojet regarding soil and ground water contamination. EPA will soon complete review of the documents received in response.

Site Status Details:
NPL Status: Final
Proposed Date: 12/30/1982
Final Date: 09/08/1983
Deleted Date: Not reported

Narratives Details:
NPL Name: AEROJET GENERAL CORP.
City: RANCHO CORDOVA
State: CA

SEMS:
Site ID: 0901718
EPA ID: CAD980358832
Cong District: 3,7
FIPS Code: 06067
Latitude: 38.608331
Longitude: -121.200000
FF: N
NPL: Currently on the Final NPL
Non NPL Status: Not reported

SEMS Detail:
Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 00
Action Code: AR
Action Name: ADMIN REC
SEQ: 2
Start Date: 2001-07-20 04:00:00
Finish Date: 7/20/2001 4:00:00 AM
Qual: E
Current Action Lead: EPA Perf In-Hse

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 00
Action Code: AR
Action Name: ADMIN REC
SEQ: 1
Start Date: 1993-07-12 04:00:00

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Finish Date:	7/8/1994 4:00:00 AM
Qual:	V
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	1982-12-30 05:00:00
Finish Date:	12/30/1982 5:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1979-08-01 04:00:00
Finish Date:	8/1/1979 4:00:00 AM
Qual:	L
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	MA
Action Name:	ST COOP
SEQ:	1
Start Date:	1991-09-30 04:00:00
Finish Date:	7/10/2018 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	NF

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Action Name:	NPL FINL
SEQ:	1
Start Date:	1983-09-08 04:00:00
Finish Date:	9/8/1983 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	1
Start Date:	1992-10-22 04:00:00
Finish Date:	10/22/1992 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1990-07-02 04:00:00
Finish Date:	7/2/1990 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	3
Start Date:	2013-04-26 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

FF: N
OU: 00
Action Code: CR
Action Name: CI
SEQ: 1
Start Date: 1986-05-01 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 06
Action Code: RO
Action Name: ROD
SEQ: 5
Start Date: 2015-07-22 04:00:00
Finish Date: 7/22/2015 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 00
Action Code: CR
Action Name: CI
SEQ: 2
Start Date: 2011-07-29 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 00
Action Code: FE
Action Name: 5 YEAR
SEQ: 1
Start Date: 2015-11-03 05:00:00
Finish Date: 9/22/2016 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901718

AEROJET ROCKETDYNE INC (Continued) **1000333003**

EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 03
Action Code: RO
Action Name: ROD
SEQ: 2
Start Date: 2001-07-20 04:00:00
Finish Date: 7/20/2001 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: RO
Action Name: ROD
SEQ: 4
Start Date: 2011-02-15 05:00:00
Finish Date: 2/15/2011 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Perf

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 11
Action Code: BD
Action Name: PRP RI/FS
SEQ: 8
Start Date: 2017-04-11 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 10
Action Code: FS
Action Name: FS
SEQ: 1
Start Date: 2016-10-31 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	17
Start Date:	2014-03-27 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	23
Start Date:	2011-09-20 04:00:00
Finish Date:	3/27/2014 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	12
Start Date:	2013-09-23 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	12
Start Date:	2011-09-20 04:00:00
Finish Date:	9/23/2013 4:00:00 AM

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BF
Action Name: PRP RA
SEQ: 13
Start Date: 2012-11-14 05:00:00
Finish Date: 7/23/2014 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BE
Action Name: PRP RD
SEQ: 13
Start Date: 2011-09-26 04:00:00
Finish Date: 11/14/2012 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BF
Action Name: PRP RA
SEQ: 11
Start Date: 2013-08-21 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BE
Action Name: PRP RD

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

SEQ: 11
Start Date: 2011-09-20 04:00:00
Finish Date: 8/21/2013 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BF
Action Name: PRP RA
SEQ: 4
Start Date: 2012-03-08 05:00:00
Finish Date: 9/26/2013 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BE
Action Name: PRP RD
SEQ: 4
Start Date: 2011-09-26 04:00:00
Finish Date: 3/8/2012 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 06
Action Code: BE
Action Name: PRP RD
SEQ: 5
Start Date: 2015-12-14 05:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

OU: 02
Action Code: BB
Action Name: PRP RV
SEQ: 1
Start Date: 1995-05-08 04:00:00
Finish Date: 11/22/1995 5:00:00 AM
Qual: S
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BF
Action Name: PRP RA
SEQ: 9
Start Date: 2012-10-01 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BE
Action Name: PRP RD
SEQ: 9
Start Date: 2011-09-26 04:00:00
Finish Date: 10/1/2012 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BE
Action Name: PRP RD
SEQ: 10
Start Date: 2011-09-26 04:00:00
Finish Date: 6/17/2015 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	10
Start Date:	2015-06-17 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BB
Action Name:	PRP RV
SEQ:	2
Start Date:	2009-11-03 05:00:00
Finish Date:	5/24/2010 5:00:00 AM
Qual:	C
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	03
Action Code:	ME
Action Name:	PRP LR
SEQ:	1
Start Date:	2011-07-07 05:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	03
Action Code:	BF
Action Name:	PRP RA
SEQ:	2
Start Date:	2003-09-12 04:00:00
Finish Date:	8/22/2012 4:00:00 AM
Qual:	Not reported
Current Action Lead:	EPA Ovrsght

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 03
Action Code: BE
Action Name: PRP RD
SEQ: 2
Start Date: 2002-09-20 04:00:00
Finish Date: 2/20/2009 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 09
Action Code: BD
Action Name: PRP RI/FS
SEQ: 7
Start Date: 1989-09-30 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 08
Action Code: BD
Action Name: PRP RI/FS
SEQ: 6
Start Date: 1989-09-30 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 07
Action Code: BD
Action Name: PRP RI/FS
SEQ: 5
Start Date: 1989-09-30 04:00:00
Finish Date: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 06
Action Code: BD
Action Name: PRP RI/FS
SEQ: 4
Start Date: 1989-09-30 04:00:00
Finish Date: 7/22/2015 4:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 05
Action Code: BD
Action Name: PRP RI/FS
SEQ: 3
Start Date: 1989-09-30 04:00:00
Finish Date: 2/15/2011 5:00:00 AM
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 04
Action Code: BD
Action Name: PRP RI/FS
SEQ: 2
Start Date: 1989-09-30 04:00:00
Finish Date: Not reported
Qual: Not reported
Current Action Lead: EPA Ovrsght

Region: 09
Site ID: 0901718
EPA ID: CAD980358832
Site Name: AEROJET GENERAL CORP.
NPL: F
FF: N
OU: 01
Action Code: BD
Action Name: PRP RI/FS

AEROJET ROCKETDYNE INC (Continued) **1000333003**

SEQ:	1
Start Date:	1988-09-08 04:00:00
Finish Date:	Not reported
Qual:	Not reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	1982-12-01 05:00:00
Finish Date:	12/1/1982 5:00:00 AM
Qual:	Not reported
Current Action Lead:	St Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1979-04-01 05:00:00
Finish Date:	4/1/1979 5:00:00 AM
Qual:	Not reported
Current Action Lead:	St Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1
Start Date:	1979-06-01 04:00:00
Finish Date:	12/1/1982 5:00:00 AM
Qual:	H
Current Action Lead:	St Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N

AEROJET ROCKETDYNE INC (Continued) **1000333003**

OU: 02
Action Code: RV
Action Name: RMVL
SEQ: 1
Start Date: 1995-11-22 05:00:00
Finish Date: 2/15/2011 5:00:00 AM
Qual: S
Current Action Lead: St Perf

CORRACTS:

EPA ID: CAD000030494
EPA Region: 09
Area Name: SWMUS 55, 373, 374, 375
Actual Date: 20050818
Action: CA999NF - Corrective Action Process Terminated, No Further Action
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: SWMUS 55, 373, 374, 375
Actual Date: 20050818
Action: CA200 - RFI Approved
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 20050816
Action: CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: 20050816
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: SWMUS 55, 373, 374, 375
Actual Date: 20050518
Action: CA190 - RFI Report Received
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494

AEROJET ROCKETDYNE INC (Continued) **1000333003**

EPA Region: 09
Area Name: SWMUS 55, 373, 374, 375
Actual Date: 20050131
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: SWMUS 55, 373, 374, 375
Actual Date: 20050105
Action: CA110 - RFI Workplan Received
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: UNITS L, M, N, P, Q
Actual Date: 20010417
Action: CA200 - RFI Approved
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 20001211
Action: CA750NO - Migration of Contaminated Groundwater under Control, Unacceptable migration of contaminated groundwater is observed or expected
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: 20001211
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 20001211
Action: CA725NO - Current Human Exposures Under Control, Current human exposures are NOT under control
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: 20001211
Schedule end date: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

EPA ID: CAD000030494
EPA Region: 09
Area Name: UNITS L, M, N, P, Q
Actual Date: 19990831
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: MCDONALD DOUGLAS (3500 ACRE PARCEL)
Actual Date: 19940630
Action: CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19940621
Action: CA050 - RFA Completed
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: 19940621
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19940621
Action: CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: 19940621
Schedule end date: Not reported

EPA ID: CAD000030494
EPA Region: 09
Area Name: AEROJET (8500 ACRE PARCEL)
Actual Date: 19910601
Action: CA150 - RFI Workplan Approved
NAICS Code(s): 336412 332994
Aircraft Engine and Engine Parts Manufacturing
Small Arms Manufacturing
Original schedule date: Not reported
Schedule end date: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

RCRA-TSDF:
Date form received by agency: 02/27/2018
Facility name: AEROJET ROCKETDYNE INC
Facility address: US HWY 50 AND AEROJET RD
RANCHO CORDOVA, CA 95813-6000
EPA ID: CAD000030494
Mailing address: PO BOX 13222
SACRAMENTO, CA 95813
Contact: JIM BUEHLER
Contact address: PO BOX 13222
SACRAMENTO, CA 95813
Contact country: US
Contact telephone: 916-355-4682
Contact email: JIM.BUEHLER@ROCKET.COM
EPA Region: 09
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: AEROJET ROCKETDYNE, INC.
Owner/operator address: PO BOX 13222
SACRAMENTO, CA 95813
Owner/operator country: US
Owner/operator telephone: 916-355-4682
Owner/operator email: JIM.BUEHLER@ROCKET.COM
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 10/01/2005
Owner/Op end date: Not reported

Owner/operator name: AEROJET ROCKETDYNE, INC.
Owner/operator address: PO BOX 13222
SACRAMENTO, CA 95813
Owner/operator country: US
Owner/operator telephone: 916-355-4682
Owner/operator email: JIM.BUEHLER@ROCKET.COM
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Owner/Operator Type: Operator
Owner/Op start date: 10/01/2005
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:
Waste type: E
Accumulated waste on-site: No
Generated waste on-site: Yes

Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: Not reported

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 291
. Waste name: Latex waste

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 513
. Waste name: Empty containers less than 30 gallons

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 751
. Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

. Waste code: 791
. Waste name: Liquids with pH < 2

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D037
. Waste name: PENTACHLOROPHENOL

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

AEROJET ROCKETDYNE INC (Continued) **1000333003**

SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F027
. Waste name: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: P082
. Waste name: METHANIMINE, N-METHYL-N-NITROSO- (OR) N-NITROSODIMETHYLAMINE

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: P105
. Waste name: SODIUM AZIDE

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Historical Generators:
Date form received by agency: 02/18/2016
Site name: AEROJET ROCKETDYNE, INC.

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 123
. Waste name: Unspecified alkaline solution

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 133
. Waste name: Aqueous solution with 10% or more total organic residues

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB’s

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 513
. Waste name: Empty containers less than 30 gallons

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 731
. Waste name: Liquids with polychlorinated biphenyls > 50 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 751
. Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL

AEROJET ROCKETDYNE INC (Continued) **1000333003**

KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: P081
. Waste name: 1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U160
. Waste name: 2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)

Date form received by agency: 03/01/2014
Site name: AEROJET ROCKETDYNE INC
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 731
. Waste name: Liquids with polychlorinated biphenyls > 50 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 751
. Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

. Waste code: 791

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 09/11/2012
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 134

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 211
. Waste name: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB’s

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 07/30/2010

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE,

AEROJET ROCKETDYNE INC (Continued) **1000333003**

1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

Date form received by agency: 03/27/2008
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND

AEROJET ROCKETDYNE INC (Continued) **1000333003**

F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: D043
. Waste name: VINYL CHLORIDE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D018
. Waste name: BENZENE

. Waste code: D011
. Waste name: SILVER

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D009
. Waste name: MERCURY

. Waste code: D008
. Waste name: LEAD

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D005
. Waste name: BARIUM

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: P105
. Waste name: SODIUM AZIDE

. Waste code: U029
. Waste name: METHANE, BROMO- (OR) METHYL BROMIDE

. Waste code: U043
. Waste name: ETHENE, CHLORO- (OR) VINYL CHLORIDE

. Waste code: U045
. Waste name: METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)

. Waste code: U075
. Waste name: DICHLORODIFLUOROMETHANE (OR) METHANE, DICHLORODIFLUORO-

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U115
. Waste name: ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 02/23/2006
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium,

AEROJET ROCKETDYNE INC (Continued) **1000333003**

beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 491
. Waste name: Unspecified sludge waste

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 711
. Waste name: Liquids with cyanides > 1000 mg/l

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND

AEROJET ROCKETDYNE INC (Continued) **1000333003**

SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 02/20/2004
Site name: AERO JET - MISSILE AND SPACES PROPULSION
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D037
. Waste name: PENTACHLOROPHENOL

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 03/28/2002

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Site name: AEROJET MISSILE & SPACE PROPULSION
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Site name: AEROJET PROPULSION & ENERGETIC SYSTEMS
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999
Site name: AEROJET SACRAMENTO OPERATIONS
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996
Site name: AEROJET GENERAL CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 02/07/1996
Site name: AEROJET SACRAMENTO OPERATIONS
Classification: Large Quantity Generator

Date form received by agency: 03/25/1994
Site name: US AEROJET RCRA FACILITY
Classification: Large Quantity Generator

Date form received by agency: 03/26/1992
Site name: UNITED STATES-AEROJET RCRA FACILITY
Classification: Large Quantity Generator

Date form received by agency: 04/16/1990
Site name: US AEROJET RCRA FACILITY
Classification: Large Quantity Generator

Date form received by agency: 08/18/1980
Site name: AEROJET GENERAL CORPORATION
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 132357.1

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Amount (Lbs): 45750

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs): 124114.4

Waste code: D005
Waste name: BARIUM
Amount (Lbs): 2617

Waste code: D006
Waste name: CADMIUM
Amount (Lbs): 7205

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 21161.8

Waste code: D008
Waste name: LEAD
Amount (Lbs): 9919

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 464

Waste code: D010
Waste name: SELENIUM
Amount (Lbs): 5860

Waste code: D011
Waste name: SILVER
Amount (Lbs): 1451

Waste code: D018
Waste name: BENZENE
Amount (Lbs): 6.7

Waste code: D022
Waste name: CHLOROFORM
Amount (Lbs): 2521.8

Waste code: D028
Waste name: 1,2-DICHLOROETHANE
Amount (Lbs): 27650

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 1347.6

Waste code: D038
Waste name: PYRIDINE
Amount (Lbs): 3406.8

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Waste code: D040
Waste name: TRICHLOROETHYLENE
Amount (Lbs): 24000

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 65890.2

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 65468

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 56935.4

Waste code: P068
Waste name: HYDRAZINE, METHYL-
Amount (Lbs): 127

Waste code: P081
Waste name: NITROGLYCERINE (R)
Amount (Lbs): 355

Waste code: P098
Waste name: POTASSIUM CYANIDE
Amount (Lbs): 10

Waste code: U002
Waste name: ACETONE (I)
Amount (Lbs): 60

Waste code: U133
Waste name: HYDRAZINE (R,T)

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Amount (Lbs): 127

Waste code: U160
Waste name: 2-BUTANONE, PEROXIDE (R,T)
Amount (Lbs): 22

Corrective Action Summary:

Event date: 01/01/1978
Event: STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT

Event date: 01/01/1982
Event: STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT

Event date: 01/01/1986
Event: STABILIZATION CONSTRUCTION COMPLETED

Event date: 09/08/1988
Event: INVESTIGATION IMPOSITION

Event date: 09/08/1988
Event: CMS IMPOSITION

Event date: 06/23/1989
Event: INVESTIGATION IMPOSITION

Event date: 06/01/1991
Event: INVESTIGATION WORKPLAN APPROVED

Event date: 06/21/1994
Event: RFA COMPLETED-ASSESSMENT WAS A RFA

Event date: 06/21/1994
Event: RFA COMPLETED

Event date: 06/21/1994
Event: DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY

Event date: 06/30/1994
Event: INVESTIGATION IMPOSITION

Event date: 06/30/1994
Event: CMS IMPOSITION

Event date: 06/30/1994
Event: STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT

Event date: 04/17/1995
Event: INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL

Event date: 06/30/1995
Event: CMS IMPOSITION

Event date: 01/01/1996

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Event: REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA

Event date: 01/01/1997
Event: STABILIZATION CONSTRUCTION COMPLETED

Event date: 11/26/1997
Event: CA PRIORITIZATION-HIGH CA PRIORITY

Event date: 04/02/1998
Event: STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO STABILIZATION

Event date: 04/02/1998
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Event date: 04/02/1998
Event: RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Event date: 04/02/1998
Event: REFERRED TO A NON-RCRA AUTHORITY

Event date: 08/31/1999
Event: INVESTIGATION WORKPLAN APPROVED

Event date: 12/23/1999
Event: INVESTIGATION WORKPLAN APPROVED

Event date: 12/11/2000
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Event date: 12/11/2000
Event: RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Event date: 12/28/2000
Event: RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Event date: 12/28/2000
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

Event date: 04/17/2001
Event: INVESTIGATION COMPLETE

Event date: 11/22/2002
Event: INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL

Event date: 01/05/2005
Event: INVESTIGATION WORKPLAN RECEIVED

Event date: 01/31/2005
Event: INVESTIGATION WORKPLAN APPROVED

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Event date: 05/18/2005
Event: INVESTIGATION REPORT RECEIVED

Event date: 08/16/2005
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 08/16/2005
Event: HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE

Event date: 08/18/2005
Event: INVESTIGATION COMPLETE

Event date: 08/18/2005
Event: CA PROCESS IS TERMINATED-NO FURTHER ACTION

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 12/01/2015
Date achieved compliance: 12/02/2015
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/02/2015
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 12/01/2015
Date achieved compliance: 12/02/2015
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/02/2015
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/2013
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: SINGLE SITE CA/FO
Enforcement action date: 06/20/2014
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 3200
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/2013
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: SINGLE SITE CA/FO
Enforcement action date: 06/20/2014
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 3200
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 04/25/2012
Date achieved compliance: 05/29/2012
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/01/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 04/25/2012
Date achieved compliance: 05/29/2012
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/01/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 04/25/2012
Date achieved compliance: 05/29/2012
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/01/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/16/2008
Date achieved compliance: 12/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/16/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 10/10/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 10/11/2005
Date achieved compliance: 11/22/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/13/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 06/01/2004
Date achieved compliance: 12/21/2006
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/01/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 06/01/2004
Date achieved compliance: 12/21/2006
Violation lead agency: State
Enforcement action: SINGLE SITE CA/FO
Enforcement action date: 12/21/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 114000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Area of violation: TSD - General Facility Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/24/2003

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Application
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Application
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Application

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Application
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 264.110-120.G
Area of violation: TSD - Closure/Post-Closure
Date violation determined: 04/02/1997
Date achieved compliance: 06/05/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/02/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 01/17/1996
Date achieved compliance: 01/31/1996
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/17/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.340-352.O
Area of violation: TSD - Incinerator Standards
Date violation determined: 05/19/1995
Date achieved compliance: 01/17/1996
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/19/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J
Area of violation: TSD - General
Date violation determined: 05/19/1995
Date achieved compliance: 01/17/1996
Violation lead agency: EPA

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/19/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 264.30-37.C
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 268 ALL
Area of violation: LDR - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 264.30-37.C
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 264.170-177.I
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 268 ALL
Area of violation: LDR - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.140-150.H
Area of violation: TSD - Financial Requirements
Date violation determined: 03/20/1991
Date achieved compliance: 01/22/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/06/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 01/22/1990
Date achieved compliance: 05/03/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/08/1990
Enf. disposition status: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 10/12/2017
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/18/2017
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/26/2016
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/01/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 12/02/2015
Evaluation lead agency: State

Evaluation date: 12/01/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 12/02/2015
Evaluation lead agency: State

Evaluation date: 11/06/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/29/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/05/2014
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/04/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/24/2014
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 02/24/2014
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 02/24/2014
Evaluation lead agency: State

Evaluation date: 09/24/2012
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/22/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/16/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/10/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/01/2010
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/25/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/02/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/16/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/16/2008
Evaluation lead agency: State

Evaluation date: 07/29/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/10/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/21/2006
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/10/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/2006
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 06/20/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/19/2005
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/11/2005
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/22/2005
Evaluation lead agency: State

Evaluation date: 08/03/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 06/01/2004
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/01/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 12/21/2006
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 12/23/2003
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Records/Reporting
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Contingency Plan and Emergency Procedures

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Manifest
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Tank System Standards
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Application
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Container Use and Management
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 12/02/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/20/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/29/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/16/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/01/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 06/05/1997
Evaluation lead agency: State

Evaluation date: 01/17/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/31/1996
Evaluation lead agency: State

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 01/17/1996
Evaluation lead agency: EPA

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Incinerator Standards
Date achieved compliance: 01/17/1996
Evaluation lead agency: EPA

Evaluation date: 01/22/1993
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 03/20/1992
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/16/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/14/1992
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 03/18/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Financial Requirements
Date achieved compliance: 01/22/1993
Evaluation lead agency: State

Evaluation date: 10/19/1990
Evaluation: OPERATION AND MAINTENANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/1990
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/22/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 05/03/1990
Evaluation lead agency: State

Evaluation date: 07/07/1989
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/13/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/24/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/06/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

RCRA-LQG:
Date form received by agency: 02/27/2018
Facility name: AEROJET ROCKETDYNE INC
Facility address: US HWY 50 AND AEROJET RD
RANCHO CORDOVA, CA 95813-6000
EPA ID: CAD000030494
Mailing address: PO BOX 13222
SACRAMENTO, CA 95813
Contact: JIM BUEHLER
Contact address: PO BOX 13222

AEROJET ROCKETDYNE INC (Continued) **1000333003**

SACRAMENTO, CA 95813
Contact country: US
Contact telephone: 916-355-4682
Contact email: JIM.BUEHLER@ROCKET.COM
EPA Region: 09
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification: Large Quantity Generator
Description: Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:
Owner/operator name: AEROJET ROCKETDYNE, INC.
Owner/operator address: PO BOX 13222
SACRAMENTO, CA 95813
Owner/operator country: US
Owner/operator telephone: 916-355-4682
Owner/operator email: JIM.BUEHLER@ROCKET.COM
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 10/01/2005
Owner/Op end date: Not reported

Owner/operator name: AEROJET ROCKETDYNE, INC.
Owner/operator address: PO BOX 13222
SACRAMENTO, CA 95813
Owner/operator country: US
Owner/operator telephone: 916-355-4682
Owner/operator email: JIM.BUEHLER@ROCKET.COM
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 10/01/2005
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: Yes

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Universal Waste Summary:

Waste type:	E
Accumulated waste on-site:	No
Generated waste on-site:	Yes

Waste type:	Batteries
Accumulated waste on-site:	Yes
Generated waste on-site:	Not reported

Waste type:	Lamps
Accumulated waste on-site:	Yes
Generated waste on-site:	Not reported

. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)

. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues

. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics

. Waste code:	181
. Waste name:	Other inorganic solid waste

. Waste code:	212
. Waste name:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code:	213
. Waste name:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code:	214
. Waste name:	Unspecified solvent mixture

. Waste code:	221
. Waste name:	Waste oil and mixed oil

. Waste code:	223
. Waste name:	Unspecified oil-containing waste

. Waste code:	261

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 291
. Waste name: Latex waste

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 513
. Waste name: Empty containers less than 30 gallons

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 751
. Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: REACTIVE WASTE

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D037
. Waste name: PENTACHLOROPHENOL

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR

AEROJET ROCKETDYNE INC (Continued) **1000333003**

MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F027
. Waste name: DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: P082
. Waste name: METHANIMINE, N-METHYL-N-NITROSO- (OR) N-NITROSODIMETHYLAMINE

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: P105
. Waste name: SODIUM AZIDE

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U134
. Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Historical Generators:
Date form received by agency: 02/18/2016
Site name: AEROJET ROCKETDYNE, INC.
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 123
. Waste name: Unspecified alkaline solution

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 133
. Waste name: Aqueous solution with 10% or more total organic residues

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB’s

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 513
. Waste name: Empty containers less than 30 gallons

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 731
. Waste name: Liquids with polychlorinated biphenyls > 50 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 751
. Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: P081

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste name: 1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: U002
. Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U160
. Waste name: 2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)

Date form received by agency: 03/01/2014
Site name: AEROJET ROCKETDYNE INC
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 731
. Waste name: Liquids with polychlorinated biphenyls > 50 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 751
. Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED

AEROJET ROCKETDYNE INC (Continued) **1000333003**

SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: P098
. Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 09/11/2012
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 211
. Waste name: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE,

AEROJET ROCKETDYNE INC (Continued) **1000333003**

CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: P068
. Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 07/30/2010
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2,

AEROJET ROCKETDYNE INC (Continued) **1000333003**

TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

Date form received by agency: 03/27/2008
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: D043
. Waste name: VINYL CHLORIDE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D018
. Waste name: BENZENE

. Waste code: D011
. Waste name: SILVER

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D009
. Waste name: MERCURY

. Waste code: D008
. Waste name: LEAD

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D005
. Waste name: BARIUM

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL

AEROJET ROCKETDYNE INC (Continued) **1000333003**

BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: P105
. Waste name: SODIUM AZIDE

. Waste code: U029
. Waste name: METHANE, BROMO- (OR) METHYL BROMIDE

. Waste code: U043
. Waste name: ETHENE, CHLORO- (OR) VINYL CHLORIDE

. Waste code: U045
. Waste name: METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)

. Waste code: U075
. Waste name: DICHLORODIFLUOROMETHANE (OR) METHANE, DICHLORODIFLUORO-

. Waste code: U080
. Waste name: METHANE, DICHLORO- (OR) METHYLENE CHLORIDE

. Waste code: U115
. Waste name: ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 02/23/2006
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 491
. Waste name: Unspecified sludge waste

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 711
. Waste name: Liquids with cyanides > 1000 mg/l

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT

AEROJET ROCKETDYNE INC (Continued) **1000333003**

MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: LABP
. Waste name: LAB PACK

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 02/20/2004
Site name: AERO JET - MISSILE AND SPACES PROPULSION
Classification: Large Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D037
. Waste name: PENTACHLOROPHENOL

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F002
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F005
. Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Date form received by agency: 03/28/2002
Site name: AEROJET MISSILE & SPACE PROPULSION
Classification: Large Quantity Generator

Date form received by agency: 10/12/2000
Site name: AEROJET PROPULSION & ENERGETIC SYSTEMS
Classification: Large Quantity Generator

Date form received by agency: 03/04/1999
Site name: AEROJET SACRAMENTO OPERATIONS
Classification: Large Quantity Generator

Date form received by agency: 09/01/1996

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Site name: AEROJET GENERAL CORPORATION
Classification: Large Quantity Generator

Date form received by agency: 02/07/1996
Site name: AEROJET SACRAMENTO OPERATIONS
Classification: Large Quantity Generator

Date form received by agency: 03/25/1994
Site name: US AEROJET RCRA FACILITY
Classification: Large Quantity Generator

Date form received by agency: 03/26/1992
Site name: UNITED STATES-AEROJET RCRA FACILITY
Classification: Large Quantity Generator

Date form received by agency: 04/16/1990
Site name: US AEROJET RCRA FACILITY
Classification: Large Quantity Generator

Date form received by agency: 08/18/1980
Site name: AEROJET GENERAL CORPORATION
Classification: Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code: D001
Waste name: IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs): 132357.1

Waste code: D002
Waste name: A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs): 45750

Waste code: D003
Waste name: A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs): 124114.4

Waste code: D005
Waste name: BARIUM

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Amount (Lbs): 2617

Waste code: D006
Waste name: CADMIUM
Amount (Lbs): 7205

Waste code: D007
Waste name: CHROMIUM
Amount (Lbs): 21161.8

Waste code: D008
Waste name: LEAD
Amount (Lbs): 9919

Waste code: D009
Waste name: MERCURY
Amount (Lbs): 464

Waste code: D010
Waste name: SELENIUM
Amount (Lbs): 5860

Waste code: D011
Waste name: SILVER
Amount (Lbs): 1451

Waste code: D018
Waste name: BENZENE
Amount (Lbs): 6.7

Waste code: D022
Waste name: CHLOROFORM
Amount (Lbs): 2521.8

Waste code: D028
Waste name: 1,2-DICHLOROETHANE
Amount (Lbs): 27650

Waste code: D035
Waste name: METHYL ETHYL KETONE
Amount (Lbs): 1347.6

Waste code: D038
Waste name: PYRIDINE
Amount (Lbs): 3406.8

Waste code: D040
Waste name: TRICHLOROETHYLENE
Amount (Lbs): 24000

Waste code: F002
Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE

AEROJET ROCKETDYNE INC (Continued) **1000333003**

OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 65890.2

Waste code: F003
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 65468

Waste code: F005
Waste name: THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs): 56935.4

Waste code: P068
Waste name: HYDRAZINE, METHYL-
Amount (Lbs): 127

Waste code: P081
Waste name: NITROGLYCERINE (R)
Amount (Lbs): 355

Waste code: P098
Waste name: POTASSIUM CYANIDE
Amount (Lbs): 10

Waste code: U002
Waste name: ACETONE (I)
Amount (Lbs): 60

Waste code: U133
Waste name: HYDRAZINE (R,T)
Amount (Lbs): 127

Waste code: U160
Waste name: 2-BUTANONE, PEROXIDE (R,T)
Amount (Lbs): 22

Corrective Action Summary:
Event date: 01/01/1978
Event: STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Event date:	01/01/1982
Event:	STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT
Event date:	01/01/1986
Event:	STABILIZATION CONSTRUCTION COMPLETED
Event date:	09/08/1988
Event:	INVESTIGATION IMPOSITION
Event date:	09/08/1988
Event:	CMS IMPOSITION
Event date:	06/23/1989
Event:	INVESTIGATION IMPOSITION
Event date:	06/01/1991
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	06/21/1994
Event:	RFA COMPLETED-ASSESSMENT WAS A RFA
Event date:	06/21/1994
Event:	RFA COMPLETED
Event date:	06/21/1994
Event:	DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY
Event date:	06/30/1994
Event:	INVESTIGATION IMPOSITION
Event date:	06/30/1994
Event:	CMS IMPOSITION
Event date:	06/30/1994
Event:	STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT
Event date:	04/17/1995
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL
Event date:	06/30/1995
Event:	CMS IMPOSITION
Event date:	01/01/1996
Event:	REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA
Event date:	01/01/1997
Event:	STABILIZATION CONSTRUCTION COMPLETED
Event date:	11/26/1997
Event:	CA PRIORITIZATION-HIGH CA PRIORITY
Event date:	04/02/1998
Event:	STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO STABILIZATION

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Event date:	04/02/1998
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/02/1998
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/02/1998
Event:	REFERRED TO A NON-RCRA AUTHORITY
Event date:	08/31/1999
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	12/23/1999
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	12/11/2000
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/11/2000
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/28/2000
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/28/2000
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/17/2001
Event:	INVESTIGATION COMPLETE
Event date:	11/22/2002
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL
Event date:	01/05/2005
Event:	INVESTIGATION WORKPLAN RECEIVED
Event date:	01/31/2005
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	05/18/2005
Event:	INVESTIGATION REPORT RECEIVED
Event date:	08/16/2005
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	08/16/2005
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	08/18/2005

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Event: INVESTIGATION COMPLETE

Event date: 08/18/2005
Event: CA PROCESS IS TERMINATED-NO FURTHER ACTION

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 12/01/2015
Date achieved compliance: 12/02/2015
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/02/2015
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 12/01/2015
Date achieved compliance: 12/02/2015
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/02/2015
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/2013
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: SINGLE SITE CA/FO
Enforcement action date: 06/20/2014
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 3200
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/23/2013
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 12/23/2013
Date achieved compliance: 02/24/2014
Violation lead agency: State
Enforcement action: SINGLE SITE CA/FO
Enforcement action date: 06/20/2014
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 3200
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: State Statute or Regulation
Date violation determined: 04/25/2012
Date achieved compliance: 05/29/2012
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/01/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 04/25/2012
Date achieved compliance: 05/29/2012
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/01/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 04/25/2012
Date achieved compliance: 05/29/2012
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/01/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 12/16/2008
Date achieved compliance: 12/16/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/16/2008
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 10/10/2006
Date achieved compliance: Not reported
Violation lead agency: State
Enforcement action: Not reported
Enforcement action date: Not reported
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: Not reported
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 10/11/2005
Date achieved compliance: 11/22/2005
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 12/13/2005
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 06/01/2004
Date achieved compliance: 12/21/2006
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/01/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General
Date violation determined: 06/01/2004
Date achieved compliance: 12/21/2006
Violation lead agency: State
Enforcement action: SINGLE SITE CA/FO
Enforcement action date: 12/21/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 114000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/24/2003
Date achieved compliance: 12/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/03/2003
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Area of violation: TSD - Container Use and Management
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 06/11/2002

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

EDR ID Number
Database(s) EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 06/11/2002
Date achieved compliance: 09/25/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement action date: 06/17/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Application
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Application
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Container Use and Management
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - General Facility Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permits - Application
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Regulation violated: Not reported
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: REFERRAL TO ATTORNEY GENERAL
Enforcement action date: 05/30/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Preparedness and Prevention
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 1200000
Paid penalty amount: Not reported

Regulation violated: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Area of violation: Permits - Application
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Tank System Standards
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date: 03/25/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: TSD - Manifest/Records/Reporting
Date violation determined: 10/05/2000
Date achieved compliance: 09/23/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/19/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: F - 264.110-120.G
Area of violation: TSD - Closure/Post-Closure

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date violation determined: 04/02/1997
Date achieved compliance: 06/05/1997
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/02/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 01/17/1996
Date achieved compliance: 01/31/1996
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/17/1996
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.340-352.O
Area of violation: TSD - Incinerator Standards
Date violation determined: 05/19/1995
Date achieved compliance: 01/17/1996
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/19/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.190-201.J
Area of violation: TSD - General
Date violation determined: 05/19/1995
Date achieved compliance: 01/17/1996
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/19/1995
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.170-177.I
Area of violation: TSD - General
Date violation determined: 05/24/1993

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 264.30-37.C
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 268 ALL
Area of violation: LDR - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 264.30-37.C
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 264.170-177.I
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 268 ALL
Area of violation: LDR - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/13/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 35000
Paid penalty amount: 35000

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 05/24/1993
Date achieved compliance: 06/24/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/24/1993
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 264.140-150.H
Area of violation: TSD - Financial Requirements
Date violation determined: 03/20/1991
Date achieved compliance: 01/22/1993
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 04/06/1991
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 270
Area of violation: TSD - General
Date violation determined: 01/22/1990
Date achieved compliance: 05/03/1990
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 03/08/1990
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 10/12/2017
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 09/18/2017
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/26/2016
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/01/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 12/02/2015
Evaluation lead agency: State

Evaluation date: 12/01/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 12/02/2015
Evaluation lead agency: State

Evaluation date: 11/06/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/29/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/05/2014
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/04/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/24/2014
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/23/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 02/24/2014
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 02/24/2014
Evaluation lead agency: State

Evaluation date: 09/24/2012
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/22/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/31/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 04/16/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/10/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/01/2010
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/25/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/02/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/16/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/16/2008
Evaluation lead agency: State

Evaluation date: 07/29/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/10/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/21/2006
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/10/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/22/2006
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 06/20/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/19/2005
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/11/2005
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 11/22/2005
Evaluation lead agency: State

Evaluation date: 08/03/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State Contractor/Grantee

Evaluation date: 06/01/2004
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/01/2004
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 12/21/2006
Evaluation lead agency: State

Evaluation date: 12/23/2003
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Financial Requirements
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

Evaluation date: 06/24/2003
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 12/23/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Tank System Standards
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Records/Reporting
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Container Use and Management
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Manifest

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Tank System Standards
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permits - Application
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Container Use and Management
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 12/02/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/20/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/29/1998
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/16/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 04/01/1997
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 06/05/1997
Evaluation lead agency: State

Evaluation date: 01/17/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/31/1996
Evaluation lead agency: State

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 01/17/1996
Evaluation lead agency: EPA

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Incinerator Standards

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Date achieved compliance: 01/17/1996
Evaluation lead agency: EPA

Evaluation date: 01/22/1993
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 03/20/1992
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/16/1992
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/14/1992
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 03/18/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Financial Requirements
Date achieved compliance: 01/22/1993
Evaluation lead agency: State

Evaluation date: 10/19/1990
Evaluation: OPERATION AND MAINTENANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Evaluation date: 01/23/1990
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 01/22/1990
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 05/03/1990
Evaluation lead agency: State

Evaluation date: 07/07/1989
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/13/1989
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/24/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 10/06/1987
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

US ENG CONTROLS:
EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Actual Date: 01/05/2011
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Alternate Drinking Water, Permanent Replacement
Contact Name: Not reported
Contact Phone and Ext: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Alternate Drinking Water, Temporary Replacement
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Biological Treatment, (N.O.S.)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Discharge
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Extraction
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Liquid Phase Carbon Adsorption
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Operations & Maintenance (O&M)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Publicly Owned Treatment Works (POTW)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: Pump And Treat
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Engineering Control: UV Oxidation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Air Stripping
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Biological Treatment, (Ex-Situ)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Carbon Adsorption
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Chemical Reduction/Oxidation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Extraction
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Reuse as Process Water
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: UV Oxidation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Cap
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Disposal
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Excavation
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Soil Vapor Extraction (in-situ)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Treatment, (N.O.S.)
Contact Name: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil Gas
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil Gas
Engineering Control: Vapor Intrusion Pathway Mitigation, (N.O.S)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Event Code Description: Not reported

US INST CONTROL:
EPA ID: CAD000030494
Site ID: Not reported
Name: AEROJET ROCKETDYNE INC
Action Name: Not reported
Address: US HWY 50 AND AEROJET RD
RANCHO CORDOVA, CA 95813-6000
EPA Region: 9
County: SACRAMENTO
Event Code: CA772PR
Inst. Control: Not reported
Actual Date: 04/17/1995
Complet. Date: 01/01/1900
Operable Unit: Not reported
Contaminated Media : Not reported
Contact Name : JIM BUEHLER
Contact Phone and Ext : 916-355-4682
Event Code Description: INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL

EPA ID: CAD000030494
Site ID: Not reported
Name: AEROJET ROCKETDYNE INC
Action Name: Not reported
Address: US HWY 50 AND AEROJET RD
RANCHO CORDOVA, CA 95813-6000
EPA Region: 9
County: SACRAMENTO
Event Code: CA772PR
Inst. Control: Not reported
Actual Date: 11/22/2002
Complet. Date: 01/01/1900
Operable Unit: Not reported
Contaminated Media : Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Contact Name : JIM BUEHLER
Contact Phone and Ext : 916-355-4682
Event Code Description: INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 07/31/2001
Complet. Date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Groundwater use/well drilling regulation
Actual Date: 07/31/2001
Complet. Date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Notice in Newspaper
Actual Date: 07/31/2001
Complet. Date: 07/20/2001
Operable Unit: 03
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Elevation | Site | Database(s) | EDR ID Number EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Groundwater use/well drilling regulation
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Deed Notices
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Covenant
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil Gas
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Deed Notices
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil Gas
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

EPA ID: CAD980358832
Site ID: 0901718
Name: AEROJET GENERAL CORP.
Action Name: RECORD OF DECISION
Address: HWY US 50 & AEROJET RD
RANCHO CORDOVA, CA 95670
EPA Region: 09
County: SACRAMENTO
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 01/05/2011
Complet. Date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil Gas
Contact Name : Not reported
Contact Phone and Ext : Not reported
Event Code Description: Not reported

ENVIROSTOR:
Facility ID: 80001284
Status: Refer: SMBRP
Status Date: 11/12/2010
Site Code: 510115
Site Type: Corrective Action
Site Type Detailed: Corrective Action
Acres: 0
NPL: NO

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Regulatory Agencies: SMBRP
Lead Agency: MBR
Program Manager: Not reported
Supervisor: William Beckman
Division Branch: Cleanup Sacramento
Assembly: 08
Senate: 08
Special Program: Not reported
Restricted Use: NO
Site Mgmt Req: NONE SPECIFIED
Funding: Not reported
Latitude: 38.61555
Longitude: -121.2032
APN: 123-01-1234
Past Use: NONE SPECIFIED
Potential COC: NONE SPECIFIED
Confirmed COC: NONE SPECIFIED
Potential Description: NONE SPECIFIED
Alias Name: 123-01-1234
Alias Type: APN
Alias Name: CAD000030494
Alias Type: EPA Identification Number
Alias Name: T10000002980
Alias Type: GeoTracker Global ID
Alias Name: 100002
Alias Type: Project Code (Site Code)
Alias Name: 510115
Alias Type: Project Code (Site Code)
Alias Name: 34370002
Alias Type: Envirostor ID Number
Alias Name: 80001284
Alias Type: Envirostor ID Number

Completed Info:
Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: RCRA Facility Assessment Report
Completed Date: 06/21/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 02/15/1995
Comments: Placeholder for LUR for Injection Wells 1 and 2. Part of Permit Closure and not part of Corrective Action. Type changed to Correspondence.

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Correspondence
Completed Date: 11/22/2002
Comments: Tracking of Waterboard and EPA Land Use Restriction for off-site groundwater for Carve-out area. No DTSC jurisdiction or involvement in LUR

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: MCDONALD DOUGLAS (3500 ACRE PARCEL)

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Completed Document Type: Consent Agreement
Completed Date: 06/30/1994
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: * Historical Operating Permit Authority
Completed Date: 06/10/1997
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: AEROJET (8500 ACRE PARCEL)
Completed Document Type: Consent Decree
Completed Date: 09/08/1988
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 08/16/1990
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Consent Order
Completed Date: 06/10/1997
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date: 06/23/1989
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Interim Measures Questionnaire
Completed Date: 04/02/1998
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SWMUs 55, 373, 374, 375
Completed Document Type: RFI Workplan
Completed Date: 01/31/2005
Comments: Changed date from 08/30/04 to 01/31/05 (03/14/06 - ps).

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: AEROJET (8500 ACRE PARCEL)
Completed Document Type: Interim Measures Implementation Report
Completed Date: 01/01/1986
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: MCDONALD DOUGLAS (3500 ACRE PARCEL)
Completed Document Type: Interim Measures Implementation Report
Completed Date: 01/01/1997
Comments: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: UNITS L, M, N, P, Q
Completed Document Type: RFI Report
Completed Date: 04/17/2001
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: SWMUs 55, 373, 374, 375
Completed Document Type: RFI Report
Completed Date: 08/18/2005
Comments: ps 03/14/06 - Four Grit piles were analyzed for perchlorate and metals, no further action required.

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: MCDONALD DOUGLAS (3500 ACRE PARCEL)
Completed Document Type: Interim Measures Workplan
Completed Date: 06/30/1994
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: AEROJET (8500 ACRE PARCEL)
Completed Document Type: RFI Workplan
Completed Date: 06/01/1991
Comments: PHASE I WORKPLAN RSARACINO 19980402.17:17S

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: UNITS L, M, N, P, Q
Completed Document Type: RFI Workplan
Completed Date: 12/23/1999
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: UNITS L, M, N, P, Q
Completed Document Type: RFI Workplan
Completed Date: 08/31/1999
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: AEROJET (8500 ACRE PARCEL)
Completed Document Type: Interim Measures Workplan
Completed Date: 01/01/1982
Comments: Not reported

Completed Area Name: Sites With No Operable Unit
Completed Sub Area Name: AEROJET (8500 ACRE PARCEL)
Completed Document Type: Interim Measures Workplan
Completed Date: 01/01/1978
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Groundwater Migration Controlled
Completed Date: 12/11/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Completed Document Type: Human Exposure Controlled
Completed Date: 12/11/2000
Comments: Not reported

Completed Area Name: PROJECT WIDE
Completed Sub Area Name: Not reported
Completed Document Type: Human Exposure Controlled
Completed Date: 08/16/2005
Comments: Not reported

Future Area Name: Not reported
Future Sub Area Name: Not reported
Future Document Type: Not reported
Future Due Date: Not reported
Schedule Area Name: Not reported
Schedule Sub Area Name: Not reported
Schedule Document Type: Not reported
Schedule Due Date: Not reported
Schedule Revised Date: Not reported

SWEEPS UST:
Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 2-N-G-
SWRCB Tank Id: 34-000-035377-000001
Tank Status: A
Capacity: 8121
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: REG UNLEADED
Number Of Tanks: 32

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 2-S-G-
SWRCB Tank Id: 34-000-035377-000002
Tank Status: A
Capacity: 8121
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: LEADED
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 7-E-2D
SWRCB Tank Id: 34-000-035377-000003
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1023-E-2D
SWRCB Tank Id: 34-000-035377-000004
Tank Status: A
Capacity: 7500
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1023-W-2D
SWRCB Tank Id: 34-000-035377-000005
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1028-E-2D

AEROJET ROCKETDYNE INC (Continued) **1000333003**

SWRCB Tank Id: 34-000-035377-000006
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1030-S-2D
SWRCB Tank Id: 34-000-035377-000007
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1034-E-2D
SWRCB Tank Id: 34-000-035377-000008
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1037-S-2D
SWRCB Tank Id: 34-000-035377-000009
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1050-E-2D
SWRCB Tank Id: 34-000-035377-000010
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1056-S-2D
SWRCB Tank Id: 34-000-035377-000011
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1058-W-2D
SWRCB Tank Id: 34-000-035377-000012
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1062-N-2D
SWRCB Tank Id: 34-000-035377-000013
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1086-N-2D
SWRCB Tank Id: 34-000-035377-000014
Tank Status: A
Capacity: 12000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 1096-W-2D
SWRCB Tank Id: 34-000-035377-000015
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 5026-N-2D
SWRCB Tank Id: 34-000-035377-000016

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 5026-S-2D
SWRCB Tank Id: 34-000-035377-000017
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 5038-N-2D
SWRCB Tank Id: 34-000-035377-000018
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 5068-E-2D
SWRCB Tank Id: 34-000-035377-000019
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 5080-S-2D
SWRCB Tank Id: 34-000-035377-000020
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 20019-E-2D
SWRCB Tank Id: 34-000-035377-000021
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 46035-S-2D
SWRCB Tank Id: 34-000-035377-000022
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 46046-S-2D
SWRCB Tank Id: 34-000-035377-000023
Tank Status: A
Capacity: 350
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 46068-S-2D
SWRCB Tank Id: 34-000-035377-000024
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 48012-W-2D
SWRCB Tank Id: 34-000-035377-000025
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 48021-N-2D
SWRCB Tank Id: 34-000-035377-000026
Tank Status: A

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Capacity: 10000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 49010-S-2D
SWRCB Tank Id: 34-000-035377-000027
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 49015-N-2D
SWRCB Tank Id: 34-000-035377-000028
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 49016-N-2D
SWRCB Tank Id: 34-000-035377-000029
Tank Status: A
Capacity: 5000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 49093-E-WO
SWRCB Tank Id: 34-000-035377-000030
Tank Status: A
Capacity: 500
Active Date: 07-01-85
Tank Use: OIL
STG: W
Content: WASTE OIL
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 7-W-CL-A
SWRCB Tank Id: 34-000-035377-000031
Tank Status: A
Capacity: 10000
Active Date: 07-01-85
Tank Use: UNKNOWN
STG: W
Content: Not reported
Number Of Tanks: Not reported

Status: Active
Comp Number: 35377
Number: 9
Board Of Equalization: 44-019214
Referral Date: 07-01-85
Action Date: Not reported
Created Date: 02-29-88
Owner Tank Id: 15011-E-2D
SWRCB Tank Id: 34-000-035377-000032
Tank Status: A
Capacity: 3000
Active Date: 07-01-85
Tank Use: M.V. FUEL
STG: P
Content: DIESEL
Number Of Tanks: Not reported

HIST UST:
File Number: 0001FD2A
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FD2A.pdf
Region: STATE
Facility ID: 00000019591
Facility Type: Other

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Other Type:	CONSTRUCTION
Contact Name:	E.L. MEYER
Telephone:	9163554621
Owner Name:	DELTA CONSTRUCTION COMPANY
Owner Address:	AEROJECT RD AND HWY 50
Owner City,St,Zip:	RANCHO CORDOVA, CA 95670
Total Tanks:	0004
Tank Num:	001
Container Num:	DELTA - LA
Year Installed:	1979
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	101
Leak Detection:	Not reported
Tank Num:	002
Container Num:	DELTA-GAS-
Year Installed:	1979
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	3/16
Leak Detection:	10
Tank Num:	003
Container Num:	DELTA-20
Year Installed:	1982
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	3/16
Leak Detection:	10
Tank Num:	004
Container Num:	DELTA-3
Year Installed:	1984
Tank Capacity:	00000026
Tank Used for:	WASTE
Type of Fuel:	Not reported
Container Construction Thickness:	6
Leak Detection:	Visual

Click here for Geo Tracker PDF:

CA FID UST:

Facility ID:	34006488
Regulated By:	UTNKA
Regulated ID:	00035377
Cortese Code:	Not reported
SIC Code:	Not reported
Facility Phone:	9163552740
Mail To:	Not reported
Mailing Address:	P O BOX
Mailing Address 2:	Not reported
Mailing City,St,Zip:	RANCHO CORDOVA 95670

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Facility ID: 34006488
Regulated By: UTNKA
Regulated ID: 00035378
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 9163554621
Mail To: Not reported
Mailing Address: P O BOX 15699C
Mailing Address 2: Not reported
Mailing City,St,Zip: RANCHO CORDOVA 95670
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Facility ID: 34006488
Regulated By: UTNKA
Regulated ID: 00035380
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 9163554621
Mail To: Not reported
Mailing Address: P O BOX 15699C
Mailing Address 2: Not reported
Mailing City,St,Zip: RANCHO CORDOVA 95670
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Facility ID: 34006488
Regulated By: UTNKA
Regulated ID: 00035461
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 9163554621
Mail To: Not reported
Mailing Address: P O BOX
Mailing Address 2: Not reported
Mailing City,St,Zip: RANCHO CORDOVA 95670
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported

AEROJET ROCKETDYNE INC (Continued) **1000333003**

NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Active

Facility ID: 34006488
Regulated By: UTNKI
Regulated ID: 00019591
Cortese Code: Not reported
SIC Code: Not reported
Facility Phone: 9163554621
Mail To: Not reported
Mailing Address: P O BOX 156994 DEPT
Mailing Address 2: Not reported
Mailing City,St,Zip: RANCHO CORDOVA 95670
Contact: Not reported
Contact Phone: Not reported
DUNs Number: Not reported
NPDES Number: Not reported
EPA ID: Not reported
Comments: Not reported
Status: Inactive

US FIN ASSUR:
EPA ID: CAD000030494
County: Not reported
Mechanism type: S
Mechanism Type Description: SURETY BOND GUARANTEEING PERFORMANCE
Cost estimate: 3958885.49
Face value: 7069501.9
Effective date: 2011-11-30 00:00:00
Provider: WESTCHESTER FIRE INS. CO.
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: L
Mechanism Type Description: LETTER OF CREDIT
Cost estimate: 831922
Face value: 849392.36
Effective date: 2012-09-12 00:00:00
Provider: WELL FARGO
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: S
Mechanism Type Description: SURETY BOND GUARANTEEING PERFORMANCE
Cost estimate: 864681.42
Face value: 7069501.9
Effective date: 2011-11-30 00:00:00
Provider: WESTCHESTER FIRE INS. CO.
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: X

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Mechanism Type Description: STANDBY TRUST FUND
Cost estimate: 864681.42
Face value: 0
Effective date: 2006-04-26 00:00:00
Provider: BANK OF NEW YORK MELLON
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: X
Mechanism Type Description: STANDBY TRUST FUND
Cost estimate: 2000000
Face value: 8000000
Effective date: 2016-02-28 00:00:00
Provider: GREAT AMERICAN E&S INS. COMPANY
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: I
Mechanism Type Description: INSURANCE
Cost estimate: 8000000
Face value: 8000000
Effective date: 2013-02-28 00:00:00
Provider: INDIAN HARBORS INS.
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: X
Mechanism Type Description: STANDBY TRUST FUND
Cost estimate: 3958885.49
Face value: 0
Effective date: 2006-04-26 00:00:00
Provider: BANK OF NEW YORK MELLON
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: L
Mechanism Type Description: LETTER OF CREDIT
Cost estimate: 3808899
Face value: 3888885.88
Effective date: 2012-09-12 00:00:00
Provider: WACHOVIA BANK
EPA region: 9

EPA ID: CAD000030494
County: Not reported
Mechanism type: X
Mechanism Type Description: STANDBY TRUST FUND
Cost estimate: 6000000
Face value: 8000000
Effective date: 2016-02-28 00:00:00
Provider: GREAT AMERICAN E&S INS. COMPANY
EPA region: 9

AEROJET ROCKETDYNE INC (Continued) **1000333003**

ROD:

EPA ID:	CAD980358832
RG:	9
Site ID:	901718
Name:	AEROJET GENERAL CORP.
Action:	GOVT Decision Document (ROD)
Operable Unit Number:	WESTERN GW OU
SEQ ID:	2
Action Completion:	2001-07-20 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported

EPA ID:	CAD980358832
RG:	9
Site ID:	901718
Name:	AEROJET GENERAL CORP.
Action:	GOVT ROD for PRP Remedy
Operable Unit Number:	PERIMETER GW
SEQ ID:	4
Action Completion:	2011-02-15 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported

EPA ID:	CAD980358832
RG:	9
Site ID:	901718
Name:	AEROJET GENERAL CORP.
Action:	GOVT ROD for PRP Remedy
Operable Unit Number:	BOUNDARY OU GW & SOIL
SEQ ID:	5
Action Completion:	2015-07-22 00:00:00
NPL Status:	Final
Non NPL Status:	Not reported

PRP:

PRP Name:	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	CORDOVA CHEMICAL CO.
	CORDOVA CHEMICAL CO.
	CORDOVA CHEMICAL CO.
	CORDOVA CHEMICAL CO.
	CORDOVA CHEMICAL CO.

PADS:

EPAID:	CAD000030494
Facility name:	US GEN CORP AEROJET SACRAMENTO
Facility Address:	HIGHWAY 50 & AEROJET RD RANCHO CORDOVA, CA 95670
Facility country:	US

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AEROJET ROCKETDYNE INC (Continued) **1000333003**

Generator:	Yes
Storer:	No
Transporter:	No
Disposer:	No
Research facility:	No
Smelter:	No
Facility owner name:	GENCORP AEROJET
Contact title:	Not reported
Contact name:	ED MYER
Contact tel:	916-355-4621
Contact extension:	Not reported
Contact Email:	Not reported
Mailing address:	PO BOX 15699 SACRAMENTO, CA 95852-1699
Mailing country:	US
Cert. date:	04/02/1990

CONSENT:

EPA ID:	CAD980358832
Site ID:	Not reported
Case Title:	U.S. V. AEROJET-GENERAL CORPORATION & CORDOVA CHEMICAL COMPANY
Court Num:	86-0064 86-63
District:	California, East
Entered Date:	19980730
Name:	AEROJET GENERAL CORP
Address:	HWY 50 AND AEROJET RD
City:	RANCHO CORDOVA
County:	Not reported
State:	CA
Zip:	95670

EPA ID:	CAD980358832
Site ID:	Not reported
Case Title:	U.S. V. AEROJET-GENERAL CORPORATION & CORDOVA CHEMICAL COMPANY
Court Num:	86-0064 86-63
District:	California, East
Entered Date:	20020415
Name:	AEROJET GENERAL CORP
Address:	HWY 50 AND AEROJET RD
City:	RANCHO CORDOVA
County:	Not reported
State:	CA
Zip:	95670

---

1 **NORTH DOUGLAS** **CIWQS S121659258**
NORTHEAST OF DOUGLAS ROAD AND AMERICANOS ROAD **N/A**
< 1/8 **RANCHO CORDOVA, CA 95670**
1 ft.

Relative: Lower
Actual: 221 ft.

CIWQS:

Agency:	MS Rialto North Douglas LLC
Agency Address:	1420 Rocky Ridge Drive Suite 320, Roseville, CA 95661
Place/Project Type:	Construction - Residential, Utility: Repairs of individual water lines and Flushing
SIC/NAICS:	Not reported
Region:	5S
Program:	CONSTW

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

NORTH DOUGLAS (Continued) **S121659258**

Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water construction
Order Number:	2009-0009-DWQ
WDID:	5S34C360061
NPDES Number:	CAS000002
Adoption Date:	Not reported
Effective Date:	12/16/2010
Termination Date:	03/04/2011
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.574204
Longitude:	-121.200414

A2 **AMERICAN RIVER ASPHALT** **AST** **S102315643**
ENE **3417 GRANTLINE RD** **CERS HAZ WASTE** **N/A**
< 1/8 **RANCHO CORDOVA, CA 95742** **CERS TANKS**
0.063 mi. **EMI**
333 ft. **Site 1 of 2 in cluster A** **ENF**
Sacramento Co. ML
Relative: Higher **NPDES**
WDS
Actual: 260 ft. **CIWQS**
CERS

AST:

Certified Unified Program Agencies:	Not reported
Owner:	Teichert Materials
Total Gallons:	Not reported
CERSID:	10219426
Facility ID:	Not reported
Business Name:	Teichert Aggregates
Phone:	(916) 351-0123
Fax:	Not reported
Mailing Address:	3417 Grant Line Road
Mailing Address City:	Rancho Cordova
Mailing Address State:	CA
Mailing Address Zip Code:	95742
Operator Name:	Teichert Aggregates - Grantline Plant
Operator Phone:	916-351-0123
Owner Phone:	916-484-3301
Owner Mail Address:	PO Box 15002
Owner State:	CA
Owner Zip Code:	95851
Owner Country:	United States
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	CAL000231531

AMERICAN RIVER ASPHALT (Continued) **S102315643**

CERS HAZ WASTE:
- Site ID: 160028
- CERS ID: 10219426
- CERS Description: Hazardous Waste Generator

Evaluation:
- Eval General Type: Other/Unknown
- Eval Date: 11-23-2016
- Violations Found: No
- Eval Type: Other, not routine, done by local agency
- Eval Notes: No violations observed this date.
- Eval Division: Sacramento County Env Management Department
- Eval Program: APSA
- Eval Source: CERS

- Eval General Type: Compliance Evaluation Inspection
- Eval Date: 07-22-2016
- Violations Found: No
- Eval Type: Routine done by local agency
- Eval Notes: No violations observed this date.
- Eval Division: Sacramento County Env Management Department
- Eval Program: HW
- Eval Source: CERS

- Eval General Type: Compliance Evaluation Inspection
- Eval Date: 07-22-2016
- Violations Found: No
- Eval Type: Routine done by local agency
- Eval Notes: No violations observed this date.
- Eval Division: Sacramento County Env Management Department
- Eval Program: HMRRP
- Eval Source: CERS

Coordinates:
- Site ID: 160028
- Facility Name: Teichert Materials - Grantline Plant
- Env Int Type Code: HWG
- Program ID: 10219426
- Coord Name: Not reported
- Ref Point Type Desc: Center of a facility or station.
- Latitude: 38.579710
- Longitude: -121.182210

Affiliation:
- Affiliation Type Desc: Document Preparer
- Entity Name: Alberto Ramirez
- Entity Title: Not reported
- Affiliation Address: Not reported
- Affiliation City: Not reported
- Affiliation State: Not reported
- Affiliation Country: Not reported
- Affiliation Zip: Not reported
- Affiliation Phone: Not reported

- Affiliation Type Desc: Facility Mailing Address
- Entity Name: Mailing Address

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Entity Title:	Not reported
Affiliation Address:	3417 Grant Line Road
Affiliation City:	Rancho Cordova
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95742
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	Teichert Aggregates - Grantline Plant
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(916) 351-0123
Affiliation Type Desc:	CUPA District
Entity Name:	Sacramento County Environmental Management Departm
Entity Title:	Not reported
Affiliation Address:	10590 Armstrong Avenue, Suite A
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95655
Affiliation Phone:	(916) 875-8550
Affiliation Type Desc:	Identification Signer
Entity Name:	Becky Wood
Entity Title:	EH&S Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Alberto Ramirez
Entity Title:	Not reported
Affiliation Address:	PO Box 15002
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95851
Affiliation Phone:	(916) 484-3348
Affiliation Type Desc:	Legal Owner
Entity Name:	Teichert Materials
Entity Title:	Not reported
Affiliation Address:	PO Box 15002
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95851
Affiliation Phone:	(916) 484-3301

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Affiliation Type Desc:	Parent Corporation
Entity Name:	Teichert Aggregates
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

CERS TANKS:

Site ID:	160028
CERS ID:	10219426
CERS Description:	Aboveground Petroleum Storage

Evaluation:

Eval General Type:	Other/Unknown
Eval Date:	11-23-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	No violations observed this date.
Eval Division:	Sacramento County Env Management Department
Eval Program:	APSA
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-22-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	No violations observed this date.
Eval Division:	Sacramento County Env Management Department
Eval Program:	HW
Eval Source:	CERS

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-22-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	No violations observed this date.
Eval Division:	Sacramento County Env Management Department
Eval Program:	HMRRP
Eval Source:	CERS

Coordinates:

Site ID:	160028
Facility Name:	Teichert Materials - Grantline Plant
Env Int Type Code:	HWG
Program ID:	10219426
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	38.579710
Longitude:	-121.182210

Affiliation:

Affiliation Type Desc:	Document Preparer

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Entity Name:	Alberto Ramirez
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3417 Grant Line Road
Affiliation City:	Rancho Cordova
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95742
Affiliation Phone:	Not reported
Affiliation Type Desc:	Operator
Entity Name:	Teichert Aggregates - Grantline Plant
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(916) 351-0123
Affiliation Type Desc:	CUPA District
Entity Name:	Sacramento County Environmental Management Departm
Entity Title:	Not reported
Affiliation Address:	10590 Armstrong Avenue, Suite A
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95655
Affiliation Phone:	(916) 875-8550
Affiliation Type Desc:	Identification Signer
Entity Name:	Becky Wood
Entity Title:	EH&S Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Alberto Ramirez
Entity Title:	Not reported
Affiliation Address:	PO Box 15002
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95851

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Affiliation Phone:	(916) 484-3348
Affiliation Type Desc:	Legal Owner
Entity Name:	Teichert Materials
Entity Title:	Not reported
Affiliation Address:	PO Box 15002
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95851
Affiliation Phone:	(916) 484-3301
Affiliation Type Desc:	Parent Corporation
Entity Name:	Teichert Aggregates
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

EMI:

Year:	1993
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	1
Particulate Matter Tons/Yr:	4
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2
Year:	1995
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	1
Reactive Organic Gases Tons/Yr:	1
Carbon Monoxide Emissions Tons/Yr:	2
NOX - Oxides of Nitrogen Tons/Yr:	2
SOX - Oxides of Sulphur Tons/Yr:	1
Particulate Matter Tons/Yr:	4
Part. Matter 10 Micrometers and Smllr Tons/Yr:	2

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Year:	1996
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	3
Carbon Monoxide Emissions Tons/Yr:	4
NOX - Oxides of Nitrogen Tons/Yr:	10
SOX - Oxides of Sulphur Tons/Yr:	3
Particulate Matter Tons/Yr:	12
Part. Matter 10 Micrometers and Smllr Tons/Yr:	4

Year:	1997
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	5
NOX - Oxides of Nitrogen Tons/Yr:	13
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	11
Part. Matter 10 Micrometers and Smllr Tons/Yr:	6

Year:	1998
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	4
Reactive Organic Gases Tons/Yr:	4
Carbon Monoxide Emissions Tons/Yr:	6
NOX - Oxides of Nitrogen Tons/Yr:	14
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	11
Part. Matter 10 Micrometers and Smllr Tons/Yr:	7

Year:	1999
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	17
SOX - Oxides of Sulphur Tons/Yr:	2
Particulate Matter Tons/Yr:	14
Part. Matter 10 Micrometers and Smllr Tons/Yr:	8

Year:	2000
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	5
Reactive Organic Gases Tons/Yr:	5
Carbon Monoxide Emissions Tons/Yr:	7
NOX - Oxides of Nitrogen Tons/Yr:	18
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	15
Part. Matter 10 Micrometers and Smllr Tons/Yr:	9

Year:	2001
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	49
NOX - Oxides of Nitrogen Tons/Yr:	15
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	16
Part. Matter 10 Micrometers and Smllr Tons/Yr:	7

Year:	2001
County Code:	34
Air Basin:	SV
Facility ID:	14
Air District Name:	SAC
SIC Code:	1442
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Not reported
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	45
Part. Matter 10 Micrometers and Smllr Tons/Yr:	16

Year:	2002
County Code:	34
Air Basin:	SV
Facility ID:	118
Air District Name:	SAC
SIC Code:	2951
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	Y
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	3
Reactive Organic Gases Tons/Yr:	2
Carbon Monoxide Emissions Tons/Yr:	49
NOX - Oxides of Nitrogen Tons/Yr:	15
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	16
Part. Matter 10 Micrometers and Smllr Tons/Yr:	7

Year:	2013
County Code:	34
Air Basin:	SV
Facility ID:	14
Air District Name:	SAC
SIC Code:	1442
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	N
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2014
County Code:	34
Air Basin:	SV
Facility ID:	14
Air District Name:	SAC
SIC Code:	1442
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	N
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

Year:	2015

AMERICAN RIVER ASPHALT (Continued) **S102315643**

County Code:	34
Air Basin:	SV
Facility ID:	14
Air District Name:	SAC
SIC Code:	1442
Air District Name:	SACRAMENTO METROPOLITAN AQMD
Community Health Air Pollution Info System:	N
Consolidated Emission Reporting Rule:	Not reported
Total Organic Hydrocarbon Gases Tons/Yr:	0
Reactive Organic Gases Tons/Yr:	0
Carbon Monoxide Emissions Tons/Yr:	0
NOX - Oxides of Nitrogen Tons/Yr:	0
SOX - Oxides of Sulphur Tons/Yr:	0
Particulate Matter Tons/Yr:	0
Part. Matter 10 Micrometers and Smllr Tons/Yr:	0

ENF:

Region:	5S
Facility Id:	227787
Agency Name:	Not reported
Place Type:	Mining
Place Subtype:	Sand and Gravel Mining
Facility Type:	Industrial
Agency Type:	Not reported
# Of Agencies:	Not reported
Place Latitude:	38.57971
Place Longitude:	-121.18221
SIC Code 1:	1442
SIC Desc 1:	Construction Sand and Gravel
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	212321
NAICS Desc 1:	Construction Sand and Gravel Mining
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Enf Action
Design Flow:	Not reported
Threat To Water Quality:	Not reported
Complexity:	Not reported
Pretreatment:	Not reported
Facility Waste Type:	Not reported
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	Not reported
Program Category1:	Not reported
Program Category2:	WDR
# Of Programs:	Not reported
WDID:	Not reported
Reg Measure Id:	Not reported
Reg Measure Type:	Not reported
Region:	Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Order #:	Not reported
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	Not reported
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Not reported
Status Date:	Not reported
Effective Date:	Not reported
Expiration/Review Date:	Not reported
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	Not reported
Individual/General:	Not reported
Fee Code:	Not reported
Direction/Voice:	Not reported
Enforcement Id(EID):	244638
Region:	5S
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	04/25/2003
Adoption/Issuance Date:	04/25/2003
Achieve Date:	Not reported
Termination Date:	04/25/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV 04/25/2003 for Teichert Aggregates, Grantline Plant
Description:	NOV for failure to submit wastewater characterization report required by WDRS.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	5S
Facility Id:	227787
Agency Name:	Grant Line Road Properties LLC
Place Type:	Mining
Place Subtype:	Sand and Gravel Mining
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	2
Place Latitude:	38.57971

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Place Longitude:	-121.18221
SIC Code 1:	1442
SIC Desc 1:	Construction Sand and Gravel
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	212321
NAICS Desc 1:	Construction Sand and Gravel Mining
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	1.5
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	N - POTW does not have EPA approved pretreatment prog.
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMINING
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	5A342027001
Reg Measure Id:	131503
Reg Measure Type:	WDR
Region:	5S
Order #:	R5-2002-0123
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	09/04/2018
Effective Date:	06/07/2002
Expiration/Review Date:	06/07/2012
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	385448
Region:	5S
Order / Resolution Number:	Not reported

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Enforcement Action Type:	Oral Communication
Effective Date:	06/07/2012
Adoption/Issuance Date:	06/07/2012
Achieve Date:	Not reported
Termination Date:	06/07/2012
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Oral Com 06/07/2012 for Teichert Aggregates
Description:	Contacted Discharger regarding late reporting.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	5S
Facility Id:	227787
Agency Name:	Grant Line Road Properties LLC
Place Type:	Mining
Place Subtype:	Sand and Gravel Mining
Facility Type:	Industrial
Agency Type:	Privately-Owned Business
# Of Agencies:	2
Place Latitude:	38.57971
Place Longitude:	-121.18221
SIC Code 1:	1442
SIC Desc 1:	Construction Sand and Gravel
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	212321
NAICS Desc 1:	Construction Sand and Gravel Mining
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	1.5
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	N - POTW does not have EPA approved pretreatment prog.
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMINING
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

WDID:	5A342027001
Reg Measure Id:	131503
Reg Measure Type:	WDR
Region:	5S
Order #:	R5-2002-0123
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	09/04/2018
Effective Date:	06/07/2002
Expiration/Review Date:	06/07/2012
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive
Enforcement Id(EID):	237414
Region:	5S
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	08/13/2001
Adoption/Issuance Date:	08/13/2001
Achieve Date:	Not reported
Termination Date:	08/13/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV 08/13/2001 for Teichert Aggregates, Grantline Plant
Description:	NOV sent to Discharger for incomplete monitoring reports.
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Region:	5S
Facility Id:	227787
Agency Name:	Grant Line Road Properties LLC
Place Type:	Mining
Place Subtype:	Sand and Gravel Mining
Facility Type:	Industrial

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Agency Type:	Privately-Owned Business
# Of Agencies:	2
Place Latitude:	38.57971
Place Longitude:	-121.18221
SIC Code 1:	1442
SIC Desc 1:	Construction Sand and Gravel
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	212321
NAICS Desc 1:	Construction Sand and Gravel Mining
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	1.5
Threat To Water Quality:	2
Complexity:	C
Pretreatment:	N - POTW does not have EPA approved pretreatment prog.
Facility Waste Type:	Solid wastes, NEC
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	WDRMINING
Program Category1:	WDR
Program Category2:	WDR
# Of Programs:	1
WDID:	5A342027001
Reg Measure Id:	131503
Reg Measure Type:	WDR
Region:	5S
Order #:	R5-2002-0123
Npdes# CA#:	Not reported
Major-Minor:	Not reported
Npdes Type:	Not reported
Reclamation:	N - No
Dredge Fill Fee:	Not reported
301H:	Not reported
Application Fee Amt Received:	Not reported
Status:	Active
Status Date:	09/04/2018
Effective Date:	06/07/2002
Expiration/Review Date:	06/07/2012
Termination Date:	Not reported
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	58 - Non15 Based on (TTWQ)/CPLX)
Direction/Voice:	Passive

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Enforcement Id(EID):	232040
Region:	5S
Order / Resolution Number:	Not reported
Enforcement Action Type:	Notice of Violation
Effective Date:	04/06/2000
Adoption/Issuance Date:	04/06/2000
Achieve Date:	Not reported
Termination Date:	04/06/2000
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	NOV 04/06/2000 for Teichert Aggregates, Grantline Plant
Description:	Sent NOV
Program:	WDR
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	0
Initial Assessed Amount:	0
Liability $ Amount:	0
Project $ Amount:	0
Liability $ Paid:	0
Project $ Completed:	0
Total $ Paid/Completed Amount:	0

Sacramento Co. ML:

Facility Id:	Not reported
Facility Status:	Not reported
FD:	Not reported
Billing Codes BP:	A
Billing Codes UST:	Not reported
WG Bill Code:	A
Target Property Bill Cod:	Not reported
Food Bill Code:	Not reported
CUPA Permit Date:	Not reported
HAZMAT Permit Date:	Not reported
HAZMAT Inspection Date:	Not reported
Hazmat Date BP Received:	Not reported
UST Permit Dt:	Not reported
UST Inspection Date:	Not reported
UST Tank Test Date:	Not reported
Number of Tanks:	Not reported
UST Tank Test Date:	Not reported
SIC Code:	Not reported
Tier Permitting:	Not reported
AST Bill Code:	Not reported
CALARP Bill Code:	Not reported

NPDES:

Facility Status:	Not reported
NPDES Number:	Not reported
Region:	Not reported
Agency Number:	Not reported
Regulatory Measure ID:	Not reported
Place ID:	Not reported
Order Number:	Not reported
WDID:	5S34I016853

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Regulatory Measure Type:	Industrial
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	Not reported
Discharge Name:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Status:	Active
Status Date:	10/09/2001
Operator Name:	Teichert Aggregates
Operator Address:	PO Box 15002
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95851

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	200867
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34I016853
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	10/09/2001
Status:	Active
Status Date:	10/09/2001
Place Size:	1500
Place Size Unit:	Acres
Contact:	Mike Cunningham
Contact Title:	Not reported
Contact Phone:	916-351-0123
Contact Phone Ext:	Not reported
Contact Email:	mcunningham@teichert.com
Operator Name:	Teichert Aggregates
Operator Address:	PO Box 15002
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95851
Operator Contact:	Michael Cunningham
Operator Contact Title:	Plant Manager
Operator Contact Phone:	916-386-6873

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Operator Contact Phone Ext:	Not reported
Operator Contact Email:	mcunningham@teichert.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	916-351-0123
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Y
Receiving Water Name:	Morrison Creek
Certifier:	Dana Davis
Certifier Title:	President
Certification Date:	12-MAR-15
Primary Sic:	1442-Construction Sand and Gravel
Secondary Sic:	2951-Asphalt Paving Mixtures and Blocks
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	200867
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S34I016853
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/09/2001
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Teichert Aggregates
Discharge Address:	PO Box 15002
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95851

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported
Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Facility Status:	Active
NPDES Number:	CAS000001
Region:	5S
Agency Number:	0
Regulatory Measure ID:	200867
Place ID:	Not reported
Order Number:	97-03-DWQ
WDID:	5S34I016853
Regulatory Measure Type:	Enrollee
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	10/09/2001
Termination Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Discharge Address:	PO Box 15002
Discharge Name:	Teichert Aggregates
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95851
Status:	Not reported
Status Date:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported

NPDES as of 03/2018:

NPDES Number:	Not reported
Status:	Not reported
Agency Number:	Not reported
Region:	5S
Regulatory Measure ID:	200867
Order Number:	Not reported
Regulatory Measure Type:	Industrial
Place ID:	Not reported
WDID:	5S34I016853
Program Type:	Not reported
Adoption Date Of Regulatory Measure:	Not reported
Effective Date Of Regulatory Measure:	Not reported
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Not reported
Discharge Address:	Not reported
Discharge City:	Not reported
Discharge State:	Not reported
Discharge Zip:	Not reported
Received Date:	05/09/2008
Processed Date:	10/09/2001
Status:	Active
Status Date:	10/09/2001
Place Size:	1500
Place Size Unit:	Acres
Contact:	Mike Cunningham
Contact Title:	Not reported
Contact Phone:	916-351-0123
Contact Phone Ext:	Not reported
Contact Email:	mcunningham@teichert.com

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Operator Name:	Teichert Aggregates
Operator Address:	PO Box 15002
Operator City:	Sacramento
Operator State:	California
Operator Zip:	95851
Operator Contact:	Michael Cunningham
Operator Contact Title:	Plant Manager
Operator Contact Phone:	916-386-6873
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	mcunningham@teichert.com
Operator Type:	Private Business
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	California
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	916-351-0123
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Y
Receiving Water Name:	Morrison Creek
Certifier:	Dana Davis
Certifier Title:	President
Certification Date:	12-MAR-15
Primary Sic:	1442-Construction Sand and Gravel
Secondary Sic:	2951-Asphalt Paving Mixtures and Blocks
Tertiary Sic:	Not reported
NPDES Number:	CAS000001
Status:	Active
Agency Number:	0
Region:	5S
Regulatory Measure ID:	200867
Order Number:	97-03-DWQ
Regulatory Measure Type:	Enrollee
Place ID:	Not reported
WDID:	5S34I016853
Program Type:	Industrial
Adoption Date Of Regulatory Measure:	Not reported

Map ID
Direction
Distance
Elevation | Site | MAP FINDINGS | Database(s) | EDR ID Number EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Effective Date Of Regulatory Measure:	10/09/2001
Expiration Date Of Regulatory Measure:	Not reported
Termination Date Of Regulatory Measure:	Not reported
Discharge Name:	Teichert Aggregates
Discharge Address:	PO Box 15002
Discharge City:	Sacramento
Discharge State:	California
Discharge Zip:	95851
Received Date:	Not reported
Processed Date:	Not reported
Status:	Not reported
Status Date:	Not reported
Place Size:	Not reported
Place Size Unit:	Not reported
Contact:	Not reported
Contact Title:	Not reported
Contact Phone:	Not reported
Contact Phone Ext:	Not reported
Contact Email:	Not reported
Operator Name:	Not reported
Operator Address:	Not reported
Operator City:	Not reported
Operator State:	Not reported
Operator Zip:	Not reported
Operator Contact:	Not reported
Operator Contact Title:	Not reported
Operator Contact Phone:	Not reported
Operator Contact Phone Ext:	Not reported
Operator Contact Email:	Not reported
Operator Type:	Not reported
Developer:	Not reported
Developer Address:	Not reported
Developer City:	Not reported
Developer State:	Not reported
Developer Zip:	Not reported
Developer Contact:	Not reported
Developer Contact Title:	Not reported
Constype Linear Utility Ind:	Not reported
Emergency Phone:	Not reported
Emergency Phone Ext:	Not reported
Constype Above Ground Ind:	Not reported
Constype Below Ground Ind:	Not reported
Constype Cable Line Ind:	Not reported
Constype Comm Line Ind:	Not reported
Constype Commertial Ind:	Not reported
Constype Electrical Line Ind:	Not reported
Constype Gas Line Ind:	Not reported
Constype Industrial Ind:	Not reported
Constype Other Description:	Not reported
Constype Other Ind:	Not reported
Constype Recons Ind:	Not reported
Constype Residential Ind:	Not reported
Constype Transport Ind:	Not reported
Constype Utility Description:	Not reported
Constype Utility Ind:	Not reported
Constype Water Sewer Ind:	Not reported
Dir Discharge Uswater Ind:	Not reported

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Receiving Water Name:	Not reported
Certifier:	Not reported
Certifier Title:	Not reported
Certification Date:	Not reported
Primary Sic:	Not reported
Secondary Sic:	Not reported
Tertiary Sic:	Not reported

WDS:

Facility ID:	5S 34I003836
Facility Type:	Other - Does not fall into the category of Municipal/Domestic, Industrial, Agricultural or Solid Waste (Class I, II or III)
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	0
Facility Telephone:	9169856370
Facility Contact:	JERRY HANSEN
Agency Name:	AMERICAN RIVER AGGREGATES
Agency Address:	PO BOX 981
Agency City,St,Zip:	FOLSOM 95630
Agency Contact:	JOHN KEMP
Agency Telephone:	9169856370
Agency Type:	Private
SIC Code:	2951
SIC Code 2:	Not reported
Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Primary Waste:	STORMS
Waste Type2:	Not reported
Waste2:	Stormwater Runoff
Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	No reclamation requirements associated with this facility.
POTW:	The facility is not a POTW.
Treat To Water:	Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity:	Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or

AMERICAN RIVER ASPHALT (Continued) **S102315643**

dischargers having waste storage systems with land disposal such as dairy waste ponds.

Facility ID: 5S 34I016853
Facility Type: Industrial - Facility that treats and/or disposes of liquid or semisolid wastes from any servicing, producing, manufacturing or processing operation of whatever nature, including mining, gravel washing, geothermal operations, air conditioning, ship building and repairing, oil production, storage and disposal operations, water pumping.
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CAS000001 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 0
Facility Telephone: 9163510123
Facility Contact: Steve Azevedo
Agency Name: TEICHERT & SON INC
Agency Address: PO BOX 15002
Agency City,St,Zip: SACRAMENTO 958511002
Agency Contact: Steve AZEVEDO
Agency Telephone: 9164843011
Agency Type: Private
SIC Code: 0
SIC Code 2: Not reported
Primary Waste Type: Not reported
Primary Waste: Not reported
Waste Type2: Not reported
Waste2: Not reported
Primary Waste Type: Not reported
Secondary Waste: Not reported
Secondary Waste Type: Not reported
Design Flow: 0
Baseline Flow: 0
Reclamation: Not reported
POTW: Not reported
Treat To Water: Minor Threat to Water Quality. A violation of a regional board order should cause a relatively minor impairment of beneficial uses compared to a major or minor threat. Not: All nurds without a TTWQ will be considered a minor threat to water quality unless coded at a higher Level. A Zero (0) may be used to code those NURDS that are found to represent no threat to water quality.
Complexity: Category C - Facilities having no waste treatment systems, such as cooling water dischargers or thosewho must comply through best management practices, facilities with passive waste treatment and disposal systems, such as septic systems with subsurface disposal, or dischargers having waste storage systems with land disposal such as dairy waste ponds.

CIWQS:
Agency: Grant Line Road Properties LLC
Agency Address: 3500 American River Drive, Sacramento, CA 95864
Place/Project Type: Sand and Gravel Mining
SIC/NAICS: 1442
Region: 5S
Program: WDRMINING
Regulatory Measure Status: Active

Map ID
Direction
Distance
Elevation Site

MAP FINDINGS

Database(s) EDR ID Number EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Regulatory Measure Type:	WDR
Order Number:	R5-2002-0123
WDID:	5A342027001
NPDES Number:	Not reported
Adoption Date:	06/07/2002
Effective Date:	06/07/2002
Termination Date:	Not reported
Expiration/Review Date:	06/07/2012
Design Flow:	1.5
Major/Minor:	Not reported
Complexity:	C
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.57971
Longitude:	-121.18221

Agency:	Teichert Aggregates
Agency Address:	PO Box 15002, Sacramento, CA 95851
Place/Project Type:	Industrial - Construction Sand and Gravel
SIC/NAICS:	Multiple
Region:	5S
Program:	INDSTW
Regulatory Measure Status:	Active
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	5S34I016853
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	10/09/2001
Termination Date:	Not reported
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.582826
Longitude:	-121.186173

Agency:	Teichert Aggregates
Agency Address:	Po Box 15002, Sacramento, CA 95851-1002
Place/Project Type:	Sand and Gravel Mining
SIC/NAICS:	1442
Region:	5S
Program:	WDR, WDRMINING
Regulatory Measure Status:	Active
Regulatory Measure Type:	WDR
Order Number:	R5-2002-0123
WDID:	5A342027001
NPDES Number:	Not reported
Adoption Date:	06/07/2002
Effective Date:	06/07/2002
Termination Date:	Not reported
Expiration/Review Date:	06/07/2012
Design Flow:	1.5

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Major/Minor:	Not reported
Complexity:	C
TTWQ:	2
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.57971
Longitude:	-121.18221
Agency:	American River Asphalt
Agency Address:	PO Box 1142, Folsom, CA 95763
Place/Project Type:	Industrial - Asphalt Paving Mixtures and Blocks
SIC/NAICS:	2951
Region:	5S
Program:	INDSTW
Regulatory Measure Status:	Terminated
Regulatory Measure Type:	Storm water industrial
Order Number:	2014-0057-DWQ
WDID:	5S34I003836
NPDES Number:	CAS000001
Adoption Date:	Not reported
Effective Date:	04/03/1992
Termination Date:	09/08/2004
Expiration/Review Date:	Not reported
Design Flow:	Not reported
Major/Minor:	Not reported
Complexity:	Not reported
TTWQ:	Not reported
Enforcement Actions within 5 years:	0
Violations within 5 years:	0
Latitude:	38.582826
Longitude:	-121.186173

CERS TANKS:

Site ID:	160028
CERS ID:	10219426
Site Name:	TEICHERT MATERIALS - GRANTLINE PLANT
CERS Description:	Chemical Storage Facilities

Evaluation:

Eval General Type:	Other/Unknown
Eval Date:	11-23-2016
Violations Found:	No
Eval Type:	Other, not routine, done by local agency
Eval Notes:	No violations observed this date.
Eval Division:	Sacramento County Env Management Department
Eval Program:	APSA
Eval Source:	CERS
Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-22-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	No violations observed this date.
Eval Division:	Sacramento County Env Management Department
Eval Program:	HW
Eval Source:	CERS

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Eval General Type:	Compliance Evaluation Inspection
Eval Date:	07-22-2016
Violations Found:	No
Eval Type:	Routine done by local agency
Eval Notes:	No violations observed this date.
Eval Division:	Sacramento County Env Management Department
Eval Program:	HMRRP
Eval Source:	CERS

Coordinates:

Site ID:	160028
Facility Name:	Teichert Materials - Grantline Plant
Env Int Type Code:	HWG
Program ID:	10219426
Coord Name:	Not reported
Ref Point Type Desc:	Center of a facility or station.
Latitude:	38.579710
Longitude:	-121.182210

Affiliation:

Affiliation Type Desc:	Document Preparer
Entity Name:	Alberto Ramirez
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

Affiliation Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	Not reported
Affiliation Address:	3417 Grant Line Road
Affiliation City:	Rancho Cordova
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95742
Affiliation Phone:	Not reported

Affiliation Type Desc:	Operator
Entity Name:	Teichert Aggregates - Grantline Plant
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	(916) 351-0123

Affiliation Type Desc:	CUPA District
Entity Name:	Sacramento County Environmental Management Departm
Entity Title:	Not reported
Affiliation Address:	10590 Armstrong Avenue, Suite A
Affiliation City:	Sacramento
Affiliation State:	CA

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AMERICAN RIVER ASPHALT (Continued) **S102315643**

Affiliation Country:	Not reported
Affiliation Zip:	95655
Affiliation Phone:	(916) 875-8550
Affiliation Type Desc:	Identification Signer
Entity Name:	Becky Wood
Entity Title:	EH&S Manager
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported
Affiliation Type Desc:	Environmental Contact
Entity Name:	Alberto Ramirez
Entity Title:	Not reported
Affiliation Address:	PO Box 15002
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	Not reported
Affiliation Zip:	95851
Affiliation Phone:	(916) 484-3348
Affiliation Type Desc:	Legal Owner
Entity Name:	Teichert Materials
Entity Title:	Not reported
Affiliation Address:	PO Box 15002
Affiliation City:	Sacramento
Affiliation State:	CA
Affiliation Country:	United States
Affiliation Zip:	95851
Affiliation Phone:	(916) 484-3301
Affiliation Type Desc:	Parent Corporation
Entity Name:	Teichert Aggregates
Entity Title:	Not reported
Affiliation Address:	Not reported
Affiliation City:	Not reported
Affiliation State:	Not reported
Affiliation Country:	Not reported
Affiliation Zip:	Not reported
Affiliation Phone:	Not reported

A3 **GRANTLINE PLANT** **AST** **A100107597**
ENE **3417 GRANT LINE RD** **N/A**
< 1/8 **RANCHO CORDOVA, CA**
0.063 mi.
333 ft. **Site 2 of 2 in cluster A**

Relative: **Higher**
Actual: **260 ft.**

AST:

Certified Unified Program Agencies:	Sacramento
Owner:	A.TEICHERT & SON, INC.
Total Gallons:	34,760
CERSID:	Not reported
Facility ID:	Not reported
Business Name:	Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation	Site	Database(s)	EDR ID Number / EPA ID Number

GRANTLINE PLANT (Continued) **A100107597**

Phone:	Not reported
Fax:	Not reported
Mailing Address:	Not reported
Mailing Address City:	Not reported
Mailing Address State:	Not reported
Mailing Address Zip Code:	Not reported
Operator Name:	Not reported
Operator Phone:	Not reported
Owner Phone:	Not reported
Owner Mail Address:	Not reported
Owner State:	Not reported
Owner Zip Code:	Not reported
Owner Country:	Not reported
Property Owner Name:	Not reported
Property Owner Phone:	Not reported
Property Owner Mailing Address:	Not reported
Property Owner City:	Not reported
Property Owner Stat :	Not reported
Property Owner Zip Code:	Not reported
Property Owner Country:	Not reported
EPAID:	Not reported

---

4 **INACTIVE RANCHO CORDOVA TEST SITE - INACTIVE RANCH** **CPS-SLIC** **S111293395**
West **NIMBUS ROAD** **N/A**
1/4-1/2 **RANCHO CORDOVA, CA 95670**
0.425 mi.
2246 ft.

Relative: **Lower**
Actual: **204 ft.**

CPS-SLIC:

Site Name:	INACTIVE RANCHO CORDOVA TEST SITE - INACTIVE RANCHO CORDOVA TEST SITE - SIGMA DEBRIS AREA
Region:	STATE
Facility Status:	**Open - Remediation**
Status Date:	09/28/2011
Global Id:	T10000003290
Lead Agency:	CENTRAL VALLEY RWQCB (REGION 5S)
Lead Agency Case Number:	Not reported
Latitude:	38.5744743358981
Longitude:	-121.210269927979
Case Type:	Cleanup Program Site
Case Worker:	AMM
Local Agency:	Not reported
RB Case Number:	Not reported
File Location:	Regional Board
Potential Media Affected:	Aquifer used for drinking water supply, Contaminated Surface / Structure, Indoor Air, Other Groundwater (uses other than drinking water), Sediments, Soil, Soil Vapor, Surface water
Potential Contaminants of Concern:	Arsenic, Copper, Lead, Mercury (elemental), Other Metal, Silver
Site History:	Investigation involving soil vapor and groundwater sampling and analysis was conducted between 1992 and 2002. Designated as a No Further Action site in a Remedial Action Plan. Contaminants of concern were identified as metals, perchlorate, and volatile organics. Metals were found at elevated levels in surface soil, but neither perchlorate or any volatile organics were detected in any of the soil samples. Investigation data shows that the Site is not a threat to human health and the environment. Removal of metal, wooden, and other debris can occur as part of future development.

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

INACTIVE RANCHO CORDOVA TEST SITE - INACTIVE RANCHO CORDOVA (Continued) **S111293395**

Click here to access the California GeoTracker records for this facility:

B5 **GENERAL ELECTRIC MEDICAL SYSTEMS** **ENVIROSTOR** **S118757512**
SSW **3920 SECURITY PARK** **N/A**
1/2-1 **RANCHO CORDOVA, CA 95670**
0.806 mi.
4256 ft. **Site 1 of 3 in cluster B**

Relative: **Lower**

Actual: **208 ft.**

ENVIROSTOR:

Facility ID:	80001343
Status:	No Action Required
Status Date:	09/02/2009
Site Code:	100393
Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	0.25
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	WM
Program Manager:	Paul Ruffin
Supervisor:	Rizgar Ghazi
Division Branch:	Cleanup Sacramento
Assembly:	08
Senate:	08
Special Program:	Not reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not reported
Latitude:	38.56099
Longitude:	-121.2081
APN:	NONE SPECIFIED
Past Use:	AEROSPACE ROCKET TESTING/LAUNCH, MANUFACTURING - ELECTRONIC
Potential COC:	Trichloroethylene (TCE
Confirmed COC:	Trichloroethylene (TCE
Potential Description:	SOIL
Alias Name:	CAD000819680
Alias Type:	EPA Identification Number
Alias Name:	100393
Alias Type:	Project Code (Site Code)
Alias Name:	80001343
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	RCRA Facility Assessment Report
Completed Date:	09/11/1998
Comments:	Completed in August 1998
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported
Completed Document Type:	No Further Action Letter
Completed Date:	07/30/2009
Comments:	Not reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

GENERAL ELECTRIC MEDICAL SYSTEMS (Continued) **S118757512**

Completed Document Type:	Preliminary Assessment Report
Completed Date:	08/31/1991
Comments:	Not reported
Future Area Name:	Not reported
Future Sub Area Name:	Not reported
Future Document Type:	Not reported
Future Due Date:	Not reported
Schedule Area Name:	Not reported
Schedule Sub Area Name:	Not reported
Schedule Document Type:	Not reported
Schedule Due Date:	Not reported
Schedule Revised Date:	Not reported

B6 **AUTOMOTIVE IMPORTING MFG INC** **SEMS-ARCHIVE** **1000214137**
SSW **3920 SECURITY PARK DR** **CORRACTS** **CAD000819680**
1/2-1 **RANCHO CORDOVA, CA 95742** **RCRA-TSDF**
0.806 mi. **RCRA-SQG**
4256 ft. **Site 2 of 3 in cluster B** **FINDS**
ECHO
Relative: **HAZNET**
Lower

Actual: **208 ft.**

SEMS Archive:

Site ID:	0903397
EPA ID:	CAD000819680
Cong District:	03
FIPS Code:	06067
FF:	N
NPL:	Not on the NPL
Non NPL Status:	Deferred to RCRA (Subtitle C)

SEMS Archive Detail:

Region:	09
Site ID:	0903397
EPA ID:	CAD000819680
Site Name:	GENERAL ELECTRIC MEDICAL SYSTEMS
NPL:	N
FF:	N
OU:	00
Action Code:	VS
Action Name:	ARCH SITE
SEQ:	1
Start Date:	Not reported
Finish Date:	1996-01-23 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf In-Hse
Region:	09
Site ID:	0903397
EPA ID:	CAD000819680
Site Name:	GENERAL ELECTRIC MEDICAL SYSTEMS
NPL:	N
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1991-03-01 05:00:00

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

Finish Date:	1991-03-01 05:00:00
Qual:	Not reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0903397
EPA ID:	CAD000819680
Site Name:	GENERAL ELECTRIC MEDICAL SYSTEMS
NPL:	N
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	Not reported
Finish Date:	1991-09-16 04:00:00
Qual:	D
Current Action Lead:	EPA Perf

CORRACTS:

EPA ID:	CAD000819680
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	Not reported
Action:	CA03193
NAICS Code(s):	Not reported
Original schedule date:	19931001
Schedule end date:	Not reported
EPA ID:	CAD000819680
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	19980911
Action:	CA050RF - RFA Completed, Assessment was an RFA
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported
EPA ID:	CAD000819680
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	19910831
Action:	CA075ME - CA Prioritization, Facility or area was assigned a medium corrective action priority
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported
EPA ID:	CAD000819680
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	19910831
Action:	CA049PA
NAICS Code(s):	Not reported
Original schedule date:	Not reported
Schedule end date:	Not reported

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

EPA ID: CAD000819680
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910831
Action: CA074ME
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

EPA ID: CAD000819680
EPA Region: 09
Area Name: ENTIRE FACILITY
Actual Date: 19910831
Action: CA029WQ
NAICS Code(s): Not reported
Original schedule date: Not reported
Schedule end date: Not reported

RCRA-TSDF:
Date form received by agency: 09/01/1996
Facility name: GENERAL ELECTRIC MEDICAL SYSTEMS
Facility address: 3920 SECURITY PARK DR
RANCHO CORDOVA, CA 95742
EPA ID: CAD000819680
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported
EPA Region: 09
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste

Owner/Operator Summary:
Owner/operator name: GENERAL ELECTRIC CO
Owner/operator address: 3920 SECURITY PARK
CITY NOT REPORTED, CA 99999
Owner/operator country: Not reported
Owner/operator telephone: 916-361-4202
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: MCDONNELL DOUGLAS CORP
Owner/operator address: 11505 DOUGLAS RD
RANCHO CORDOVA, CA 95670
Owner/operator country: Not reported
Owner/operator telephone: 916-351-0550
Owner/operator email: Not reported

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/14/1996
Site name: GENERAL ELECTRIC MEDICAL SYSTEMS
Classification: Large Quantity Generator

Corrective Action Summary:
Event date: 08/31/1991
Event: LEAD AGENCY DETERMINATION

Event date: 08/31/1991
Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Event date: 08/31/1991
Event: PA OR CERCLA INSPECTION

Event date: 08/31/1991
Event: NCAPS RANKING/PRIORITY

Event date: 09/11/1998
Event: RFA COMPLETED-ASSESSMENT WAS A RFA

Event date: Not reported
Event: REEVALUATE IN FY

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 05/19/1988
Date achieved compliance: 07/23/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

Enforcement action date: 05/26/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:

Evaluation date: 05/30/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/22/1989
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/21/1989
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/19/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements
Date achieved compliance: 07/23/1988
Evaluation lead agency: State

Evaluation date: 01/19/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/22/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

RCRA-SQG:

Date form received by agency: 09/01/1996
Facility name: GENERAL ELECTRIC MEDICAL SYSTEMS
Facility address: 3920 SECURITY PARK DR
RANCHO CORDOVA, CA 95742
EPA ID: CAD000819680
Contact: Not reported
Contact address: Not reported
Not reported
Contact country: US
Contact telephone: Not reported
Contact email: Not reported

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

EPA Region: 09
Land type: Private
Classification: TSDF
Description: Handler is engaged in the treatment, storage or disposal of hazardous waste

Owner/Operator Summary:
Owner/operator name: GENERAL ELECTRIC CO
Owner/operator address: 3920 SECURITY PARK
CITY NOT REPORTED, CA 99999
Owner/operator country: Not reported
Owner/operator telephone: 916-361-4202
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: MCDONNELL DOUGLAS CORP
Owner/operator address: 11505 DOUGLAS RD
RANCHO CORDOVA, CA 95670
Owner/operator country: Not reported
Owner/operator telephone: 916-351-0550
Owner/operator email: Not reported
Owner/operator fax: Not reported
Owner/operator extension: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 02/14/1996
Site name: GENERAL ELECTRIC MEDICAL SYSTEMS
Classification: Large Quantity Generator

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

Corrective Action Summary:
Event date: 08/31/1991
Event: LEAD AGENCY DETERMINATION

Event date: 08/31/1991
Event: CA PRIORITIZATION-MEDIUM CA PRIORITY

Event date: 08/31/1991
Event: PA OR CERCLA INSPECTION

Event date: 08/31/1991
Event: NCAPS RANKING/PRIORITY

Event date: 09/11/1998
Event: RFA COMPLETED-ASSESSMENT WAS A RFA

Event date: Not reported
Event: REEVALUATE IN FY

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: TSD - Financial Requirements
Date violation determined: 05/19/1988
Date achieved compliance: 07/23/1988
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/26/1988
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 05/30/1991
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/22/1989
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/21/1989
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 05/19/1988
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: TSD - Financial Requirements

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

Date achieved compliance: 07/23/1988
Evaluation lead agency: State

Evaluation date: 01/19/1988
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/22/1987
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110000609173

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Registry ID: 110009552607

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

Click this hyperlink while viewing on your computer to access additional FINDS: detail in the EDR Site Report.

ECHO:

Envid: 1000214137
Registry ID: 110009552607
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110009552607

Envid: 1000214137
Registry ID: 110000609173
DFR URL: http://echo.epa.gov/detailed-facility-report?fid=110000609173

HAZNET:

Site Name: GENERAL ELECTRIC MEDICAL SYSTEMS
Year: 1996
GEPAID: CAD000819680
Contact: MCDONNEL DOUGLAS CORPORATION
Telephone: 0000000000
Mailing Name: Not reported

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

Mailing Address: 3920 SECURITY PARK
Mailing City,St,Zip: RANCHO CORDOVA, CA 956700000
Gen County: Not reported
TSD EPA ID: WAD000812909
TSD County: Not reported
Waste Category: Asbestos containing waste
Disposal Method: Not reported
Tons: 2.2500
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Sacramento

Site Name: GENERAL ELECTRIC MEDICAL SYSTEMS
Year: 1996
GEPAID: CAD000819680
Contact: MCDONNEL DOUGLAS CORPORATION
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 3920 SECURITY PARK
Mailing City,St,Zip: RANCHO CORDOVA, CA 956700000
Gen County: Not reported
TSD EPA ID: WAD000812909
TSD County: Not reported
Waste Category: Other inorganic solid waste
Disposal Method: Not reported
Tons: 1.9836
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Sacramento

Site Name: GENERAL ELECTRIC MEDICAL SYSTEMS
Year: 1996
GEPAID: CAD000819680
Contact: MCDONNEL DOUGLAS CORPORATION
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 3920 SECURITY PARK
Mailing City,St,Zip: RANCHO CORDOVA, CA 956700000
Gen County: Not reported
TSD EPA ID: CA0000084517
TSD County: Not reported
Waste Category: Hydrocarbon solvents (benzene, hexane, Stoddard, Etc.)
Disposal Method: Transfer Station
Tons: 1.6262
Cat Decode: Not reported
Method Decode: Not reported
Facility County: Sacramento

Site Name: GENERAL ELECTRIC MEDICAL SYSTEMS
Year: 1995
GEPAID: CAD000819680
Contact: MCDONNEL DOUGLAS CORPORATION
Telephone: 0000000000
Mailing Name: Not reported
Mailing Address: 3920 SECURITY PARK
Mailing City,St,Zip: RANCHO CORDOVA, CA 956700000
Gen County: Not reported

MAP FINDINGS

Map ID / Direction / Distance / Elevation | Site | Database(s) | EDR ID Number / EPA ID Number

AUTOMOTIVE IMPORTING MFG INC (Continued) **1000214137**

TSD EPA ID:	WAD000812909
TSD County:	Not reported
Waste Category:	Other inorganic solid waste
Disposal Method:	Not reported
Tons:	.7129
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Sacramento
Site Name:	GENERAL ELECTRIC MEDICAL SYSTEMS
Year:	1993
GEPAID:	CAD000819680
Contact:	MCDONNEL DOUGLAS CORPORATION
Telephone:	0000000000
Mailing Name:	Not reported
Mailing Address:	3920 SECURITY PARK
Mailing City,St,Zip:	RANCHO CORDOVA, CA 956700000
Gen County:	Not reported
TSD EPA ID:	CAT000613950
TSD County:	Not reported
Waste Category:	Liquids with halogenated organic compounds >= 1,000 Mg./L
Disposal Method:	Transfer Station
Tons:	3.74999999999
Cat Decode:	Not reported
Method Decode:	Not reported
Facility County:	Sacramento

Click this hyperlink while viewing on your computer to access additional CA_HAZNET: detail in the EDR Site Report.

B7 **GENERAL ELECTRIC MEDICAL SYSTEMS** **HWP S111865965**
SSW **3920 SECURITY PARK** **CERS N/A**
1/2-1 **RANCHO CORDOVA, CA 95670**
0.806 mi.
4256 ft. **Site 3 of 3 in cluster B**

Relative: **Lower**

Actual: **208 ft.**

HWP:

EPA Id:	CAD000819680
Cleanup Status:	CLOSED
Latitude:	38.56099
Longitude:	-121.2081
Facility Type:	Historical - Non-Operating
Facility Size:	Not reported
Team:	Not reported
Supervisor:	Not reported
Site Code:	100393
Assembly District:	08
Senate District:	08
Public Information Officer:	Not reported
Public Information Officer:	Not reported

Activities:

EPA Id:	CAD000819680
Facility Type:	Historical - Non-Operating
Unit Names:	CONTAIN1, TANKTRT, TANKTRT1
Event Description:	New Operating Permit - CALL-IN LETTER ISSUED
Actual Date:	02/15/1982

GENERAL ELECTRIC MEDICAL SYSTEMS (Continued) **S111865965**

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST RECEIVED
Actual Date: 11/30/1987

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: New Operating Permit - FINAL PERMIT
Actual Date: 06/29/1987

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: New Operating Permit - FINAL PERMIT (EXPIRES)
Actual Date: 06/29/1992

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: New Operating Permit - APPLICATION PART A RECEIVED
Actual Date: 11/19/1980

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: New Operating Permit - FINAL PERMIT (EFFECTIVE)
Actual Date: 06/29/1987

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: New Operating Permit - FINAL PERMIT - WITHDRAWAL REQUEST ACKNOWLEDGED
Actual Date: 10/21/1988

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: New Operating Permit - APPLICATION PART B RECEIVED
Actual Date: 06/10/1982

Closure:

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: Closure Final - CLOSURE PLAN APPROVED
Actual Date: 10/21/1988

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: Closure Final - CLOSURE PLAN RECEIVED
Actual Date: 11/30/1987

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating

GENERAL ELECTRIC MEDICAL SYSTEMS (Continued) **S111865965**

Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: Closure Final - RECEIVE CLOSURE CERTIFICATION
Actual Date: 12/22/1988

EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Unit Names: CONTAIN1, TANKTRT, TANKTRT1
Event Description: Closure Final - ISSUE CLOSURE VERIFICATION
Actual Date: 06/28/1991

Alias:
EPA Id: CAD000819680
Facility Type: Historical - Non-Operating
Alias Type: Project Code (Site Code)
Alias: 100393

CERS TANKS:
Site ID: 194650
CERS ID: CAD000819680
Site Name: GENERAL ELECTRIC MEDICAL SYSTEMS
CERS Description: Hazardous Waste

Affiliation:
Affiliation Type Desc: Facility Contact
Entity Name: NON-DELIVERABLE 4/94 FEE FORM
Entity Title: Not reported
Affiliation Address: --
Affiliation City: RANCHO CORDOVA
Affiliation State: CA
Affiliation Country: Not reported
Affiliation Zip: 956700000
Affiliation Phone: 9163614200

Affiliation Type Desc: Facility Owner
Entity Name: MCDONNEL DOUGLAS CORPORATION
Entity Title: Not reported
Affiliation Address: --
Affiliation City: --
Affiliation State: 99
Affiliation Country: Not reported
Affiliation Zip: --
Affiliation Phone: 0000000000

Count: 0 records.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
		NO SITES FOUND			

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: N/A
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/07/2016
Date Data Arrived at EDR: 01/05/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 92

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21
Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21
Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 02/22/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 41

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 02/07/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 02/04/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 28

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 21

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 5: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST: Leaking Underground Fuel Tank Report (GEOTRACKER)
Leaking Underground Storage Tank (LUST) Sites included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 12/11/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

LUST REG 9: Leaking Underground Storage Tank Report
Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks
California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing
Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing
For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 4: Underground Storage Tank Leak List
Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database
Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List
Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation
Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

CPS-SLIC: Statewide SLIC Cases (GEOTRACKER)
Cleanup Program Sites (CPS; also known as Site Cleanups [SC] and formerly known as Spills, Leaks, Investigations, and Cleanups [SLIC] sites) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18
Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30
Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28
Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47
Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16
Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 05/15/2017
Date Data Arrived at EDR: 05/30/2017
Date Made Active in Reports: 10/13/2017
Number of Days to Update: 136

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35
Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 12/11/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Semi-Annually

UST CLOSURE: Proposed Closure of Underground Storage Tank (UST) Cases
UST cases that are being considered for closure by either the State Water Resources Control Board or the Executive Director have been posted for a 60-day public comment period. UST Case Closures being proposed for consideration by the State Water Resources Control Board. These are primarily UST cases that meet closure criteria under the decisional framework in State Water Board Resolution No. 92-49 and other Board orders. UST Case Closures proposed for consideration by the Executive Director pursuant to State Water Board Resolution No. 2012-0061. These are cases that meet the criteria of the Low-Threat UST Case Closure Policy. UST Case Closure Review Denials and Approved Orders.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 21
Source: State Water Resources Control Board
Telephone: 916-327-7844
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

MILITARY UST SITES: Military UST Sites (GEOTRACKER)
Military ust sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 09/19/2016
Number of Days to Update: 69
Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63
Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 04/12/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 04/24/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 04/25/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 04/10/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 04/13/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 04/01/2018
Date Data Arrived at EDR: 05/18/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 63

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng
A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing
A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties
Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/26/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 34

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 12/17/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/11/2019
Number of Days to Update: 24

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 03/19/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database

Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: No Update Planned

SWRCY: Recycler Database

A listing of recycling facilities in California.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 48

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing

A listing of registered waste tire haulers.

Date of Government Version: 03/26/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 34

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands

Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: No Update Planned

IHS OPEN DUMPS: Open Dumps on Indian Land
A listing of all open dumps located on Indian Land in the United States.

Date of Government Version: 04/01/2014
Date Data Arrived at EDR: 08/06/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 176
Source: Department of Health & Human Serivces, Indian Health Service
Telephone: 301-443-1452
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21
Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs
A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/12/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 55
Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites
Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27
Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

CERS HAZ WASTE: CERS HAZ WASTE
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, and RCRA LQ HW Generator programs.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38
Source: CalEPA
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

US CDL: Clandestine Drug Labs
A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 02/24/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 50
Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Quarterly

PFAS: PFAS Contamination Site Location Listing
A listing of PFAS contaminated sites included in the GeoTracker database.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 04/15/2019
Number of Days to Update: 52
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing
Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database
A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 12/04/2018
Date Data Arrived at EDR: 12/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 8
Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database
The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

SAN FRANCISCO AST: Aboveground Storage Tank Site Listing
Aboveground storage tank sites

Date of Government Version: 09/11/2018
Date Data Arrived at EDR: 09/12/2018
Date Made Active in Reports: 10/11/2018
Number of Days to Update: 29

Source: San Francisco County Department of Public Health
Telephone: 415-252-3896
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

CA FID UST: Facility Inventory Database
The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CERS TANKS: California Environmental Reporting System (CERS) Tanks
List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs.

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

Local Land Records

LIENS: Environmental Liens Listing
A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 32

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information
A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 27

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 41

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

CHMIRS: California Hazardous Material Incident Report System

California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 10/24/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 40

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

LDS: Land Disposal Sites Listing (GEOTRACKER)

Land Disposal sites (Landfills) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing (GEOTRACKER)

Military sites (consisting of: Military UST sites; Military Privatized sites; and Military Cleanup sites [formerly known as DoD non UST]) included in GeoTracker. GeoTracker is the Water Boards data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch

Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 03/25/2019
Date Data Arrived at EDR: 03/27/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 21

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 03/27/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 04/03/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 01/01/2017
Date Data Arrived at EDR: 02/03/2017
Date Made Active in Reports: 04/07/2017
Number of Days to Update: 63
Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/15/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 01/31/2019
Date Data Arrived at EDR: 02/04/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 32
Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88
Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 09/30/2017
Date Data Arrived at EDR: 05/08/2018
Date Made Active in Reports: 07/20/2018
Number of Days to Update: 73
Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 02/08/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 06/21/2017
Date Made Active in Reports: 01/05/2018
Number of Days to Update: 198
Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2016
Date Data Arrived at EDR: 01/10/2018
Date Made Active in Reports: 01/12/2018
Number of Days to Update: 2

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 04/24/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 18

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 02/01/2019
Date Data Arrived at EDR: 02/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 35

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties
A listing of verified Potentially Responsible Parties

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 04/17/2019
Number of Days to Update: 34

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

PADS: PCB Activity Database System
PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 09/14/2018
Date Data Arrived at EDR: 10/11/2018
Date Made Active in Reports: 12/07/2018
Number of Days to Update: 57

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System
The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 11/18/2016
Date Data Arrived at EDR: 11/23/2016
Date Made Active in Reports: 02/10/2017
Number of Days to Update: 79

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/18/2017
Next Scheduled EDR Contact: 12/04/2017
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System
MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 08/30/2016
Date Data Arrived at EDR: 09/08/2016
Date Made Active in Reports: 10/21/2016
Number of Days to Update: 43

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data
A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76
Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 03/07/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List
A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 05/24/2017
Date Data Arrived at EDR: 11/30/2017
Date Made Active in Reports: 12/15/2017
Number of Days to Update: 15
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 04/26/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 01/03/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 71
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data

Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 12/03/2018
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 51

Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 04/30/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Quarterly

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2018
Date Data Arrived at EDR: 02/11/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 38

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 04/05/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 09/28/2017
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/14/2015
Date Made Active in Reports: 01/10/2017
Number of Days to Update: 546

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 08/08/2017
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 06/23/2017
Date Data Arrived at EDR: 10/11/2017
Date Made Active in Reports: 11/03/2017
Number of Days to Update: 23
Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 02/22/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites
A listing of former lead smelter site locations.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/14/2019
Date Made Active in Reports: 03/21/2019
Number of Days to Update: 7
Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites
A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36
Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)
The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data
A listing of minor source facilities.

Date of Government Version: 10/12/2016
Date Data Arrived at EDR: 10/26/2016
Date Made Active in Reports: 02/03/2017
Number of Days to Update: 100
Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 09/26/2017
Next Scheduled EDR Contact: 01/08/2018
Data Release Frequency: Annually

US MINES: Mines Master Index File
Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 11/27/2018
Date Data Arrived at EDR: 02/27/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 33
Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing
This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

ABANDONED MINES: Abandoned Mines

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by OSMRE to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of AML impacts, as well as, information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Date of Government Version: 09/10/2018
Date Data Arrived at EDR: 09/11/2018
Date Made Active in Reports: 09/14/2018
Number of Days to Update: 3

Source: Department of Interior
Telephone: 202-208-2609
Last EDR Contact: 03/21/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 03/15/2019
Number of Days to Update: 10

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 05/31/2018
Date Data Arrived at EDR: 07/26/2018
Date Made Active in Reports: 10/05/2018
Number of Days to Update: 71

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 03/01/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 03/03/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 27

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 04/09/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

UXO: Unexploded Ordnance Sites
A listing of unexploded ordnance site locations

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 74
Source: Department of Defense
Telephone: 703-704-1564
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

FUELS PROGRAM: EPA Fuels Program Registered Listing
This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/21/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 39
Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

CA BOND EXP. PLAN: Bond Expenditure Plan
Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6
Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List
The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 12/20/2018
Date Data Arrived at EDR: 12/21/2018
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 69
Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 03/26/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

CUPA LIVERMORE-PLEASANTON: CUPA Facility Listing
list of facilities associated with the various CUPA programs in Livermore-Pleasanton

Date of Government Version: 01/23/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 34
Source: Livermore-Pleasanton Fire Department
Telephone: 925-454-2361
Last EDR Contact: 02/26/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

CUPA SAN FRANCISCO CO: CUPA Facility Listing
Cupa facilities

Date of Government Version: 04/18/2019
Date Data Arrived at EDR: 04/19/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 11
Source: San Francisco County Department of Environmental Health
Telephone: 415-252-3896
Last EDR Contact: 04/18/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

DRYCLEAN SOUTH COAST: South Coast Air Quality Management District Drycleaner Listing
A listing of dry cleaners in the South Coast Air Quality Management District

Date of Government Version: 03/19/2019
Date Data Arrived at EDR: 03/22/2019
Date Made Active in Reports: 04/09/2019
Number of Days to Update: 18
Source: South Coast Air Quality Management District
Telephone: 909-396-3211
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 01/17/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 47
Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Annually

DRYCLEAN AVAQMD: Antelope Valley Air Quality Management District Drycleaner Listing

A listing of dry cleaners in the Antelope Valley Air Quality Management District.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32
Source: Antelope Valley Air Quality Management District
Telephone: 661-723-8070
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

EMI: Emissions Inventory Data

Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/20/2018
Date Made Active in Reports: 08/06/2018
Number of Days to Update: 47
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 03/22/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Varies

ENF: Enforcement Action Listing

A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 11/01/2018
Date Data Arrived at EDR: 11/02/2018
Date Made Active in Reports: 12/13/2018
Number of Days to Update: 41
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing

Financial Assurance information

Date of Government Version: 01/10/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41
Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing

A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 02/15/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 14

Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 02/11/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data

Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/10/2018
Date Made Active in Reports: 11/16/2018
Number of Days to Update: 37

Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

ICE: ICE

Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

HIST CORTESE: Hazardous Waste & Substance Site List

The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing

Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 02/19/2019
Date Data Arrived at EDR: 02/20/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 13

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 02/20/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database

A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 56

Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 04/09/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/12/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 34
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Quarterly

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 23
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/05/2019
Number of Days to Update: 31
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 03/18/2019
Date Data Arrived at EDR: 03/19/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 41
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 04/27/2018
Date Data Arrived at EDR: 06/13/2018
Date Made Active in Reports: 07/17/2018
Number of Days to Update: 34
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Varies

UIC GEO: Underground Injection Control Sites (GEOTRACKER)
Underground control injection sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35
Source: State Water Resource Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water boards review found that more than one-third of the region's active disposal pits are operating without permission.

Date of Government Version: 05/08/2018
Date Data Arrived at EDR: 07/11/2018
Date Made Active in Reports: 09/13/2018
Number of Days to Update: 64
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 04/12/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Quarterly

MILITARY PRIV SITES: Military Privatized Sites (GEOTRACKER)
Military privatized sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

PROJECT: Project Sites (GEOTRACKER)
Projects sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WDR: Waste Discharge Requirements Listing
In general, the Waste Discharge Requirements (WDRs) Program (sometimes also referred to as the "Non Chapter 15 (Non 15) Program") regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. Exemptions from Title 27 may be granted for nine categories of discharges (e.g., sewage, wastewater, etc.) that meet, and continue to meet, the preconditions listed for each specific exemption. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47

Source: State Water Resources Control Board
Telephone: 916-341-5810
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

CIWQS: California Integrated Water Quality System

The California Integrated Water Quality System (CIWQS) is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: State Water Resources Control Board
Telephone: 866-794-4977
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

CERS: CalEPA Regulated Site Portal Data

The CalEPA Regulated Site Portal database combines data about environmentally regulated sites and facilities in California into a single database. It combines data from a variety of state and federal databases, and provides an overview of regulated activities across the spectrum of environmental programs for any given location in California. These activities include hazardous materials and waste, state and federal cleanups, impacted ground and surface waters, and toxic materials

Date of Government Version: 10/22/2018
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/30/2018
Number of Days to Update: 38

Source: California Environmental Protection Agency
Telephone: 916-323-2514
Last EDR Contact: 04/11/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

WIP: Well Investigation Program Case List

Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13

Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

NON-CASE INFO: Non-Case Information Sites (GEOTRACKER)

Non-Case Information sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

OTHER OIL GAS: Other Oil & Gas Projects Sites (GEOTRACKER)

Other Oil & Gas Projects sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

PROD WATER PONDS: Produced Water Ponds Sites (GEOTRACKER)

Produced water ponds sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

SAMPLING POINT: Sampling Point ? Public Sites (GEOTRACKER)
Sampling point - public sites

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

WELL STIM PROJ: Well Stimulation Project (GEOTRACKER)
Includes areas of groundwater monitoring plans, a depiction of the monitoring network, and the facilities, boundaries, and subsurface characteristics of the oilfield and the features (oil and gas wells, produced water ponds, UIC wells, water supply wells, etc?) being monitored

Date of Government Version: 12/10/2018
Date Data Arrived at EDR: 12/11/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 12/12/2018
Next Scheduled EDR Contact: 03/25/2019
Data Release Frequency: Varies

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants
The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historical Auto Stations
EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historical Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

CS ALAMEDA: Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 01/09/2019
Date Data Arrived at EDR: 01/11/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 53

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

UST ALAMEDA: Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 59

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 04/24/2047
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA AMADOR: CUPA Facility List
Cupa Facility List

Date of Government Version: 01/07/2019
Date Data Arrived at EDR: 01/08/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 58

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA BUTTE: CUPA Facility Listing
Cupa facility list.

Date of Government Version: 04/21/2017
Date Data Arrived at EDR: 04/25/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 106

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA CALVERAS: CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 01/24/2019
Date Data Arrived at EDR: 01/25/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 39

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA COLUSA: CUPA Facility List
Cupa facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Semi-Annually

CONTRA COSTA COUNTY:

SL CONTRA COSTA: Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 02/14/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 17

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA DEL NORTE: CUPA Facility List
Cupa Facility list

Date of Government Version: 01/16/2019
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 28

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA EL DORADO: CUPA Facility List
CUPA facility list.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 32

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 04/29/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA FRESNO: CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 04/10/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Semi-Annually

GLENN COUNTY:

CUPA GLENN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/22/2018
Date Data Arrived at EDR: 01/24/2018
Date Made Active in Reports: 03/14/2018
Number of Days to Update: 49

Source: Glenn County Air Pollution Control District
Telephone: 830-934-6500
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

HUMBOLDT COUNTY:

CUPA HUMBOLDT: CUPA Facility List
CUPA facility list.

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 11/19/2018
Next Scheduled EDR Contact: 03/04/2019
Data Release Frequency: Semi-Annually

IMPERIAL COUNTY:

CUPA IMPERIAL: CUPA Facility List
Cupa facility list.

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 41

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

INYO COUNTY:

CUPA INYO: CUPA Facility List
Cupa facility list.

Date of Government Version: 04/02/2018
Date Data Arrived at EDR: 04/03/2018
Date Made Active in Reports: 06/14/2018
Number of Days to Update: 72

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

KERN COUNTY:

UST KERN: Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 01/28/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 29

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA KINGS: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/14/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 14

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

LAKE COUNTY:

CUPA LAKE: CUPA Facility List
Cupa facility list

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/12/2019
Number of Days to Update: 28

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

LASSEN COUNTY:

CUPA LASSEN: CUPA Facility List
Cupa facility list

Date of Government Version: 01/17/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46

Source: Lassen County Environmental Health
Telephone: 530-251-8528
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

LOS ANGELES COUNTY:

AOCONCERN: Key Areas of Concerns in Los Angeles County
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office. Date of Government Version: 3/30/2009 Exide Site area is a cleanup plan of lead-impacted soil surrounding the former Exide Facility as designated by the DTSC. Date of Government Version: 7/17/2017

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: N/A
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: No Update Planned

HMS LOS ANGELES: HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 12/19/2018
Date Data Arrived at EDR: 01/10/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 56

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Semi-Annually

LF LOS ANGELES: List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

LF LOS ANGELES CITY: City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/15/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 51

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

SITE MIT LOS ANGELES: Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 01/30/2019
Date Data Arrived at EDR: 02/01/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 34

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 04/16/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

UST EL SEGUNDO: City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 04/19/2017
Date Made Active in Reports: 05/10/2017
Number of Days to Update: 21
Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Semi-Annually

UST LONG BEACH: City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 03/09/2017
Date Data Arrived at EDR: 03/10/2017
Date Made Active in Reports: 05/03/2017
Number of Days to Update: 54
Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Annually

UST TORRANCE: City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 10/02/2018
Date Data Arrived at EDR: 10/05/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 28
Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA MADERA: CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 02/20/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 13
Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 02/15/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

MARIN COUNTY:

UST MARIN: Underground Storage Tank Sites
Currently permitted USTs in Marin County.

Date of Government Version: 09/26/2018
Date Data Arrived at EDR: 10/04/2018
Date Made Active in Reports: 11/02/2018
Number of Days to Update: 29
Source: Public Works Department Waste Management
Telephone: 415-473-6647
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA MERCED: CUPA Facility List
CUPA facility list.

Date of Government Version: 08/29/2018
Date Data Arrived at EDR: 08/31/2018
Date Made Active in Reports: 09/19/2018
Number of Days to Update: 19

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

MONO COUNTY:

CUPA MONO: CUPA Facility List
CUPA Facility List

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/26/2019
Date Made Active in Reports: 04/01/2019
Number of Days to Update: 34

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA MONTEREY: CUPA Facility Listing
CUPA Program listing from the Environmental Health Division.

Date of Government Version: 02/05/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 04/01/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Varies

NAPA COUNTY:

LUST NAPA: Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 01/09/2017
Date Data Arrived at EDR: 01/11/2017
Date Made Active in Reports: 03/02/2017
Number of Days to Update: 50

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

UST NAPA: Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 02/21/2019
Date Data Arrived at EDR: 02/22/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 14

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA NEVADA: CUPA Facility List
CUPA facility list.

Date of Government Version: 01/25/2019
Date Data Arrived at EDR: 01/29/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 35

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

ORANGE COUNTY:

IND_SITE ORANGE: List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 02/07/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 26
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Annually

LUST ORANGE: List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 02/08/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 26
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/04/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

UST ORANGE: List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 01/02/2019
Date Data Arrived at EDR: 02/05/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 31
Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 02/05/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

PLACER COUNTY:

MS PLACER: Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/12/2019
Number of Days to Update: 42
Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

PLUMAS COUNTY:

CUPA PLUMAS: CUPA Facility List
Plumas County CUPA Program facilities.

Date of Government Version: 01/14/2019
Date Data Arrived at EDR: 01/18/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 46
Source: Plumas County Environmental Health
Telephone: 530-283-6355
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

RIVERSIDE COUNTY:

LUST RIVERSIDE: Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/11/2019
Date Data Arrived at EDR: 04/12/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 18
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

UST RIVERSIDE: Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 01/29/2019
Date Data Arrived at EDR: 01/31/2019
Date Made Active in Reports: 03/08/2019
Number of Days to Update: 36
Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

CS SACRAMENTO: Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 01/04/2019
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 60
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

ML SACRAMENTO: Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 11/07/2018
Date Data Arrived at EDR: 12/28/2018
Date Made Active in Reports: 03/05/2019
Number of Days to Update: 67
Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 04/02/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Quarterly

SAN BENITO COUNTY:

CUPA SAN BENITO: CUPA Facility List
Cupa facility list

Date of Government Version: 03/11/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 48
Source: San Benito County Environmental Health
Telephone: N/A
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

SAN BERNARDINO COUNTY:

PERMITS SAN BERNARDINO: Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 02/27/2019
Date Data Arrived at EDR: 02/28/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 33
Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 02/19/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

HMMD SAN DIEGO: Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/05/2019
Date Made Active in Reports: 04/02/2019
Number of Days to Update: 28

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 03/05/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

LF SAN DIEGO: Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 04/18/2018
Date Data Arrived at EDR: 04/24/2018
Date Made Active in Reports: 06/19/2018
Number of Days to Update: 56

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

SAN DIEGO CO LOP: Local Oversight Program Listing

A listing of all LOP release sites that are or were under the County of San Diego's jurisdiction. Included are closed or transferred cases, open cases, and cases that did not have a case type indicated. The cases without a case type are mostly complaints; however, some of them could be LOP cases.

Date of Government Version: 03/06/2019
Date Data Arrived at EDR: 03/06/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 54

Source: Department of Environmental Health
Telephone: 858-505-6874
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

SAN DIEGO CO. SAM: Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

LUST SAN FRANCISCO: Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

UST SAN FRANCISCO: Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/05/2018
Date Data Arrived at EDR: 11/06/2018
Date Made Active in Reports: 12/14/2018
Number of Days to Update: 38
Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

UST SAN JOAQUIN: San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/22/2018
Date Data Arrived at EDR: 06/26/2018
Date Made Active in Reports: 07/11/2018
Number of Days to Update: 15
Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 03/18/2019
Next Scheduled EDR Contact: 07/01/2019
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA SAN LUIS OBISPO: CUPA Facility List
Cupa Facility List.

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/15/2019
Date Made Active in Reports: 03/14/2019
Number of Days to Update: 27
Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SAN MATEO COUNTY:

BI SAN MATEO: Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 03/04/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 47
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

LUST SAN MATEO: Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/23/2019
Number of Days to Update: 36
Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA SANTA BARBARA: CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28
Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SANTA CLARA COUNTY:

CUPA SANTA CLARA: Cupa Facility List
Cupa facility list

Date of Government Version: 02/13/2019
Date Data Arrived at EDR: 02/19/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 15

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

HIST LUST SANTA CLARA: HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LUST SANTA CLARA: LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 02/21/2019
Next Scheduled EDR Contact: 06/10/2019
Data Release Frequency: Annually

SAN JOSE HAZMAT: Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 01/30/2019
Date Data Arrived at EDR: 02/01/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 34

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA SANTA CRUZ: CUPA Facility List
CUPA facility listing.

Date of Government Version: 01/21/2017
Date Data Arrived at EDR: 02/22/2017
Date Made Active in Reports: 05/23/2017
Number of Days to Update: 90

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA SHASTA: CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/15/2017
Date Data Arrived at EDR: 06/19/2017
Date Made Active in Reports: 08/09/2017
Number of Days to Update: 51

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 02/13/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Varies

SOLANO COUNTY:

LUST SOLANO: Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/29/2019
Number of Days to Update: 53

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

UST SOLANO: Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 03/05/2019
Date Data Arrived at EDR: 03/07/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 27

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Quarterly

SONOMA COUNTY:

CUPA SONOMA: Cupa Facility List
Cupa Facility list

Date of Government Version: 12/21/2018
Date Data Arrived at EDR: 12/27/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 19

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 03/25/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Varies

LUST SONOMA: Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 04/03/2019
Date Data Arrived at EDR: 04/11/2019
Date Made Active in Reports: 04/30/2019
Number of Days to Update: 19

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 04/08/2019
Next Scheduled EDR Contact: 07/08/2019
Data Release Frequency: Quarterly

STANISLAUS COUNTY:

CUPA STANISLAUS: CUPA Facility List
Cupa facility list

Date of Government Version: 12/11/2018
Date Data Arrived at EDR: 12/13/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 33

Source: Stanislaus County Department of Ennvironmental Protection
Telephone: 209-525-6751
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Varies

SUTTER COUNTY:

UST SUTTER: Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 02/28/2019
Date Data Arrived at EDR: 03/01/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 33

Source: Sutter County Environmental Health Services
Telephone: 530-822-7500
Last EDR Contact: 02/27/2019
Next Scheduled EDR Contact: 06/17/2019
Data Release Frequency: Semi-Annually

TEHAMA COUNTY:

CUPA TEHAMA: CUPA Facility List
Cupa facilities

Date of Government Version: 12/13/2018
Date Data Arrived at EDR: 12/18/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 28

Source: Tehama County Department of Environmental Health
Telephone: 530-527-8020
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TRINITY COUNTY:

CUPA TRINITY: CUPA Facility List
Cupa facility list

Date of Government Version: 01/18/2019
Date Data Arrived at EDR: 01/23/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 42

Source: Department of Toxic Substances Control
Telephone: 760-352-0381
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

TULARE COUNTY:

CUPA TULARE: CUPA Facility List
Cupa program facilities

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 12/27/2018
Date Made Active in Reports: 01/15/2019
Number of Days to Update: 19

Source: Tulare County Environmental Health Services Division
Telephone: 559-624-7400
Last EDR Contact: 01/31/2019
Next Scheduled EDR Contact: 05/20/2019
Data Release Frequency: Varies

TUOLUMNE COUNTY:

CUPA TUOLUMNE: CUPA Facility List
Cupa facility list

Date of Government Version: 04/23/2018
Date Data Arrived at EDR: 04/25/2018
Date Made Active in Reports: 06/25/2018
Number of Days to Update: 61

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 04/22/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Varies

VENTURA COUNTY:

BWT VENTURA: Business Plan, Hazardous Waste Producers, and Operating Underground Tanks
The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 02/28/2019
Number of Days to Update: 35

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

LF VENTURA: Inventory of Illegal Abandoned and Inactive Sites
Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Annually

LUST VENTURA: Listing of Underground Tank Cleanup Sites
Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 02/07/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: Quarterly

MED WASTE VENTURA: Medical Waste Program List
To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/24/2019
Date Made Active in Reports: 03/07/2019
Number of Days to Update: 42
Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 04/23/2019
Next Scheduled EDR Contact: 08/05/2019
Data Release Frequency: Quarterly

UST VENTURA: Underground Tank Closed Sites List
Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 02/26/2019
Date Data Arrived at EDR: 03/13/2019
Date Made Active in Reports: 04/03/2019
Number of Days to Update: 21
Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 03/13/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Quarterly

YOLO COUNTY:

UST YOLO: Underground Storage Tank Comprehensive Facility Report
Underground storage tank sites located in Yolo county.

Date of Government Version: 12/26/2018
Date Data Arrived at EDR: 01/03/2019
Date Made Active in Reports: 01/16/2019
Number of Days to Update: 13
Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 03/29/2019
Next Scheduled EDR Contact: 07/15/2019
Data Release Frequency: Annually

YUBA COUNTY:

CUPA YUBA: CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 02/08/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/06/2019
Number of Days to Update: 22
Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 04/25/2019
Next Scheduled EDR Contact: 08/12/2019
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 02/11/2019
Date Data Arrived at EDR: 02/12/2019
Date Made Active in Reports: 03/04/2019
Number of Days to Update: 20

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 02/12/2019
Next Scheduled EDR Contact: 05/27/2019
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 07/13/2018
Date Made Active in Reports: 08/01/2018
Number of Days to Update: 19

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 04/10/2019
Next Scheduled EDR Contact: 07/22/2019
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 01/01/2019
Date Data Arrived at EDR: 01/30/2019
Date Made Active in Reports: 02/14/2019
Number of Days to Update: 15

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 01/30/2019
Next Scheduled EDR Contact: 05/11/2019
Data Release Frequency: Quarterly

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 10/23/2018
Date Made Active in Reports: 11/27/2018
Number of Days to Update: 35

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 04/15/2019
Next Scheduled EDR Contact: 07/29/2019
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 02/23/2018
Date Made Active in Reports: 04/09/2018
Number of Days to Update: 45

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 02/19/2019
Next Scheduled EDR Contact: 06/03/2019
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2017
Date Data Arrived at EDR: 06/15/2018
Date Made Active in Reports: 07/09/2018
Number of Days to Update: 24

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 03/11/2019
Next Scheduled EDR Contact: 06/24/2019
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
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Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

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GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

THE PRESERVE PHASE I ESA
12525 DOUGLAS ROAD
RANCHO CORDOVA, CA 95742

TARGET PROPERTY COORDINATES

Latitude (North):	38.575586 - 38° 34' 32.11''
Longitude (West):	121.196464 - 121° 11' 47.27''
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	657109.8
UTM Y (Meters):	4271015.5
Elevation:	243 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5619686 BUFFALO CREEK, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principle investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

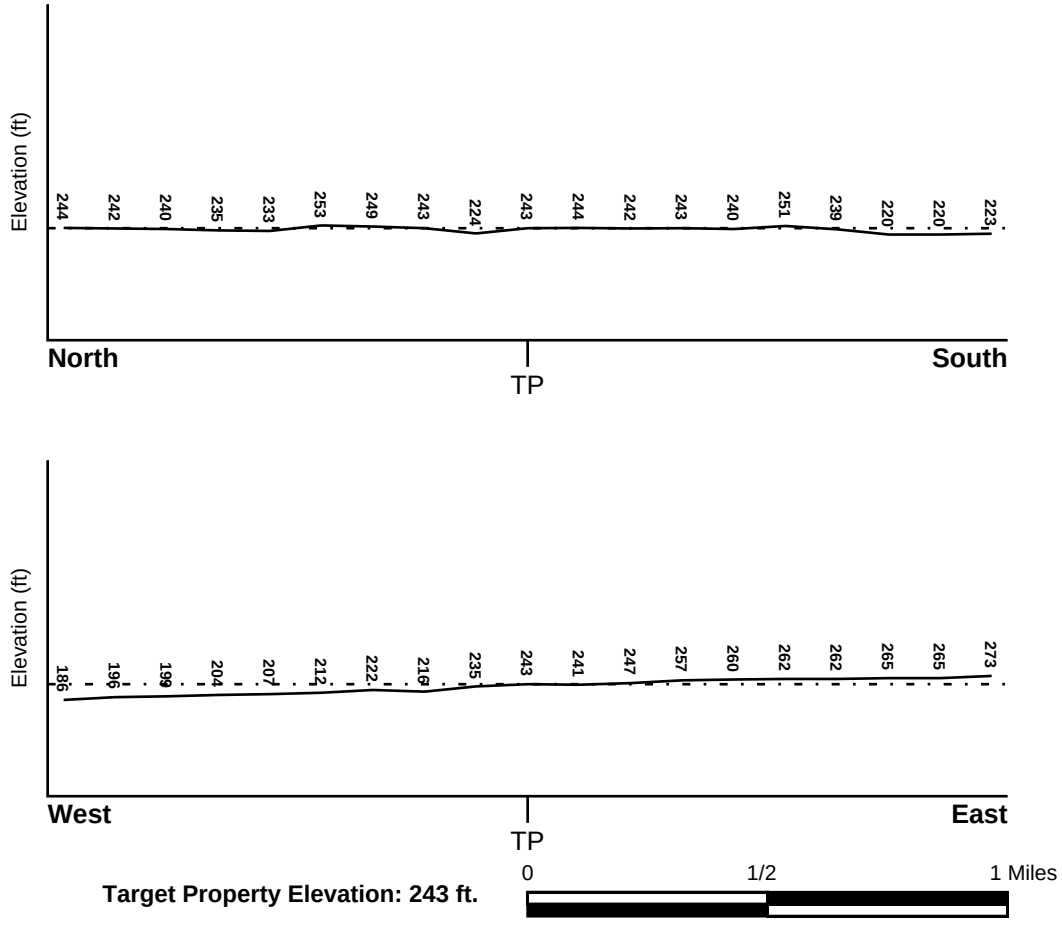
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General West

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Flood Plain Panel at Target Property	FEMA Source Type
06067C0250H	FEMA FIRM Flood data

Additional Panels in search area:	FEMA Source Type
06067C0240H	FEMA FIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
BUFFALO CREEK	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius:	1.25 miles
Status:	Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
Not Reported		

* ©1996 Site−specific hydrogeological data gathered by CERCLIS Alerts, Inc., Bainbridge Island, WA. All rights reserved. All of the information and opinions presented are those of the cited EPA report(s), which were completed under a Comprehensive Environmental Response Compensation and Liability Information System (CERCLIS) investigation.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

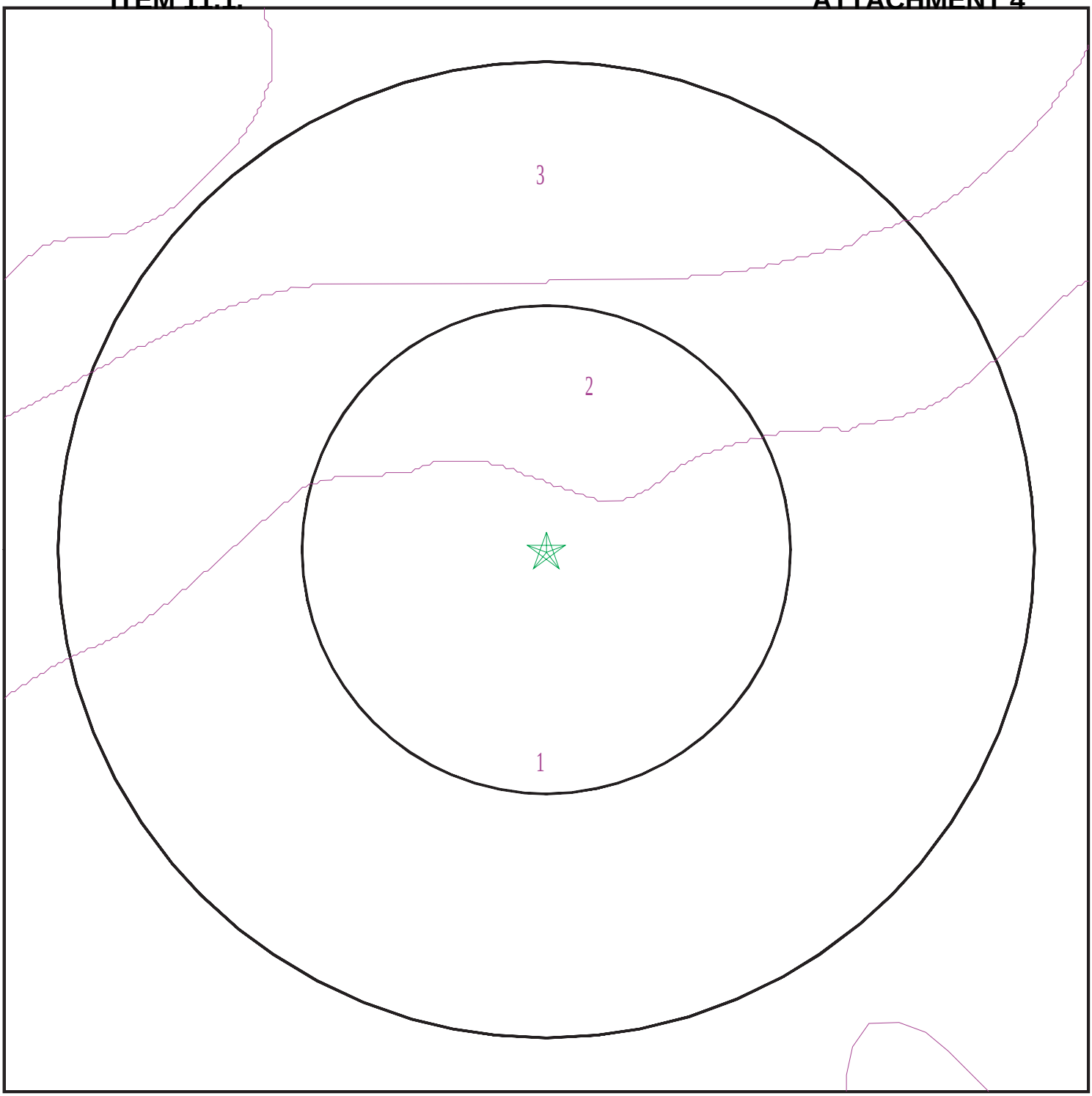
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 5633265.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	The Preserve Phase I ESA	CLIENT:	Youngdahl Consulting Group
ADDRESS:	12525 Douglas Road Rancho Cordova CA 95742	CONTACT:	Dennis Eck
LAT/LONG:	38.575586 / 121.196464	INQUIRY #:	5633265.2s
		DATE:	May 01, 2019 10:32 am

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GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: RED BLUFF

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 6.5 Min: 5.6
2	7 inches	25 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 6.5 Min: 5.6
3	25 inches	42 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 6.5 Min: 5.6
4	42 inches	68 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 6.5 Min: 5.6

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Map ID: 2

Soil Component Name: HICKSVILLE

Soil Surface Texture: gravelly loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information

	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	12 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
2	12 inches	42 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
3	42 inches	64 inches	stratified very gravelly sandy loam to clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Clayey Gravel	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6

Soil Map ID: 3

Soil Component Name: REDDING

Soil Surface Texture: gravelly loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
2	7 inches	20 inches	gravelly loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
3	20 inches	27 inches	gravelly clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:
4	27 inches	66 inches	indurated	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	Not reported	Max: 0.01 Min: 0	Max: Min:

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	USGS40000189193	1/2 - 1 Mile ESE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

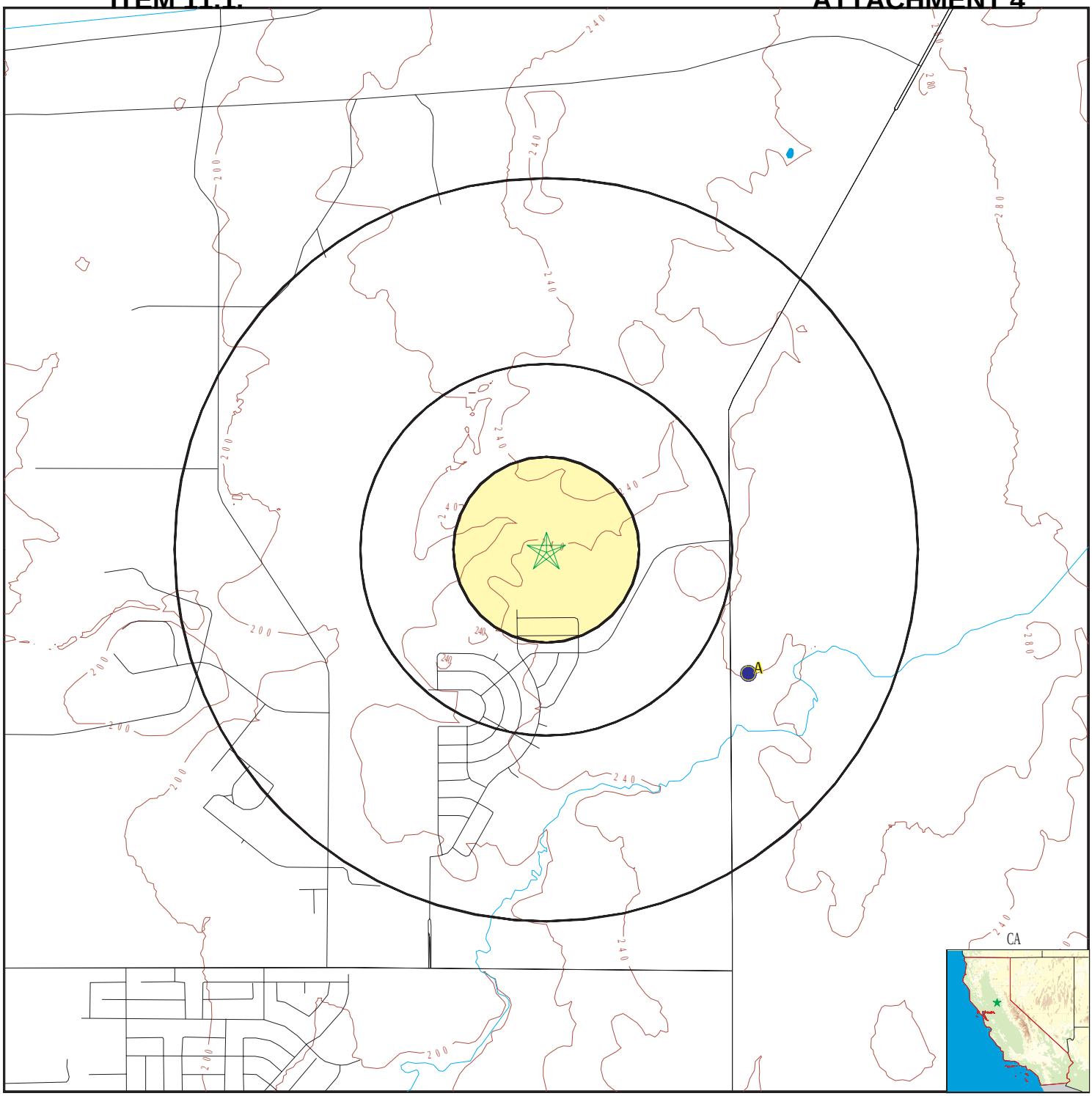
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	CADWR8000038442	1/2 - 1 Mile ESE

PHYSICAL SETTING SOURCE MAP - 5633265.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	The Preserve Phase I ESA	CLIENT:	Youngdahl Consulting Group
ADDRESS:	12525 Douglas Road Rancho Cordova CA 95742	CONTACT:	Dennis Eck
		INQUIRY #:	5633265.2s
LAT/LONG:	38.575586 / 121.196464	DATE:	May 01, 2019 10:32 am

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GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID Direction Distance Elevation	Database	EDR ID Number
A1 **ESE** **1/2 - 1 Mile** **Higher**	**CA WELLS**	**CADWR8000038442**

State Well #:	08N07E02N001M	Station ID:	30672
Well Name:	SCGA #20	Well Use:	Irrigation
Well Type:	Single Well	Well Depth:	675
Basin Name:	South American	Well Completion Rpt #:	21010

A2 **ESE** **1/2 - 1 Mile** **Higher**		**FED USGS**	**USGS40000189193**

Organization ID:	USGS-CA		
Organization Name:	USGS California Water Science Center		
Monitor Location:	008N007E02N001M	Type:	Well
Description:	COMPUTER GENERATED LAT/LONG		
HUC:	Not Reported	Drainage Area:	Not Reported
Drainage Area Units:	Not Reported	Contrib Drainage Area:	Not Reported
Contrib Drainage Area Unts:	Not Reported	Aquifer:	Central Valley aquifer system
Formation Type:	Not Reported	Aquifer Type:	Not Reported
Construction Date:	19560126	Well Depth:	600
Well Depth Units:	ft	Well Hole Depth:	675
Well Hole Depth Units:	ft		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
95742	6	0

Federal EPA Radon Zone for SACRAMENTO County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for SACRAMENTO COUNTY, CA

Number of sites tested: 52

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.665 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.200 pCi/L	100%	0%	0%
Basement	8.350 pCi/L	50%	50%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data was obtained from the Federal Emergency Management Agency (FEMA). It depicts 100-year and 500-year flood zones as defined by FEMA. It includes the National Flood Hazard Layer (NFHL) which incorporates Flood Insurance Rate Map (FIRM) data and Q3 data from FEMA in areas not covered by NFHL.
Source: FEMA
Telephone: 877-336-2627
Date of Government Version: 2003, 2015

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish and Wildlife
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

California Earthquake Fault Lines
Source: California Division of Mines and Geology
The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

RADON

State Database: CA Radon
Source: Department of Public Health
Telephone: 916-210-8558
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

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APPENDIX D
EDR Vapor Encroachment Screen

The Preserve Phase I ESA
12525 Douglas Road
Rancho Cordova, CA 95742

Inquiry Number: 5633265.2s
June 5, 2019

EDR Vapor Encroachment Screen

Prepared using EDR's Vapor Encroachment Worksheet

EDR® Environmental Data Resources Inc

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

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Executive Summary	ES1
Primary Map	2
Secondary Map	3
Map Findings	4
Record Sources and Currency	GR-1

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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The EDR Vapor Encroachment Worksheet enables EDR's customers to make certain online modifications that effects maps, text and calculations contained in this Report. As a result, maps, text and calculations contained in this Report may have been so modified. EDR has not taken any action to verify any such modifications, and this report and the findings set forth herein must be read in light of this fact. Environmental Data Resources shall not be responsible for any customer's decision to include or not include in any final report any records determined to be within the relevant minimum search distances.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by EDR. The report was designed to assist parties seeking to meet the search requirements of the ASTM Standard Practice for Assessment of Vapor Encroachment into Structures on Property Involved in Real Estate Transactions (E 2600).

STANDARD ENVIRONMENTAL RECORDS	Default Area of Concern (Miles)*	property	1/10	> 1/10
Federal NPL site list	1.0	0	1	0
Federal Delisted NPL site list	1.0	0	0	0
Federal CERCLIS list	0.5	0	1	0
Federal CERCLIS NFRAP site list	0.5	0	0	0
Federal RCRA CORRACTS facilities list	1.0	0	1	0
Federal RCRA non-CORRACTS TSD facilities list	0.5	0	1	0
Federal RCRA generators list	0.25	0	1	0
Federal institutional controls / engineering controls registries	0.5	0	1	0
Federal ERNS list	0.001	0	0	-
State- and tribal - equivalent NPL	1.0	0	0	0
State- and tribal - equivalent CERCLIS	1.0	0	1	0
State and tribal landfill and/or solid waste disposal site lists	0.5	0	0	0
State and tribal leaking storage tank lists	0.5	0	0	0
State and tribal registered storage tank lists	0.25	0	0	0
State and tribal institutional control / engineering control registries	not searched	-	-	-
State and tribal voluntary cleanup sites	0.5	0	0	0
State and tribal Brownfields sites	0.5	0	0	0

ADDITIONAL ENVIRONMENTAL RECORDS				
Local Brownfield lists	0.5	0	0	0
Local Lists of Landfill / Solid Waste Disposal Sites	0.5	0	0	0
Local Lists of Hazardous waste / Contaminated Sites	1.0	0	0	0
Local Lists of Registered Storage Tanks	0.25	0	1	0
Local Land Records	0.5	0	0	0
Records of Emergency Release Reports	0.5	0	0	0
Other Ascertainable Records	1.0	0	1	0

EDR HIGH RISK HISTORICAL RECORDS				
EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

EXECUTIVE SUMMARY

EDR RECOVERED GOVERNMENT ARCHIVES

EDR Exclusive Records	1.0	0	0	0
Exclusive Recovered Govt. Archives	0.001	0	0	-

*The Default Area of Concern may be adjusted by the environmental professional using experience and professional judgement. Each category may include several databases, and each database may have a different distance. A list of individual databases is provided at the back of this report.

EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

THE PRESERVE PHASE I ESA
12525 DOUGLAS ROAD
RANCHO CORDOVA, CA 95742

COORDINATES

Latitude (North):	38.575586 - 38° 34′ 32.10388″
Longitude (West):	121.196464 - 121° 11′ 47.27234″
Elevation:	243 ft. above sea level

EXECUTIVE SUMMARY

SEARCH RESULTS

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
AEROJET ROCKETDYNE INC	US HWY 50 AND AEROJET RD	<1/10 N	Region	8

RCRA-TSDF: RCRA-TSDF
ROD: ROD
CONSENT: CONSENT
RCRA-LQG: RCRA-LQG
PRP: PRP
SEMS: SEMS
US ENG CONTROLS: US ENG CONTROLS
CORRACTS: CORRACTS
PADS: PADS
US INST CONTROL: US INST CONTROL
US FIN ASSUR: US FIN ASSUR
NPL: NPL
SWEEPS UST: SWEEPS UST
CA FID UST: CA FID UST
HIST UST: HIST UST
ENVIROSTOR: ENVIROSTOR

ADDITIONAL ENVIRONMENTAL RECORDS

Name	Address	Dist/Dir	Map ID	Page
AEROJET ROCKETDYNE INC	US HWY 50 AND AEROJET RD	<1/10 N	Region	

RCRA-TSDF: RCRA-TSDF
ROD: ROD
CONSENT: CONSENT
RCRA-LQG: RCRA-LQG
PRP: PRP
SEMS: SEMS
US ENG CONTROLS: US ENG CONTROLS
CORRACTS: CORRACTS
PADS: PADS
US INST CONTROL: US INST CONTROL
US FIN ASSUR: US FIN ASSUR
NPL: NPL
SWEEPS UST: SWEEPS UST
CA FID UST: CA FID UST
HIST UST: HIST UST
ENVIROSTOR: ENVIROSTOR

EDR HIGH RISK HISTORICAL RECORDS

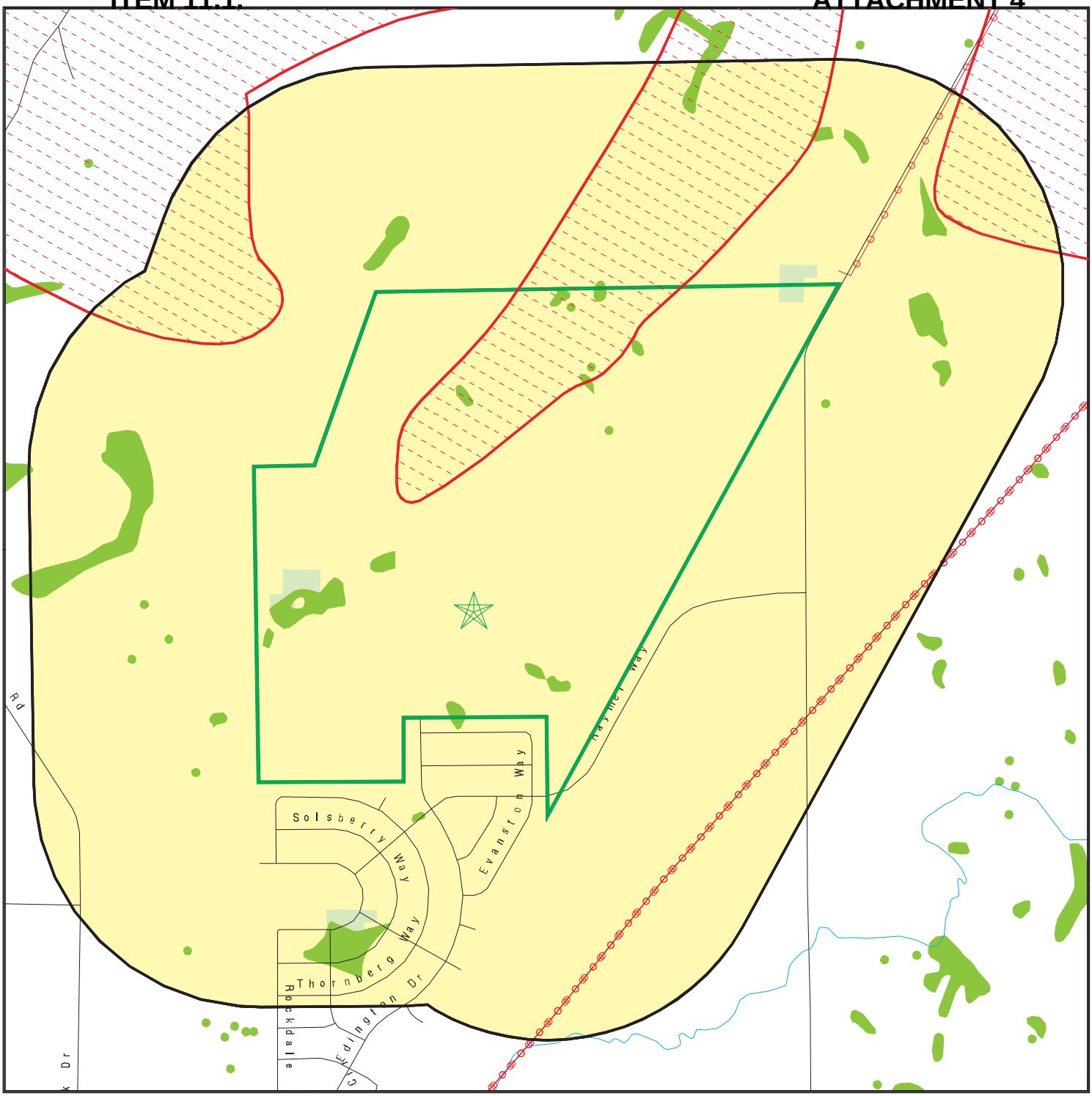
Name	Address	Dist/Dir	Map ID	Page

Not Reported

EDR RECOVERED GOVERNMENT ARCHIVES

Name	Address	Dist/Dir	Map ID	Page

Not Reported



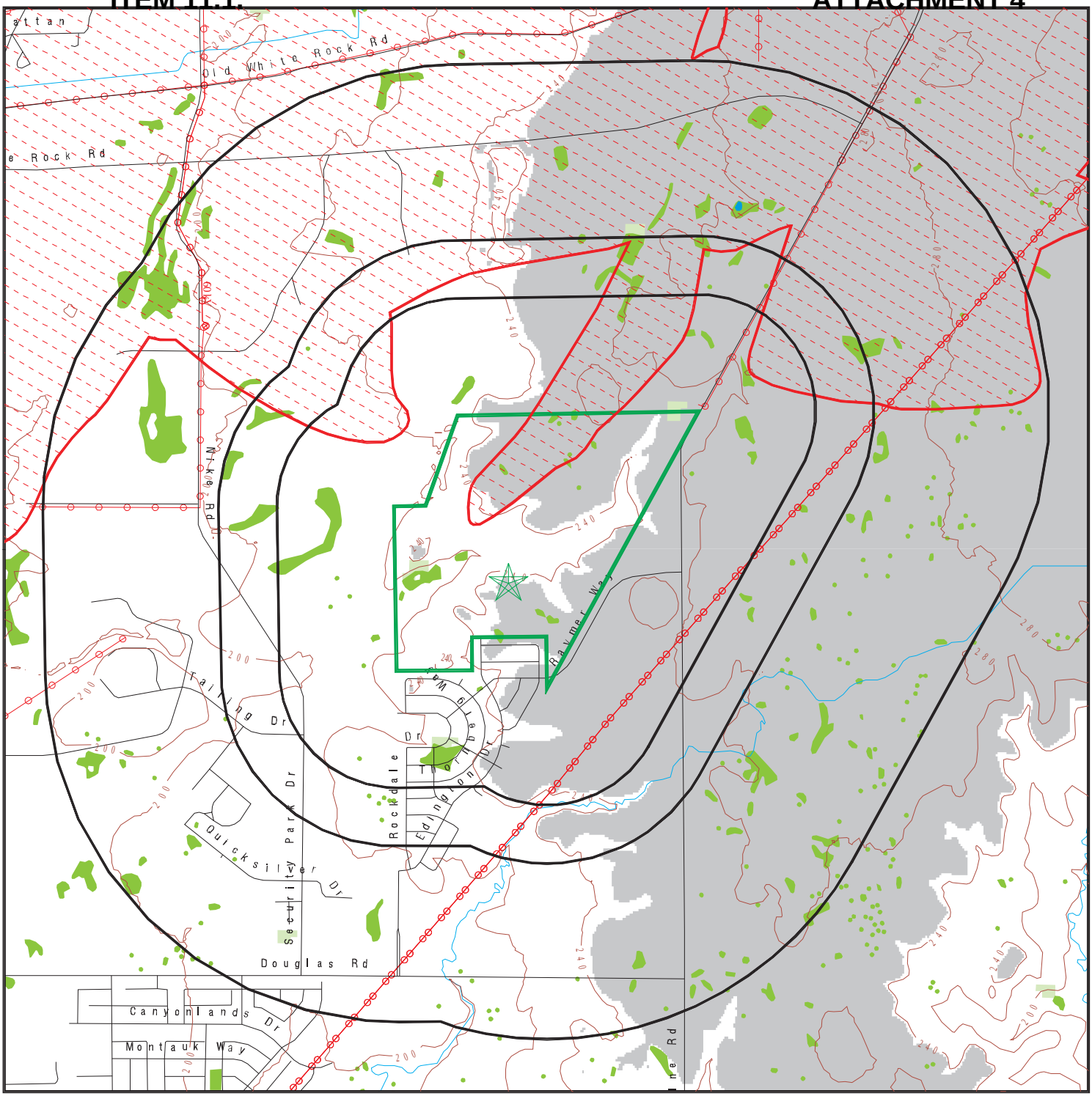
0 300 1/3 1/2 Miles

- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	The Preserve Phase I ESA	CLIENT:	Youngdahl Consulting Group
ADDRESS:	12525 Douglas Road Rancho Cordova CA 95742	CONTACT:	Dennis Eck
LAT/LONG:	38.575586 / 121.196464	INQUIRY #:	5633265.2s
		DATE:	May 01, 2019 10:30 am

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- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Upgradient Area
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: The Preserve Phase I ESA	CLIENT: Youngdahl Consulting Group
ADDRESS: 12525 Douglas Road Rancho Cordova CA 95742	CONTACT: Dennis Eck
LAT/LONG: 38.575586 / 121.196464	INQUIRY #: 5633265.2s DATE: May 01, 2019 10:29 am

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MAP FINDINGS

LEGEND

FACILITY NAME **FACILITY ADDRESS, CITY, ST, ZIP**		EDR SITE ID NUMBER
◆ **MAP ID#**	Direction Distance Range (Distance feet / miles) Relative Elevation Feet Above Sea Level	ASTM 2600 Record Sources found in this report. Each database searched has been assigned to one or more categories. For detailed information about categorization, see the section of the report Records Searched and Currency.

Worksheet:

Comments:
Comments may be added on the online Vapor Encroachment Worksheet.

DATABASE ACRONYM: Applicable categories (A hoverbox with database description).

AEROJET ROCKETDYNE INC US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA,		1000333003
Region	N <1/10 (0 ft. / 0 mi.)	Federal NPL site list Federal CERCLIS list Federal RCRA CORRACTS facilities list Federal RCRA non-CORRACTS TSD facilities list Federal RCRA generators list Federal institutional controls / engineering controls registries State- and tribal - equivalent CERCLIS Local Lists of Registered Storage Tanks Other Ascertainable Records

Worksheet:

NPL: Federal NPL site list

EPA ID:	CAD980358832
Cerclis ID:	901718
EPA Region:	9
Federal:	N
Final Date:	1983-09-08 00:00:00
Site Score:	54.630000000000003
Latitude:	38.608331
Longitude:	-121.2

Category Details:

NPL Status:	Currently on the Final NPL
Category Description:	Depth To Aquifer-> 50 And <= 100 Feet
Category Value:	80
NPL Status:	Currently on the Final NPL
Category Description:	Distance To Nearest Population-> 0 And <= 1/4 Mile
Category Value:	10

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Site Details:

Site Name:	AEROJET GENERAL CORP.
Site Status:	Final
Site Zip:	95670
Site City:	RANCHO CORDOVA
Site State:	CA
Federal Site:	No
Site County:	SACRAMENTO
EPA Region:	09
Date Proposed:	12/30/82
Date Deleted:	Not Reported
Date Finalized:	09/08/83

Substance Details:

NPL Status:	Currently on the Final NPL
Substance ID:	Not Reported
Substance:	Not Reported
CAS #:	Not Reported
Pathway:	Not Reported
Scoring:	Not Reported
NPL Status:	Currently on the Final NPL
Substance ID:	A046
Substance:	POLYCHLORINATED BIPHENYLS
CAS #:	1336-36-3
Pathway:	GROUND WATER PATHWAY
Scoring:	3
NPL Status:	Currently on the Final NPL
Substance ID:	A046
Substance:	POLYCHLORINATED BIPHENYLS
CAS #:	1336-36-3
Pathway:	SURFACE WATER PATHWAY
Scoring:	3
NPL Status:	Currently on the Final NPL
Substance ID:	U210
Substance:	TETRACHLOROETHENE
CAS #:	127-18-4
Pathway:	GROUND WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U210
Substance:	TETRACHLOROETHENE
CAS #:	127-18-4
Pathway:	SURFACE WATER PATHWAY
Scoring:	2
NPL Status:	Currently on the Final NPL
Substance ID:	U228

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Substance:	TRICHLOROETHYLENE (TCE)
CAS #:	79-01-6
Pathway:	NO PATHWAY INDICATED
Scoring:	1

Summary Details:

Conditions at listing October 1981): The Aerojet General Corp. Site covers 8,500 acres in the eastern portion of Sacramento County, California, adjacent to the Rancho Cordova area population 40,000). The northeast edge of the site is approximately 0.5 mile from the American River. Underlying the site are extensive 50-foot deep) gold dredge tailings, a remnant of past mining operations. The upper aquifer is 80 feet below the surface. Ground water is used extensively throughoutthe Rancho Cordova area to supply municipal, domestic, and industrial water. Since 1953, Aerojet and its subsidiaries have disposed of, on-site, unknown quantities of ha ardous waste, including trichloroethylene, tetrachloroethylene, chloroform, Freon and other chemicals associated with rocket propellants, and various chemical processing wastes. Soil on-site is contaminated. Monitoring data show extensive ground water contamination on- and off-site, primarily with trichloroethylene. In April 1979, Aerojet and its subsidiaries started ground water studies to examine the impact of past disposal practices and to determine the requirements for cleanup. In December 1979, the State filed suit against Aerojet and a subsidiary, Cordova Chemical. Status July 1983): EPA has worked with the State since 1979, providing technical assistance through the Emergency Response Team, the Las Vegas lab, and Region IX. In March 1982, the State requested EPA s assistance in evaluating Aerojet s Proposal for a Ground Water Quality Control Program. EPA found major technical problems in Aerojet s proposal. In the past, a confidentiality agreement between Aerojet and the State limited EPA access to the documents that would allow EPA to independently assess the company s progress toward cleanup. The agreement is no longer in effect. On February 25, 1983, Region IX requested information from Aerojet regarding soil and ground water contamination. EPA will soon complete review of the documents received in response.

Site Status Details:

NPL Status:	Final
Proposed Date:	12/30/1982
Final Date:	09/08/1983
Deleted Date:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Narratives Details:

NPL Name:	AEROJET GENERAL CORP.
City:	RANCHO CORDOVA
State:	CA

SEMS: Federal CERCLIS list

Site ID:	0901718
EPA ID:	CAD980358832
Cong District:	3,7
FIPS Code:	06067
Latitude:	38.608331
Longitude:	-121.200000
FF:	N
NPL:	Currently on the Final NPL
Non NPL Status:	Not Reported

SEMS Detail:

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	2
Start Date:	2001-07-20 04:00:00
Finish Date:	7/20/2001 4:00:00 AM
Qual:	E
Current Action Lead:	EPA Perf In-Hse
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	AR
Action Name:	ADMIN REC
SEQ:	1
Start Date:	1993-07-12 04:00:00
Finish Date:	7/8/1994 4:00:00 AM
Qual:	V
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	NP
Action Name:	PROPOSED
SEQ:	1
Start Date:	1982-12-30 05:00:00
Finish Date:	12/30/1982 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	PA
Action Name:	PA
SEQ:	1
Start Date:	1979-08-01 04:00:00
Finish Date:	8/1/1979 4:00:00 AM
Qual:	L
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	MA
Action Name:	ST COOP
SEQ:	1
Start Date:	1991-09-30 04:00:00
Finish Date:	7/10/2018 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	NF

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Name:	NPL FINL
SEQ:	1
Start Date:	1983-09-08 04:00:00
Finish Date:	9/8/1983 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	1
Start Date:	1992-10-22 04:00:00
Finish Date:	10/22/1992 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	RS
Action Name:	RV ASSESS
SEQ:	2
Start Date:	1990-07-02 04:00:00
Finish Date:	7/2/1990 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	3
Start Date:	2013-04-26 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	1
Start Date:	1986-05-01 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	06
Action Code:	RO
Action Name:	ROD
SEQ:	5
Start Date:	2015-07-22 04:00:00
Finish Date:	7/22/2015 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	CR
Action Name:	CI
SEQ:	2
Start Date:	2011-07-29 05:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Perf

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

OU:	00
Action Code:	FE
Action Name:	5 YEAR
SEQ:	1
Start Date:	2015-11-03 05:00:00
Finish Date:	9/22/2016 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	03
Action Code:	RO
Action Name:	ROD
SEQ:	2
Start Date:	2001-07-20 04:00:00
Finish Date:	7/20/2001 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	RO
Action Name:	ROD
SEQ:	4
Start Date:	2011-02-15 05:00:00
Finish Date:	2/15/2011 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	11
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	8
Start Date:	2017-04-11 04:00:00
Finish Date:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	10
Action Code:	FS
Action Name:	FS
SEQ:	1
Start Date:	2016-10-31 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	17
Start Date:	2014-03-27 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	23
Start Date:	2011-09-20 04:00:00
Finish Date:	3/27/2014 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	12
Start Date:	2013-09-23 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	12
Start Date:	2011-09-20 04:00:00
Finish Date:	9/23/2013 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	13
Start Date:	2012-11-14 05:00:00
Finish Date:	7/23/2014 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	13

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Start Date:	2011-09-26 04:00:00
Finish Date:	11/14/2012 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	11
Start Date:	2013-08-21 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	11
Start Date:	2011-09-20 04:00:00
Finish Date:	8/21/2013 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	4
Start Date:	2012-03-08 05:00:00
Finish Date:	9/26/2013 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	4
Start Date:	2011-09-26 04:00:00
Finish Date:	3/8/2012 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	06
Action Code:	BE
Action Name:	PRP RD
SEQ:	5
Start Date:	2015-12-14 05:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	02
Action Code:	BB
Action Name:	PRP RV
SEQ:	1
Start Date:	1995-05-08 04:00:00
Finish Date:	11/22/1995 5:00:00 AM
Qual:	S
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Name:	PRP RA
SEQ:	9
Start Date:	2012-10-01 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	9
Start Date:	2011-09-26 04:00:00
Finish Date:	10/1/2012 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BE
Action Name:	PRP RD
SEQ:	10
Start Date:	2011-09-26 04:00:00
Finish Date:	6/17/2015 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BF
Action Name:	PRP RA
SEQ:	10
Start Date:	2015-06-17 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BB
Action Name:	PRP RV
SEQ:	2
Start Date:	2009-11-03 05:00:00
Finish Date:	5/24/2010 5:00:00 AM
Qual:	C
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	03
Action Code:	ME
Action Name:	PRP LR
SEQ:	1
Start Date:	2011-07-07 05:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	03
Action Code:	BF
Action Name:	PRP RA
SEQ:	2
Start Date:	2003-09-12 04:00:00
Finish Date:	8/22/2012 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght

Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

OU:	03
Action Code:	BE
Action Name:	PRP RD
SEQ:	2
Start Date:	2002-09-20 04:00:00
Finish Date:	2/20/2009 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	09
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	7
Start Date:	1989-09-30 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	08
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	6
Start Date:	1989-09-30 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	07
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	5
Start Date:	1989-09-30 04:00:00
Finish Date:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	06
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	4
Start Date:	1989-09-30 04:00:00
Finish Date:	7/22/2015 4:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	05
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	3
Start Date:	1989-09-30 04:00:00
Finish Date:	2/15/2011 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	04
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	2
Start Date:	1989-09-30 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

NPL:	F
FF:	N
OU:	01
Action Code:	BD
Action Name:	PRP RI/FS
SEQ:	1
Start Date:	1988-09-08 04:00:00
Finish Date:	Not Reported
Qual:	Not Reported
Current Action Lead:	EPA Ovrsght
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	HR
Action Name:	HAZRANK
SEQ:	1
Start Date:	1982-12-01 05:00:00
Finish Date:	12/1/1982 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	St Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	DS
Action Name:	DISCVRY
SEQ:	1
Start Date:	1979-04-01 05:00:00
Finish Date:	4/1/1979 5:00:00 AM
Qual:	Not Reported
Current Action Lead:	St Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	00
Action Code:	SI
Action Name:	SI
SEQ:	1

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Start Date:	1979-06-01 04:00:00
Finish Date:	12/1/1982 5:00:00 AM
Qual:	H
Current Action Lead:	St Perf
Region:	09
Site ID:	0901718
EPA ID:	CAD980358832
Site Name:	AEROJET GENERAL CORP.
NPL:	F
FF:	N
OU:	02
Action Code:	RV
Action Name:	RMVL
SEQ:	1
Start Date:	1995-11-22 05:00:00
Finish Date:	2/15/2011 5:00:00 AM
Qual:	S
Current Action Lead:	St Perf

CORRACTS: Federal RCRA CORRACTS facilities list

EPA ID:	CAD000030494
EPA Region:	09
Area Name:	SWMUS 55, 373, 374, 375
Actual Date:	20050818
Action:	CA999NF - Corrective Action Process Terminated, No Further Action
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	SWMUS 55, 373, 374, 375
Actual Date:	20050818
Action:	CA200 - RFI Approved
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	20050816
Action:	CA725YE - Current Human Exposures Under Control, Yes, Current Human Exposures Under Control has been verified

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	20050816
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	SWMUS 55, 373, 374, 375
Actual Date:	20050518
Action:	CA190 - RFI Report Received
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	SWMUS 55, 373, 374, 375
Actual Date:	20050131
Action:	CA150 - RFI Workplan Approved
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	SWMUS 55, 373, 374, 375
Actual Date:	20050105
Action:	CA110 - RFI Workplan Received
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	UNITS L, M, N, P, Q
Actual Date:	20010417
Action:	CA200 - RFI Approved
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

EPA ID:	CAD000030494
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	20001211
Action:	CA750NO - Migration of Contaminated Groundwater under Control, Unacceptable migration of contaminated groundwater is observed or expected
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	20001211
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	20001211
Action:	CA725NO - Current Human Exposures Under Control, Current human exposures are NOT under control
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	20001211
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	UNITS L, M, N, P, Q
Actual Date:	19990831
Action:	CA150 - RFI Workplan Approved
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	MCDONALD DOUGLAS (3500 ACRE PARCEL)
Actual Date:	19940630
Action:	CA600SR - Stabilization Measures Implemented, Primary measure is source removal and/or treatment
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	19940621

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action:	CA050 - RFA Completed
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	19940621
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	ENTIRE FACILITY
Actual Date:	19940621
Action:	CA070YE - RFA Determination Of Need For An RFI, RFI is Necessary
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	19940621
Schedule end date:	Not Reported
EPA ID:	CAD000030494
EPA Region:	09
Area Name:	AEROJET (8500 ACRE PARCEL)
Actual Date:	19910601
Action:	CA150 - RFI Workplan Approved
NAICS Code(s):	336412 332994 Aircraft Engine and Engine Parts Manufacturing Small Arms Manufacturing
Original schedule date:	Not Reported
Schedule end date:	Not Reported

RCRA-TSDF: Federal RCRA non-CORRACTS TSD facilities list

Date form received by agency:	02/27/2018
Facility name:	AEROJET ROCKETDYNE INC
Facility address:	US HWY 50 AND AEROJET RD RANCHO CORDOVA, CA 95813-6000
EPA ID:	CAD000030494
Mailing address:	PO BOX 13222 SACRAMENTO, CA 95813
Contact:	JIM BUEHLER
Contact address:	PO BOX 13222 SACRAMENTO, CA 95813
Contact country:	US
Contact telephone:	916-355-4682
Contact email:	JIM.BUEHLER@ROCKET.COM
EPA Region:	09
Land type:	Private
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	AEROJET ROCKETDYNE, INC.
Owner/operator address:	PO BOX 13222 SACRAMENTO, CA 95813
Owner/operator country:	US
Owner/operator telephone:	916-355-4682
Owner/operator email:	JIM.BUEHLER@ROCKET.COM
Owner/operator fax:	Not Reported
Owner/operator extension:	Not Reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	10/01/2005
Owner/Op end date:	Not Reported
Owner/operator name:	AEROJET ROCKETDYNE, INC.
Owner/operator address:	PO BOX 13222 SACRAMENTO, CA 95813
Owner/operator country:	US
Owner/operator telephone:	916-355-4682
Owner/operator email:	JIM.BUEHLER@ROCKET.COM
Owner/operator fax:	Not Reported
Owner/operator extension:	Not Reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	10/01/2005
Owner/Op end date:	Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	Yes
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Used oil transfer facility: No
Used oil transporter: No

Universal Waste Summary:

Waste type: E
Accumulated waste on-site: No
Generated waste on-site: Yes

Waste type: Batteries
Accumulated waste on-site: Yes
Generated waste on-site: Not Reported

Waste type: Lamps
Accumulated waste on-site: Yes
Generated waste on-site: Not Reported

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 291
. Waste name: Latex waste

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: 343
- Waste name: Unspecified organic liquid mixture

- Waste code: 351
- Waste name: Organic solids with halogens

- Waste code: 352
- Waste name: Other organic solids

- Waste code: 512
- Waste name: Other empty containers 30 gallons or more

- Waste code: 513
- Waste name: Empty containers less than 30 gallons

- Waste code: 541
- Waste name: Photochemicals / photo processing waste

- Waste code: 551
- Waste name: Laboratory waste chemicals

- Waste code: 591
- Waste name: Baghouse waste

- Waste code: 725
- Waste name: Liquids with mercury > 20 mg/l

- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l

- Waste code: 751
- Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

- Waste code: 791
- Waste name: Liquids with pH < 2

- Waste code: 792
- Waste name: Liquids with pH < 2 with metals

- Waste code: D001
- Waste name: IGNITABLE WASTE

- Waste code: D002
- Waste name: CORROSIVE WASTE

- Waste code: D003
- Waste name: REACTIVE WASTE

- Waste code: D006
- Waste name: CADMIUM

- Waste code: D007
- Waste name: CHROMIUM

- Waste code: D008
- Waste name: LEAD

- Waste code: D009
- Waste name: MERCURY

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D037
. Waste name:	PENTACHLOROPHENOL
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F027
. Waste name:	DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)
. Waste code:	P068
. Waste name:	HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: P082
- Waste name: METHANIMINE, N-METHYL-N-NITROSO- (OR) N-NITROSODIMETHYLAMINE

- Waste code: P098
- Waste name: POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

- Waste code: P105
- Waste name: SODIUM AZIDE

- Waste code: U002
- Waste name: 2-PROPANONE (I) (OR) ACETONE (I)

- Waste code: U133
- Waste name: HYDRAZINE (R,T)

- Waste code: U134
- Waste name: HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)

- Waste code: U223
- Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Historical Generators:

Date form received by agency: 02/18/2016
Site name: AEROJET ROCKETDYNE, INC.
Classification: Large Quantity Generator

- Waste code: 121
- Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

- Waste code: 122
- Waste name: Alkaline solution without metals (pH > 12.5)

- Waste code: 123
- Waste name: Unspecified alkaline solution

- Waste code: 132
- Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

- Waste code: 133
- Waste name: Aqueous solution with 10% or more total organic residues

- Waste code: 134
- Waste name: Aqueous solution with <10% total organic residues

- Waste code: 135
- Waste name: Unspecified aqueous solution

- Waste code: 141
- Waste name: Off-specification, aged, or surplus inorganics

- Waste code: 151
- Waste name: Asbestos-containing waste

- Waste code: 181
- Waste name: Other inorganic solid waste

- Waste code: 212

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
- Waste code: 213
- Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
- Waste code: 214
- Waste name: Unspecified solvent mixture
- Waste code: 221
- Waste name: Waste oil and mixed oil
- Waste code: 223
- Waste name: Unspecified oil-containing waste
- Waste code: 261
- Waste name: Polychlorinated biphenyls and material containing PCB's
- Waste code: 331
- Waste name: Off-specification, aged, or surplus organics
- Waste code: 341
- Waste name: Organic liquids (nonsolvents) with halogens
- Waste code: 343
- Waste name: Unspecified organic liquid mixture
- Waste code: 351
- Waste name: Organic solids with halogens
- Waste code: 352
- Waste name: Other organic solids
- Waste code: 512
- Waste name: Other empty containers 30 gallons or more
- Waste code: 513
- Waste name: Empty containers less than 30 gallons
- Waste code: 541
- Waste name: Photochemicals / photo processing waste
- Waste code: 551
- Waste name: Laboratory waste chemicals
- Waste code: 591
- Waste name: Baghouse waste
- Waste code: 731
- Waste name: Liquids with polychlorinated biphenyls > 50 mg/l
- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l
- Waste code: 751
- Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg
- Waste code: 791
- Waste name: Liquids with pH < 2
- Waste code: 792

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	Liquids with pH < 2 with metals
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D005
. Waste name:	BARIUM
. Waste code:	D006
. Waste name:	CADMIUM
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	D040
. Waste name:	TRICHLORETHYLENE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	P068
. Waste name:	HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE
. Waste code:	P081
. Waste name:	1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)
. Waste code:	P098
. Waste name:	POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
. Waste code:	U002
. Waste name:	2-PROPANONE (I) (OR) ACETONE (I)
. Waste code:	U133
. Waste name:	HYDRAZINE (R,T)
. Waste code:	U160
. Waste name:	2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)
Date form received by agency:	03/01/2014
Site name:	AEROJET ROCKETDYNE INC
Classification:	Large Quantity Generator
. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	132
. Waste name:	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues
. Waste code:	135
. Waste name:	Unspecified aqueous solution
. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics
. Waste code:	151
. Waste name:	Asbestos-containing waste

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: 181
- Waste name: Other inorganic solid waste

- Waste code: 212
- Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

- Waste code: 213
- Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

- Waste code: 214
- Waste name: Unspecified solvent mixture

- Waste code: 221
- Waste name: Waste oil and mixed oil

- Waste code: 261
- Waste name: Polychlorinated biphenyls and material containing PCB's

- Waste code: 331
- Waste name: Off-specification, aged, or surplus organics

- Waste code: 341
- Waste name: Organic liquids (nonsolvents) with halogens

- Waste code: 343
- Waste name: Unspecified organic liquid mixture

- Waste code: 351
- Waste name: Organic solids with halogens

- Waste code: 352
- Waste name: Other organic solids

- Waste code: 512
- Waste name: Other empty containers 30 gallons or more

- Waste code: 541
- Waste name: Photochemicals / photo processing waste

- Waste code: 551
- Waste name: Laboratory waste chemicals

- Waste code: 591
- Waste name: Baghouse waste

- Waste code: 611
- Waste name: Contaminated soil from site clean-ups

- Waste code: 725
- Waste name: Liquids with mercury > 20 mg/l

- Waste code: 731
- Waste name: Liquids with polychlorinated biphenyls > 50 mg/l

- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l

- Waste code: 751
- Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	791
. Waste name:	Liquids with pH < 2
. Waste code:	792
. Waste name:	Liquids with pH < 2 with metals
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D005
. Waste name:	BARIUM
. Waste code:	D006
. Waste name:	CADMIUM
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	P068
. Waste name:	HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE
. Waste code:	P098
. Waste name:	POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
. Waste code:	U133
. Waste name:	HYDRAZINE (R,T)
. Waste code:	U223
. Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)
Date form received by agency:	09/11/2012
Site name:	AEROJET - GENERAL CORPORATION
Classification:	Large Quantity Generator
. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	132
. Waste name:	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues
. Waste code:	135
. Waste name:	Unspecified aqueous solution
. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics
. Waste code:	151
. Waste name:	Asbestos-containing waste
. Waste code:	181

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name: Other inorganic solid waste

. Waste code: 211
. Waste name: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 512
. Waste name: Other empty containers 30 gallons or more

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 591
. Waste name: Baghouse waste

. Waste code: 611
. Waste name: Contaminated soil from site clean-ups

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741
. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 791

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	Liquids with pH < 2
. Waste code:	792
. Waste name:	Liquids with pH < 2 with metals
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D005
. Waste name:	BARIUM
. Waste code:	D006
. Waste name:	CADMIUM
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	P068
. Waste name:	HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE
. Waste code:	U133
. Waste name:	HYDRAZINE (R,T)
. Waste code:	U220
. Waste name:	BENZENE, METHYL- (OR) TOLUENE
. Waste code:	U223
. Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)
Date form received by agency:	07/30/2010
Site name:	AEROJET - GENERAL CORPORATION
Classification:	Large Quantity Generator
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues
. Waste code:	135
. Waste name:	Unspecified aqueous solution
. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics
. Waste code:	181
. Waste name:	Other inorganic solid waste
. Waste code:	212
. Waste name:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
. Waste code:	213
. Waste name:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
. Waste code:	214
. Waste name:	Unspecified solvent mixture
. Waste code:	221

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste name: Waste oil and mixed oil
- Waste code: 331
- Waste name: Off-specification, aged, or surplus organics
- Waste code: 341
- Waste name: Organic liquids (nonsolvents) with halogens
- Waste code: 343
- Waste name: Unspecified organic liquid mixture
- Waste code: 351
- Waste name: Organic solids with halogens
- Waste code: 352
- Waste name: Other organic solids
- Waste code: 541
- Waste name: Photochemicals / photo processing waste
- Waste code: 551
- Waste name: Laboratory waste chemicals
- Waste code: 725
- Waste name: Liquids with mercury > 20 mg/l
- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l
- Waste code: 791
- Waste name: Liquids with pH < 2
- Waste code: 792
- Waste name: Liquids with pH < 2 with metals
- Waste code: D001
- Waste name: IGNITABLE WASTE
- Waste code: D002
- Waste name: CORROSIVE WASTE
- Waste code: D003
- Waste name: REACTIVE WASTE
- Waste code: D005
- Waste name: BARIUM
- Waste code: D006
- Waste name: CADMIUM
- Waste code: D007
- Waste name: CHROMIUM
- Waste code: D008
- Waste name: LEAD
- Waste code: D009
- Waste name: MERCURY
- Waste code: D010

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste name: SELENIUM
- Waste code: D011
- Waste name: SILVER
- Waste code: D018
- Waste name: BENZENE
- Waste code: D022
- Waste name: CHLOROFORM
- Waste code: D028
- Waste name: 1,2-DICHLOROETHANE
- Waste code: D035
- Waste name: METHYL ETHYL KETONE
- Waste code: D038
- Waste name: PYRIDINE
- Waste code: D040
- Waste name: TRICHLORETHYLENE
- Waste code: F001
- Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- Waste code: F002
- Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- Waste code: F003
- Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- Waste code: F005
- Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- Waste code: LABP
- Waste name: LAB PACK

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	U133
. Waste name:	HYDRAZINE (R,T)
Date form received by agency:	03/27/2008
Site name:	AEROJET - GENERAL CORPORATION
Classification:	Large Quantity Generator
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	D043
. Waste name:	VINYL CHLORIDE
. Waste code:	D040
. Waste name:	TRICHLORETHYLENE
. Waste code:	D039
. Waste name:	TETRACHLOROETHYLENE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D006
. Waste name:	CADMIUM
. Waste code:	D005
. Waste name:	BARIUM

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	D004
. Waste name:	ARSENIC
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	P105
. Waste name:	SODIUM AZIDE
. Waste code:	U029
. Waste name:	METHANE, BROMO- (OR) METHYL BROMIDE
. Waste code:	U043
. Waste name:	ETHENE, CHLORO- (OR) VINYL CHLORIDE
. Waste code:	U045
. Waste name:	METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)
. Waste code:	U075
. Waste name:	DICHLORODIFLUOROMETHANE (OR) METHANE, DICHLORODIFLUORO-
. Waste code:	U080
. Waste name:	METHANE, DICHLORO- (OR) METHYLENE CHLORIDE
. Waste code:	U115
. Waste name:	ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)
. Waste code:	U223
. Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)
Date form received by agency:	02/23/2006
Site name:	AEROJET - GENERAL CORPORATION
Classification:	Large Quantity Generator

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	132
. Waste name:	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues
. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics
. Waste code:	181
. Waste name:	Other inorganic solid waste
. Waste code:	212
. Waste name:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
. Waste code:	213
. Waste name:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
. Waste code:	214
. Waste name:	Unspecified solvent mixture
. Waste code:	331
. Waste name:	Off-specification, aged, or surplus organics
. Waste code:	341
. Waste name:	Organic liquids (nonsolvents) with halogens
. Waste code:	343
. Waste name:	Unspecified organic liquid mixture
. Waste code:	351
. Waste name:	Organic solids with halogens
. Waste code:	352
. Waste name:	Other organic solids
. Waste code:	491
. Waste name:	Unspecified sludge waste
. Waste code:	541
. Waste name:	Photochemicals / photo processing waste
. Waste code:	551
. Waste name:	Laboratory waste chemicals
. Waste code:	711
. Waste name:	Liquids with cyanides > 1000 mg/l
. Waste code:	725
. Waste name:	Liquids with mercury > 20 mg/l
. Waste code:	741

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	Liquids with halogenated organic compounds > 1000 mg/l
. Waste code:	791
. Waste name:	Liquids with pH < 2
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D005
. Waste name:	BARIUM
. Waste code:	D006
. Waste name:	CADMIUM
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	U223
. Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)
Date form received by agency:	02/20/2004
Site name:	AERO JET - MISSILE AND SPACES PROPULSION
Classification:	Large Quantity Generator
. Waste code:	D001
. Waste name:	IGNITABLE WASTE
. Waste code:	D002
. Waste name:	CORROSIVE WASTE
. Waste code:	D003
. Waste name:	REACTIVE WASTE
. Waste code:	D005
. Waste name:	BARIUM
. Waste code:	D006
. Waste name:	CADMIUM
. Waste code:	D007
. Waste name:	CHROMIUM
. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D022

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	CHLOROFORM
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D037
. Waste name:	PENTACHLOROPHENOL
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	D040
. Waste name:	TRICHLORETHYLENE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Date form received by agency:	03/28/2002
Site name:	AEROJET MISSILE & SPACE PROPULSION
Classification:	Large Quantity Generator
Date form received by agency:	10/12/2000
Site name:	AEROJET PROPULSION & ENERGETIC SYSTEMS
Classification:	Large Quantity Generator
Date form received by agency:	03/04/1999
Site name:	AEROJET SACRAMENTO OPERATIONS
Classification:	Large Quantity Generator
Date form received by agency:	09/01/1996
Site name:	AEROJET GENERAL CORPORATION
Classification:	Large Quantity Generator
Date form received by agency:	02/07/1996
Site name:	AEROJET SACRAMENTO OPERATIONS
Classification:	Large Quantity Generator

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date form received by agency:	03/25/1994
Site name:	US AEROJET RCRA FACILITY
Classification:	Large Quantity Generator
Date form received by agency:	03/26/1992
Site name:	UNITED STATES-AEROJET RCRA FACILITY
Classification:	Large Quantity Generator
Date form received by agency:	04/16/1990
Site name:	US AEROJET RCRA FACILITY
Classification:	Large Quantity Generator
Date form received by agency:	08/18/1980
Site name:	AEROJET GENERAL CORPORATION
Classification:	Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs):	132357.1
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs):	45750
Waste code:	D003
Waste name:	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs):	124114.4
Waste code:	D005
Waste name:	BARIUM
Amount (Lbs):	2617
Waste code:	D006
Waste name:	CADMIUM
Amount (Lbs):	7205
Waste code:	D007
Waste name:	CHROMIUM

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Amount (Lbs):	21161.8
Waste code:	D008
Waste name:	LEAD
Amount (Lbs):	9919
Waste code:	D009
Waste name:	MERCURY
Amount (Lbs):	464
Waste code:	D010
Waste name:	SELENIUM
Amount (Lbs):	5860
Waste code:	D011
Waste name:	SILVER
Amount (Lbs):	1451
Waste code:	D018
Waste name:	BENZENE
Amount (Lbs):	6.7
Waste code:	D022
Waste name:	CHLOROFORM
Amount (Lbs):	2521.8
Waste code:	D028
Waste name:	1,2-DICHLOROETHANE
Amount (Lbs):	27650
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Amount (Lbs):	1347.6
Waste code:	D038
Waste name:	PYRIDINE
Amount (Lbs):	3406.8
Waste code:	D040
Waste name:	TRICHLOROETHYLENE
Amount (Lbs):	24000
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs):	65890.2
Waste code:	F003

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Waste name:	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs):	65468
Waste code:	F005
Waste name:	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs):	56935.4
Waste code:	P068
Waste name:	HYDRAZINE, METHYL-
Amount (Lbs):	127
Waste code:	P081
Waste name:	NITROGLYCERINE (R)
Amount (Lbs):	355
Waste code:	P098
Waste name:	POTASSIUM CYANIDE
Amount (Lbs):	10
Waste code:	U002
Waste name:	ACETONE (I)
Amount (Lbs):	60
Waste code:	U133
Waste name:	HYDRAZINE (R,T)
Amount (Lbs):	127
Waste code:	U160
Waste name:	2-BUTANONE, PEROXIDE (R,T)
Amount (Lbs):	22

Corrective Action Summary:

Event date:	01/01/1978
Event:	STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT
Event date:	01/01/1982
Event:	STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT
Event date:	01/01/1986
Event:	STABILIZATION CONSTRUCTION COMPLETED
Event date:	09/08/1988
Event:	INVESTIGATION IMPOSITION
Event date:	09/08/1988
Event:	CMS IMPOSITION

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Event date:	06/23/1989
Event:	INVESTIGATION IMPOSITION
Event date:	06/01/1991
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	06/21/1994
Event:	RFA COMPLETED-ASSESSMENT WAS A RFA
Event date:	06/21/1994
Event:	RFA COMPLETED
Event date:	06/21/1994
Event:	DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY
Event date:	06/30/1994
Event:	INVESTIGATION IMPOSITION
Event date:	06/30/1994
Event:	CMS IMPOSITION
Event date:	06/30/1994
Event:	STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT
Event date:	04/17/1995
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL
Event date:	06/30/1995
Event:	CMS IMPOSITION
Event date:	01/01/1996
Event:	REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA
Event date:	01/01/1997
Event:	STABILIZATION CONSTRUCTION COMPLETED
Event date:	11/26/1997
Event:	CA PRIORITIZATION-HIGH CA PRIORITY
Event date:	04/02/1998
Event:	STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO STABILIZATION
Event date:	04/02/1998
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/02/1998
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/02/1998
Event:	REFERRED TO A NON-RCRA AUTHORITY
Event date:	08/31/1999
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	12/23/1999
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	12/11/2000
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Event date:	12/11/2000
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/28/2000
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/28/2000
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/17/2001
Event:	INVESTIGATION COMPLETE
Event date:	11/22/2002
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL
Event date:	01/05/2005
Event:	INVESTIGATION WORKPLAN RECEIVED
Event date:	01/31/2005
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	05/18/2005
Event:	INVESTIGATION REPORT RECEIVED
Event date:	08/16/2005
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	08/16/2005
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	08/18/2005
Event:	INVESTIGATION COMPLETE
Event date:	08/18/2005
Event:	CA PROCESS IS TERMINATED-NO FURTHER ACTION

Facility Has Received Notices of Violations:

Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	12/01/2015
Date achieved compliance:	12/02/2015
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/02/2015
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	12/01/2015
Date achieved compliance:	12/02/2015

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/02/2015
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/23/2013
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	SINGLE SITE CA/FO
Enforcement action date:	06/20/2014
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	3200
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/23/2013
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	SINGLE SITE CA/FO
Enforcement action date:	06/20/2014
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	3200
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	04/25/2012
Date achieved compliance:	05/29/2012
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/01/2012
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	04/25/2012
Date achieved compliance:	05/29/2012
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/01/2012
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	04/25/2012
Date achieved compliance:	05/29/2012
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/01/2012
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	12/16/2008
Date achieved compliance:	12/16/2008
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/16/2008
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	10/10/2006
Date achieved compliance:	Not Reported
Violation lead agency:	State
Enforcement action:	Not Reported
Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	10/11/2005
Date achieved compliance:	11/22/2005
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/13/2005
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General
Date violation determined:	06/01/2004
Date achieved compliance:	12/21/2006
Violation lead agency:	State

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/01/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General
Date violation determined:	06/01/2004
Date achieved compliance:	12/21/2006
Violation lead agency:	State
Enforcement action:	SINGLE SITE CA/FO
Enforcement action date:	12/21/2006
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	114000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	TSD - Tank System Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/11/2002

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	TSD - Container Use and Management
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	F - 264.110-120.G
Area of violation:	TSD - Closure/Post-Closure
Date violation determined:	04/02/1997
Date achieved compliance:	06/05/1997
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	04/02/1997
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 262.30-34.C
Area of violation:	Generators - General
Date violation determined:	01/17/1996
Date achieved compliance:	01/31/1996
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	01/17/1996

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.340-352.O
Area of violation:	TSD - Incinerator Standards
Date violation determined:	05/19/1995
Date achieved compliance:	01/17/1996
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/19/1995
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.190-201.J
Area of violation:	TSD - General
Date violation determined:	05/19/1995
Date achieved compliance:	01/17/1996
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/19/1995
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.170-177.I
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000
Regulation violated:	FR - 264.30-37.C
Area of violation:	TSD - General
Date violation determined:	05/24/1993

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000
Regulation violated:	FR - 268 ALL
Area of violation:	LDR - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000
Regulation violated:	FR - 264.30-37.C
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 262.50-60
Area of violation:	Generators - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Paid penalty amount:	35000
Regulation violated:	FR - 264.170-177.I
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 268 ALL
Area of violation:	LDR - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 270
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000
Regulation violated:	FR - 270
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 262.50-60
Area of violation:	Generators - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.140-150.H
Area of violation:	TSD - Financial Requirements
Date violation determined:	03/20/1991
Date achieved compliance:	01/22/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	04/06/1991
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 270
Area of violation:	TSD - General
Date violation determined:	01/22/1990
Date achieved compliance:	05/03/1990
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	03/08/1990
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Evaluation Action Summary:

Evaluation date:	10/12/2017
Evaluation:	FINANCIAL RECORD REVIEW

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 09/18/2017
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 07/26/2016
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/01/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 12/02/2015
Evaluation lead agency: State

Evaluation date: 12/01/2015
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 12/02/2015
Evaluation lead agency: State

Evaluation date: 11/06/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 10/29/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 03/05/2014
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 03/04/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 02/24/2014
Evaluation: NOT A SIGNIFICANT NON-COMPLIER

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 01/23/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 02/24/2014
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 02/24/2014
Evaluation lead agency: State

Evaluation date: 09/24/2012
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 08/22/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 07/31/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation: State Statute or Regulation
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/16/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 04/10/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 06/01/2010
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 05/25/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/02/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/16/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/16/2008
Evaluation lead agency: State

Evaluation date: 07/29/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 06/10/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	12/21/2006
Evaluation:	NOT A SIGNIFICANT NON-COMPLIER
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/10/2006
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	09/22/2006
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	EPA Contractor/Grantee
Evaluation date:	06/20/2006
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	12/19/2005
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/11/2005
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	TSD - Financial Requirements
Date achieved compliance:	11/22/2005
Evaluation lead agency:	State
Evaluation date:	08/03/2004
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State Contractor/Grantee
Evaluation date:	06/01/2004
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/01/2004
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	TSD - General
Date achieved compliance:	12/21/2006
Evaluation lead agency:	State
Evaluation date:	12/23/2003
Evaluation:	NOT A SIGNIFICANT NON-COMPLIER
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Financial Requirements
Date achieved compliance:	12/23/2003
Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Container Use and Management
Date achieved compliance:	12/23/2003
Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - General Facility Standards
Date achieved compliance:	12/23/2003
Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Tank System Standards
Date achieved compliance:	12/23/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Tank System Standards
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	Generators - Records/Reporting
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Container Use and Management
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - Contingency Plan and Emergency Procedures
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: TSD - General Facility Standards
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 06/11/2002
Evaluation: FOLLOW-UP INSPECTION
Area of violation: Generators - Manifest
Date achieved compliance: 09/25/2003
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Tank System Standards
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Preparedness and Prevention
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Manifest/Records/Reporting
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 09/23/2002
Evaluation lead agency: State

Evaluation date: 10/05/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Permits - Application
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Container Use and Management
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - Records/Reporting
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	12/02/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/20/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	05/29/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	12/16/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	04/01/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation: TSD - Closure/Post-Closure
Date achieved compliance: 06/05/1997
Evaluation lead agency: State

Evaluation date: 01/17/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 01/31/1996
Evaluation lead agency: State

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 01/17/1996
Evaluation lead agency: EPA

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 02/27/1995
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - Incinerator Standards
Date achieved compliance: 01/17/1996
Evaluation lead agency: EPA

Evaluation date: 01/22/1993
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 01/19/1993
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 06/24/1993
Evaluation lead agency: State

Evaluation date: 03/20/1992
Evaluation: FINANCIAL RECORD REVIEW

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	03/16/1992
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	02/14/1992
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	03/18/1991
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Financial Requirements
Date achieved compliance:	01/22/1993
Evaluation lead agency:	State
Evaluation date:	10/19/1990
Evaluation:	OPERATION AND MAINTENANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/23/1990
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/22/1990
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General
Date achieved compliance:	05/03/1990
Evaluation lead agency:	State
Evaluation date:	07/07/1989
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/13/1989
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	11/24/1987
Evaluation:	FINANCIAL RECORD REVIEW

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/06/1987
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State

RCRA-LQG: Federal RCRA generators list

Date form received by agency:	02/27/2018
Facility name:	AEROJET ROCKETDYNE INC
Facility address:	US HWY 50 AND AEROJET RD RANCHO CORDOVA, CA 95813-6000
EPA ID:	CAD000030494
Mailing address:	PO BOX 13222 SACRAMENTO, CA 95813
Contact:	JIM BUEHLER
Contact address:	PO BOX 13222 SACRAMENTO, CA 95813
Contact country:	US
Contact telephone:	916-355-4682
Contact email:	JIM.BUEHLER@ROCKET.COM
EPA Region:	09
Land type:	Private
Classification:	TSDF
Description:	Handler is engaged in the treatment, storage or disposal of hazardous waste
Classification:	Large Quantity Generator
Description:	Handler: generates 1,000 kg or more of hazardous waste during any calendar month; or generates more than 1 kg of acutely hazardous waste during any calendar month; or generates more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month; or generates 1 kg or less of acutely hazardous waste during any calendar month, and accumulates more than 1 kg of acutely hazardous waste at any time; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates more than 100 kg of that material at any time

Owner/Operator Summary:

Owner/operator name:	AEROJET ROCKETDYNE, INC.
Owner/operator address:	PO BOX 13222 SACRAMENTO, CA 95813
Owner/operator country:	US
Owner/operator telephone:	916-355-4682
Owner/operator email:	JIM.BUEHLER@ROCKET.COM
Owner/operator fax:	Not Reported
Owner/operator extension:	Not Reported
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	10/01/2005
Owner/Op end date:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Owner/operator name:	AEROJET ROCKETDYNE, INC.
Owner/operator address:	PO BOX 13222 SACRAMENTO, CA 95813
Owner/operator country:	US
Owner/operator telephone:	916-355-4682
Owner/operator email:	JIM.BUEHLER@ROCKET.COM
Owner/operator fax:	Not Reported
Owner/operator extension:	Not Reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	10/01/2005
Owner/Op end date:	Not Reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	Yes
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Universal Waste Summary:

Waste type:	E
Accumulated waste on-site:	No
Generated waste on-site:	Yes
Waste type:	Batteries
Accumulated waste on-site:	Yes
Generated waste on-site:	Not Reported
Waste type:	Lamps
Accumulated waste on-site:	Yes
Generated waste on-site:	Not Reported
. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	134

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste name: Aqueous solution with <10% total organic residues
- Waste code: 141
- Waste name: Off-specification, aged, or surplus inorganics
- Waste code: 181
- Waste name: Other inorganic solid waste
- Waste code: 212
- Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
- Waste code: 213
- Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
- Waste code: 214
- Waste name: Unspecified solvent mixture
- Waste code: 221
- Waste name: Waste oil and mixed oil
- Waste code: 223
- Waste name: Unspecified oil-containing waste
- Waste code: 261
- Waste name: Polychlorinated biphenyls and material containing PCB's
- Waste code: 291
- Waste name: Latex waste
- Waste code: 331
- Waste name: Off-specification, aged, or surplus organics
- Waste code: 341
- Waste name: Organic liquids (nonsolvents) with halogens
- Waste code: 343
- Waste name: Unspecified organic liquid mixture
- Waste code: 351
- Waste name: Organic solids with halogens
- Waste code: 352
- Waste name: Other organic solids
- Waste code: 512
- Waste name: Other empty containers 30 gallons or more
- Waste code: 513
- Waste name: Empty containers less than 30 gallons
- Waste code: 541
- Waste name: Photochemicals / photo processing waste
- Waste code: 551
- Waste name: Laboratory waste chemicals
- Waste code: 591
- Waste name: Baghouse waste
- Waste code: 725

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste name: Liquids with mercury > 20 mg/l
- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l
- Waste code: 751
- Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg
- Waste code: 791
- Waste name: Liquids with pH < 2
- Waste code: 792
- Waste name: Liquids with pH < 2 with metals
- Waste code: D001
- Waste name: IGNITABLE WASTE
- Waste code: D002
- Waste name: CORROSIVE WASTE
- Waste code: D003
- Waste name: REACTIVE WASTE
- Waste code: D006
- Waste name: CADMIUM
- Waste code: D007
- Waste name: CHROMIUM
- Waste code: D008
- Waste name: LEAD
- Waste code: D009
- Waste name: MERCURY
- Waste code: D010
- Waste name: SELENIUM
- Waste code: D011
- Waste name: SILVER
- Waste code: D018
- Waste name: BENZENE
- Waste code: D022
- Waste name: CHLOROFORM
- Waste code: D028
- Waste name: 1,2-DICHLOROETHANE
- Waste code: D035
- Waste name: METHYL ETHYL KETONE
- Waste code: D037
- Waste name: PENTACHLOROPHENOL
- Waste code: D038
- Waste name: PYRIDINE
- Waste code: F002

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F027
. Waste name:	DISCARDED UNUSED FORMULATIONS CONTAINING TRI-, TETRA-, OR PENTACHLOROPHENOL OR DISCARDED UNUSED FORMULATIONS CONTAINING COMPOUNDS DERIVED FROM THESE CHLOROPHENOLS. (THIS LISTING DOES NOT INCLUDE FORMULATIONS CONTAINING HEXACHLOROPHENE SYNTHESIZED FROM PREPURIFIED 2,4,5-TRICHLOROPHENOL AS THE SOLE COMPONENT.)
. Waste code:	P068
. Waste name:	HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE
. Waste code:	P082
. Waste name:	METHANIMINE, N-METHYL-N-NITROSO- (OR) N-NITROSODIMETHYLAMINE
. Waste code:	P098
. Waste name:	POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
. Waste code:	P105
. Waste name:	SODIUM AZIDE
. Waste code:	U002
. Waste name:	2-PROPANONE (I) (OR) ACETONE (I)
. Waste code:	U133
. Waste name:	HYDRAZINE (R,T)
. Waste code:	U134
. Waste name:	HYDROFLUORIC ACID (C,T) (OR) HYDROGEN FLUORIDE (C,T)
. Waste code:	U223
. Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Historical Generators:

Date form received by agency:	02/18/2016
Site name:	AEROJET ROCKETDYNE, INC.

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Classification:	Large Quantity Generator
. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	123
. Waste name:	Unspecified alkaline solution
. Waste code:	132
. Waste name:	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
. Waste code:	133
. Waste name:	Aqueous solution with 10% or more total organic residues
. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues
. Waste code:	135
. Waste name:	Unspecified aqueous solution
. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics
. Waste code:	151
. Waste name:	Asbestos-containing waste
. Waste code:	181
. Waste name:	Other inorganic solid waste
. Waste code:	212
. Waste name:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
. Waste code:	213
. Waste name:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
. Waste code:	214
. Waste name:	Unspecified solvent mixture
. Waste code:	221
. Waste name:	Waste oil and mixed oil
. Waste code:	223
. Waste name:	Unspecified oil-containing waste
. Waste code:	261
. Waste name:	Polychlorinated biphenyls and material containing PCB's
. Waste code:	331
. Waste name:	Off-specification, aged, or surplus organics
. Waste code:	341
. Waste name:	Organic liquids (nonsolvents) with halogens
. Waste code:	343
. Waste name:	Unspecified organic liquid mixture

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: 351
- Waste name: Organic solids with halogens

- Waste code: 352
- Waste name: Other organic solids

- Waste code: 512
- Waste name: Other empty containers 30 gallons or more

- Waste code: 513
- Waste name: Empty containers less than 30 gallons

- Waste code: 541
- Waste name: Photochemicals / photo processing waste

- Waste code: 551
- Waste name: Laboratory waste chemicals

- Waste code: 591
- Waste name: Baghouse waste

- Waste code: 731
- Waste name: Liquids with polychlorinated biphenyls > 50 mg/l

- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l

- Waste code: 751
- Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg

- Waste code: 791
- Waste name: Liquids with pH < 2

- Waste code: 792
- Waste name: Liquids with pH < 2 with metals

- Waste code: D001
- Waste name: IGNITABLE WASTE

- Waste code: D002
- Waste name: CORROSIVE WASTE

- Waste code: D003
- Waste name: REACTIVE WASTE

- Waste code: D005
- Waste name: BARIUM

- Waste code: D006
- Waste name: CADMIUM

- Waste code: D007
- Waste name: CHROMIUM

- Waste code: D008
- Waste name: LEAD

- Waste code: D009
- Waste name: MERCURY

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	D040
. Waste name:	TRICHLORETHYLENE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	P068
. Waste name:	HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE
. Waste code:	P081
. Waste name:	1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)
. Waste code:	P098
. Waste name:	POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)
. Waste code:	U002

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	2-PROPANONE (I) (OR) ACETONE (I)
. Waste code:	U133
. Waste name:	HYDRAZINE (R,T)
. Waste code:	U160
. Waste name:	2-BUTANONE, PEROXIDE (R,T) (OR) METHYL ETHYL KETONE PEROXIDE (R,T)
Date form received by agency:	03/01/2014
Site name:	AEROJET ROCKETDYNE INC
Classification:	Large Quantity Generator
. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	132
. Waste name:	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues
. Waste code:	135
. Waste name:	Unspecified aqueous solution
. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics
. Waste code:	151
. Waste name:	Asbestos-containing waste
. Waste code:	181
. Waste name:	Other inorganic solid waste
. Waste code:	212
. Waste name:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)
. Waste code:	213
. Waste name:	Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)
. Waste code:	214
. Waste name:	Unspecified solvent mixture
. Waste code:	221
. Waste name:	Waste oil and mixed oil
. Waste code:	261
. Waste name:	Polychlorinated biphenyls and material containing PCB's
. Waste code:	331
. Waste name:	Off-specification, aged, or surplus organics
. Waste code:	341
. Waste name:	Organic liquids (nonsolvents) with halogens
. Waste code:	343
. Waste name:	Unspecified organic liquid mixture

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: 351
- Waste name: Organic solids with halogens
- Waste code: 352
- Waste name: Other organic solids
- Waste code: 512
- Waste name: Other empty containers 30 gallons or more
- Waste code: 541
- Waste name: Photochemicals / photo processing waste
- Waste code: 551
- Waste name: Laboratory waste chemicals
- Waste code: 591
- Waste name: Baghouse waste
- Waste code: 611
- Waste name: Contaminated soil from site clean-ups
- Waste code: 725
- Waste name: Liquids with mercury > 20 mg/l
- Waste code: 731
- Waste name: Liquids with polychlorinated biphenyls > 50 mg/l
- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l
- Waste code: 751
- Waste name: Solids or sludge with halogenated organic comp. > 1000 mg/kg
- Waste code: 791
- Waste name: Liquids with pH < 2
- Waste code: 792
- Waste name: Liquids with pH < 2 with metals
- Waste code: D001
- Waste name: IGNITABLE WASTE
- Waste code: D002
- Waste name: CORROSIVE WASTE
- Waste code: D003
- Waste name: REACTIVE WASTE
- Waste code: D005
- Waste name: BARIUM
- Waste code: D006
- Waste name: CADMIUM
- Waste code: D007
- Waste name: CHROMIUM
- Waste code: D008
- Waste name: LEAD

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D018
. Waste name:	BENZENE
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	P068
. Waste name:	HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE
. Waste code:	P098
. Waste name:	POTASSIUM CYANIDE (OR) POTASSIUM CYANIDE K(CN)

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code: U133
. Waste name: HYDRAZINE (R,T)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 09/11/2012
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 121
. Waste name: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 132
. Waste name: Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 151
. Waste name: Asbestos-containing waste

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 211
. Waste name: Halogenated solvents (chloroform, methyl chloride, perchloroethylene, etc.)

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 223
. Waste name: Unspecified oil-containing waste

. Waste code: 261
. Waste name: Polychlorinated biphenyls and material containing PCB's

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste name: Organic liquids (nonsolvents) with halogens
- Waste code: 343
- Waste name: Unspecified organic liquid mixture
- Waste code: 351
- Waste name: Organic solids with halogens
- Waste code: 352
- Waste name: Other organic solids
- Waste code: 512
- Waste name: Other empty containers 30 gallons or more
- Waste code: 541
- Waste name: Photochemicals / photo processing waste
- Waste code: 551
- Waste name: Laboratory waste chemicals
- Waste code: 591
- Waste name: Baghouse waste
- Waste code: 611
- Waste name: Contaminated soil from site clean-ups
- Waste code: 725
- Waste name: Liquids with mercury > 20 mg/l
- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l
- Waste code: 791
- Waste name: Liquids with pH < 2
- Waste code: 792
- Waste name: Liquids with pH < 2 with metals
- Waste code: D001
- Waste name: IGNITABLE WASTE
- Waste code: D002
- Waste name: CORROSIVE WASTE
- Waste code: D003
- Waste name: REACTIVE WASTE
- Waste code: D005
- Waste name: BARIUM
- Waste code: D006
- Waste name: CADMIUM
- Waste code: D007
- Waste name: CHROMIUM
- Waste code: D008
- Waste name: LEAD
- Waste code: D009

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste name: MERCURY
- Waste code: D010
- Waste name: SELENIUM
- Waste code: D011
- Waste name: SILVER
- Waste code: D018
- Waste name: BENZENE
- Waste code: D022
- Waste name: CHLOROFORM
- Waste code: D028
- Waste name: 1,2-DICHLOROETHANE
- Waste code: D035
- Waste name: METHYL ETHYL KETONE
- Waste code: D038
- Waste name: PYRIDINE
- Waste code: F002
- Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- Waste code: F003
- Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- Waste code: F005
- Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
- Waste code: LABP
- Waste name: LAB PACK
- Waste code: P068
- Waste name: HYDRAZINE, METHYL- (OR) METHYL HYDRAZINE
- Waste code: U133
- Waste name: HYDRAZINE (R,T)
- Waste code: U220
- Waste name: BENZENE, METHYL- (OR) TOLUENE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code: U223
. Waste name: BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)

Date form received by agency: 07/30/2010
Site name: AEROJET - GENERAL CORPORATION
Classification: Large Quantity Generator

. Waste code: 122
. Waste name: Alkaline solution without metals (pH > 12.5)

. Waste code: 134
. Waste name: Aqueous solution with <10% total organic residues

. Waste code: 135
. Waste name: Unspecified aqueous solution

. Waste code: 141
. Waste name: Off-specification, aged, or surplus inorganics

. Waste code: 181
. Waste name: Other inorganic solid waste

. Waste code: 212
. Waste name: Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

. Waste code: 213
. Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

. Waste code: 214
. Waste name: Unspecified solvent mixture

. Waste code: 221
. Waste name: Waste oil and mixed oil

. Waste code: 331
. Waste name: Off-specification, aged, or surplus organics

. Waste code: 341
. Waste name: Organic liquids (nonsolvents) with halogens

. Waste code: 343
. Waste name: Unspecified organic liquid mixture

. Waste code: 351
. Waste name: Organic solids with halogens

. Waste code: 352
. Waste name: Other organic solids

. Waste code: 541
. Waste name: Photochemicals / photo processing waste

. Waste code: 551
. Waste name: Laboratory waste chemicals

. Waste code: 725
. Waste name: Liquids with mercury > 20 mg/l

. Waste code: 741

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name: Liquids with halogenated organic compounds > 1000 mg/l

. Waste code: 791
. Waste name: Liquids with pH < 2

. Waste code: 792
. Waste name: Liquids with pH < 2 with metals

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D022
. Waste name: CHLOROFORM

. Waste code: D028
. Waste name: 1,2-DICHLOROETHANE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: D038
. Waste name: PYRIDINE

. Waste code: D040
. Waste name: TRICHLORETHYLENE

. Waste code: F001

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	U133
. Waste name:	HYDRAZINE (R,T)
Date form received by agency:	03/27/2008
Site name:	AEROJET - GENERAL CORPORATION
Classification:	Large Quantity Generator
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	D043
. Waste name:	VINYL CHLORIDE
. Waste code:	D040
. Waste name:	TRICHLORETHYLENE
. Waste code:	D039
. Waste name:	TETRACHLOROETHYLENE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: D038
- Waste name: PYRIDINE

- Waste code: D035
- Waste name: METHYL ETHYL KETONE

- Waste code: D028
- Waste name: 1,2-DICHLOROETHANE

- Waste code: D022
- Waste name: CHLOROFORM

- Waste code: D018
- Waste name: BENZENE

- Waste code: D011
- Waste name: SILVER

- Waste code: D010
- Waste name: SELENIUM

- Waste code: D009
- Waste name: MERCURY

- Waste code: D008
- Waste name: LEAD

- Waste code: D007
- Waste name: CHROMIUM

- Waste code: D006
- Waste name: CADMIUM

- Waste code: D005
- Waste name: BARIUM

- Waste code: D004
- Waste name: ARSENIC

- Waste code: D003
- Waste name: REACTIVE WASTE

- Waste code: D002
- Waste name: CORROSIVE WASTE

- Waste code: D001
- Waste name: IGNITABLE WASTE

- Waste code: F003
- Waste name: THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- Waste code: F005

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	P105
. Waste name:	SODIUM AZIDE
. Waste code:	U029
. Waste name:	METHANE, BROMO- (OR) METHYL BROMIDE
. Waste code:	U043
. Waste name:	ETHENE, CHLORO- (OR) VINYL CHLORIDE
. Waste code:	U045
. Waste name:	METHANE, CHLORO- (I,T) (OR) METHYL CHLORIDE (I,T)
. Waste code:	U075
. Waste name:	DICHLORODIFLUOROMETHANE (OR) METHANE, DICHLORODIFLUORO-
. Waste code:	U080
. Waste name:	METHANE, DICHLORO- (OR) METHYLENE CHLORIDE
. Waste code:	U115
. Waste name:	ETHYLENE OXIDE (I,T) (OR) OXIRANE (I,T)
. Waste code:	U223
. Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)
Date form received by agency:	02/23/2006
Site name:	AEROJET - GENERAL CORPORATION
Classification:	Large Quantity Generator
. Waste code:	121
. Waste name:	Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)
. Waste code:	122
. Waste name:	Alkaline solution without metals (pH > 12.5)
. Waste code:	132
. Waste name:	Aqueous solution w/metals (< restricted levels and see waste code 121 for a list of metals)
. Waste code:	134
. Waste name:	Aqueous solution with <10% total organic residues
. Waste code:	141
. Waste name:	Off-specification, aged, or surplus inorganics
. Waste code:	181
. Waste name:	Other inorganic solid waste
. Waste code:	212
. Waste name:	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: 213
- Waste name: Hydrocarbon solvents (benzene, hexane, Stoddard, etc.)

- Waste code: 214
- Waste name: Unspecified solvent mixture

- Waste code: 331
- Waste name: Off-specification, aged, or surplus organics

- Waste code: 341
- Waste name: Organic liquids (nonsolvents) with halogens

- Waste code: 343
- Waste name: Unspecified organic liquid mixture

- Waste code: 351
- Waste name: Organic solids with halogens

- Waste code: 352
- Waste name: Other organic solids

- Waste code: 491
- Waste name: Unspecified sludge waste

- Waste code: 541
- Waste name: Photochemicals / photo processing waste

- Waste code: 551
- Waste name: Laboratory waste chemicals

- Waste code: 711
- Waste name: Liquids with cyanides > 1000 mg/l

- Waste code: 725
- Waste name: Liquids with mercury > 20 mg/l

- Waste code: 741
- Waste name: Liquids with halogenated organic compounds > 1000 mg/l

- Waste code: 791
- Waste name: Liquids with pH < 2

- Waste code: D001
- Waste name: IGNITABLE WASTE

- Waste code: D002
- Waste name: CORROSIVE WASTE

- Waste code: D003
- Waste name: REACTIVE WASTE

- Waste code: D005
- Waste name: BARIUM

- Waste code: D006
- Waste name: CADMIUM

- Waste code: D007
- Waste name: CHROMIUM

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste code:	D008
. Waste name:	LEAD
. Waste code:	D009
. Waste name:	MERCURY
. Waste code:	D010
. Waste name:	SELENIUM
. Waste code:	D011
. Waste name:	SILVER
. Waste code:	D022
. Waste name:	CHLOROFORM
. Waste code:	D028
. Waste name:	1,2-DICHLOROETHANE
. Waste code:	D035
. Waste name:	METHYL ETHYL KETONE
. Waste code:	D038
. Waste name:	PYRIDINE
. Waste code:	F002
. Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F003
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	LABP
. Waste name:	LAB PACK
. Waste code:	U223
. Waste name:	BENZENE, 1,3-DIISOCYANATOMETHYL- (R,T) (OR) TOLUENE DIISOCYANATE (R,T)
Date form received by agency:	02/20/2004
Site name:	AERO JET - MISSILE AND SPACES PROPULSION
Classification:	Large Quantity Generator

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

- Waste code: D001
- Waste name: IGNITABLE WASTE

- Waste code: D002
- Waste name: CORROSIVE WASTE

- Waste code: D003
- Waste name: REACTIVE WASTE

- Waste code: D005
- Waste name: BARIUM

- Waste code: D006
- Waste name: CADMIUM

- Waste code: D007
- Waste name: CHROMIUM

- Waste code: D008
- Waste name: LEAD

- Waste code: D009
- Waste name: MERCURY

- Waste code: D010
- Waste name: SELENIUM

- Waste code: D011
- Waste name: SILVER

- Waste code: D018
- Waste name: BENZENE

- Waste code: D022
- Waste name: CHLOROFORM

- Waste code: D035
- Waste name: METHYL ETHYL KETONE

- Waste code: D037
- Waste name: PENTACHLOROPHENOL

- Waste code: D038
- Waste name: PYRIDINE

- Waste code: D040
- Waste name: TRICHLORETHYLENE

- Waste code: F002
- Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2, TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- Waste code: F003

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS, AND A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
. Waste code:	F005
. Waste name:	THE FOLLOWING SPENT NONHALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Date form received by agency:	03/28/2002
Site name:	AEROJET MISSILE & SPACE PROPULSION
Classification:	Large Quantity Generator
Date form received by agency:	10/12/2000
Site name:	AEROJET PROPULSION & ENERGETIC SYSTEMS
Classification:	Large Quantity Generator
Date form received by agency:	03/04/1999
Site name:	AEROJET SACRAMENTO OPERATIONS
Classification:	Large Quantity Generator
Date form received by agency:	09/01/1996
Site name:	AEROJET GENERAL CORPORATION
Classification:	Large Quantity Generator
Date form received by agency:	02/07/1996
Site name:	AEROJET SACRAMENTO OPERATIONS
Classification:	Large Quantity Generator
Date form received by agency:	03/25/1994
Site name:	US AEROJET RCRA FACILITY
Classification:	Large Quantity Generator
Date form received by agency:	03/26/1992
Site name:	UNITED STATES-AEROJET RCRA FACILITY
Classification:	Large Quantity Generator
Date form received by agency:	04/16/1990
Site name:	US AEROJET RCRA FACILITY
Classification:	Large Quantity Generator
Date form received by agency:	08/18/1980
Site name:	AEROJET GENERAL CORPORATION
Classification:	Large Quantity Generator

Biennial Reports:

Last Biennial Reporting Year: 2017

Annual Waste Handled:

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Waste code:	D001
Waste name:	IGNITABLE HAZARDOUS WASTES ARE THOSE WASTES WHICH HAVE A FLASHPOINT OF LESS THAN 140 DEGREES FAHRENHEIT AS DETERMINED BY A PENSKY-MARTENS CLOSED CUP FLASH POINT TESTER. ANOTHER METHOD OF DETERMINING THE FLASH POINT OF A WASTE IS TO REVIEW THE MATERIAL SAFETY DATA SHEET, WHICH CAN BE OBTAINED FROM THE MANUFACTURER OR DISTRIBUTOR OF THE MATERIAL. LACQUER THINNER IS AN EXAMPLE OF A COMMONLY USED SOLVENT WHICH WOULD BE CONSIDERED AS IGNITABLE HAZARDOUS WASTE.
Amount (Lbs):	132357.1
Waste code:	D002
Waste name:	A WASTE WHICH HAS A PH OF LESS THAN 2 OR GREATER THAN 12.5 IS CONSIDERED TO BE A CORROSIVE HAZARDOUS WASTE. SODIUM HYDROXIDE, A CAUSTIC SOLUTION WITH A HIGH PH, IS OFTEN USED BY INDUSTRIES TO CLEAN OR DEGREASE PARTS. HYDROCHLORIC ACID, A SOLUTION WITH A LOW PH, IS USED BY MANY INDUSTRIES TO CLEAN METAL PARTS PRIOR TO PAINTING. WHEN THESE CAUSTIC OR ACID SOLUTIONS BECOME CONTAMINATED AND MUST BE DISPOSED, THE WASTE WOULD BE A CORROSIVE HAZARDOUS WASTE.
Amount (Lbs):	45750
Waste code:	D003
Waste name:	A MATERIAL IS CONSIDERED TO BE A REACTIVE HAZARDOUS WASTE IF IT IS NORMALLY UNSTABLE, REACTS VIOLENTLY WITH WATER, GENERATES TOXIC GASES WHEN EXPOSED TO WATER OR CORROSIVE MATERIALS, OR IF IT IS CAPABLE OF DETONATION OR EXPLOSION WHEN EXPOSED TO HEAT OR A FLAME. ONE EXAMPLE OF SUCH WASTE WOULD BY WASTE GUNPOWDER.
Amount (Lbs):	124114.4
Waste code:	D005
Waste name:	BARIUM
Amount (Lbs):	2617
Waste code:	D006
Waste name:	CADMIUM
Amount (Lbs):	7205
Waste code:	D007
Waste name:	CHROMIUM
Amount (Lbs):	21161.8
Waste code:	D008
Waste name:	LEAD
Amount (Lbs):	9919
Waste code:	D009
Waste name:	MERCURY
Amount (Lbs):	464
Waste code:	D010
Waste name:	SELENIUM
Amount (Lbs):	5860
Waste code:	D011
Waste name:	SILVER
Amount (Lbs):	1451
Waste code:	D018
Waste name:	BENZENE
Amount (Lbs):	6.7
Waste code:	D022

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Waste name:	CHLOROFORM
Amount (Lbs):	2521.8
Waste code:	D028
Waste name:	1,2-DICHLOROETHANE
Amount (Lbs):	27650
Waste code:	D035
Waste name:	METHYL ETHYL KETONE
Amount (Lbs):	1347.6
Waste code:	D038
Waste name:	PYRIDINE
Amount (Lbs):	3406.8
Waste code:	D040
Waste name:	TRICHLOROETHYLENE
Amount (Lbs):	24000
Waste code:	F002
Waste name:	THE FOLLOWING SPENT HALOGENATED SOLVENTS: TETRACHLOROETHYLENE, METHYLENE CHLORIDE, TRICHLOROETHYLENE, 1,1,1-TRICHLOROETHANE, CHLOROBENZENE, 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE, ORTHO-DICHLOROBENZENE, TRICHLOROFLUOROMETHANE, AND 1,1,2-TRICHLOROETHANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE LISTED IN F001, F004, OR F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs):	65890.2
Waste code:	F003
Waste name:	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: XYLENE, ACETONE, ETHYL ACETATE, ETHYL BENZENE, ETHYL ETHER, METHYL ISOBUTYL KETONE, N-BUTYL ALCOHOL, CYCLOHEXANONE, AND METHANOL; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONLY THE ABOVE SPENT NON-HALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS, AND, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THOSE SOLVENTS LISTED IN F001, F002, F004, AND F005, AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs):	65468
Waste code:	F005
Waste name:	THE FOLLOWING SPENT NON-HALOGENATED SOLVENTS: TOLUENE, METHYL ETHYL KETONE, CARBON DISULFIDE, ISOBUTANOL, PYRIDINE, BENZENE, 2-ETHOXYETHANOL, AND 2-NITROPROPANE; ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE NON-HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Amount (Lbs):	56935.4
Waste code:	P068
Waste name:	HYDRAZINE, METHYL-
Amount (Lbs):	127
Waste code:	P081
Waste name:	NITROGLYCERINE (R)
Amount (Lbs):	355
Waste code:	P098
Waste name:	POTASSIUM CYANIDE
Amount (Lbs):	10

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Waste code:	U002
Waste name:	ACETONE (I)
Amount (Lbs):	60
Waste code:	U133
Waste name:	HYDRAZINE (R,T)
Amount (Lbs):	127
Waste code:	U160
Waste name:	2-BUTANONE, PEROXIDE (R,T)
Amount (Lbs):	22

Corrective Action Summary:

Event date:	01/01/1978
Event:	STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT
Event date:	01/01/1982
Event:	STABILIZATION/INTERIM MEASURES DECISION-GROUNDWATER EXTRACTION & TREATMENT
Event date:	01/01/1986
Event:	STABILIZATION CONSTRUCTION COMPLETED
Event date:	09/08/1988
Event:	INVESTIGATION IMPOSITION
Event date:	09/08/1988
Event:	CMS IMPOSITION
Event date:	06/23/1989
Event:	INVESTIGATION IMPOSITION
Event date:	06/01/1991
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	06/21/1994
Event:	RFA COMPLETED-ASSESSMENT WAS A RFA
Event date:	06/21/1994
Event:	RFA COMPLETED
Event date:	06/21/1994
Event:	DETERMINATION OF NEED FOR AN INVESTIGATION-INVESTIGATION IS NECESSARY
Event date:	06/30/1994
Event:	INVESTIGATION IMPOSITION
Event date:	06/30/1994
Event:	CMS IMPOSITION
Event date:	06/30/1994
Event:	STABILIZATION/INTERIM MEASURES DECISION-PRIMARY MEAS IS SOURCE REMOVL &/OR TRT
Event date:	04/17/1995
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL
Event date:	06/30/1995

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Event:	CMS IMPOSITION
Event date:	01/01/1996
Event:	REFERRED TO A NON-RCRA AUTHORITY-REFERRED TO CERCLA
Event date:	01/01/1997
Event:	STABILIZATION CONSTRUCTION COMPLETED
Event date:	11/26/1997
Event:	CA PRIORITIZATION-HIGH CA PRIORITY
Event date:	04/02/1998
Event:	STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO STABILIZATION
Event date:	04/02/1998
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/02/1998
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/02/1998
Event:	REFERRED TO A NON-RCRA AUTHORITY
Event date:	08/31/1999
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	12/23/1999
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	12/11/2000
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/11/2000
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/28/2000
Event:	RELEASE TO GW CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	12/28/2000
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-FACILITY DOES NOT MEET DEFINITION
Event date:	04/17/2001
Event:	INVESTIGATION COMPLETE
Event date:	11/22/2002
Event:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL
Event date:	01/05/2005
Event:	INVESTIGATION WORKPLAN RECEIVED
Event date:	01/31/2005
Event:	INVESTIGATION WORKPLAN APPROVED
Event date:	05/18/2005
Event:	INVESTIGATION REPORT RECEIVED
Event date:	08/16/2005
Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	08/16/2005

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Event:	HUMAN EXPOSURES CONTROLLED DETERMINATION-YES, APPLICABLE AS OF THIS DATE
Event date:	08/18/2005
Event:	INVESTIGATION COMPLETE
Event date:	08/18/2005
Event:	CA PROCESS IS TERMINATED-NO FURTHER ACTION

Facility Has Received Notices of Violations:

Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	12/01/2015
Date achieved compliance:	12/02/2015
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/02/2015
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	12/01/2015
Date achieved compliance:	12/02/2015
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/02/2015
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/23/2013
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	TSD - General Facility Standards
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	SINGLE SITE CA/FO
Enforcement action date:	06/20/2014
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	3200
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/23/2013
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	12/23/2013
Date achieved compliance:	02/24/2014
Violation lead agency:	State
Enforcement action:	SINGLE SITE CA/FO
Enforcement action date:	06/20/2014
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	3200
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	State Statute or Regulation
Date violation determined:	04/25/2012
Date achieved compliance:	05/29/2012
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/01/2012
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	04/25/2012
Date achieved compliance:	05/29/2012
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/01/2012
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	04/25/2012
Date achieved compliance:	05/29/2012
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/01/2012
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	12/16/2008
Date achieved compliance:	12/16/2008
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/16/2008
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - General
Date violation determined:	10/10/2006
Date achieved compliance:	Not Reported
Violation lead agency:	State
Enforcement action:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action date:	Not Reported
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	Not Reported
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	10/11/2005
Date achieved compliance:	11/22/2005
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	12/13/2005
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General
Date violation determined:	06/01/2004
Date achieved compliance:	12/21/2006
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/01/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General
Date violation determined:	06/01/2004
Date achieved compliance:	12/21/2006
Violation lead agency:	State
Enforcement action:	SINGLE SITE CA/FO
Enforcement action date:	12/21/2006
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	114000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Financial Requirements
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/24/2003
Date achieved compliance:	12/23/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	07/03/2003
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	06/11/2002

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	06/11/2002
Date achieved compliance:	09/25/2003
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	06/17/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Container Use and Management
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - General Facility Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Manifest
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Generators - Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date violation determined:	10/05/2000

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	REFERRAL TO ATTORNEY GENERAL
Enforcement action date:	05/30/2002
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Preparedness and Prevention
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	FINAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	1200000

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	Permits - Application
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Tank System Standards
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	INITIAL CIVIL JUDICIAL ACTION FOR COMPLIANCE AND/OR MONETARY PENALTY
Enforcement action date:	03/25/2004
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	Not Reported
Area of violation:	TSD - Manifest/Records/Reporting
Date violation determined:	10/05/2000
Date achieved compliance:	09/23/2002
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	10/19/2000
Enf. disposition status:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	F - 264.110-120.G
Area of violation:	TSD - Closure/Post-Closure
Date violation determined:	04/02/1997
Date achieved compliance:	06/05/1997
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	04/02/1997
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 262.30-34.C
Area of violation:	Generators - General
Date violation determined:	01/17/1996
Date achieved compliance:	01/31/1996
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	01/17/1996
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.340-352.O
Area of violation:	TSD - Incinerator Standards
Date violation determined:	05/19/1995
Date achieved compliance:	01/17/1996
Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/19/1995
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.190-201.J
Area of violation:	TSD - General
Date violation determined:	05/19/1995
Date achieved compliance:	01/17/1996

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Violation lead agency:	EPA
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/19/1995
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	EPA
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.170-177.I
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000
Regulation violated:	FR - 264.30-37.C
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000
Regulation violated:	FR - 268 ALL
Area of violation:	LDR - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Regulation violated:	FR - 264.30-37.C
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	FR - 262.50-60
Area of violation:	Generators - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000

Regulation violated:	FR - 264.170-177.I
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Regulation violated:	FR - 268 ALL
Area of violation:	LDR - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 270
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date:	12/13/1994
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	35000
Paid penalty amount:	35000
Regulation violated:	FR - 270
Area of violation:	TSD - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 262.50-60
Area of violation:	Generators - General
Date violation determined:	05/24/1993
Date achieved compliance:	06/24/1993
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	05/24/1993
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 264.140-150.H
Area of violation:	TSD - Financial Requirements
Date violation determined:	03/20/1991
Date achieved compliance:	01/22/1993
Violation lead agency:	State

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	04/06/1991
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported
Regulation violated:	FR - 270
Area of violation:	TSD - General
Date violation determined:	01/22/1990
Date achieved compliance:	05/03/1990
Violation lead agency:	State
Enforcement action:	WRITTEN INFORMAL
Enforcement action date:	03/08/1990
Enf. disposition status:	Not Reported
Enf. disp. status date:	Not Reported
Enforcement lead agency:	State
Proposed penalty amount:	Not Reported
Final penalty amount:	Not Reported
Paid penalty amount:	Not Reported

Evaluation Action Summary:

Evaluation date:	10/12/2017
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	09/18/2017
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	07/26/2016
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	12/01/2015
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	State Statute or Regulation
Date achieved compliance:	12/02/2015
Evaluation lead agency:	State
Evaluation date:	12/01/2015
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Manifest/Records/Reporting
Date achieved compliance:	12/02/2015

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency: State

Evaluation date: 11/06/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 10/29/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 03/05/2014
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 03/04/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 02/24/2014
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 01/23/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 02/24/2014
Evaluation lead agency: State

Evaluation date: 12/23/2013
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 02/24/2014

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency: State

Evaluation date: 09/24/2012
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 08/22/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 07/31/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General Facility Standards
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: State Statute or Regulation
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/25/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 05/29/2012
Evaluation lead agency: State

Evaluation date: 04/16/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 04/10/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 06/01/2010
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency: State

Evaluation date: 05/25/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/02/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/16/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/16/2008
Evaluation lead agency: State

Evaluation date: 07/29/2008
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 06/10/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 12/21/2006
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 10/10/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: Not Reported
Evaluation lead agency: State

Evaluation date: 09/22/2006
Evaluation: FINANCIAL RECORD REVIEW
Area of violation: Not Reported
Date achieved compliance: Not Reported
Evaluation lead agency: EPA Contractor/Grantee

Evaluation date: 06/20/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not Reported
Date achieved compliance: Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency:	State
Evaluation date:	12/19/2005
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/11/2005
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	TSD - Financial Requirements
Date achieved compliance:	11/22/2005
Evaluation lead agency:	State
Evaluation date:	08/03/2004
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State Contractor/Grantee
Evaluation date:	06/01/2004
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/01/2004
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General
Date achieved compliance:	12/21/2006
Evaluation lead agency:	State
Evaluation date:	12/23/2003
Evaluation:	NOT A SIGNIFICANT NON-COMPLIER
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Financial Requirements
Date achieved compliance:	12/23/2003
Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Container Use and Management
Date achieved compliance:	12/23/2003
Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - General Facility Standards
Date achieved compliance:	12/23/2003

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency:	State
Evaluation date:	06/24/2003
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Tank System Standards
Date achieved compliance:	12/23/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Tank System Standards
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	Generators - Records/Reporting
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Container Use and Management
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Preparedness and Prevention
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	TSD - General Facility Standards
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	06/11/2002
Evaluation:	FOLLOW-UP INSPECTION
Area of violation:	Generators - Manifest
Date achieved compliance:	09/25/2003
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Tank System Standards
Date achieved compliance:	09/23/2002

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - Manifest
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Preparedness and Prevention
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Manifest/Records/Reporting
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General Facility Standards
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Contingency Plan and Emergency Procedures
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Permits - Application
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Container Use and Management
Date achieved compliance:	09/23/2002
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	SIGNIFICANT NON-COMPLIER
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/05/2000
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - Records/Reporting
Date achieved compliance:	09/23/2002

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency:	State
Evaluation date:	12/02/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/20/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	05/29/1998
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	12/16/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	04/01/1997
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Closure/Post-Closure
Date achieved compliance:	06/05/1997
Evaluation lead agency:	State
Evaluation date:	01/17/1996
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	01/31/1996
Evaluation lead agency:	State
Evaluation date:	02/27/1995
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General
Date achieved compliance:	01/17/1996
Evaluation lead agency:	EPA
Evaluation date:	02/27/1995
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	02/27/1995
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Incinerator Standards
Date achieved compliance:	01/17/1996

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency:	EPA
Evaluation date:	01/22/1993
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/19/1993
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	LDR - General
Date achieved compliance:	06/24/1993
Evaluation lead agency:	State
Evaluation date:	01/19/1993
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Generators - General
Date achieved compliance:	06/24/1993
Evaluation lead agency:	State
Evaluation date:	01/19/1993
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General
Date achieved compliance:	06/24/1993
Evaluation lead agency:	State
Evaluation date:	03/20/1992
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	03/16/1992
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	02/14/1992
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	03/18/1991
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - Financial Requirements
Date achieved compliance:	01/22/1993
Evaluation lead agency:	State
Evaluation date:	10/19/1990
Evaluation:	OPERATION AND MAINTENANCE INSPECTION
Area of violation:	Not Reported
Date achieved compliance:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Evaluation lead agency:	State
Evaluation date:	01/23/1990
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	01/22/1990
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	TSD - General
Date achieved compliance:	05/03/1990
Evaluation lead agency:	State
Evaluation date:	07/07/1989
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	06/13/1989
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	11/24/1987
Evaluation:	FINANCIAL RECORD REVIEW
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State
Evaluation date:	10/06/1987
Evaluation:	COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation:	Not Reported
Date achieved compliance:	Not Reported
Evaluation lead agency:	State

US ENG CONTROLS: Federal institutional controls / engineering controls registries

EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Actual Date:	01/05/2011
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	002

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Alternate Drinking Water, Permanent Replacement
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Alternate Drinking Water, Temporary Replacement
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Biological Treatment, (N.O.S.)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Discharge
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Extraction
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Liquid Phase Carbon Adsorption
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Monitoring
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Operations & Maintenance (O&M)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Publicly Owned Treatment Works (POTW)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Engineering Control:	Pump And Treat
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	002
Action Name:	RECORD OF DECISION
Action Completion date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Engineering Control:	UV Oxidation
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Engineering Control:	Air Stripping
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Engineering Control:	Biological Treatment, (Ex-Situ)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Engineering Control:	Carbon Adsorption
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Engineering Control:	Chemical Reduction/Oxidation
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported
Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Engineering Control:	Extraction
Contact Name:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Monitoring
Contact Name: Not Reported
Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: Reuse as Process Water
Contact Name: Not Reported
Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Groundwater
Engineering Control: UV Oxidation
Contact Name: Not Reported
Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Cap
Contact Name: Not Reported
Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

Action ID: 004
Action Name: RECORD OF DECISION
Action Completion date: 02/15/2011
Operable Unit: 05
Contaminated Media : Soil
Engineering Control: Disposal
Contact Name: Not Reported
Contact Phone and Ext: Not Reported
Event Code Description: Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil
Engineering Control:	Excavation
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil
Engineering Control:	Soil Vapor Extraction (in-situ)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil
Engineering Control:	Treatment, (N.O.S.)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil Gas
Engineering Control:	Monitoring
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

Action ID:	004
Action Name:	RECORD OF DECISION
Action Completion date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil Gas
Engineering Control:	Vapor Intrusion Pathway Mitigation, (N.O.S)
Contact Name:	Not Reported
Contact Phone and Ext:	Not Reported
Event Code Description:	Not Reported

US INST CONTROL: Federal institutional controls / engineering controls registries

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

EPA ID:	CAD000030494
Site ID:	Not Reported
Name:	AEROJET ROCKETDYNE INC
Action Name:	Not Reported
Address:	US HWY 50 AND AEROJET RD
	RANCHO CORDOVA, CA 95813-6000
EPA Region:	9
County:	SACRAMENTO
Event Code:	CA772PR
Inst. Control:	Not Reported
Actual Date:	04/17/1995
Complet. Date:	01/01/1900
Operable Unit:	Not Reported
Contaminated Media :	Not Reported
Contact Name :	JIM BUEHLER
Contact Phone and Ext :	916-355-4682
Event Code Description:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL

EPA ID:	CAD000030494
Site ID:	Not Reported
Name:	AEROJET ROCKETDYNE INC
Action Name:	Not Reported
Address:	US HWY 50 AND AEROJET RD
	RANCHO CORDOVA, CA 95813-6000
EPA Region:	9
County:	SACRAMENTO
Event Code:	CA772PR
Inst. Control:	Not Reported
Actual Date:	11/22/2002
Complet. Date:	01/01/1900
Operable Unit:	Not Reported
Contaminated Media :	Not Reported
Contact Name :	JIM BUEHLER
Contact Phone and Ext :	916-355-4682
Event Code Description:	INSTITUTIONAL CONTROLS ESTABLISHED-PROPRIETARY CONTROL

EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD
	RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Covenant
Actual Date:	07/31/2001
Complet. Date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Groundwater use/well drilling regulation
Actual Date:	07/31/2001
Complet. Date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Notice in Newspaper
Actual Date:	07/31/2001
Complet. Date:	07/20/2001
Operable Unit:	03
Contaminated Media :	Groundwater
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Covenant

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Deed Restriction
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Groundwater use/well drilling regulation
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Groundwater
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Covenant
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Deed Notices
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Land Use Restriction
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD
	RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Covenant
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil Gas
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD
	RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Deed Notices
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil Gas
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported
EPA ID:	CAD980358832
Site ID:	0901718
Name:	AEROJET GENERAL CORP.
Action Name:	RECORD OF DECISION
Address:	HWY US 50 & AEROJET RD
	RANCHO CORDOVA, CA 95670
EPA Region:	09
County:	SACRAMENTO
Event Code:	Not Reported
Inst. Control:	Land Use Restriction
Actual Date:	01/05/2011
Complet. Date:	02/15/2011
Operable Unit:	05
Contaminated Media :	Soil Gas
Contact Name :	Not Reported
Contact Phone and Ext :	Not Reported
Event Code Description:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

ENVIROSTOR: State- and tribal - equivalent CERCLIS

Facility ID:	80001284
Status:	Refer: SMBRP
Status Date:	11/12/2010
Site Code:	510115
Site Type:	Corrective Action
Site Type Detailed:	Corrective Action
Acres:	0
NPL:	NO
Regulatory Agencies:	SMBRP
Lead Agency:	MBR
Program Manager:	Not Reported
Supervisor:	William Beckman
Division Branch:	Cleanup Sacramento
Assembly:	08
Senate:	08
Special Program:	Not Reported
Restricted Use:	NO
Site Mgmt Req:	NONE SPECIFIED
Funding:	Not Reported
Latitude:	38.61555
Longitude:	-121.2032
APN:	123-01-1234
Past Use:	NONE SPECIFIED
Potential COC:	NONE SPECIFIED
Confirmed COC:	NONE SPECIFIED
Potential Description:	NONE SPECIFIED
Alias Name:	123-01-1234
Alias Type:	APN
Alias Name:	CAD000030494
Alias Type:	EPA Identification Number
Alias Name:	T10000002980
Alias Type:	GeoTracker Global ID
Alias Name:	100002
Alias Type:	Project Code (Site Code)
Alias Name:	510115
Alias Type:	Project Code (Site Code)
Alias Name:	34370002
Alias Type:	Envirostor ID Number
Alias Name:	80001284
Alias Type:	Envirostor ID Number

Completed Info:

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	RCRA Facility Assessment Report
Completed Date:	06/21/1994
Comments:	Not Reported

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Correspondence
Completed Date:	02/15/1995
Comments:	Placeholder for LUR for Injection Wells 1 and 2. Part of Permit Closure and not part of Corrective Action. Type changed to Correspondence.

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Correspondence
Completed Date:	11/22/2002
Comments:	Tracking of Waterboard and EPA Land Use Restriction for off-site groundwater for Carve-out area. No DTSC jurisdiction or involvement in LUR

Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	MCDONALD DOUGLAS (3500 ACRE PARCEL)
Completed Document Type:	Consent Agreement
Completed Date:	06/30/1994
Comments:	Not Reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	* Historical Operating Permit Authority
Completed Date:	06/10/1997
Comments:	Not Reported

Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	AEROJET (8500 ACRE PARCEL)
Completed Document Type:	Consent Decree
Completed Date:	09/08/1988
Comments:	Not Reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Consent Order
Completed Date:	08/16/1990
Comments:	Not Reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Consent Order
Completed Date:	06/10/1997
Comments:	Not Reported

Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Unilateral Order (I/SE, RAO, CAO, EPA AO)
Completed Date:	06/23/1989
Comments:	Not Reported

Completed Area Name:	PROJECT WIDE

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Completed Sub Area Name:	Not Reported
Completed Document Type:	Interim Measures Questionnaire
Completed Date:	04/02/1998
Comments:	Not Reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	SWMUs 55, 373, 374, 375
Completed Document Type:	RFI Workplan
Completed Date:	01/31/2005
Comments:	Changed date from 08/30/04 to 01/31/05 (03/14/06 - ps).
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	AEROJET (8500 ACRE PARCEL)
Completed Document Type:	Interim Measures Implementation Report
Completed Date:	01/01/1986
Comments:	Not Reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	MCDONALD DOUGLAS (3500 ACRE PARCEL)
Completed Document Type:	Interim Measures Implementation Report
Completed Date:	01/01/1997
Comments:	Not Reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	UNITS L, M, N, P, Q
Completed Document Type:	RFI Report
Completed Date:	04/17/2001
Comments:	Not Reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	SWMUs 55, 373, 374, 375
Completed Document Type:	RFI Report
Completed Date:	08/18/2005
Comments:	ps 03/14/06 - Four Grit piles were analyzed for perchlorate and metals, no further action required.
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	MCDONALD DOUGLAS (3500 ACRE PARCEL)
Completed Document Type:	Interim Measures Workplan
Completed Date:	06/30/1994
Comments:	Not Reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	AEROJET (8500 ACRE PARCEL)
Completed Document Type:	RFI Workplan
Completed Date:	06/01/1991
Comments:	PHASE I WORKPLAN RSARACINO 19980402.17:17S
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	UNITS L, M, N, P, Q
Completed Document Type:	RFI Workplan
Completed Date:	12/23/1999
Comments:	Not Reported

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	UNITS L, M, N, P, Q
Completed Document Type:	RFI Workplan
Completed Date:	08/31/1999
Comments:	Not Reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	AEROJET (8500 ACRE PARCEL)
Completed Document Type:	Interim Measures Workplan
Completed Date:	01/01/1982
Comments:	Not Reported
Completed Area Name:	Sites With No Operable Unit
Completed Sub Area Name:	AEROJET (8500 ACRE PARCEL)
Completed Document Type:	Interim Measures Workplan
Completed Date:	01/01/1978
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Groundwater Migration Controlled
Completed Date:	12/11/2000
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Human Exposure Controlled
Completed Date:	12/11/2000
Comments:	Not Reported
Completed Area Name:	PROJECT WIDE
Completed Sub Area Name:	Not Reported
Completed Document Type:	Human Exposure Controlled
Completed Date:	08/16/2005
Comments:	Not Reported
Future Area Name:	Not Reported
Future Sub Area Name:	Not Reported
Future Document Type:	Not Reported
Future Due Date:	Not Reported
Schedule Area Name:	Not Reported
Schedule Sub Area Name:	Not Reported
Schedule Document Type:	Not Reported
Schedule Due Date:	Not Reported
Schedule Revised Date:	Not Reported

SWEEPS UST: Local Lists of Registered Storage Tanks

Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	2-N-G-
SWRCB Tank Id:	34-000-035377-000001
Tank Status:	A
Capacity:	8121
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	REG UNLEADED
Number Of Tanks:	32
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	2-S-G-
SWRCB Tank Id:	34-000-035377-000002
Tank Status:	A
Capacity:	8121
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	LEADED
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	7-E-2D
SWRCB Tank Id:	34-000-035377-000003
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1023-E-2D
SWRCB Tank Id:	34-000-035377-000004
Tank Status:	A
Capacity:	7500
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1023-W-2D
SWRCB Tank Id:	34-000-035377-000005
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1028-E-2D
SWRCB Tank Id:	34-000-035377-000006
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1030-S-2D
SWRCB Tank Id:	34-000-035377-000007
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1034-E-2D
SWRCB Tank Id:	34-000-035377-000008
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1037-S-2D
SWRCB Tank Id:	34-000-035377-000009
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1050-E-2D
SWRCB Tank Id:	34-000-035377-000010
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1056-S-2D
SWRCB Tank Id:	34-000-035377-000011
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1058-W-2D
SWRCB Tank Id:	34-000-035377-000012
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1062-N-2D
SWRCB Tank Id:	34-000-035377-000013
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1086-N-2D
SWRCB Tank Id:	34-000-035377-000014
Tank Status:	A
Capacity:	12000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	1096-W-2D
SWRCB Tank Id:	34-000-035377-000015
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	5026-N-2D
SWRCB Tank Id:	34-000-035377-000016
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	5026-S-2D
SWRCB Tank Id:	34-000-035377-000017
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	5038-N-2D
SWRCB Tank Id:	34-000-035377-000018
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	5068-E-2D
SWRCB Tank Id:	34-000-035377-000019
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	5080-S-2D
SWRCB Tank Id:	34-000-035377-000020
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	20019-E-2D
SWRCB Tank Id:	34-000-035377-000021
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	46035-S-2D
SWRCB Tank Id:	34-000-035377-000022
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	46046-S-2D
SWRCB Tank Id:	34-000-035377-000023
Tank Status:	A
Capacity:	350
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	46068-S-2D
SWRCB Tank Id:	34-000-035377-000024
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	48012-W-2D
SWRCB Tank Id:	34-000-035377-000025
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	48021-N-2D
SWRCB Tank Id:	34-000-035377-000026
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	49010-S-2D
SWRCB Tank Id:	34-000-035377-000027
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	49015-N-2D
SWRCB Tank Id:	34-000-035377-000028
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	49016-N-2D
SWRCB Tank Id:	34-000-035377-000029
Tank Status:	A
Capacity:	5000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	49093-E-WO
SWRCB Tank Id:	34-000-035377-000030
Tank Status:	A
Capacity:	500
Active Date:	07-01-85
Tank Use:	OIL
STG:	W
Content:	WASTE OIL
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	7-W-CL-A
SWRCB Tank Id:	34-000-035377-000031
Tank Status:	A
Capacity:	10000
Active Date:	07-01-85
Tank Use:	UNKNOWN
STG:	W
Content:	Not Reported
Number Of Tanks:	Not Reported
Status:	Active
Comp Number:	35377
Number:	9
Board Of Equalization:	44-019214
Referral Date:	07-01-85
Action Date:	Not Reported
Created Date:	02-29-88
Owner Tank Id:	15011-E-2D
SWRCB Tank Id:	34-000-035377-000032
Tank Status:	A
Capacity:	3000
Active Date:	07-01-85
Tank Use:	M.V. FUEL
STG:	P
Content:	DIESEL
Number Of Tanks:	Not Reported

HIST UST: Local Lists of Registered Storage Tanks

File Number:	0001FD2A
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FD2A.pdf
Region:	STATE
Facility ID:	00000019591
Facility Type:	Other
Other Type:	CONSTRUCTION
Contact Name:	E.L. MEYER
Telephone:	9163554621
Owner Name:	DELTA CONSTRUCTION COMPANY
Owner Address:	AEROJECT RD AND HWY 50
Owner City,St,Zip:	RANCHO CORDOVA, CA 95670
Total Tanks:	0004
Tank Num:	001
Container Num:	DELTA - LA
Year Installed:	1979
Tank Capacity:	00001000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	101

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Leak Detection:	Not Reported
Tank Num:	002
Container Num:	DELTA-GAS-
Year Installed:	1979
Tank Capacity:	00002000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	3/16
Leak Detection:	10
Tank Num:	003
Container Num:	DELTA-20
Year Installed:	1982
Tank Capacity:	00008000
Tank Used for:	PRODUCT
Type of Fuel:	DIESEL
Container Construction Thickness:	3/16
Leak Detection:	10
Tank Num:	004
Container Num:	DELTA-3
Year Installed:	1984
Tank Capacity:	00000026
Tank Used for:	WASTE
Type of Fuel:	Not Reported
Container Construction Thickness:	6
Leak Detection:	Visual
Click here for Geo Tracker PDF:	http://www.web.edrnet.com/ordering/switchboard/redirect.aspx?s=GRR_CA_HISTUST_PDF&img_id=0001FD2A

CA FID UST: Local Lists of Registered Storage Tanks

Facility ID:	34006488
Regulated By:	UTNKA
Regulated ID:	00035377
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	9163552740
Mail To:	Not Reported
Mailing Address:	P O BOX
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	RANCHO CORDOVA 95670
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Active
Facility ID:	34006488
Regulated By:	UTNKA

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Regulated ID:	00035378
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	9163554621
Mail To:	Not Reported
Mailing Address:	P O BOX 15699C
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	RANCHO CORDOVA 95670
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Active

Facility ID:	34006488
Regulated By:	UTNKA
Regulated ID:	00035380
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	9163554621
Mail To:	Not Reported
Mailing Address:	P O BOX 15699C
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	RANCHO CORDOVA 95670
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Active

Facility ID:	34006488
Regulated By:	UTNKA
Regulated ID:	00035461
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	9163554621
Mail To:	Not Reported
Mailing Address:	P O BOX
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	RANCHO CORDOVA 95670
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Active

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Facility ID:	34006488
Regulated By:	UTNKI
Regulated ID:	00019591
Cortese Code:	Not Reported
SIC Code:	Not Reported
Facility Phone:	9163554621
Mail To:	Not Reported
Mailing Address:	P O BOX 156994 DEPT
Mailing Address 2:	Not Reported
Mailing City,St,Zip:	RANCHO CORDOVA 95670
Contact:	Not Reported
Contact Phone:	Not Reported
DUNs Number:	Not Reported
NPDES Number:	Not Reported
EPA ID:	Not Reported
Comments:	Not Reported
Status:	Inactive

US FIN ASSUR: Other Ascertainable Records

EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	S
Mechanism Type Description:	SURETY BOND GUARANTEEING PERFORMANCE
Cost estimate:	3958885.49
Face value:	7069501.9
Effective date:	2011-11-30 00:00:00
Provider:	WESTCHESTER FIRE INS. CO.
EPA region:	9

EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	L
Mechanism Type Description:	LETTER OF CREDIT
Cost estimate:	831922
Face value:	849392.36
Effective date:	2012-09-12 00:00:00
Provider:	WELL FARGO
EPA region:	9

EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	S
Mechanism Type Description:	SURETY BOND GUARANTEEING PERFORMANCE
Cost estimate:	864681.42
Face value:	7069501.9
Effective date:	2011-11-30 00:00:00
Provider:	WESTCHESTER FIRE INS. CO.
EPA region:	9

EPA ID:	CAD000030494

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

County:	Not Reported
Mechanism type:	X
Mechanism Type Description:	STANDBY TRUST FUND
Cost estimate:	864681.42
Face value:	0
Effective date:	2006-04-26 00:00:00
Provider:	BANK OF NEW YORK MELLON
EPA region:	9
EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	X
Mechanism Type Description:	STANDBY TRUST FUND
Cost estimate:	2000000
Face value:	8000000
Effective date:	2016-02-28 00:00:00
Provider:	GREAT AMERICAN E&S INS. COMPANY
EPA region:	9
EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	I
Mechanism Type Description:	INSURANCE
Cost estimate:	8000000
Face value:	8000000
Effective date:	2013-02-28 00:00:00
Provider:	INDIAN HARBORS INS.
EPA region:	9
EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	X
Mechanism Type Description:	STANDBY TRUST FUND
Cost estimate:	3958885.49
Face value:	0
Effective date:	2006-04-26 00:00:00
Provider:	BANK OF NEW YORK MELLON
EPA region:	9
EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	L
Mechanism Type Description:	LETTER OF CREDIT
Cost estimate:	3808899
Face value:	3888885.88
Effective date:	2012-09-12 00:00:00
Provider:	WACHOVIA BANK
EPA region:	9
EPA ID:	CAD000030494
County:	Not Reported
Mechanism type:	X

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

Mechanism Type Description:	STANDBY TRUST FUND
Cost estimate:	6000000
Face value:	8000000
Effective date:	2016-02-28 00:00:00
Provider:	GREAT AMERICAN E&S INS. COMPANY
EPA region:	9

ROD: Other Ascertainable Records

EPA ID:	CAD980358832
RG:	9
Site ID:	901718
Name:	AEROJET GENERAL CORP.
Action:	GOVT Decision Document (ROD)
Operable Unit Number:	WESTERN GW OU
SEQ ID:	2
Action Completion:	2001-07-20 00:00:00
NPL Status:	Final
Non NPL Status:	Not Reported

EPA ID:	CAD980358832
RG:	9
Site ID:	901718
Name:	AEROJET GENERAL CORP.
Action:	GOVT ROD for PRP Remedy
Operable Unit Number:	PERIMETER GW
SEQ ID:	4
Action Completion:	2011-02-15 00:00:00
NPL Status:	Final
Non NPL Status:	Not Reported

EPA ID:	CAD980358832
RG:	9
Site ID:	901718
Name:	AEROJET GENERAL CORP.
Action:	GOVT ROD for PRP Remedy
Operable Unit Number:	BOUNDARY OU GW & SOIL
SEQ ID:	5
Action Completion:	2015-07-22 00:00:00
NPL Status:	Final
Non NPL Status:	Not Reported

PRP: Other Ascertainable Records

PRP Name:	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.
	AEROJET-GENERAL CORP.

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

AEROJET-GENERAL CORP.

AEROJET-GENERAL CORP.

AEROJET-GENERAL CORP.

CORDOVA CHEMICAL CO.

CORDOVA CHEMICAL CO.

CORDOVA CHEMICAL CO.

CORDOVA CHEMICAL CO.

CORDOVA CHEMICAL CO.

PADS: Other Ascertainable Records

EPAID:	CAD000030494
Facility name:	US GEN CORP AEROJET SACRAMENTO
Facility Address:	HIGHWAY 50 & AEROJET RD RANCHO CORDOVA, CA 95670
Facility country:	US
Generator:	Yes
Storer:	No
Transporter:	No
Disposer:	No
Research facility:	No
Smelter:	No
Facility owner name:	GENCORP AEROJET
Contact title:	Not Reported
Contact name:	ED MYER
Contact tel:	916-355-4621
Contact extension:	Not Reported
Contact Email:	Not Reported
Mailing address:	PO BOX 15699 SACRAMENTO, CA 95852-1699
Mailing country:	US
Cert. date:	04/02/1990

CONSENT: Other Ascertainable Records

EPA ID:	CAD980358832
Site ID:	Not Reported
Case Title:	U.S. V. AEROJET-GENERAL CORPORATION & CORDOVA CHEMICAL COMPANY
Court Num:	86-0064 86-63
District:	California, East
Entered Date:	19980730
Name:	AEROJET GENERAL CORP
Address:	HWY 50 AND AEROJET RD
City:	RANCHO CORDOVA
County:	Not Reported
State:	CA
Zip:	95670

MAP FINDINGS

AEROJET ROCKETDYNE INC, US HWY 50 AND AEROJET RD, RANCHO CORDOVA, CA (Continued)

EPA ID:	CAD980358832
Site ID:	Not Reported
Case Title:	U.S. V. AEROJET-GENERAL CORPORATION & CORDOVA CHEMICAL COMPANY
Court Num:	86-0064 86-63
District:	California, East
Entered Date:	20020415
Name:	AEROJET GENERAL CORP
Address:	HWY 50 AND AEROJET RD
City:	RANCHO CORDOVA
County:	Not Reported
State:	CA
Zip:	95670

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
ENVIRONMENTAL RECORDS						
Federal NPL site list						
US	NPL	National Priority List	EPA	03/11/2019	03/14/2019	04/01/2019
US	Proposed NPL	Proposed National Priority List Sites	EPA	03/11/2019	03/14/2019	04/01/2019
US	NPL LIENS	Federal Superfund Liens	EPA	10/15/1991	02/02/1994	03/30/1994
Federal CERCLIS list						
US	SEMS	Superfund Enterprise Management System	EPA	03/11/2019	03/14/2019	04/17/2019
Federal RCRA CORRACTS facilities list						
US	CORRACTS	Corrective Action Report	EPA	03/25/2019	03/27/2019	04/17/2019
Federal RCRA TSD facilities list						
US	RCRA-TSDF	RCRA - Treatment, Storage and Disposal	Environmental Protection Agency	03/25/2019	03/27/2019	04/17/2019
Federal RCRA generators list						
US	RCRA-LQG	RCRA - Large Quantity Generators	Environmental Protection Agency	03/25/2019	03/27/2019	04/17/2019
US	RCRA-SQG	RCRA - Small Quantity Generators	Environmental Protection Agency	03/25/2019	03/27/2019	04/17/2019
US	RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generators	Environmental Protection Agency	03/25/2019	03/27/2019	04/17/2019
Federal institutional controls / engineering controls registries						
US	LUCIS	Land Use Control Information System	Department of the Navy	02/22/2019	03/07/2019	04/17/2019
US	US ENG CONTROLS	Engineering Controls Sites List	Environmental Protection Agency	01/31/2019	02/04/2019	03/08/2019
US	US INST CONTROL	Sites with Institutional Controls	Environmental Protection Agency	01/31/2019	02/04/2019	03/08/2019
Federal ERNS list						
US	ERNS	Emergency Response Notification System	National Response Center, United States Coast	02/04/2019	02/08/2019	03/08/2019
State and tribal - equivalent NPL						
CA	RESPONSE	State Response Sites	Department of Toxic Substances Control	01/28/2019	01/29/2019	03/05/2019
State and tribal - equivalent CERCLIS						
CA	ENVIROSTOR	EnviroStor Database	Department of Toxic Substances Control	01/28/2019	01/29/2019	03/05/2019
State and tribal landfill / solid waste disposal						
CA	SWF/LF (SWIS)	Solid Waste Information System	Department of Resources Recycling and Recover	02/11/2019	02/12/2019	03/05/2019
State and tribal leaking storage tank lists						
CA	LUST	Leaking Underground Fuel Tank Report (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	LUST REG 5	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	07/01/2008	07/22/2008	07/31/2008
CA	LUST REG 3	Leaking Underground Storage Tank Database	California Regional Water Quality Control Boa	05/19/2003	05/19/2003	06/02/2003
CA	LUST REG 2	Fuel Leak List	California Regional Water Quality Control Boa	09/30/2004	10/20/2004	11/19/2004
CA	LUST REG 1	Active Toxic Site Investigation	California Regional Water Quality Control Boa	02/01/2001	02/28/2001	03/29/2001
CA	LUST REG 4	Underground Storage Tank Leak List	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	LUST REG 6L	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	09/09/2003	09/10/2003	10/07/2003

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	LUST REG 6V	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	06/07/2005	06/07/2005	06/29/2005
CA	LUST REG 7	Leaking Underground Storage Tank Case Listing	California Regional Water Quality Control Boa	02/26/2004	02/26/2004	03/24/2004
CA	LUST REG 9	Leaking Underground Storage Tank Report	California Regional Water Quality Control Boa	03/01/2001	04/23/2001	05/21/2001
CA	LUST REG 8	Leaking Underground Storage Tanks	California Regional Water Quality Control Boa	02/14/2005	02/15/2005	03/28/2005
US	INDIAN LUST R1	Leaking Underground Storage Tanks on Indian Land	EPA Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN LUST R10	Leaking Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN LUST R9	Leaking Underground Storage Tanks on Indian Land	Environmental Protection Agency	04/10/2018	05/18/2018	07/20/2018
US	INDIAN LUST R8	Leaking Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN LUST R7	Leaking Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN LUST R6	Leaking Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN LUST R4	Leaking Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN LUST R5	Leaking Underground Storage Tanks on Indian Land	EPA, Region 5	04/12/2018	05/18/2018	07/20/2018
CA	CPS-SLIC	Statewide SLIC Cases (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	SLIC REG 1	Active Toxic Site Investigations	California Regional Water Quality Control Boa	04/03/2003	04/07/2003	04/25/2003
CA	SLIC REG 2	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board San Fran	09/30/2004	10/20/2004	11/19/2004
CA	SLIC REG 3	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	05/18/2006	05/18/2006	06/15/2006
CA	SLIC REG 4	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Region Water Quality Control Board Los Angele	11/17/2004	11/18/2004	01/04/2005
CA	SLIC REG 5	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board Central	04/01/2005	04/05/2005	04/21/2005
CA	SLIC REG 6V	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	Regional Water Quality Control Board, Victorv	05/24/2005	05/25/2005	06/16/2005
CA	SLIC REG 6L	SLIC Sites	California Regional Water Quality Control Boa	09/07/2004	09/07/2004	10/12/2004
CA	SLIC REG 7	SLIC List	California Regional Quality Control Board, Co	11/24/2004	11/29/2004	01/04/2005
CA	SLIC REG 8	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Region Water Quality Control Board	04/03/2008	04/03/2008	04/14/2008
CA	SLIC REG 9	Spills, Leaks, Investigation & Cleanup Cost Recovery Listing	California Regional Water Quality Control Boa	09/10/2007	09/11/2007	09/28/2007
State and tribal registered storage tank lists						
CA	UST	Active UST Facilities	SWRCB	12/10/2018	12/11/2018	01/15/2019
CA	UST CLOSURE	Proposed Closure of Underground Storage Tank (UST) Cases	State Water Resources Control Board	03/11/2019	03/13/2019	04/03/2019
CA	MILITARY UST SITES	Military UST Sites (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	UST MENDOCINO	Mendocino County UST Database	Department of Public Health	12/04/2018	12/06/2018	12/14/2018
CA	AST	Aboveground Petroleum Storage Tank Facilities	California Environmental Protection Agency	07/06/2016	07/12/2016	09/19/2016
US	INDIAN UST R10	Underground Storage Tanks on Indian Land	EPA Region 10	04/12/2018	05/18/2018	07/20/2018
US	INDIAN UST R9	Underground Storage Tanks on Indian Land	EPA Region 9	04/10/2018	05/18/2018	07/20/2018
US	INDIAN UST R8	Underground Storage Tanks on Indian Land	EPA Region 8	04/25/2018	05/18/2018	07/20/2018
US	INDIAN UST R7	Underground Storage Tanks on Indian Land	EPA Region 7	04/24/2018	05/18/2018	07/20/2018
US	INDIAN UST R6	Underground Storage Tanks on Indian Land	EPA Region 6	04/01/2018	05/18/2018	07/20/2018
US	INDIAN UST R1	Underground Storage Tanks on Indian Land	EPA, Region 1	04/13/2018	05/18/2018	07/20/2018
US	INDIAN UST R4	Underground Storage Tanks on Indian Land	EPA Region 4	05/08/2018	05/18/2018	07/20/2018
US	INDIAN UST R5	Underground Storage Tanks on Indian Land	EPA Region 5	04/12/2018	05/18/2018	07/20/2018
US	FEMA UST	Underground Storage Tank Listing	FEMA	05/15/2017	05/30/2017	10/13/2017

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
State and tribal voluntary cleanup sites						
US	INDIAN VCP R7	Voluntary Cleanup Priority Lisitng	EPA, Region 7	03/20/2008	04/22/2008	05/19/2008
US	INDIAN VCP R1	Voluntary Cleanup Priority Listing	EPA, Region 1	07/27/2015	09/29/2015	02/18/2016
CA	VCP	Voluntary Cleanup Program Properties	Department of Toxic Substances Control	01/28/2019	01/29/2019	03/05/2019
State and tribal Brownfields sites						
CA	BROWNFIELDS	Considered Brownfieds Sites Listing	State Water Resources Control Board	03/25/2019	03/26/2019	04/29/2019
Other Records						
US	CONSENT	Superfund (CERCLA) Consent Decrees	Department of Justice, Consent Decree Library	12/31/2018	02/11/2019	03/21/2019
US	ROD	Records Of Decision	EPA	03/11/2019	03/14/2019	04/01/2019
US	LIENS 2	CERCLA Lien Information	Environmental Protection Agency	03/11/2019	03/14/2019	03/21/2019
CA	HIST CAL-SITES	Calsites Database	Department of Toxic Substance Control	08/08/2005	08/03/2006	08/24/2006
US	DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations	EPA, Region 9	01/12/2009	05/07/2009	09/21/2009
CA	SWRCY	Recycler Database	Department of Conservation	03/11/2019	03/13/2019	04/30/2019
CA	CA FID UST	Facility Inventory Database	California Environmental Protection Agency	10/31/1994	09/05/1995	09/29/1995
CA	HIST UST	Hazardous Substance Storage Container Database	State Water Resources Control Board	10/15/1990	01/25/1991	02/12/1991
CA	SAN FRANCISCO AST	Aboveground Storage Tank Site Listing	San Francisco County Department of Public Hea	09/11/2018	09/12/2018	10/11/2018
CA	SWEEPS UST	SWEEPS UST Listing	State Water Resources Control Board	06/01/1994	07/07/2005	08/11/2005
US	FUSRAP	Formerly Utilized Sites Remedial Action Program	Department of Energy	08/08/2017	09/11/2018	09/14/2018
US	LEAD SMELTER 2	Lead Smelter Sites	American Journal of Public Health	04/05/2001	10/27/2010	12/02/2010
US	2020 COR ACTION	2020 Corrective Action Program List	Environmental Protection Agency	09/30/2017	05/08/2018	07/20/2018
US	US HIST CDL	National Clandestine Laboratory Register	Drug Enforcement Administration	02/24/2019	02/26/2019	04/17/2019
US	US FIN ASSUR	Financial Assurance Information	Environmental Protection Agency	01/31/2019	02/04/2019	03/08/2019
US	US AIRS MINOR	Air Facility System Data	EPA	10/12/2016	10/26/2016	02/03/2017
US	US AIRS (AFS)	Aerometric Information Retrieval System Facility Subsystem (	EPA	10/12/2016	10/26/2016	02/03/2017
US	COAL ASH DOE	Steam-Electric Plant Operation Data	Department of Energy	12/31/2005	08/07/2009	10/22/2009
US	COAL ASH EPA	Coal Combustion Residues Surface Impoundments List	Environmental Protection Agency	07/01/2014	09/10/2014	10/20/2014
US	SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing	Environmental Protection Agency	01/01/2017	02/03/2017	04/07/2017
US	LEAD SMELTER 1	Lead Smelter Sites	Environmental Protection Agency	03/11/2019	03/14/2019	03/21/2019
US	EPA WATCH LIST	EPA WATCH LIST	Environmental Protection Agency	08/30/2013	03/21/2014	06/17/2014
US	PCB TRANSFORMER	PCB Transformer Registration Database	Environmental Protection Agency	05/24/2017	11/30/2017	12/15/2017
US	Delisted NPL	National Priority List Deletions	EPA	03/11/2019	03/14/2019	04/01/2019
US	SEMS-ARCHIVE	Superfund Enterprise Management System Archive	EPA	03/11/2019	03/14/2019	04/17/2019
US	RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated	Environmental Protection Agency	03/25/2019	03/27/2019	04/17/2019
US	HMIRS	Hazardous Materials Information Reporting System	U.S. Department of Transportation	02/08/2019	02/08/2019	03/21/2019
US	DOT OPS	Incident and Accident Data	Department of Transporation, Office of Pipeli	12/03/2018	01/29/2019	03/21/2019
US	US CDL	Clandestine Drug Labs	Drug Enforcement Administration	02/24/2019	02/26/2019	04/17/2019
US	US BROWNFIELDS	A Listing of Brownfields Sites	Environmental Protection Agency	12/17/2018	12/18/2018	01/11/2019
US	DOD	Department of Defense Sites	USGS	12/31/2005	11/10/2006	01/11/2007
US	FEDLAND	Federal and Indian Lands	U.S. Geological Survey	12/31/2005	02/06/2006	01/11/2007
US	FUDS	Formerly Used Defense Sites	U.S. Army Corps of Engineers	01/31/2015	07/08/2015	10/13/2015
US	UMTRA	Uranium Mill Tailings Sites	Department of Energy	06/23/2017	10/11/2017	11/03/2017
US	ODI	Open Dump Inventory	Environmental Protection Agency	06/30/1985	08/09/2004	09/17/2004
US	US MINES	Mines Master Index File	Department of Labor, Mine Safety and Health A	11/27/2018	02/27/2019	04/01/2019
US	US MINES 2	Ferrous and Nonferrous Metal Mines Database Listing	USGS	12/05/2005	02/29/2008	04/18/2008

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
US	US MINES 3	Active Mines & Mineral Plants Database Listing	USGS	04/14/2011	06/08/2011	09/13/2011
US	PRP	Potentially Responsible Parties	EPA	03/11/2019	03/14/2019	04/17/2019
US	TRIS	Toxic Chemical Release Inventory System	EPA	12/31/2016	01/10/2018	01/12/2018
US	TSCA	Toxic Substances Control Act	EPA	12/31/2016	06/21/2017	01/05/2018
US	FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA/Office of Prevention, Pesticides and Toxi	04/09/2009	04/16/2009	05/11/2009
US	FTTS INSP	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fu	EPA	04/09/2009	04/16/2009	05/11/2009
US	HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	HIST FTTS INSP	FIFRA/TSCA Tracking System Inspection & Enforcement Case Lis	Environmental Protection Agency	10/19/2006	03/01/2007	04/10/2007
US	SSTS	Section 7 Tracking Systems	EPA	12/31/2009	12/10/2010	02/25/2011
US	ICIS	Integrated Compliance Information System	Environmental Protection Agency	11/18/2016	11/23/2016	02/10/2017
US	PADS	PCB Activity Database System	EPA	09/14/2018	10/11/2018	12/07/2018
US	MLTS	Material Licensing Tracking System	Nuclear Regulatory Commission	08/30/2016	09/08/2016	10/21/2016
US	RADINFO	Radiation Information Database	Environmental Protection Agency	01/02/2019	01/03/2019	03/15/2019
US	FINDS	Facility Index System/Facility Registry System	EPA	02/15/2019	03/05/2019	03/15/2019
US	RAATS	RCRA Administrative Action Tracking System	EPA	04/17/1995	07/03/1995	08/07/1995
US	RMP	Risk Management Plans	Environmental Protection Agency	02/01/2019	02/14/2019	03/21/2019
US	BRS	Biennial Reporting System	EPA/NTIS	12/31/2015	02/22/2017	09/28/2017
US	PWS	Public Water System Data	EPA	12/17/2013	01/09/2014	10/15/2014
US	INDIAN RESERV	Indian Reservations	USGS	12/31/2014	07/14/2015	01/10/2017
US	INDIAN ODI	Report on the Status of Open Dumps on Indian Lands	Environmental Protection Agency	12/31/1998	12/03/2007	01/24/2008
CA	CA BOND EXP. PLAN	Bond Expenditure Plan	Department of Health Services	01/01/1989	07/27/1994	08/02/1994
CA	CDL	Clandestine Drug Labs	Department of Toxic Substances Control	12/31/2017	06/12/2018	08/06/2018
CA	CHMIRS	California Hazardous Material Incident Report System	Office of Emergency Services	10/24/2018	01/24/2019	03/05/2019
CA	CORTESE	"Cortese" Hazardous Waste & Substances Sites List	CAL EPA/Office of Emergency Information	12/20/2018	12/21/2018	02/28/2019
CA	CUPA LIVERMORE-PLEASANTON	CUPA Facility Listing	Livermore-Pleasanton Fire Department	01/23/2019	02/26/2019	04/01/2019
CA	CUPA SAN FRANCISCO CO	CUPA Facility Listing	San Francisco County Department of Environmen	04/18/2019	04/19/2019	04/30/2019
CA	DEED	Deed Restriction Listing	DTSC and SWRCB	03/04/2019	03/05/2019	04/01/2019
CA	DRYCLEAN AVAQMD	Antelope Valley Air Quality Management District Drycleaner L	Antelope Valley Air Quality Management Distri	02/27/2019	02/28/2019	04/01/2019
CA	DRYCLEAN SOUTH COAST	South Coast Air Quality Management District Drycleaner Listi	South Coast Air Quality Management District	03/19/2019	03/22/2019	04/09/2019
CA	DRYCLEANERS	Cleaner Facilities	Department of Toxic Substance Control	12/13/2018	01/17/2019	03/05/2019
CA	EMI	Emissions Inventory Data	California Air Resources Board	12/31/2017	06/20/2018	08/06/2018
CA	ENF	Enforcement Action Listing	State Water Resoruces Control Board	11/01/2018	11/02/2018	12/13/2018
CA	Financial Assurance 1	Financial Assurance Information Listing	Department of Toxic Substances Control	01/10/2019	01/23/2019	03/05/2019
CA	Financial Assurance 2	Financial Assurance Information Listing	California Integrated Waste Management Board	02/15/2019	02/19/2019	03/05/2019
CA	HAULERS	Registered Waste Tire Haulers Listing	Integrated Waste Management Board	03/26/2019	03/27/2019	04/30/2019
CA	HAZNET	Facility and Manifest Data	California Environmental Protection Agency	12/31/2017	10/10/2018	11/16/2018
CA	HIST CORTESE	Hazardous Waste & Substance Site List	Department of Toxic Substances Control	04/01/2001	01/22/2009	04/08/2009
CA	HWP	EnviroStor Permitted Facilities Listing	Department of Toxic Substances Control	02/19/2019	02/20/2019	03/05/2019
CA	HWT	Registered Hazardous Waste Transporter Database	Department of Toxic Substances Control	01/07/2019	01/08/2019	03/05/2019
CA	ICE	ICE	Department of Toxic Subsances Control	02/19/2019	02/20/2019	03/05/2019
CA	LDS	Land Disposal Sites Listing (GEOTRACKER)	State Water Qualilty Control Board	12/10/2018	12/11/2018	01/15/2019
CA	LIENS	Environmental Liens Listing	Department of Toxic Substances Control	02/28/2019	03/01/2019	04/02/2019
CA	MCS	Military Cleanup Sites Listing (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	MINES	Mines Site Location Listing	Department of Conservation	12/10/2018	12/12/2018	01/15/2019
CA	MWMP	Medical Waste Management Program Listing	Department of Public Health	02/20/2019	03/05/2019	04/02/2019
CA	NPDES	NPDES Permits Listing	State Water Resources Control Board	02/11/2019	02/12/2019	03/07/2019
CA	PEST LIC	Pesticide Regulation Licenses Listing	Department of Pesticide Regulation	03/04/2019	03/05/2019	04/05/2019

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	PROC	Certified Processors Database	Department of Conservation	03/11/2019	03/13/2019	04/29/2019
CA	NOTIFY 65	Proposition 65 Records	State Water Resources Control Board	03/18/2019	03/19/2019	04/29/2019
CA	SCH	School Property Evaluation Program	Department of Toxic Substances Control	01/28/2019	01/29/2019	03/05/2019
CA	SPILLS 90	SPILLS90 data from FirstSearch	FirstSearch	06/06/2012	01/03/2013	02/22/2013
CA	TOXIC PITS	Toxic Pits Cleanup Act Sites	State Water Resources Control Board	07/01/1995	08/30/1995	09/26/1995
CA	UIC	UIC Listing	Deaprtment of Conservation	04/27/2018	06/13/2018	07/17/2018
CA	WASTEWATER PITS	Oil Wastewater Pits Listing	RWQCB, Central Valley Region	05/08/2018	07/11/2018	09/13/2018
CA	WDS	Waste Discharge System	State Water Resources Control Board	06/19/2007	06/20/2007	06/29/2007
CA	WIP	Well Investigation Program Case List	Los Angeles Water Quality Control Board	07/03/2009	07/21/2009	08/03/2009
CA	WMUDS/SWAT	Waste Management Unit Database	State Water Resources Control Board	04/01/2000	04/10/2000	05/10/2000
CA	OTHER OIL GAS	Other Oil & Gas Projects Sites (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	WELL STIM PROJ	Well Stimulation Project (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
US	ECHO	Enforcement & Compliance History Information	Environmental Protection Agency	03/03/2019	03/05/2019	04/01/2019
CA	CIWQS	California Integrated Water Quality System	State Water Resources Control Board	03/05/2019	03/05/2019	04/02/2019
CA	UIC GEO	Underground Injection Control Sites (GEOTRACKER)	State Water Resource Control Board	12/10/2018	12/11/2018	01/15/2019
CA	PFAS	PFAS Contamination Site Location Listing	State Water Resources Control Board	02/21/2019	02/22/2019	04/15/2019
CA	CERS	CalEPA Regulated Site Portal Data	California Environmental Protection Agency	10/22/2018	10/23/2018	11/30/2018
US	DOCKET HWC	Hazardous Waste Compliance Docket Listing	Environmental Protection Agency	05/31/2018	07/26/2018	10/05/2018
CA	NON-CASE INFO	Non-Case Information Sites (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
US	FUELS PROGRAM	EPA Fuels Program Registered Listing	EPA	02/19/2019	02/21/2019	04/01/2019
US	UXO	Unexploded Ordnance Sites	Department of Defense	12/31/2017	01/17/2019	04/01/2019
US	ABANDONED MINES	Abandoned Mines	Department of Interior	09/10/2018	09/11/2018	09/14/2018
CA	PROJECT	Project Sites (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	MILITARY PRIV SITES	Military Privatized Sites (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	CERS HAZ WASTE	CERS HAZ WASTE	CalEPA	10/22/2018	10/23/2018	11/30/2018
CA	SAMPLING POINT	Sampling Point ? Public Sites (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
CA	CERS TANKS	California Environmental Reporting System (CERS) Tanks	California Environmental Protection Agency	10/22/2018	10/23/2018	11/30/2018
CA	PROD WATER PONDS	Produced Water Ponds Sites (GEOTRACKER)	State Water Resources Control Board	12/10/2018	12/11/2018	01/15/2019
US	IHS OPEN DUMPS	Open Dumps on Indian Land	Department of Health & Human Serivces, Indian	04/01/2014	08/06/2014	01/29/2015
CA	WDR	Waste Discharge Requirements Listing	State Water Resources Control Board	03/11/2019	03/13/2019	04/29/2019

HISTORICAL USE RECORDS

US	EDR MGP	EDR Proprietary Manufactured Gas Plants	EDR, Inc.			
US	EDR Hist Auto	EDR Exclusive Historical Auto Stations	EDR, Inc.			
US	EDR Hist Cleaner	EDR Exclusive Historical Cleaners	EDR, Inc.			
CA	RGA LF	Recovered Government Archive Solid Waste Facilities List	Department of Resources Recycling and Recover		07/01/2013	01/13/2014
CA	RGA LUST	Recovered Government Archive Leaking Underground Storage Tan	State Water Resources Control Board		07/01/2013	12/30/2013

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
COUNTY RECORDS						
CA	CS ALAMEDA	Contaminated Sites	Alameda County Environmental Health Services	01/09/2019	01/11/2019	03/05/2019
CA	UST ALAMEDA	Underground Tanks	Alameda County Environmental Health Services	01/07/2019	01/08/2019	03/08/2019
CA	CUPA AMADOR	CUPA Facility List	Amador County Environmental Health	01/07/2019	01/08/2019	03/07/2019
CA	CUPA BUTTE	CUPA Facility Listing	Public Health Department	04/21/2017	04/25/2017	08/09/2017
CA	CUPA CALVERAS	CUPA Facility Listing	Calveras County Environmental Health	01/24/2019	01/25/2019	03/05/2019
CA	CUPA COLUSA	CUPA Facility List	Health & Human Services	02/27/2019	02/28/2019	04/01/2019
CA	SL CONTRA COSTA	Site List	Contra Costa Health Services Department	02/14/2019	02/19/2019	03/08/2019
CA	CUPA DEL NORTE	CUPA Facility List	Del Norte County Environmental Health Divisio	01/16/2019	02/05/2019	03/05/2019
CA	CUPA EL DORADO	CUPA Facility List	El Dorado County Environmental Management Dep	02/27/2019	02/28/2019	04/01/2019
CA	CUPA FRESNO	CUPA Resources List	Dept. of Community Health	04/10/2019	04/11/2019	04/30/2019
CA	CUPA GLENN	CUPA Facility List	Glenn County Air Pollution Control District	01/22/2018	01/24/2018	03/14/2018
CA	CUPA HUMBOLDT	CUPA Facility List	Humboldt County Environmental Health	12/11/2018	12/13/2018	01/15/2019
CA	CUPA IMPERIAL	CUPA Facility List	San Diego Border Field Office	01/18/2019	01/23/2019	03/05/2019
CA	CUPA INYO	CUPA Facility List	Inyo County Environmental Health Services	04/02/2018	04/03/2018	06/14/2018
CA	UST KERN	Underground Storage Tank Sites & Tank Listing	Kern County Environment Health Services Depar	01/28/2019	02/07/2019	03/08/2019
CA	CUPA KINGS	CUPA Facility List	Kings County Department of Public Health	02/14/2019	02/19/2019	03/05/2019
CA	CUPA LAKE	CUPA Facility List	Lake County Environmental Health	02/08/2019	02/12/2019	03/12/2019
CA	CUPA LASSEN	CUPA Facility List	Lassen County Environmental Health	01/17/2019	01/18/2019	03/05/2019
CA	AOCONCERN	Key Areas of Concerns in Los Angeles County		03/30/2009	03/31/2009	10/23/2009
CA	HMS LOS ANGELES	HMS: Street Number List	Department of Public Works	12/19/2018	01/10/2019	03/07/2019
CA	LF LOS ANGELES	List of Solid Waste Facilities	La County Department of Public Works	01/14/2019	01/15/2019	03/07/2019
CA	LF LOS ANGELES CITY	City of Los Angeles Landfills	Engineering & Construction Division	01/01/2019	01/15/2019	03/07/2019
CA	SITE MIT LOS ANGELES	Site Mitigation List	Community Health Services	01/30/2019	02/01/2019	03/07/2019
CA	UST EL SEGUNDO	City of El Segundo Underground Storage Tank	City of El Segundo Fire Department	01/21/2017	04/19/2017	05/10/2017
CA	UST LONG BEACH	City of Long Beach Underground Storage Tank	City of Long Beach Fire Department	03/09/2017	03/10/2017	05/03/2017
CA	UST TORRANCE	City of Torrance Underground Storage Tank	City of Torrance Fire Department	10/02/2018	10/05/2018	11/02/2018
CA	CUPA MADERA	CUPA Facility List	Madera County Environmental Health	02/20/2019	02/22/2019	03/07/2019
CA	UST MARIN	Underground Storage Tank Sites	Public Works Department Waste Management	09/26/2018	10/04/2018	11/02/2018
CA	CUPA MERCED	CUPA Facility List	Merced County Environmental Health	08/29/2018	08/31/2018	09/19/2018
CA	CUPA MONO	CUPA Facility List	Mono County Health Department	02/21/2019	02/26/2019	04/01/2019
CA	CUPA MONTEREY	CUPA Facility Listing	Monterey County Health Department	02/05/2019	02/07/2019	03/05/2019
CA	LUST NAPA	Sites With Reported Contamination	Napa County Department of Environmental Manag	01/09/2017	01/11/2017	03/02/2017
CA	UST NAPA	Closed and Operating Underground Storage Tank Sites	Napa County Department of Environmental Manag	02/21/2019	02/22/2019	03/08/2019
CA	CUPA NEVADA	CUPA Facility List	Community Development Agency	01/25/2019	01/29/2019	03/05/2019
CA	IND_SITE ORANGE	List of Industrial Site Cleanups	Health Care Agency	01/02/2019	02/07/2019	03/05/2019
CA	LUST ORANGE	List of Underground Storage Tank Cleanups	Health Care Agency	01/02/2019	02/08/2019	03/06/2019
CA	UST ORANGE	List of Underground Storage Tank Facilities	Health Care Agency	01/02/2019	02/05/2019	03/08/2019
CA	MS PLACER	Master List of Facilities	Placer County Health and Human Services	02/28/2019	03/01/2019	04/12/2019
CA	CUPA PLUMAS	CUPA Facility List	Plumas County Environmental Health	01/14/2019	01/18/2019	03/05/2019
CA	LUST RIVERSIDE	Listing of Underground Tank Cleanup Sites	Department of Environmental Health	04/11/2019	04/12/2019	04/30/2019
CA	UST RIVERSIDE	Underground Storage Tank Tank List	Department of Environmental Health	01/29/2019	01/31/2019	03/08/2019
CA	CS SACRAMENTO	Toxic Site Clean-Up List	Sacramento County Environmental Management	11/07/2018	01/04/2019	03/05/2019
CA	ML SACRAMENTO	Master Hazardous Materials Facility List	Sacramento County Environmental Management	11/07/2018	12/28/2018	03/05/2019
CA	CUPA SAN BENITO	CUPA Facility List	San Benito County Environmental Health	03/11/2019	03/13/2019	04/30/2019
CA	PERMITS SAN BERNARDINO	Hazardous Material Permits	San Bernardino County Fire Department Hazardo	02/27/2019	02/28/2019	04/02/2019

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

St	Acronym	Full Name	Government Agency	Gov Date	Arvl. Date	Active Date
CA	HMMD SAN DIEGO	Hazardous Materials Management Division Database	Hazardous Materials Management Division	03/04/2019	03/05/2019	04/02/2019
CA	LF SAN DIEGO	Solid Waste Facilities	Department of Health Services	04/18/2018	04/24/2018	06/19/2018
CA	SAN DIEGO CO LOP	Local Oversight Program Listing	Department of Environmental Health	03/06/2019	03/06/2019	04/29/2019
CA	SAN DIEGO CO. SAM	Environmental Case Listing	San Diego County Department of Environmental	03/23/2010	06/15/2010	07/09/2010
CA	LUST SAN FRANCISCO	Local Oversite Facilities	Department Of Public Health San Francisco Cou	09/19/2008	09/19/2008	09/29/2008
CA	UST SAN FRANCISCO	Underground Storage Tank Information	Department of Public Health	11/05/2018	11/06/2018	12/14/2018
CA	UST SAN JOAQUIN	San Joaquin Co. UST	Environmental Health Department	06/22/2018	06/26/2018	07/11/2018
CA	CUPA SAN LUIS OBISPO	CUPA Facility List	San Luis Obispo County Public Health Departme	02/13/2019	02/15/2019	03/14/2019
CA	BI SAN MATEO	Business Inventory	San Mateo County Environmental Health Service	03/04/2019	03/13/2019	04/29/2019
CA	LUST SAN MATEO	Fuel Leak List	San Mateo County Environmental Health Service	12/13/2018	12/18/2018	01/23/2019
CA	CUPA SANTA BARBARA	CUPA Facility Listing	Santa Barbara County Public Health Department	09/08/2011	09/09/2011	10/07/2011
CA	CUPA SANTA CLARA	Cupa Facility List	Department of Environmental Health	02/13/2019	02/19/2019	03/06/2019
CA	HIST LUST SANTA CLARA	HIST LUST - Fuel Leak Site Activity Report	Santa Clara Valley Water District	03/29/2005	03/30/2005	04/21/2005
CA	LUST SANTA CLARA	LOP Listing	Department of Environmental Health	03/03/2014	03/05/2014	03/18/2014
CA	SAN JOSE HAZMAT	Hazardous Material Facilities	City of San Jose Fire Department	01/30/2019	02/01/2019	03/07/2019
CA	CUPA SANTA CRUZ	CUPA Facility List	Santa Cruz County Environmental Health	01/21/2017	02/22/2017	05/23/2017
CA	CUPA SHASTA	CUPA Facility List	Shasta County Department of Resource Manageme	06/15/2017	06/19/2017	08/09/2017
CA	LUST SOLANO	Leaking Underground Storage Tanks	Solano County Department of Environmental Man	03/05/2019	03/07/2019	04/29/2019
CA	UST SOLANO	Underground Storage Tanks	Solano County Department of Environmental Man	03/05/2019	03/07/2019	04/03/2019
CA	CUPA SONOMA	Cupa Facility List	County of Sonoma Fire & Emergency Services De	12/21/2018	12/27/2018	01/15/2019
CA	LUST SONOMA	Leaking Underground Storage Tank Sites	Department of Health Services	04/03/2019	04/11/2019	04/30/2019
CA	CUPA STANISLAUS	CUPA Facility List	Stanislaus County Department of Ennvironmenta	12/11/2018	12/13/2018	01/15/2019
CA	UST SUTTER	Underground Storage Tanks	Sutter County Environmental Health Services	02/28/2019	03/01/2019	04/03/2019
CA	CUPA TEHAMA	CUPA Facility List	Tehama County Department of Environmental Hea	12/13/2018	12/18/2018	01/15/2019
CA	CUPA TRINITY	CUPA Facility List	Department of Toxic Substances Control	01/18/2019	01/23/2019	03/06/2019
CA	CUPA TULARE	CUPA Facility List	Tulare County Environmental Health Services D	12/26/2018	12/27/2018	01/15/2019
CA	CUPA TUOLUMNE	CUPA Facility List	Divison of Environmental Health	04/23/2018	04/25/2018	06/25/2018
CA	BWT VENTURA	Business Plan, Hazardous Waste Producers, and Operating Unde	Ventura County Environmental Health Division	12/26/2018	01/24/2019	02/28/2019
CA	LF VENTURA	Inventory of Illegal Abandoned and Inactive Sites	Environmental Health Division	12/01/2011	12/01/2011	01/19/2012
CA	LUST VENTURA	Listing of Underground Tank Cleanup Sites	Environmental Health Division	05/29/2008	06/24/2008	07/31/2008
CA	MED WASTE VENTURA	Medical Waste Program List	Ventura County Resource Management Agency	12/26/2018	01/24/2019	03/07/2019
CA	UST VENTURA	Underground Tank Closed Sites List	Environmental Health Division	02/26/2019	03/13/2019	04/03/2019
CA	UST YOLO	Underground Storage Tank Comprehensive Facility Report	Yolo County Department of Health	12/26/2018	01/03/2019	01/16/2019
CA	CUPA YUBA	CUPA Facility List	Yuba County Environmental Health Department	02/08/2019	02/12/2019	03/06/2019

STREET AND ADDRESS INFORMATION

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Appendix H

RUGGERI-JENSEN-AZAR

ENGINEERS • PLANNERS • SURVEYORS

DRAINAGE STUDY FOR THE PRESERVE

Rancho Cordova, California
October 2018
Updated June 2019
Updated October 2019
Updated January 2020

Prepared for: Grantline Road, LLC

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1.0 Introduction

This Study addresses the required drainage analysis for The Preserve Tentative Subdivision Map by providing hydrologic and hydraulic analysis, Low Impact Development (LID), treatment control measures and hydromodification management for the proposed development area.

The following information is provided in this Drainage Study:

- A delineation of existing watersheds within the project limits (Figure 2).
- A delineation of proposed watersheds within the project limits (Figure 3).
- Hydrologic analyses for primary watersheds.
- LID Credits and Treatment BMP Sizing Calculations.
- Sacramento Hydrology Model (SAHM) Project Report.
- HEC-HMS analysis of 100-year, 24-hour storm (existing condition vs. developed condition)
- HEC-RAS analysis of Morrison Creek through project limits (10-year and 100-year storms)

1.1 Study Area

The Study Area for this Drainage Study is The Preserve project limits (see Figure 1), which includes offsite open space tributary to the headwaters of Morrison Creek. Morrison Creek flows through the project limits adjacent to the proposed development area. The overall project size is 283.5 acres, but only 100.0 acres will be developed while the remaining area will be classified as open space. Proposed storm drain infrastructure represented herein reflects the storm drain infrastructure needed to serve The Preserve area under buildout land use conditions as shown on the Tentative Subdivision Map. The vertical datum referenced with the elevation data used in this report is NAVD 88.

1.2 Storm Drainage Facility Design Standards

In this Drainage Study, and in accordance with City of Rancho Cordova and County of Sacramento design methods, proposed storm drain facilities have been sized based on the following criteria:

- Underground storm drains: The design of “onsite” storm drain systems will follow the Nolte Method design charts.
- Bio-Retention Basins: Storage volume calculated in the LID Credits and Treatment BMP Sizing Calculations (per the adopted “Stormwater Quality Design Manual” for the Sacramento Region) and included in the SAHM model.
- Hydromodification Basin: The design of the hydromodification (hydromod) basin was sized using the criteria in the SAMH program (comparing existing condition vs developed condition using Low Flow Threshold: 25 percent of a 2-year storm and High Flow

Threshold: 10-year storm). The basin was evaluated for the 10-year, 24-hour storm; 100-year, 24-hour storm and 100-year, 10-day storm with HEC-HMS.

2.0 Hydrology

The Existing Condition Drainage Map (Figure 2) and Developed Condition Drainage Map (Figure 3) delineate the watersheds for each condition within The Preserve. Copies of both maps are included in the Appendix along with output from SacCalc and HEC-HMS.

2.1 Sacramento Method

The Sacramento Method develops hydrographs for use in programs like HEC-HMS and XP-SWMM. This method also calculates peak flows from the hydrographs it develops. The hydrographs are developed based on a design storm, initial losses, constant losses, lag time and land use. The major contributor in loss coefficients is Soil Type. The U.S. Soil Conservation Service (SCS) has classified soils into four hydrologic categories (A, B, C & D) based on infiltration rates from prolonged wetting. Soil Type A has the highest infiltration rate and Type D has the lowest infiltration rate. The majority of The Preserve site is Type C with a small area near the creek being Type C/D. Below is a summary of the coefficients used in the program called SacCalc developed to calculate the Sacramento Method and Nolte Method.

Table 2-1, Hydrology Coefficients

Land Use	Initial Loss (in)	*Constant Losses (in/hr)	Percent Impervious	Precipitation Zone
Open Space (Grassland)	0.10	0.10	2	2
Recreation (Park)	0.10	0.10	5	2
Low Density Residential (6-8 du/ac)	0.10	0.10	50	2

*Notes:

1. Constant losses are based on combination of Type C and D soils.

The Design Storm selected for The Preserve project is the 100-year, 24-hour storm. The 10-year, 24-hour storm and 100-year, 10-day storm were also evaluated for the Developed Condition and are included in Appendix 1. This 100-year, 24-hour storm is appropriate for an analysis of a Hydromod Basin designed to reduce the peak flow from a Developed Condition to the Existing Condition peak flow. The hydrograph created with the Sacramento Method will be used in the Hydromod Basin routing with HEC-HMS. Below is a summary of the peak flows developed by the Sacramento Method.

Table 2-2

Project Development	100-year, 24-hour Peak Flow
Existing Condition	134 cfs
Developed Condition	171 cfs

2.2 HEC-HMS Modeling

The proposed Hydromodification Basin, to be discussed further in this study, is designed for 25 percent of the 2-year storm up to a 10-year storm using SAHM. While this addresses low flow design criteria, the basin is also analyzed for a 100-year, 24-hour storm using HEC-HMS. The 10-year, 24-hour storm and 100-year, 10-day storm were also evaluated for the Developed Condition and are included in Appendix 4. The stage-storage-discharge relationships for the hydromodification basin are provided in Table 1 of Appendix 4 and were applied to the HEC-HMS model. The 100-year, 24-hour hydrograph developed by SacCalc (using the Sacramento Method) for the Developed Condition is routed through the basin and the peak outflow is compared to the Existing Condition peak flow. The Developed Condition outlet peak flow from the basin is 117 cfs. This satisfies the requirement that the Developed Condition shall not exceed the Existing Condition peak flow.

2.3 Nolte Method

The storm drainage infrastructure to be designed within the public streets will be based on the Nolte Method for the Developed Condition. The project site is located in Hydrologic Zone 1.

The Tentative Subdivision Map shows preliminary pipe sizes that will be further evaluated with a detailed hydraulic analysis during improvement plan design.

3.0 Stormwater Quality Control Measures

The Stormwater Quality Design Manual (SQDM) for the Sacramento Region (July 2018) is the governing document for stormwater quality in Sacramento County. From Table 3-2 of the SQDM, the requirements for a single family residential development project over 20 acres are Source Control, Hydromodification Control, LID Control and Treatment Control. The source controls, storm drain markings and others, will be addressed with the grading and improvement plans. Hydromodification controls are determined with SAHM. LID and Treatment Controls are calculated with LID Credits and Treatment BMP Sizing Calculator. The SAHM Project Report and LID Credits and Treatment BMP Sizing output are provided in the Appendix. Included in the Appendix is Figure 4 showing the Stormwater Quality Control Measures.

3.1 Hydromodification Control

The SAHM developed for The Preserve project evaluates 100.0 acres of development. The remaining 185.3 acres within the project limits is left untouched and is not part of the model for the development area. SAHM compares the percent imperviousness of the Existing Condition (pre-project) and the Developed Condition (mitigated). A Hydromodification (Hydromod) Basin was prepared for the Developed Condition with 25 percent of a 2-year storm up to a 10-year storm being routed through the basin with SAMH. All the runoff from the Developed Condition is conveyed to the Hydromod Basin by overland release or storm drain pipe. The mitigated flows discharged from the basin do not exceed the pre-project flows.

3.2 LID Controls

The goal of LID controls is to reduce the impact of development by using design techniques that mimic a site's predevelopment runoff. The design techniques that will be implemented on The Preserve project are disconnected pavement, disconnected roof drains, interceptor trees, bio-retention basin and Stormwater Quality/Hydromod Basin.

The project is required to earn 100 points of LID credits. Each measure listed above earns points and is documented in the LID Credits and Treatment BMP Sizing Calculator (See Appendix A.3). The major contributor of LID credits is the dedication of open space. The Preserve project has 185.3 acres within the project limits that will be dedicated as open space. In addition to open space the project provides 65,000 square feet of bio-retention area to reach 100 points. The project satisfied that requirement by providing two basins adjacent to the Hydromod Basin. The bio-retention basins will route overflow runoff to the Hydromod Basin prior to discharge into the creek. Large storms, greater than a 10-year storm, will bypass the bio-retention areas and go directly to the Hydromod Basin. Diversion structures will be designed upstream of the bio-retention areas to direct larger flows into the Hydromod Basin.

3.3 Treatment Controls

The Preserve project will provide multiple treatment controls as part of the overall design of the project. Each LID control implemented reduces the size of the dedicated Stormwater Quality/Hydromod Basin. The final piece for treatment control is the Hydromod Basin. It has enough capacity to meet the requirements for Volume Based Design (WQV).

Table 3-1

Basin	Required Water Quality Volume (ac-ft)	Storage Volume Provided (ac-ft)	Water Quality Flow from hydromod basin @ storage volume (cfs)	Bio-Retention Area (sq. ft.)
Hydromod Basin	1.73	1.73	1.6	-
Bio-retention Basin 1	-	-	-	39,000
Bio-retention Basin 2	-	-	-	26,700

4.0 Morrison Creek Water Surface Elevation Analysis

Morrison Creek conveys runoff from the east side of Grant Line Road at the projects east boundary through the project limits to the western edge of The Preserve project site. There are two man-made ponds located near the western edge of the project site that store runoff. Per a requirement from the City of Rancho Cordova, The Preserve project evaluated the 10-year and 100-year water surface elevations of Morrison Creek through the project limits. The existing 10-year, 24-hour and 100-year, 24-hour storm flowrates for Morrison Creek are 194 cfs and 361 cfs respectively. These existing flowrates were developed for the Master Drainage Study (MDS) for Rio Del Oro in August 2005 by Wood Rodgers and calculated with the Sacramento Method. The existing flowrates are from US3 (Figure F from the MDS) and include The Preserve project site along with an additional 700 acres for a total drainage area of 1003 acres. The Preserve forms the western boundary of drainage area US3. Included in Appendix 7 are Figure F and the

4.1 HEC-RAS Analysis

The HEC-RAS analysis was prepared for the Existing and Developed Conditions on the project site. The Existing Condition cross sections (Figure 5) for the HEC-RAS model were developed from the existing topography for the project site and supplemental field survey points. The Developed Condition cross sections (Figure 6) used the existing topography, survey points and the preliminary grading plan included with the Tentative Subdivision Map. The Developed Condition 100-year water surface elevations from the HEC-RAS model have been plotted on the Tentative Subdivision Map and added to exhibits in this report.

The cross sections begin at the downstream end of the project site (western boundary) and continue upstream until the final cross section located east of Grant Line Road. The beginning water surface elevation at the downstream cross section is calculated based on a normal depth condition with a slope along the creek flowline at S=0.004. Along the way are two man-made ponds and an existing driveway. The two ponds are assumed full for the HEC-RAS analysis. The water surface for each pond is the lowest overflow elevation. The overflow elevation for the downstream pond is elevation 210.5 and the upper pond overflow elevation is 215.2. The existing driveway crosses the creek upstream of the upper pond. The typical Manning's 'n' Value used for the creek is 0.035. This value is appropriate for the grasses that grow along the creek. The 'n' values were increased to 0.04 at the overflows from the two ponds. The existing overflows from the two ponds show erosion and the output from the HEC-RAS model show higher velocities in these areas.

5.0 Summary

The Preserve project satisfies requirements for Stormwater Quality Control Measures established by the City of Rancho Cordova and County of Sacramento for a Single Family Residential Development with over 20 gross acres of area. The Hydromod Basin designed for Hydromodification will also meet flood control requirements for a 100-year, 24-hour storm event and the outlet invert elevation from the Hydromod Basin will be above the 100-year water surface elevation calculated from the HEC-RAS model of Morrison Creek.

6. Appendix

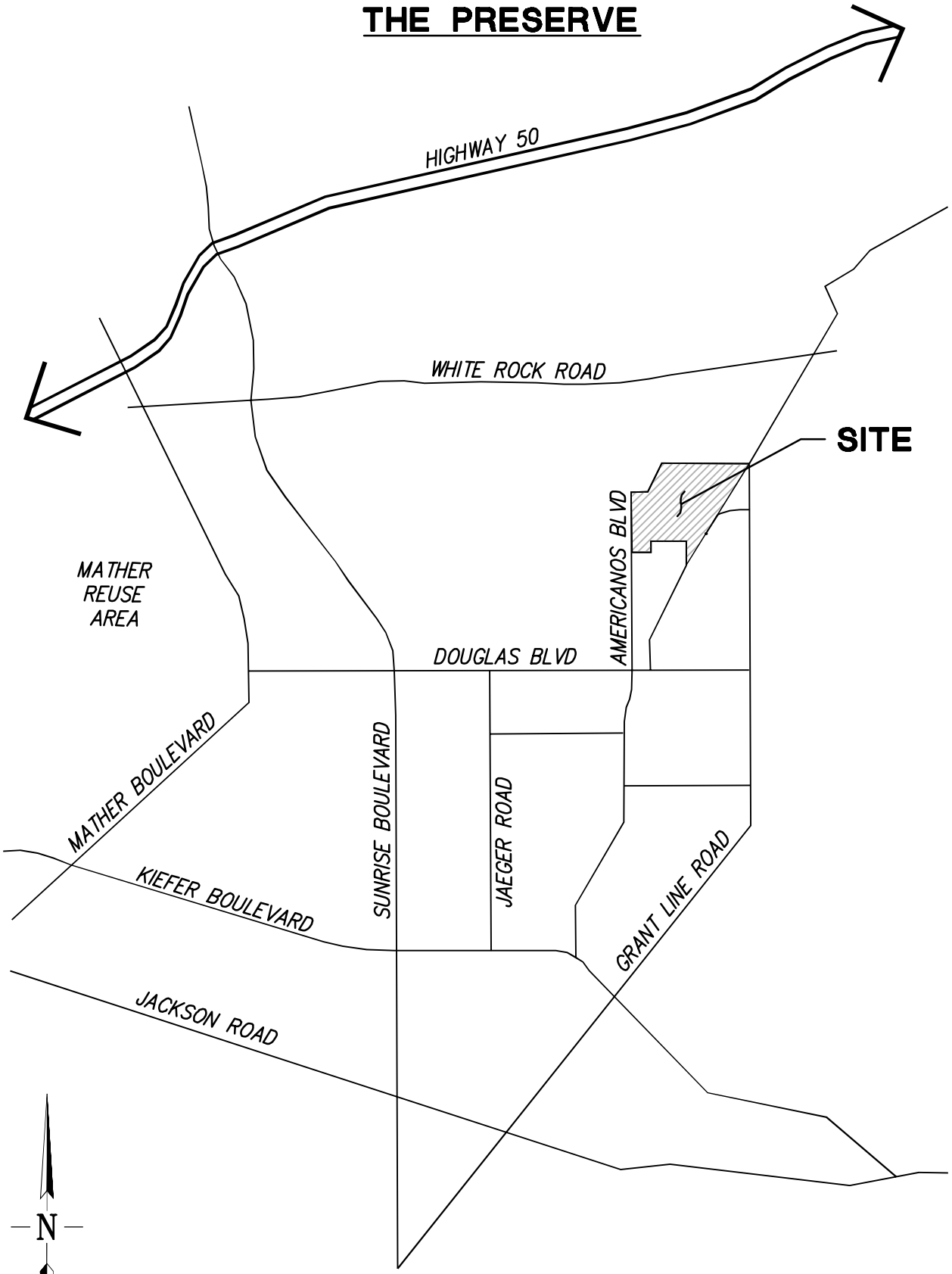
- Figure 1 – Vicinity Map
- Figure 2 – Existing Condition Drainage Map
- Figure 3 – Developed Condition Drainage Map
- Figure 4 – Stormwater Quality Control Measures Exhibit
- Figure 5 – HEC-RAS Existing Condition Cross Sections
- Figure 6 - HEC-RAS Developed Condition Cross Sections
- Appendix 1 - SacCalc-Sacramento Method 10-year, 24-hour storm; 100-year, 24-hour storm and 100-year, 10-day storm Input & Output for Developed Conditions and 100-year, 24-hour storm Input & Output for Existing Conditions
- Appendix 2 - SAHM Project Report
- Appendix 3 - Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations
- Appendix 4 - HEC-HMS Output for 10-year, 24-hour storm; 100-year, 24-hour storm and 100-year, 10-day storm
- Appendix 5 - Design Data Summary Sheet for Bioretention Basin
- Appendix 6 - Design Data Summary Sheet for Water Quality Detention Basin
- Appendix 7 – HEC-RAS Output for Existing Condition 10-year storm and 100-year storm
- Appendix 8 – HEC-RAS Output for Developed Condition 10-year storm and 100-year storm
- Appendix 9 – Bioretention Basin and Hydromodification Basin Outlet Details

- Appendix 10 – Drawdown Calculations

- Appendix 11 – Preliminary Grading Plan included with Tentative Map package

- Appendix 12 – Existing Conditions Plan included with Tentative Map package

FIGURE 1
VICINITY MAP
THE PRESERVE



NOT TO SCALE

RJA
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PROJECT LIMITS

OFFSITE OPEN SPACE
185.3 AC.

CREEK CENTERLINE
MORRISON CREEK

EX-DA1
7.3 AC.

EX-DA2
18.4 AC.

EX-DA3
17.6 AC.

EX-DA4
4.2 AC.

EX-DA5
35.0 AC.

EX-DA6
12.7 AC.

EX-DA7
4.9 AC.

EVANSTON WAY

NORTH DOUGLAS VILLAGE 2
(351 M 4)

BARKSDALE WAY

EDINGTON DRIVE

EVANSTON WAY

RAYMAR WAY

THORNBERG WAY

NORTH DOUGLAS VILLAGE 1
(351 M 3)

GRANT LINE ROAD

PROJECT LIMITS

LEGEND

- EX-DA7 / 3.2 AC. — DRAINAGE AREA / DRAINAGE ACREAGE
- LIMITS OF SUB-BASIN
- SACRAMENTO COUNTY SOIL #193 TYPE C
- SACRAMENTO COUNTY SOIL #159 TYPE C/D
- SACRAMENTO COUNTY SOIL #198 TYPE D
- SACRAMENTO COUNTY SOIL #192 TYPE C

N

0 150 300 450

1 inch = 150 ft.

EXISTING CONDITIONS DRAINAGE MAP-FIGURE 2

CITY OF RANCHO CORDOVA, SACRAMENTO COUNTY, CALIFORNIA

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DATE: OCTOBER 2019 JOB NO. 165018

C:\JOBS\2016\165018\HYDRO\EXHIBITS\165018 EX-HYDROMAP (FIGURE 2).DWG 10/18/2019 11:34:12 AM SEAN DAVIS

PROJECT LIMITS

OFFSITE OPEN SPACE
185.3 AC.

100-YEAR WATER SURFACE
Q=361 cfs.

CREEK CENTERLINE
MORRISON CREEK

MORRISON CREEK

ORPD NEIGHBORHOOD PARK 1

ORPD NEIGHBORHOOD PARK 2

OS-1
4.8 AC.

OS-2
7.6 AC.

DA1-1
0.7 AC.

DA1-2
2.8 AC.

DA1-3
1.6 AC.

DA1-4
2.6 AC.

DA1-5
2.7 AC.

DA1-6
1.7 AC.

DA1-7
13.9 AC.

DA1-7A
2.6 AC.

DA1-8
14.7 AC.

DA2-1
1.5 AC.

DA2-2
2.6 AC.

DA2-2A
1.4 AC.

DA2-3
4.9 AC.

DA2-4
5.0 AC.

DA2-5
15.7 AC.

DA3-1
3.0 AC.

OS-3
8.2 AC.

EX-DA7
0.2 AC.

DA1-A
1.8 AC.

BIO-RETENTION BASIN 1

BIO-RETENTION BASIN 2

PARK 2

100-YEAR WATER SURFACE
Q=361 cfs.

100-YEAR WSEL = 207.0

GRANT LINE ROAD

RAYMAR WAY

EDINGTON DRIVE

EVANSTON WAY

PROJECT LIMITS

EVANSTON WAY
NORTH DOUGLAS VILLAGE 2
(351 M 4)

BARKSDALE WAY

RAYMAR WAY

THORNBERG WAY

NORTH DOUGLAS VILLAGE 1
(351 M 3)

LEGEND

- DA2 / 2.8 AC. — DRAINAGE AREA / DRAINAGE ACREAGE
- 7 — TIME OF CONCENTRATION NODE
- LIMITS OF SUB-BASIN
- SACRAMENTO COUNTY SOIL #193 TYPE C
- SACRAMENTO COUNTY SOIL #159 TYPE C/D
- SACRAMENTO COUNTY SOIL #198 TYPE D
- SACRAMENTO COUNTY SOIL #192 TYPE C

N

0 150 300 450

1 inch = 150 ft.

DEVELOPED CONDITIONS DRAINAGE MAP-FIGURE 3

CITY OF RANCHO CORDOVA, SACRAMENTO COUNTY, CALIFORNIA

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DATE: OCTOBER 2019 JOB NO. 165018

C:\JOBS\2016\165018\HYDRO\EXHIBITS\165018 DEV-HYDROMAP FIGURE 3(3).DWG 10/16/2019 11:27:21 AM SEAN DAVIS

100 YEAR WATER SURFACE ELEVATION Q=361 cfs.

OPEN SPACE ±185.3 ACRES

PARK 1

LIMITS OF DEVELOPED AREA

PARK 2
RECREATION AREA
±20.6 ACRES

MORRISON CREEK TRAIL

CREEK CENTERLINE
MORRISON CREEK

100 YEAR WATER SURFACE ELEVATION Q=361 cfs.

BIO-RETENTION BASIN 1

LIMITS OF RESIDENTIAL AREA

HYDROMOD BASIN

PARK 3

BIO-RETENTION BASIN 2

RESIDENTIAL AREA
±79.2 ACRES

LIMITS OF DEVELOPED AREA

LIMITS OF DEVELOPED AREA

LOTS WITH SEPARATED SIDEWALKS

N

0 100 200 300

1 inch = 100 ft.

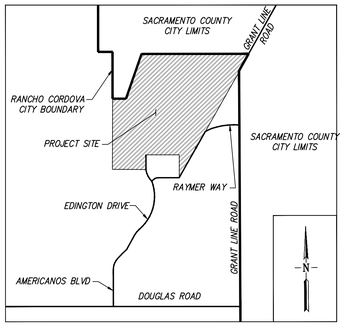
STORMWATER QUALITY CONTROL MEASURES EXHIBIT-FIGURE 4

CITY OF RANCHO CORDOVA,
SACRAMENTO COUNTY, CALIFORNIA

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DATE: OCTOBER 2019 JOB NO. 165018

C:_JOBS\165018\HYDRO\EXHIBITS\165018 LID EXHIBIT FIGURE 4.DWG 10/18/2019 12:07:05 PM SEAN DAVIS



VICINITY MAP
NTS

PROJECT LIMITS

MORRISON CREEK

PROJECT LIMITS

PROJECT LIMITS

HEC-RAS EXISTING CONDITION CROSS SECTIONS-FIGURE 5

CITY OF RANCHO CORDOVA, SACRAMENTO COUNTY, CALIFORNIA

N

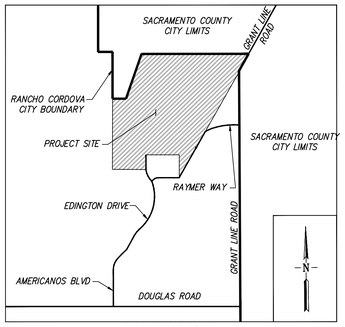
0 150 300 450

(IN FEET)
1 inch = 150 ft.

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DATE: OCTOBER 2019 JOB NO. 165018

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VICINITY MAP
NTS

PROJECT LIMITS

MORRISON CREEK

PROJECT LIMITS

PROJECT LIMITS

HEC-RAS DEVELOPED CONDITION CROSS SECTIONS-FIGURE 6

CITY OF RANCHO CORDOVA, SACRAMENTO COUNTY, CALIFORNIA

N

0 150 300 450

(IN FEET)
1 inch = 150 ft.

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DATE: OCTOBER 2019 JOB NO. 165018

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Appendix

Appendix 1 - SacCalc-Sacramento Method 10-year, 24-hour storm; 100-year, 24-hour storm and 100-year, 10-day storm Input & Output for Developed Conditions and 100-year, 24-hour storm Input & Output for Existing Conditions

Sacramento Hydrologic Calculator Report

October 3, 2019 10:23

Project Title: Pre Development Hydrographs
Comments:
Prepared by:

Method: Sacramento County HEC-1 method
Date: 6/12/2018

Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
EX-DA1	7.3	0	Basin "n"	-	Specified	.115	Specified	0.1	Computed	-
EX-DA2	18.4	0	Basin "n"	-	Specified	.115	Specified	0.1	Computed	-
EX-DA3	17.6	0	Basin "n"	-	Specified	0.115	Specified	0.1	Computed	-
EX-DA4	4.2	0	Basin "n"	-	Specified	0.115	Specified	0.1	Computed	-
EX-DA5	35	0	Basin "n"	-	Specified	0.115	Specified	0.1	Computed	-
EX-DA6	12.7	0	Basin "n"	-	Specified	.115	Specified	0.1	Computed	-

Basin "n" Method Data for Lag Time Computation

Watershed	Channel Length (ft)	Centroid Length (ft)	Slope (ft/ft)	Channelization	Land Use Impervious Area Percent (% or acres)																
					95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
EX-DA1	400	200	.0425	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EX-DA2	1430	700	.019	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EX-DA3	1480	700	.020	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EX-DA4	580	200	.04	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EX-DA5	1280	600	.016	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EX-DA6	640	100	.03	Undeveloped	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				Developed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Refer to the Drainage manual for Land Use Impervious Area Percent

*Dense Oaks, Shrubs, Vines

Infiltration Loss Rate Data

Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																	
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
EX-DA1	B																		
	C																7.3		
	D																		
EX-DA2	B																		
	C																16.6		
	D																1.8		
EX-DA3	B																		
	C																15.8		
	D																1.8		
EX-DA4	B																		
	C																3.8		
	D																0.4		
EX-DA5	B																		
	C																31.7		
	D																3.3		
EX-DA6	B																		
	C																12.7		
	D																		

Refer to the help file for Land Use Impervious Area Percent

*Dense Oaks, Shrubs, Vines

View HEC-1 output

Sacramento method results
(Project: Pre Development Hydrographs)
(100-year, 1-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
EX-DA1	18.	12:07	.01			
EX-DA2	27.	12:21	.03			
EX-DA3	25.	12:21	.03			
JNC1	60.	12:20	.07			
EX-DA4	9.8	12:08	.01			
EX-DA5	52.	12:20	.05			
EX-DA6	32.	12:07	.02			
JNC2	75.	12:16	.08			
JNC3	134.	12:18	.15			

← Combined Peak flow at outlet to check from Existing Condition

(10-year, 1-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
EX-DA1	11.	12:07	.01			
EX-DA2	16.	12:21	.03			
EX-DA3	15.	12:21	.03			
JNC1	35.	12:20	.07			
EX-DA4	5.7	12:08	.01			
EX-DA5	31.	12:20	.05			
EX-DA6	18.	12:07	.02			
JNC2	44.	12:16	.08			
JNC3	79.	12:18	.15			

(100-year, 10-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
EX-DA1	4.7	153:00	.01			
EX-DA2	11.	153:04	.03			
EX-DA3	10.	153:04	.03			
JNC1	26.	153:02	.07			
EX-DA4	2.7	153:00	.01			
EX-DA5	21.	153:03	.05			
EX-DA6	8.1	153:00	.02			
JNC2	32.	153:01	.08			
JNC3	57.	153:01	.15			

Sacramento Hydrologic Calculator Report

October 3, 2019 10:18

Project Title: Developed Hydrograph for HEC-HMS
Comments:
Prepared by: SMD

Method: Sacramento County HEC-1 method
Date: 6/12/2019

Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
RES1	48.1	0	Travel Time	-	-	-	Specified	0.1	Computed	-
OS2-3	15.8	0	Travel Time	-	-	-	Specified	0.1	Computed	-
RES2	33.1	0	Travel Time	-	-	-	Specified	0.1	Computed	-
RES3	3	0	Travel Time	-	-	-	Specified	0.1	Computed	-

Travel Time Component Method Data for Lag Time Computation

	Overflow		Gutter Flow			Channel and Pipe Flow					
Watershed	Land Use	Slope (ft/ft)	Length (ft)	Slope (ft/ft)	Side Slope (ft/ft)	Type	Length (ft)	Slope (ft/ft)	Width or Diameter (ft)	Design or Flow (cfs)	Mannings "n"
RES1	Residential	-	180	0.0035	0.02:1	Pipe	400	.007	1.25	2	0.012
						Pipe	270	.0035	1.25	8	0.012
						Pipe	400	.0035	2	16	0.012
						Pipe	500	.005	2	18	0.012
						Pipe	580	.005	2	22	0.012
						Pipe	250	.006	2.5	24	0.012
						Pipe	450	.005	3	42	0.012
						Pipe	400	.02	3.5	59	0.012
OS2-3	Open Space	.01	-	-	-	Pipe	2200	.01	2	10	0.012
RES2	Residential	-	100	0.006	0.02:1	Pipe	350	.005	1.25	7	0.012
						Pipe	820	.005	2	14	0.012
						Pipe	800	.005	2	20	0.012
						Pipe	680	.005	2.5	26	0.012
						Pipe	370	.005	3	44	0.012
RES3	Residential	-	350	0.005	0.02:1	-	-	-	-	-	-

Infiltration Loss Rate Data

Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																	
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
RES1	B																		
	C								43.3							4.8			
	D																		
OS2-3	B																		
	C															8.5			
	D															7.3			
RES2	B																		
	C								33.1										
	D																		
RES3	B																		
	C								3										
	D																		

Refer to the help file for Land Use Impervious Area Percent

*Dense Oaks, Shrubs, Vines

ITEM 11.1. **ATTACHMENT 4**

View HEC-1 output

Sacramento method results
(Project: Developed Hydrograph for HEC-HMS)

(100-year, 1-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
OS2-3	28.	12:14	.02			
RES1	81.	12:17	.08			
RES2	58.	12:16	.05			
RES3	7.4	12:07	.00			
JNC1	143.	12:16	.13			
JNC2	171.	12:16	.16			

← Combined Peak Flow at outlet to creek from Developed Condition

(10-year, 1-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
OS2-3	15.	12:16	.02			
RES1	52.	12:14	.08			
RES2	37.	12:13	.05			
RES3	4.3	12:07	.00			
JNC1	92.	12:14	.13			
JNC2	107.	12:14	.16			

(100-year, 10-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
OS2-3	9.8	153:01	.02			
RES1	31.	153:02	.08			
RES2	22.	153:02	.05			
RES3	2.1	153:00	.00			
JNC1	55.	153:02	.13			
JNC2	65.	153:02	.16			

Appendix 2 - SAHM Project Report

SAHM

PROJECT REPORT

General Model Information

Project Name:	Divine-BIO1
Site Name:	Divine
Site Address:	
City:	Rancho Cordova
Report Date:	10/11/2019
Gage:	RANCHO C
Data Start:	1961/10/01
Data End:	2004/09/30
Timestep:	Hourly
Precip Scale:	1.056
Version Date:	2019/10/01

POC Thresholds

Low Flow Threshold for POC1:	25 Percent of the 2 Year
High Flow Threshold for POC1:	10 Year

Landuse Basin Data

Pre-Project Land Use

Basin 1

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
C,Grass,Mod (1-2%)	4.8
C,Grass,Steep(2-5%)	81.3
D,Grass,Steep(2-5%)	7.3
Pervious Total	93.4

Impervious Land Use	acre
Imperv,Mod (1-2%)	1.8
Impervious Total	1.8
Basin Total	95.2

Element Flows To:

Surface	Interflow	Groundwater

Mitigated Land Use

Development Area

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
C,Grass,Mod (1-2%)	15.8
C,Grass,VSteep(>5%)	1.3
D,Grass,VSteep(>5%)	1
D,Grass,Steep(2-5%)	2.7
C,Grass,Steep(2-5%)	7.4
Pervious Total	28.2

Impervious Land Use	acre
Imperv,Mod (1-2%)	30.6
Impervious Total	30.6
Basin Total	58.8

Element Flows To:

Surface	Interflow	Groundwater
Surface retention 1	Surface retention 1	

Development Area 2

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
C,Grass,Mod (1-2%)	11.2
C,Grass,VSteep(>5%)	1.1
D,Grass,VSteep(>5%)	1
D,Grass,Steep(2-5%)	2.6
C,Grass,Steep(2-5%)	3.5
Pervious Total	19.4

Impervious Land Use	acre
Imperv,Mod (1-2%)	21.7
Impervious Total	21.7
Basin Total	41.1

Element Flows To:

Surface	Interflow	Groundwater
Surface retention 2	Surface retention 2	

Routing Elements

Pre-Project Routing

Mitigated Routing

Water Quality Basin 1

Bottom Length: 310.00 ft.
Bottom Width: 80.00 ft.
Depth: 8 ft.
Volume at riser head: 4.8579 acre-feet.
Side slope 1: 4 To 1
Side slope 2: 4 To 1
Side slope 3: 4 To 1
Side slope 4: 4 To 1
Discharge Structure
Riser Height: 6 ft.
Riser Diameter: 54 in.
Notch Type: Rectangular
Notch Width: 4.500 ft.
Notch Height: 1.500 ft.
Orifice 1 Diameter: 4 in. Elevation:0 ft.
Orifice 2 Diameter: 4 in. Elevation:1 ft.
Orifice 3 Diameter: 4 in. Elevation:2 ft.
Element Flows To:
Outlet 1 Outlet 2

Pond Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.569	0.000	0.000	0.000
0.0889	0.575	0.050	0.129	0.000
0.1778	0.582	0.102	0.183	0.000
0.2667	0.588	0.154	0.224	0.000
0.3556	0.595	0.207	0.258	0.000
0.4444	0.601	0.260	0.289	0.000
0.5333	0.607	0.313	0.317	0.000
0.6222	0.614	0.368	0.342	0.000
0.7111	0.621	0.423	0.366	0.000
0.8000	0.627	0.478	0.388	0.000
0.8889	0.634	0.534	0.409	0.000
0.9778	0.640	0.591	0.429	0.000
1.0667	0.647	0.648	0.560	0.000
1.1556	0.654	0.706	0.638	0.000
1.2444	0.660	0.764	0.699	0.000
1.3333	0.667	0.823	0.752	0.000
1.4222	0.674	0.883	0.799	0.000
1.5111	0.680	0.943	0.844	0.000
1.6000	0.687	1.004	0.885	0.000
1.6889	0.694	1.066	0.924	0.000
1.7778	0.701	1.128	0.961	0.000
1.8667	0.708	1.190	0.997	0.000
1.9556	0.715	1.254	1.031	0.000
2.0444	0.721	1.317	1.156	0.000
2.1333	0.728	1.382	1.254	0.000
2.2222	0.735	1.447	1.331	0.000
2.3111	0.742	1.513	1.399	0.000
2.4000	0.749	1.579	1.461	0.000
2.4889	0.756	1.646	1.518	0.000
2.5778	0.763	1.714	1.572	0.000

Water Quality Treatment Volume - L10 Credits and Treatment BMP Sizing Calcs V = 1.73 ac-ft

2.6667	0.770	1.782	1.624	0.000
2.7556	0.777	1.851	1.673	0.000
2.8444	0.785	1.920	1.720	0.000
2.9333	0.792	1.990	1.766	0.000
3.0222	0.799	2.061	1.811	0.000
3.1111	0.806	2.132	1.854	0.000
3.2000	0.813	2.204	1.896	0.000
3.2889	0.820	2.277	1.937	0.000
3.3778	0.828	2.350	1.977	0.000
3.4667	0.835	2.424	2.016	0.000
3.5556	0.842	2.499	2.054	0.000
3.6444	0.849	2.574	2.091	0.000
3.7333	0.857	2.650	2.128	0.000
3.8222	0.864	2.726	2.164	0.000
3.9111	0.871	2.803	2.199	0.000
4.0000	0.879	2.881	2.234	0.000
4.0889	0.886	2.960	2.268	0.000
4.1778	0.894	3.039	2.302	0.000
4.2667	0.901	3.119	2.335	0.000
4.3556	0.909	3.199	2.367	0.000
4.4444	0.916	3.280	2.400	0.000
4.5333	0.924	3.362	2.522	0.000
4.6222	0.931	3.445	3.103	0.000
4.7111	0.939	3.528	3.947	0.000
4.8000	0.947	3.612	4.986	0.000
4.8889	0.954	3.696	6.188	0.000
4.9778	0.962	3.781	7.532	0.000
5.0667	0.969	3.867	9.005	0.000
5.1556	0.977	3.954	10.59	0.000
5.2444	0.985	4.041	12.29	0.000
5.3333	0.993	4.129	14.09	0.000
5.4222	1.000	4.218	15.99	0.000
5.5111	1.008	4.307	17.99	0.000
5.6000	1.016	4.397	20.07	0.000
5.6889	1.024	4.488	22.23	0.000
5.7778	1.032	4.579	24.48	0.000
5.8667	1.040	4.671	26.80	0.000
5.9556	1.048	4.764	29.20	0.000
6.0444	1.055	4.857	30.89	0.000
6.1333	1.063	4.952	32.79	0.000
6.2222	1.071	5.047	35.49	0.000
6.3111	1.079	5.142	38.78	0.000
6.4000	1.087	5.239	42.57	0.000
6.4889	1.096	5.336	46.77	0.000
6.5778	1.104	5.433	51.31	0.000
6.6667	1.112	5.532	56.13	0.000
6.7556	1.120	5.631	61.18	0.000
6.8444	1.128	5.731	66.37	0.000
6.9333	1.136	5.832	71.66	0.000
7.0222	1.144	5.933	76.97	0.000
7.1111	1.153	6.035	82.23	0.000
7.2000	1.161	6.138	87.38	0.000
7.2889	1.169	6.242	92.36	0.000
7.3778	1.177	6.346	97.11	0.000
7.4667	1.186	6.451	101.5	0.000
7.5556	1.194	6.557	105.7	0.000
7.6444	1.202	6.663	109.4	0.000
7.7333	1.211	6.771	112.8	0.000

2-year Mitigated Flow = 14.7 cfs

10-year Mitigated Flow = 36.6 cfs

7.8222	1.219	6.879	115.8	0.000
7.9111	1.227	6.987	118.4	0.000
8.0000	1.236	7.097	120.6	0.000
8.0889	1.244	7.207	122.6	0.000

100-year, 24-hr HEC-HMS
= 116.7 cfs

Bioretention 1

Bottom Length:	250.00 ft.
Bottom Width:	100.00 ft.
Material thickness of first layer:	0.5
Material type for first layer:	Sandy loam
Material thickness of second layer:	1.5
Material type for second layer:	Amended 5 in/hr
Material thickness of third layer:	0.75
Material type for third layer:	GRAVEL
Underdrain used	
Underdrain Diameter (feet):	1.33
Orifice Diameter (in.):	14
Offset (in.):	0
Flow Through Underdrain (ac-ft.):	2188.085
Total Outflow (ac-ft.):	2432.145
Percent Through Underdrain:	89.97
Discharge Structure	
Riser Height:	1 ft.
Riser Diameter:	36 in.
Element Flows To:	
Outlet 1	Outlet 2
Water Quality Basin 1	

Landscape Swale Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.7618	0.0000	0.0000	0.0000
0.0522	0.7592	0.0060	0.0000	0.0000
0.1044	0.7554	0.0121	0.0000	0.0000
0.1566	0.7517	0.0182	0.0000	0.0000
0.2088	0.7479	0.0244	0.0000	0.0000
0.2610	0.7442	0.0305	0.0000	0.0000
0.3132	0.7405	0.0368	0.0000	0.0000
0.3654	0.7367	0.0430	0.0000	0.0000
0.4176	0.7330	0.0493	0.0000	0.0000
0.4698	0.7293	0.0556	0.0000	0.0000
0.5220	0.7256	0.0689	0.0386	0.0000
0.5742	0.7219	0.0823	0.0572	0.0000
0.6264	0.7182	0.0957	0.0812	0.0000
0.6786	0.7145	0.1092	0.1111	0.0000
0.7308	0.7109	0.1228	0.1475	0.0000
0.7830	0.7072	0.1365	0.1908	0.0000
0.8352	0.7035	0.1502	0.2414	0.0000
0.8874	0.6999	0.1641	0.2998	0.0000
0.9396	0.6963	0.1780	0.3664	0.0000
0.9918	0.6926	0.1919	0.4009	0.0000
1.0440	0.6890	0.2060	0.4415	0.0000
1.0962	0.6854	0.2201	0.4633	0.0000
1.1484	0.6818	0.2343	0.4742	0.0000
1.2005	0.6782	0.2486	0.6115	0.0000
1.2527	0.6746	0.2629	0.6187	0.0000
1.3049	0.6710	0.2774	0.7214	0.0000
1.3571	0.6674	0.2919	0.8098	0.0000
1.4093	0.6639	0.3065	0.8339	0.0000
1.4615	0.6603	0.3212	0.9566	0.0000
1.5137	0.6568	0.3359	0.9863	0.0000
1.5659	0.6532	0.3507	1.0011	0.0000

1.6181	0.6497	0.3657	1.1602	0.0000
1.6703	0.6461	0.3806	1.3095	0.0000
1.7225	0.6426	0.3957	1.3419	0.0000
1.7747	0.6391	0.4108	1.3419	0.0000
1.8269	0.6356	0.4261	1.5776	0.0000
1.8791	0.6321	0.4414	1.7035	0.0000
1.9313	0.6286	0.4568	1.7664	0.0000
1.9835	0.6252	0.4722	1.8966	0.0000
2.0357	0.6217	0.4876	1.9616	0.0000
2.0879	0.6182	0.5030	2.0838	0.0000
2.1401	0.6148	0.5185	2.1448	0.0000
2.1923	0.6113	0.5341	2.1754	0.0000
2.2445	0.6079	0.5498	2.3023	0.0000
2.2967	0.6044	0.5656	2.5121	0.0000
2.3489	0.6010	0.5814	2.7489	0.0000
2.4011	0.5976	0.5973	2.9883	0.0000
2.4533	0.5942	0.6133	3.2206	0.0000
2.5055	0.5908	0.6294	3.4424	0.0000
2.5577	0.5874	0.6456	3.6533	0.0000
2.6099	0.5840	0.6618	3.8541	0.0000
2.6621	0.5806	0.6781	4.0874	0.0000
2.7143	0.5773	0.6945	4.0874	0.0000
2.7500	0.5739	0.7058	4.0874	0.0000

Landscape Swale Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	To Amended(cfs)	Infilt(cfs)
2.7500	0.7618	0.7058	0.0000	1.3625	0.0000
2.8022	0.7656	0.7457	0.0000	1.3625	0.0000
2.8544	0.7694	0.7857	0.0000	1.6469	0.0000
2.9066	0.7732	0.8260	0.0000	1.7892	0.0000
2.9588	0.7770	0.8665	0.0000	1.9314	0.0000
3.0110	0.7808	0.9071	0.0000	2.0736	0.0000
3.0632	0.7846	0.9480	0.0000	2.2159	0.0000
3.1154	0.7884	0.9890	0.0000	2.3581	0.0000
3.1676	0.7923	1.0303	0.0000	2.5003	0.0000
3.2198	0.7961	1.0717	0.0000	2.6426	0.0000
3.2720	0.8000	1.1134	0.0000	2.7848	0.0000
3.3242	0.8038	1.1552	0.0000	2.9270	0.0000
3.3764	0.8077	1.1973	0.0000	3.0693	0.0000
3.4286	0.8116	1.2396	0.0000	3.2115	0.0000
3.4808	0.8155	1.2820	0.0000	3.3538	0.0000
3.5330	0.8194	1.3247	0.0000	3.4960	0.0000
3.5852	0.8233	1.3676	0.0000	3.6382	0.0000
3.6374	0.8272	1.4106	0.0000	3.7805	0.0000
3.6896	0.8311	1.4539	0.0000	3.9227	0.0000
3.7418	0.8350	1.4974	0.0000	4.0649	0.0000
3.7940	0.8389	1.5411	0.2934	4.2072	0.0000
3.8462	0.8429	1.5850	0.9486	4.3494	0.0000
3.8984	0.8468	1.6291	1.8167	4.4916	0.0000
3.9505	0.8508	1.6734	2.8524	4.6339	0.0000
4.0027	0.8548	1.7179	4.0291	4.7761	0.0000
4.0549	0.8587	1.7626	5.3267	4.9183	0.0000
4.1071	0.8627	1.8075	6.7280	5.0606	0.0000
4.1593	0.8667	1.8527	8.2171	5.2028	0.0000
4.2115	0.8707	1.8980	9.7782	5.3450	0.0000
4.2637	0.8747	1.9436	11.396	5.4873	0.0000
4.3159	0.8787	1.9893	13.053	5.6295	0.0000
4.3681	0.8827	2.0353	14.735	5.7717	0.0000

4.4203	0.8868	2.0815	16.424	5.9140	0.0000
4.4725	0.8908	2.1279	18.105	6.0562	0.0000
4.5247	0.8948	2.1745	19.759	6.1984	0.0000
4.5769	0.8989	2.2213	21.373	6.3407	0.0000
4.6291	0.9030	2.2683	22.930	6.4829	0.0000
4.6813	0.9070	2.3156	24.416	6.6252	0.0000
4.7335	0.9111	2.3630	25.819	6.7674	0.0000
4.7500	0.9124	2.3781	27.127	6.8123	0.0000

Surface retention 1

Element Flows To:

Outlet 1	Outlet 2
Water Quality Basin 1	Bioretention 1

Bioretention 2

Bottom Length:	350.00 ft.
Bottom Width:	50.00 ft.
Material thickness of first layer:	0.5
Material type for first layer:	Sandy loam
Material thickness of second layer:	1.5
Material type for second layer:	Amended 5 in/hr
Material thickness of third layer:	0.75
Material type for third layer:	GRAVEL
Underdrain used	
Underdrain Diameter (feet):	1.17
Orifice Diameter (in.):	12
Offset (in.):	0
Flow Through Underdrain (ac-ft.):	1559.701
Total Outflow (ac-ft.):	1723.055
Percent Through Underdrain:	90.52
Discharge Structure	
Riser Height:	1 ft.
Riser Diameter:	36 in.
Element Flows To:	
Outlet 1	Outlet 2
Water Quality Basin 1	

Landscape Swale Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.6149	0.0000	0.0000	0.0000
0.0522	0.6120	0.0042	0.0000	0.0000
0.1044	0.6077	0.0085	0.0000	0.0000
0.1566	0.6035	0.0128	0.0000	0.0000
0.2088	0.5992	0.0172	0.0000	0.0000
0.2610	0.5950	0.0216	0.0000	0.0000
0.3132	0.5908	0.0260	0.0000	0.0000
0.3654	0.5866	0.0305	0.0000	0.0000
0.4176	0.5824	0.0350	0.0000	0.0000
0.4698	0.5782	0.0396	0.0000	0.0000
0.5220	0.5740	0.0444	0.0270	0.0000
0.5742	0.5699	0.0492	0.0401	0.0000
0.6264	0.5657	0.0541	0.0568	0.0000
0.6786	0.5615	0.0591	0.0778	0.0000
0.7308	0.5574	0.0690	0.1032	0.0000
0.7830	0.5532	0.0791	0.1336	0.0000
0.8352	0.5491	0.0892	0.1690	0.0000
0.8874	0.5450	0.0994	0.2099	0.0000
0.9396	0.5409	0.1097	0.2565	0.0000
0.9918	0.5367	0.1201	0.2806	0.0000
1.0440	0.5326	0.1306	0.3091	0.0000
1.0962	0.5285	0.1412	0.3327	0.0000
1.1484	0.5245	0.1518	0.3445	0.0000
1.2005	0.5204	0.1626	0.4280	0.0000
1.2527	0.5163	0.1734	0.4331	0.0000
1.3049	0.5123	0.1843	0.5050	0.0000
1.3571	0.5082	0.1953	0.5669	0.0000
1.4093	0.5041	0.2064	0.5837	0.0000
1.4615	0.5001	0.2176	0.6696	0.0000
1.5137	0.4961	0.2289	0.7386	0.0000
1.5659	0.4921	0.2402	0.7425	0.0000

1.6181	0.4880	0.2517	0.7444	0.0000
1.6703	0.4840	0.2632	0.9166	0.0000
1.7225	0.4800	0.2749	0.9393	0.0000
1.7747	0.4760	0.2866	0.9471	0.0000
1.8269	0.4721	0.2984	1.1397	0.0000
1.8791	0.4681	0.3103	1.2418	0.0000
1.9313	0.4641	0.3223	1.2929	0.0000
1.9835	0.4602	0.3344	1.3910	0.0000
2.0357	0.4562	0.3464	1.4400	0.0000
2.0879	0.4523	0.3585	1.5303	0.0000
2.1401	0.4483	0.3707	1.5755	0.0000
2.1923	0.4444	0.3830	1.5981	0.0000
2.2445	0.4405	0.3954	1.6914	0.0000
2.2967	0.4366	0.4079	1.8456	0.0000
2.3489	0.4327	0.4205	2.0196	0.0000
2.4011	0.4288	0.4331	2.1955	0.0000
2.4533	0.4249	0.4459	2.3661	0.0000
2.5055	0.4210	0.4587	2.5291	0.0000
2.5577	0.4171	0.4717	2.6841	0.0000
2.6099	0.4133	0.4847	2.8612	0.0000
2.6621	0.4094	0.4978	2.8612	0.0000
2.7143	0.4056	0.5110	2.8612	0.0000
2.7500	0.4017	0.5201	2.8612	0.0000

Landscape Swale Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	To Amended(cfs)	Infilt(cfs)
2.7500	0.6149	0.5201	0.0000	0.9537	0.0000
2.8022	0.6191	0.5523	0.0000	0.9537	0.0000
2.8544	0.6234	0.5848	0.0000	1.1529	0.0000
2.9066	0.6277	0.6174	0.0000	1.2524	0.0000
2.9588	0.6320	0.6503	0.0000	1.3520	0.0000
3.0110	0.6363	0.6834	0.0000	1.4515	0.0000
3.0632	0.6406	0.7167	0.0000	1.5511	0.0000
3.1154	0.6449	0.7503	0.0000	1.6507	0.0000
3.1676	0.6492	0.7840	0.0000	1.7502	0.0000
3.2198	0.6535	0.8180	0.0000	1.8498	0.0000
3.2720	0.6578	0.8522	0.0000	1.9494	0.0000
3.3242	0.6622	0.8867	0.0000	2.0489	0.0000
3.3764	0.6665	0.9214	0.0000	2.1485	0.0000
3.4286	0.6709	0.9563	0.0000	2.2481	0.0000
3.4808	0.6752	0.9914	0.0000	2.3476	0.0000
3.5330	0.6796	1.0268	0.0000	2.4472	0.0000
3.5852	0.6840	1.0624	0.0000	2.5468	0.0000
3.6374	0.6884	1.0982	0.0000	2.6463	0.0000
3.6896	0.6928	1.1342	0.0000	2.7459	0.0000
3.7418	0.6972	1.1705	0.0000	2.8454	0.0000
3.7940	0.7016	1.2070	0.2934	2.9450	0.0000
3.8462	0.7060	1.2438	0.9486	3.0446	0.0000
3.8984	0.7105	1.2807	1.8167	3.1441	0.0000
3.9505	0.7149	1.3179	2.8524	3.2437	0.0000
4.0027	0.7193	1.3554	4.0291	3.3433	0.0000
4.0549	0.7238	1.3930	5.3267	3.4428	0.0000
4.1071	0.7282	1.4309	6.7280	3.5424	0.0000
4.1593	0.7327	1.4690	8.2171	3.6420	0.0000
4.2115	0.7372	1.5074	9.7782	3.7415	0.0000
4.2637	0.7417	1.5460	11.396	3.8411	0.0000
4.3159	0.7462	1.5848	13.053	3.9407	0.0000
4.3681	0.7507	1.6239	14.735	4.0402	0.0000

4.4203	0.7552	1.6632	16.424	4.1398	0.0000
4.4725	0.7597	1.7027	18.105	4.2393	0.0000
4.5247	0.7642	1.7425	19.759	4.3389	0.0000
4.5769	0.7688	1.7825	21.373	4.4385	0.0000
4.6291	0.7733	1.8228	22.930	4.5380	0.0000
4.6813	0.7778	1.8632	24.416	4.6376	0.0000
4.7335	0.7824	1.9040	25.819	4.7372	0.0000
4.7500	0.7838	1.9169	27.127	4.7686	0.0000

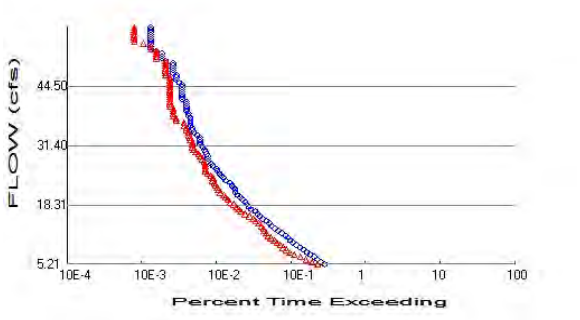
Surface retention 2

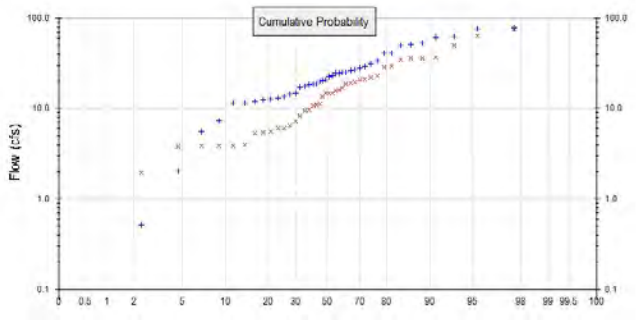
Element Flows To:

Outlet 1	Outlet 2
Water Quality Basin 1	Bioretention 2

Analysis Results

POC 1





\+ Pre-Project x Mitigated

Pre-Project Landuse Totals for POC #1
Total Pervious Area: 93.4
Total Impervious Area: 1.8

Mitigated Landuse Totals for POC #1
Total Pervious Area: 47.6
Total Impervious Area: 52.3

Flow Frequency Method: Log Pearson Type III 17B

Flow Frequency Return Periods for Pre-Project. POC #1

Return Period	Flow(cfs)
2 year	20.8288
5 year	41.264845
10 year	57.600255
25 year	75.854205

Flow Frequency Return Periods for Mitigated. POC #1

Return Period	Flow(cfs)
2 year	14.7172
5 year	28.585955
10 year	36.596082
25 year	65.903659

Annual Peaks

Annual Peaks for Pre-Project and Mitigated. POC #1

Year	Pre-Project	Mitigated
1962	23.319	19.527
1963	11.584	8.328
1964	7.413	3.880
1965	24.493	16.724
1966	5.537	3.978
1967	22.500	21.112
1968	13.535	3.873
1969	18.868	13.685
1970	17.331	14.836
1971	26.017	21.981
1972	2.044	3.913
1973	52.708	28.956
1974	20.146	11.266
1975	27.939	6.050

1976	0.422	1.949
1977	0.515	1.550
1978	33.997	10.933
1979	11.350	6.079
1980	50.580	15.809
1981	11.889	7.112
1982	41.235	34.441
1983	49.968	36.627
1984	18.509	20.735
1985	17.590	14.717
1986	75.459	64.377
1987	12.656	6.479
1988	20.566	5.513
1989	29.501	19.088
1990	24.844	14.884
1991	25.109	10.727
1992	27.075	28.504
1993	20.829	15.968
1994	13.003	5.305
1995	78.358	75.574
1996	61.677	36.491
1997	62.742	50.265
1998	41.398	36.559
1999	14.789	9.411
2000	31.230	18.861
2001	12.473	3.830
2002	14.415	5.404
2003	18.188	9.729
2004	25.327	23.184

Ranked Annual Peaks

Ranked Annual Peaks for Pre-Project and Mitigated. POC #1

Rank	Pre-Project	Mitigated
1	78.3578	75.5744
2	75.4589	64.3767
3	62.7417	50.2652
4	61.6773	36.6274
5	52.7078	36.5585
6	50.5802	36.4907
7	49.9680	34.4406
8	41.3978	28.9561
9	41.2353	28.5037
10	33.9971	23.1842
11	31.2296	21.9812
12	29.5006	21.1117
13	27.9387	20.7350
14	27.0753	19.5272
15	26.0166	19.0876
16	25.3267	18.8612
17	25.1087	16.7242
18	24.8436	15.9679
19	24.4934	15.8086
20	23.3191	14.8843
21	22.4995	14.8358
22	20.8288	14.7172
23	20.5658	13.6846
24	20.1457	11.2657
25	18.8676	10.9328

26	18.5088	10.7267
27	18.1877	9.7292
28	17.5898	9.4114
29	17.3306	8.3276
30	14.7889	7.1120
31	14.4151	6.4794
32	13.5351	6.0791
33	13.0031	6.0498
34	12.6556	5.5134
35	12.4734	5.4039
36	11.8893	5.3047
37	11.5836	3.9776
38	11.3498	3.9128
39	7.4132	3.8796
40	5.5367	3.8728
41	2.0438	3.8305
42	0.5155	1.9486
43	0.4216	1.5503

Duration Flows

The Facility PASSED

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
5.2072	1077	863	80	Pass
5.7364	961	728	75	Pass
6.2656	863	607	70	Pass
6.7949	767	510	66	Pass
7.3241	689	420	60	Pass
7.8533	618	366	59	Pass
8.3825	560	332	59	Pass
8.9118	501	299	59	Pass
9.4410	444	274	61	Pass
9.9702	402	247	61	Pass
10.4994	367	228	62	Pass
11.0287	346	205	59	Pass
11.5579	320	187	58	Pass
12.0871	286	176	61	Pass
12.6163	259	165	63	Pass
13.1455	232	162	69	Pass
13.6748	207	151	72	Pass
14.2040	194	140	72	Pass
14.7332	179	128	71	Pass
15.2624	159	118	74	Pass
15.7917	145	106	73	Pass
16.3209	136	93	68	Pass
16.8501	126	81	64	Pass
17.3793	110	75	68	Pass
17.9085	103	69	66	Pass
18.4378	97	65	67	Pass
18.9670	92	58	63	Pass
19.4962	85	54	63	Pass
20.0254	79	50	63	Pass
20.5547	73	48	65	Pass
21.0839	68	43	63	Pass
21.6131	68	40	58	Pass
22.1423	65	39	60	Pass
22.6716	61	37	60	Pass
23.2008	58	36	62	Pass
23.7300	50	34	68	Pass
24.2592	47	34	72	Pass
24.7884	44	32	72	Pass
25.3177	42	29	69	Pass
25.8469	39	27	69	Pass
26.3761	38	27	71	Pass
26.9053	34	27	79	Pass
27.4346	32	27	84	Pass
27.9638	29	26	89	Pass
28.4930	29	25	86	Pass
29.0222	29	23	79	Pass
29.5514	28	22	78	Pass
30.0807	27	20	74	Pass
30.6099	26	19	73	Pass
31.1391	25	18	72	Pass
31.6683	23	18	78	Pass
32.1976	23	18	78	Pass
32.7268	23	17	73	Pass

33.2560	23	17	73	Pass
33.7852	21	16	76	Pass
34.3145	19	16	84	Pass
34.8437	18	15	83	Pass
35.3729	18	15	83	Pass
35.9021	17	14	82	Pass
36.4313	17	14	82	Pass
36.9606	17	11	64	Pass
37.4898	17	11	64	Pass
38.0190	16	10	62	Pass
38.5482	16	10	62	Pass
39.0775	15	10	66	Pass
39.6067	15	10	66	Pass
40.1359	15	9	60	Pass
40.6651	15	9	60	Pass
41.1943	15	9	60	Pass
41.7236	13	9	69	Pass
42.2528	13	9	69	Pass
42.7820	13	9	69	Pass
43.3112	13	9	69	Pass
43.8405	13	9	69	Pass
44.3697	13	9	69	Pass
44.8989	13	9	69	Pass
45.4281	12	9	75	Pass
45.9574	11	9	81	Pass
46.4866	11	9	81	Pass
47.0158	11	8	72	Pass
47.5450	10	8	80	Pass
48.0742	10	8	80	Pass
48.6035	10	8	80	Pass
49.1327	10	8	80	Pass
49.6619	10	8	80	Pass
50.1911	8	8	100	Pass
50.7204	7	6	85	Pass
51.2496	7	6	85	Pass
51.7788	7	6	85	Pass
52.3080	6	6	100	Pass
52.8373	5	5	100	Pass
53.3665	5	5	100	Pass
53.8957	5	4	80	Pass
54.4249	5	3	60	Pass
54.9541	5	3	60	Pass
55.4834	5	3	60	Pass
56.0126	5	3	60	Pass
56.5418	5	3	60	Pass
57.0710	5	3	60	Pass
57.6003	5	3	60	Pass

Water Quality

Drawdown Time Results

Pond: Water Quality Basin 1

Days	Stage(feet)	Percent of Total Run Time
1	0.950	6.9747
2	4.662	0.4361
3	8.000	N/A
4	8.000	N/A
5	8.000	N/A

Maximum Stage: 8.000 Drawdown Time: 02 01:41:30

Appendix 3 - Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations

Appendix D-1: Residential Sites: Low Impact Development (LID) Credits and Treatment BMP Sizing Calculations

Name of Drainage Shed: Morrison Creek
Location of project: Sacramento

Fill in Blue Highlighted boxes

Step 1 - Open Space and Pervious Area Credits

Is your project within the drainage area of a common drainage plan that includes open space? If not, skip to 1 b.

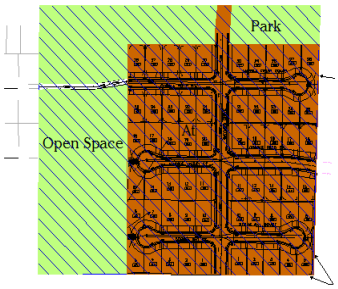
1 a. Common Drainage Plan Area		acres	A_{CDP}	
Common Drainage Plan Open Space (Off-project)	0	acres	A_{OS}	**see area example below**
a. Natural storage reservoirs and drainage corridors	0	acres		
b. Buffer zones for natural water bodies	0	acres		
c. Natural areas including existing trees, other vegetation, and soil	0	acres		
d. Common landscape area/park	0	acres		
e. Regional Flood Control/Drainage basins	0	acres		
1 b. Project Drainage Shed Area (Total)	285.10	acres	A	
Project-Specific Open Space (In-project, communal)**	205.90	acres	A_{PSOS}	**see area example below**
a. Natural storage reservoirs and drainage corridors	61.80	acres		
b. Buffer zones for natural water bodies	61.80	acres		
c. Natural areas including existing trees, other vegetation, and soil	61.70	acres		
d. Landscape area/park	12.40	acres		
e. Flood Control/Drainage basins	8.20	acres		

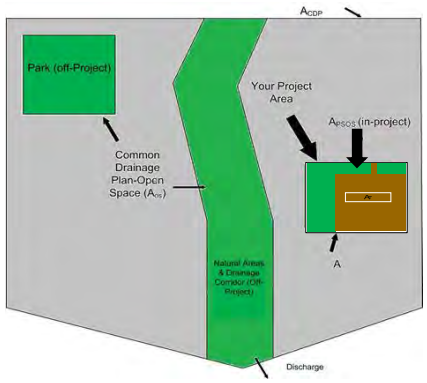
** Doesn't include impervious areas within individual lots and surrounding individual units. That is accounted for below using Form D-1a in Step 2.

Area with Runoff Reduction Potential	$A - A_{PSOS}$ =	79.20	acres	A_T
Number of Units in A_T		434		
Number of units per acre in A_T	DU/A_T =	6	DUA	
Assumed Initial Impervious Fraction of A_T (determined using Table D-1a)		0.4	I	
Open Space & Pervious Area LID Credit (Step 1)	$(A_{OS}/A_{CDP}+A_{PSOS}/A)x100$ =	72	pts	

Table D-1a

Dwelling units per acre	Imperviousness
1	0.17
2	0.25
3,4	0.35
5,6	0.40
7	0.50
8,9	0.55
10-14	0.60
15-20	0.70





Step 2 - Runoff Reduction Credits

Runoff Reduction Measures		Effective Area Managed (A_C)	
Disconnected Roof Drains (see Fact Sheet)	use Form D-1a for credits →	4.90	acres
Disconnected Pavement (see Fact Sheet)	use Form D-1b for credits →	0.35	acres
Interceptor Trees (see Fact Sheet)	use Form D-1c for credits →	0.30	acres
Alternative Driveway Design (see Fact Sheet)	use Form D-1d for credits →	0.00	acres
Total Effective Area Managed (Credit Area)	A_C	5.54	acres EAM
Runoff Reduction Credit (Step 2)	$(A_C / A_T)*100$ =	7	pts

Form D-1a: Disconnected Roof Drains Worksheet

See Fact Sheet for more information regarding Disconnected Roof Drain credit guidelines

					Effective Area Managed (A_C)
1. Determine efficiency Multiplier					
Runoff is directed to a dispersal trench or dry well (Type A and B soils only)		1.00			
Runoff is directed across landscaping, determine setback					
25 ft +	Use multiplier of	1.00			
≥ 20 and < 25 ft	Use multiplier of	0.90			
≥ 15 and < 20 ft	Use multiplier of	0.70			
≥ 10 and < 15 ft	Use multiplier of	0.45			
≥ 5 and < 10 ft	Use multiplier of	0.25			
	Efficiency Multiplier →		0.45	Box J1	
2. Determine percentage of roof drains disconnected	→		100.0%	Box J2	
3. Select project density in dwelling units per acre:					
1	Use reduction factor of	0.08			
2	Use reduction factor of	0.13			
3,4	Use reduction factor of	0.19			
5,6	Use reduction factor of	0.23			
7	Use reduction factor of	0.29			
8,9	Use reduction factor of	0.33			
10-14	Use reduction factor of	0.37			
15-20	Use reduction factor of	0.44			
	Reduction Factor →		0.23	Box J3	
4. Determine Area Managed					
	Multiply Box J3 by A_T, and enter the result in Box J4		18.1 acres	Box J4	
5. Multiply Boxes J1, J2 and J4, and enter 60% of the Result in Box J					4.9 acres Box J
This is the amount of area credit to enter into the "Disconnected Roof Drains" Box of Form D-1					

Form D-1b: Disconnected Pavement Worksheet

See Fact Sheet for more information regarding NDC Pavement credit guidelines

			Effective Area Managed (A_C)
Divided Sidewalks			
1. Determine percentage of units with divided Sidewalks	18.2%	Box K1	
Multiply Box K1, A_T, and 0.04 and enter 60% of the result in Box K			0.35 acres Box K
This is the amount of area credit to enter into the "Disconnected Pavement" Box of Form D-1			

Form D-1c: Interceptor Tree Worksheet

See Fact Sheet for more information regarding Interceptor Tree credit guidelines

				Effective Area Managed (A_C)
New Evergreen Trees				
1. Enter number of new evergreen trees that qualify as Interceptor Trees in Box L1.	217	trees	Box L1	
2. Multiply Box L1 by 200 and enter result in Box L2	43400	sq. ft.	Box L2	
New Deciduous Trees				
3. Enter number of new deciduous trees that qualify as Interceptor Trees in Box L3.	217	trees	Box L3	
4. Multiply Box L3 by 100 and enter result in Box L4	21700	sq. ft.	Box L4	
Existing Tree Canopy				
5. Enter square footage of existing tree canopy that qualifies as Existing Tree canopy in Box L5.		sq. ft.	Box L5	
6. Multiply Box L5 by 0.5 and enter the result in Box L6	0	sq. ft.	Box L6	
Total Interceptor Tree Credits				
Add Boxes L2, L4, and L6 and enter it into Box L7	65100	sq. ft.	Box L7	
Divide Box L7 by 43,560 and multiply by 20% to get effective area managed and enter the result in Box L8	0.30	acres	Box L8	
This is the amount of area credit to enter into the "Interceptor Trees" Box of Form D-1				

Form D-1d: Alternative Driveway Design

See Fact Sheet for more information regarding Alternative Driveway Design credit guidelines

1. Select type of driveway

Pervious Driveway:	Multiplier:
Cobblestone Block P	0.40
Pervious Concrete/A	0.60
Modular Block Porous Pavement	0.75
Porous Gravel	
Not Directly-connected	1.00

Box M1

2. Determine percentage of units with Alternative Driveways: Box M2

4. Multiply Boxes M1, M2, A_T and 0.04, and enter the result in Box M
This is the amount of area credit to enter into the "Alternative Driveway Design" Box of Form D-1: 0.00 acres

Step 3 - Runoff Management Credits

Capture and Use Credits

Impervious Area Managed by Rain barrels, Cisterns, and automatically-emptied systems
(see Fact Sheet) enter gallons, for simple rain barrels: 0.00 acres

Automated-Control Capture and Use System
(see Fact Sheet, then enter impervious area managed by the system): 0.00 acres

Bioretention/Infiltration Credits

Impervious Area Managed by Bioretention BMPs
(see Fact Sheet)
Bioretention Area: 65,700 sq ft
Subdrain Elevation: inches
Ponding Depth, inches: 12.0 inches: 8.44 acres

Impervious Area Managed by Infiltration BMPs
(see Fact Sheet)
Drawdown Time, hrs: 12 drawdown_hrs_inf
Soil Infiltration Rate, in/hr: 0.50 soil_inf_rate
Sizing Option 1: Capture Volume, acre-ft: capture_vol_inf: 0.00 acres
Sizing Option 2: Infiltration BMP surface area, sq ft: soil_surface_area: 0.00 acres
Basin or trench? Basin; approximate BMP depth: 0.50 ft

Impervious Area Managed by Amended Soil or Mulch Beds
(see Fact Sheet) Mulched Infiltration Area, sq ft: mulch_area: 0.00 acres

Total Effective Area Managed by Capture-and-Use/Bioretention/Infiltration BMPs: 8.44 A_{LIDc}

Runoff Management Credit (Step 3) A_{LIDC}/A_T*200 = 21.3 pts

Total LID Credits (Step 1+2+3) LID compliant, check for treatment sizing in Step 4: 100.5

Does project require hydromodification management? If yes, proceed to using SacHM.

Adjusted Area for Flow-Based, Non-LID Treatment $A_T - A_C - A_{LIDC}$ = 65.22 A_{AT}

Adjusted Impervious Fraction of A for Volume-Based, Non-LID Treatment $(A_T*I-A_C-A_{LIDC}) / A$ = 0.062 I_A

Further treatment is required, see choose flow-based or volume-based sizing in Step 4

Step 4a Treatment - Flow-Based (Rational Method)

Form D-1e

Calculate treatment flow (cfs): Flow = Runoff Coefficient x Rainfall Intensity x Adjusted Treatment Area

Determine C Factor using Table D-1b: 0.00 C

Determine i using Table D-1c (Rainfall Intensity): 0.18 i

A_{AT} from Step 2: 65.22 A_{AT}

Flow = C * i * A_{AT}: 0.00 cfs

TABLE D-1b

Development Type	Runoff Coefficient (Rational), C
Single-family areas	0.50
Multi-units, detached	0.60
Apartment dwelling areas	0.70
Multi-units, attached	0.75
User Specified	0.00

Table D-1c

Rainfall Intensity		
Roseville	i = 0.20	in/hr
Sacramento	i = 0.18	in/hr
Folsom	i = 0.20	in/hr

Step 4b Treatment - Volume-Based (ASCE-WEF)

Calculate water quality volume (Acre-Feet):	WQV = Area x Maximized Detention Volume (P_0)			
Obtain A from Step 1	285.10	A	24 hrs	Specified Draw Down time
Obtain P_0: Maximized Detention Volume from figures E-1 to E-4 in Appendix E of this manual using I_A from Step 2.	0.07	P_0		
Calculate treatment volume (acre-ft): **Treatment volume = A x (P_0 / 12)**	1.73	Acre-Feet		

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Appendix 4 - HEC-HMS Output for 10-year, 24-hour storm; 100-year, 24-hour storm and 100-year, 10-day storm

Project: The Preserve Simulation Run: RES10+OS10 thru Basin

Start of Run: 01Nov2018, 00:00
End of Run: 02Nov2018, 00:00
Compute Time: 11Oct2019, 11:30:37

Basin Model: Developed Site-10
Meteorologic Model: 10-yr, 24-h
Control Specifications: 10yr, 24-hr

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
RES1 hydrograph	0.1314	91.9	01Nov2018, 12:14	1.96
OS1 hydrograph	0.0247	15.3	01Nov2018, 12:16	1.12
DET1	0.1561	65.9	01Nov2018, 12:30	1.42

Project: The Preserve Simulation Run: RES10+OS10 thru Basin
Reservoir: DET1

Start of Run:	01Nov2018, 00:00	Basin Model:	Developed Site-10
End of Run:	02Nov2018, 00:00	Meteorologic Model:	10-yr, 24-h
Compute Time:	11Oct2019, 11:30:37	Control Specifications:	10yr, 24-hr

Volume Units:IN

Computed Results

Peak Inflow:	106.8 (CFS)	Date/Time of Peak Inflow:	01Nov2018, 12:14
Peak Discharge:	65.9 (CFS)	Date/Time of Peak Discharge	01Nov2018, 12:30
Inflow Volume:	1.83 (IN)	Peak Storage:	5.7 (AC-FT)
Discharge Volume	1.42 (IN)	Peak Elevation:	214.3 (FT)

Project: The Preserve Simulation Run: RES100+OS100 thru Basin

Start of Run: 01Nov2018, 00:00
End of Run: 02Nov2018, 00:00
Compute Time: 11Oct2019, 11:30:32

Basin Model: Developed Site-100
Meteorologic Model: 100-yr, 24-h
Control Specifications: 100yr, 24-hr

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
RES1 hydrograph	0.1314	143.5	01Nov2018, 12:16	3.10
OS1 hydrograph	0.0247	28.3	01Nov2018, 12:14	2.23
DET1	0.1561	116.7	01Nov2018, 12:28	2.55

Project: The Preserve Simulation Run: RES100+OS100 thru Basin
Reservoir: DET1

Start of Run:	01Nov2018, 00:00	Basin Model:	Developed Site-100
End of Run:	02Nov2018, 00:00	Meteorologic Model:	100-yr, 24-h
Compute Time:	11Oct2019, 11:30:32	Control Specifications:	100yr, 24-hr

Volume Units:IN

Computed Results

Peak Inflow:	171.2 (CFS)	Date/Time of Peak Inflow:	01Nov2018, 12:16
Peak Discharge:	116.7 (CFS)	Date/Time of Peak Discharge	01Nov2018, 12:28
Inflow Volume:	2.96 (IN)	Peak Storage:	6.9 (AC-FT)
Discharge Volume	2.55 (IN)	Peak Elevation:	215.4 (FT)

Project: The Preserve Simulation Run: (RES100+OS100) 10 day

Start of Run: 01Nov2018, 00:00
End of Run: 11Nov2018, 00:00
Compute Time: 11Oct2019, 11:30:41

Basin Model: Developed Site-100-10day
Meteorologic Model: 100-yr, 10-day
Control Specifications: 100yr, 10-day

Hydrologic Element	Drainage Area (MI2)	Peak Discharge (CFS)	Time of Peak	Volume (IN)
RES1 hydrograph	0.1314	55.1	07Nov2018, 09:00	7.50
OS1 hydrograph	0.0247	9.8	07Nov2018, 08:59	4.64
DET1	0.1561	62.3	07Nov2018, 09:10	6.65

Project: The Preserve Simulation Run: (RES100+OS100) 10 day
Reservoir: DET1

Start of Run:	01Nov2018, 00:00	Basin Model:	Developed Site-100-10day
End of Run:	11Nov2018, 00:00	Meteorologic Model:	100-yr, 10-day
Compute Time:	11Oct2019, 11:30:41	Control Specifications:	100yr, 10-day

Volume Units:IN

Computed Results

Peak Inflow:	64.9 (CFS)	Date/Time of Peak Inflow:	07Nov2018, 09:00
Peak Discharge:	62.3 (CFS)	Date/Time of Peak Discharge	07Nov2018, 09:10
Inflow Volume:	7.05 (IN)	Peak Storage:	5.7 (AC-FT)
Discharge Volume	6.65 (IN)	Peak Elevation:	214.3 (FT)

Appendix 4-Table 1					
Hydromod Basin Stage-Storage-Discharge					
Basin Bottom Elevation (feet) =	207.5	100-year maximum water surface (feet) =	215.4	Top of Bank Elevation (feet) =	216.5
Stage (feet)	Basin Stage-Grading (feet)		Area (acres)	Volume (ac-ft)	Discharge (cfs)
0	207.5		0.569	0	0
0.0889	207.5889		0.575	0.05	0.129
0.1778	207.6778		0.582	0.102	0.183
0.2667	207.7667		0.588	0.154	0.224
0.3556	207.8556		0.595	0.207	0.258
0.4444	207.9444		0.601	0.26	0.289
0.5333	208.0333		0.607	0.313	0.317
0.6222	208.1222		0.614	0.368	0.342
0.7111	208.2111		0.621	0.423	0.366
0.8	208.3		0.627	0.478	0.388
0.8889	208.3889		0.634	0.534	0.409
0.9778	208.4778		0.64	0.591	0.429
1.0667	208.5667		0.647	0.648	0.56
1.1556	208.6556		0.654	0.706	0.638
1.2444	208.7444		0.66	0.764	0.699
1.3333	208.8333		0.667	0.823	0.752
1.4222	208.9222		0.674	0.883	0.799
1.5111	209.0111		0.68	0.943	0.844
1.6	209.1		0.687	1.004	0.885
1.6889	209.1889		0.694	1.066	0.924
1.7778	209.2778		0.701	1.128	0.961
1.8667	209.3667		0.708	1.19	0.997
1.9556	209.4556		0.715	1.254	1.031
2.0444	209.5444		0.721	1.317	1.156
2.1333	209.6333		0.728	1.382	1.254
2.2222	209.7222		0.735	1.447	1.331
2.3111	209.8111		0.742	1.513	1.399
2.4	209.9		0.749	1.579	1.461
2.4889	209.9889		0.756	1.646	1.518
2.5778	210.0778		0.763	1.714	1.572
2.6667	210.1667		0.77	1.782	1.624
2.7556	210.2556		0.777	1.851	1.673
2.8444	210.3444		0.785	1.92	1.72
2.9333	210.4333		0.792	1.99	1.766
3.0222	210.5222		0.799	2.061	1.811
3.1111	210.6111		0.806	2.132	1.854
3.2	210.7		0.813	2.204	1.896
3.2889	210.7889		0.82	2.277	1.937
3.3778	210.8778		0.828	2.35	1.977
3.4667	210.9667		0.835	2.424	2.016
3.5556	211.0556		0.842	2.499	2.054
3.6444	211.1444		0.849	2.574	2.091
3.7333	211.2333		0.857	2.65	2.128
3.8222	211.3222		0.864	2.726	2.164
3.9111	211.4111		0.871	2.803	2.199
4	211.5		0.879	2.881	2.234
4.0889	211.5889		0.886	2.96	2.268
4.1778	211.6778		0.894	3.039	2.302
4.2667	211.7667		0.901	3.119	2.335
4.3556	211.8556		0.909	3.199	2.367

Appendix 4-Table 1					
Hydromod Basin Stage-Storage-Discharge					
Basin Bottom Elevation (feet) =	207.5	100-year maximum water surface (feet) =	215.4	Top of Bank Elevation (feet) =	216.5
Stage (feet)	Basin Stage-Grading (feet)		Area (acres)	Volume (ac-ft)	Discharge (cfs)
4.4444	211.9444		0.916	3.28	2.4
4.5333	212.0333		0.924	3.362	2.522
4.6222	212.1222		0.931	3.445	3.103
4.7111	212.2111		0.939	3.528	3.947
4.8	212.3		0.947	3.612	4.986
4.8889	212.3889		0.954	3.696	6.188
4.9778	212.4778		0.962	3.781	7.532
5.0667	212.5667		0.969	3.867	9.005
5.1556	212.6556		0.977	3.954	10.59
5.2444	212.7444		0.985	4.041	12.29
5.3333	212.8333		0.993	4.129	14.09
5.4222	212.9222		1	4.218	15.99
5.5111	213.0111		1.008	4.307	17.99
5.6	213.1		1.016	4.397	20.07
5.6889	213.1889		1.024	4.488	22.23
5.7778	213.2778		1.032	4.579	24.48
5.8667	213.3667		1.04	4.671	26.8
5.9556	213.4556		1.048	4.764	29.2
6.0444	213.5444		1.055	4.857	30.89
6.1333	213.6333		1.063	4.952	32.79
6.2222	213.7222		1.071	5.047	35.49
6.3111	213.8111		1.079	5.142	38.78
6.4	213.9		1.087	5.239	42.57
6.4889	213.9889		1.096	5.336	46.77
6.5778	214.0778		1.104	5.433	51.31
6.6667	214.1667		1.112	5.532	56.13
6.7556	214.2556		1.12	5.631	61.18
6.8444	214.3444		1.128	5.731	66.37
6.9333	214.4333		1.136	5.832	71.66
7.0222	214.5222		1.144	5.933	76.97
7.1111	214.6111		1.153	6.035	82.23
7.2	214.7		1.161	6.138	87.38
7.2889	214.7889		1.169	6.242	92.36
7.3778	214.8778		1.177	6.346	97.11
7.4667	214.9667		1.186	6.451	101.5
7.5556	215.0556		1.194	6.557	105.7
7.6444	215.1444		1.202	6.663	109.4
7.7333	215.2333		1.211	6.771	112.8
7.8222	215.3222		1.219	6.879	115.8
7.9111	215.4111		1.227	6.987	118.4
8	215.5		1.236	7.097	120.6
8.0889	215.5889		1.244	7.207	122.6

Appendix 5 - Design Data Summary Sheet for Bioretention Basin

Table BP-3. Design Data Summary Sheet for Bioretention Planter

Designer: Sean Davis **Date:** 6/14/19

Company: RJA

Project: The Preserve

Location: Rancho Cordova, Morrison Creek

1a. Determine Design Water Quality Volume

a. Contributing drainage area	Area =	100 ac	~~ft²~~
b. Water Quality Volume	WQV =	75,360	ft³

1b. Adjust Volume Up for Hydromodification Management
(If Applicable) Based upon SAHM Modeling

a. Water Quality Volume based on SAHM modeling	V =		ft³
b. SAHM Model Demonstrates Compliance with Flow Duration Standards	(Yes or No)		

2. Design average surcharge depth (d_s)
d_s = 6-12 inches (0.5-1 foot) d_s = ft

3. Design Planter Surface Area (A_s)
$A_s = WQV/d_s$ A_s = ft²

4. Base Course Layers

a. Top Layer (6 in. minimum)	6	in
b. Bioretention Soil Media (18 in. minimum, See App I)	18	in
c. Gravel Layer (9 in. minimum)	9	in

5. Planter Type (check type used)

- ☐ Infiltration without underdrain
- ☑ Infiltration with underdrain
- ☐ Flow-through with impermeable liner

6. Vegetation (describe)

7. Overflow Device (check type used or describe "Other")

- ☐ Drop inlet
- ☑ Standpipe
- ☐ Other

Notes:

Appendix 6 - Design Data Summary Sheet for Water Quality Detention Basin

Table DB-6. Design Data Summary Sheet for Water Quality Detention Basin

Designer:	Sean Davis	**Date:**	10/30/18	
Company:	RSA			
Project:	The Preserve - Dry Basin			
Location:	Rancho Cordova, Morrison Creek			
1a. Design Water Quality Volume				
a. Tributary drainage area		Area =	100 ac.	~~ft²~~
b. Water Quality Volume		WQV =	75,360	ft³
1b. Adjust Volume Up for Hydromodification Management (If Applicable) Based upon SAHM Modeling				
a. Water Quality Volume based on SAHM modeling		V =	75,360	ft³
b. SAHM Model Demonstrates Compliance with Flow Duration Standards		(Yes or No)	Yes	
2. Basin Depths and Water Surface Areas		**ACTUAL DESIGN**		
a. For Wet and Combination Basins				
Permanent pool volume (Vol_{pp})		Vol_{pp} =		acre-ft
Average depth of permanent pool (D_{avg}) (4-8 ft)		D_{avg} =		ft
Water surface area of permanent pool (A_{pp})		A_{pp} =		ft²
Water surface elevation of permanent pool ($WS\ Elev_{pp}$)		$WS\ Elev_{pp}$ =		ft
b. Forebay				
Depth range = 2-4 ft		Depth =		ft
Volume range = 5-10% of WQV		Volume =		acre-ft
Water surface area range		WS Area =		ft²
3. Depth of WQV and Max WS Elevation				
a. Maximum water surface area with WQV (A_{WQV})		A_{WQV} =	32,670	ft²
b. Maximum water surface elevation with WQV ($WS\ Elev_{WQV}$)		$WS\ Elev_{WQV}$ =	2.7	ft
4. For Wet and Combo Basins: Determine maximum dry season inflow to maintain permanent pond in the dry season. Use Table DB-2 and an evaporation rate of 0.45 in/day for the Sacramento area. $Q_{inflow} = -Q_{E-P} + Q_{seepage}$		Q_{E-P} =		acre-ft/mo
		$Q_{seepage}$ =		acre-ft/mo
		Q_{Inflow} =		acre-ft/mo
5. Outlet				
a. Outlet Type:	orifice / Notch / Riser			
b. Drawdown Time		Time =	50	Hours

See SAHM Drawdown Time Results

Design Data Summary Sheet for Water Quality Detention Basin (Page 2 of 2)

Project: The Preserve - Dry Basin

6. Basin Shape

Length-Width Ratio (2:1 minimum)	Ratio =	4:1	L:W

7. Embankment Side Slope

a. Interior Side Slope (4:1 or flatter)	Slope =	4:1	H:V
b. Exterior Side Slope (3:1 or flatter)	Slope =		H:V

8. Maintenance Access Ramp

a. Slope (10% maximum)	Slope =		%
b. Width (15 to 20 feet)	Width =		ft

9. Vegetation (describe)

Native Grasses: This vegetation is most appropriate for dry basin and no irrigation

Irrigated Turf:

Trees:

Emergent Aquatic Plants (specify type/density):

Other:

Notes: Access provided to Basin and outlet structure, but no ramp into basin provided at this time.

Appendix 7 - HEC-RAS Output for Existing Condition 10-year storm and 100-year storm

Sacramento Hydrologic C lator Report

August 2, 2005 1 .20

Project Title: EXISTING
Comments: Onsite existing conditions and offsite existing conditions. Mining tailings have soil type A and very long flow paths.
Prepared by: SGL
Method: Sacramento County HEC-1 method
Date: 6/20/2005

Watershed Hydrologic Summary Data

Watershed	Area (acres)	Mean Elevation (ft)	Lag Times		Basin "n"		Loss Rates		Percent Impervious	
			Method	Lag Time (min)	Method	Basin "n"	Method	Loss Rate (in/hr)	Method	Impervious Area (%)
ZDS	685.87	125	Basin "n"	-	Computed	-	Computed	-	Computed	-
DS1	111.82	140	Basin "n"	-	Computed	-	Computed	-	Computed	-
DS2	180.89	150	Basin "n"	-	Computed	-	Computed	-	Computed	-
ZUS	325.04	188	Specified	114	-	-	Specified	.28	Specified	2
US1	1522.62	249	Specified	214	-	-	Specified	.29	Specified	2
US2	1192.06	263	Specified	182	-	-	Specified	.21	Specified	2
US3	1002.77	265	Specified	181	-	-	Specified	.13	Specified	2
EZ1A	414.92	160	Specified	119	-	-	Specified	0.19	Specified	2
EZ1B	693.98	160	Specified	209	-	-	Specified	0.26	Specified	2
EM3	2235.4	280	Specified	253	-	-	Specified	.22	Specified	2
EM2	132.17	150	Specified	70	-	-	Specified	.19	Specified	2
DUMMY1	1	249	Specified	2	-	-	Specified	.29	Specified	2
DUMMY2	1	165	Specified	2	-	-	Specified	.22	Specified	2
ND1N2	216.9	225	Basin "n"	-	Computed	-	Computed	-	Computed	-

Basin "n" Met ata for Lag Time Computation

Watershed	Channel Length (ft)	Centroid Length (ft)	Slope (ft/ft)	Channelization	Land Use Impervious Area Percent (% or acres)																
					95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
ZDS	10176	3526	.003	Undeveloped			0													0		
				Developed			551.24													134.63		
DS1	3850	1966	.0045	Undeveloped			0													0		
				Developed			63.31													48.51		
DS2	2680	1245	.007	Undeveloped	0															0		
				Developed	14.97															165.92		
ND1N2	5810	3667	.008	Undeveloped																216.9		
				Developed																0		

Refer to the Drainage manual for Land Use Impervious Area Percent

*Dense Oaks, Shrubs, Vines

Infiltration Loss Rate Data

Watershed	Soil Cover Group	Land Use Impervious Area Percent (% or acres)																	
		95	90	85	80	75	70	60	50	40	30	25	20	15	10	5	2	1	1*
ZDS	B			33.69													2.5		
	C			139.89													42		
	D			377.66													90.13		
DS1	B																		
	C			63.31													27.6		
	D																20.91		
DS2	B	4.99															19.11		
	C	4.99															98.3		
	D	4.99															48.51		
ND1N2	B																		
	C																203.9		
	D																13		

Refer to the help file for Land Use Impervious Area Percent

*Dense Oaks, Shrubs, Vines

Hydrograph Rc . – Muskingum–Cunge (Standard)

Routing ID	Route From	Route To	Channel Type	Length (ft)	Slope (ft/ft)	Width or Diameter (ft)	Side Slope (H:V)	Mannings "n"
R40	ZUS	J30	Trapezoidal	5665	0.01	10	10:1	0.06
R10	US1	J10	Trapezoidal	9210	0.002	24	10:1	0.06
R50	J50	J60	Trapezoidal	8629	0.004	24	10:1	0.06
R30	J20		Pipe	4150	.0082	4		.015
R20	J10	J20	Trapezoidal	9210	0.002	24	10:1	0.06
R60	J60	J70	Trapezoidal	8629	0.004	24	10:1	0.06

View HEC-1 output

Sacramento method results
(Project: EXISTING)
(100-year, 1-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
ZDS	698.	12:40	1.07			
DS1	147.	12:25	.17			
DS2	247.	12:22	.28			
ZUS	127.	13:31	.51			
R40	127.	13:58	.51			
EZ1A	184.	13:36	.65			
J30	299.	13:47	1.16			
EZ1B	163.	14:46	1.08			
US1	329.	14:50	2.38			
R10	318.	15:55	2.38			
DUMMY1	3.1	12:02	.00			
J10	318.	15:55	2.38			
R20	307.	17:03	2.38			
J20	376.	16:56	3.47			
R30	376.	17:00	3.47			
EM3	483.	15:22	3.49			
US2	355.	14:25	1.86			
US3	361.	14:26	1.57			
ND1N2	140.	13:11	.34			
J50	787.	14:22	3.77			
R50	782.	14:59	3.77			
DUMMY2	3 2	12:02	.00			
J60	782.	14:59	3.77			
R60	777.	15:35	3.77			
J70	1256.	15:32	7.26			
EM2	89.	12:56	.21			

(10-year, 1-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
ZDS	429.	12:33	1.07			
DS1	83.	12:22	.17			
DS2	128.	12:21	.28			
ZUS	56.	13:31	.51			
R40	56.	14:05	.51			
EZ1A	91.	13:36	.65			
J30	139.	13:51	1.16			
EZ1B	76.	14:47	1.08			
US1	145.	14:50	2.38			
R10	139.	16:13	2.38			
DUMMY1	1.4	12:02	.00			
J10	139.	16:13	2.38			
R20	134.	17:39	2.38			
J20	160.	17:34	3.47			
R30	160.	17:39	3.47			
EM3	237.	15:22	3.49			
US2	174.	14:26	1.86			
US3	194.	14:28	1.57			

ND1N2	76.	13:12	.34
J50	411.	14:21	3.77
R50	408.	15:04	3.77
DUMMY2	1.5	12:02	.00
J60	408.	15:04	3.77
R60	405.	15:48	3.77
J70	636.	15:42	7.26
EM2	43.	12:56	.21

(100-year, 10-day rainfall)

ID	Peak flow (cfs)	Time of peak (hours)	Basin area (sq. mi)	Peak stage (feet)	Peak storage (ac-ft)	Diversion volume (ac-ft)
ZDS	401.	153:17	1.07			
DS1	70.	153:06	.17			
DS2	107.	153:04	.28			
ZUS	74.	154:03	.51			
R40	74.	154:34	.51			
EZ1A	122.	154:08	.65			
J30	191.	154:19	1.16			
EZ1B	114.	155:15	1.08			
US1	217.	155:19	2.38			
R10	211.	156:30	2.38			
DUMMY1	.4	152:34	.00			
J10	211.	156:30	2.38			
R20	206.	157:44	2.38			
J20	256.	157:32	3.47			
R30	256.	157:37	3.47			
EM3	370.	155:48	3.49			
US2	257.	154:54	1.86			
US3	280.	154:53	1.57			
ND1N2	92.	153:45	.34			
J50	599.	154:47	3.77			
R50	596.	155:25	3.77			
DUMMY2	.5	152:34	.00			
J60	596.	155:25	3.77			
R60	593.	156:04	3.77			
J70	959.	155:58	7.26			
EM2	49.	153:30	.21			

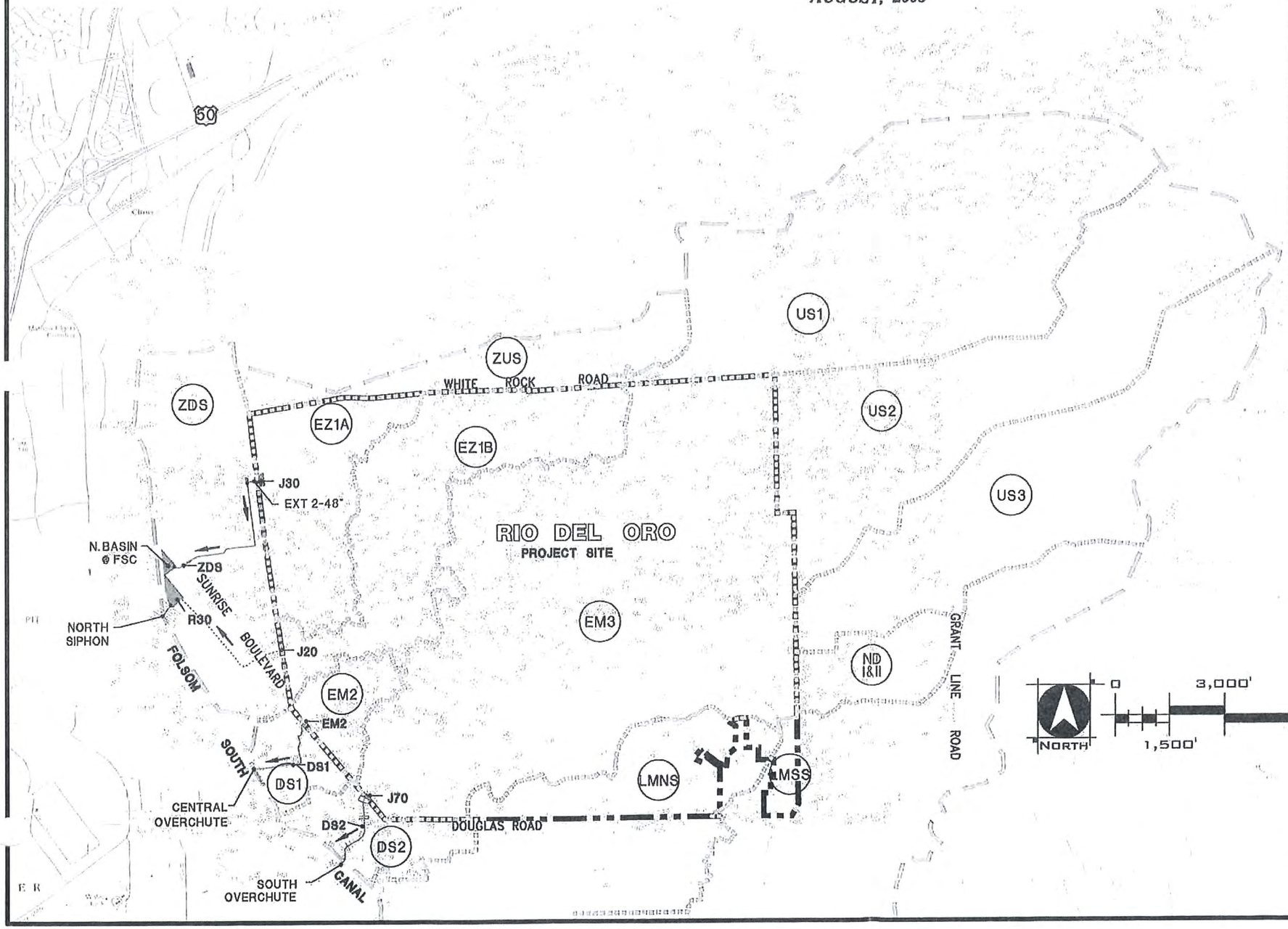
FIGURE G

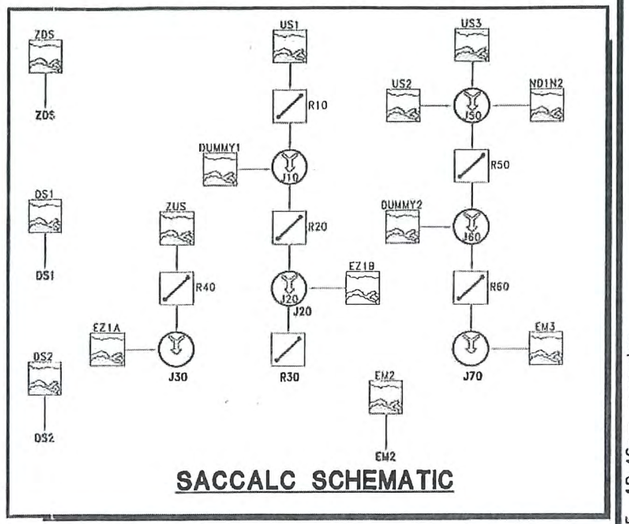
EXISTING-CONDITIONS HYDROLOGIC (SACCALC) AND HYDRAULIC (HEC-RAS) NETWORK

RIO DEL ORO

CITY OF RANCHO CORDOVA, CALIFORNIA

AUGUST, 2005





SACCALC SCHEMATIC

NOTE: JUNCTION J30 FLOWS INTO US BASIN NORTH ROUTED R30 FLOWS INTO N BASIN @ FSC SHED EM2 FLOWS INTO CHANNEL IN SHED DS1 JUNCTION J70 FLOWS INTO CHANNEL IN SHED DS2 SHEDS ZDS, DS1, DS2 FLOW INTO DOWNSTREAM CHANNELS

LEGEND

- PROPERTY BOUNDARY
- EXISTING WATERSHED BOUNDARY
- EXISTING SUB-SHED BOUNDARY
- 170 EXISTING GROUND CONTOUR
- EXISTING CONDITIONS HEC-RAS MODEL
- FLOW DIRECTION
- US3 WATERSHED I.D.
- SACCALC WATERSHED HYDROGRAPH
- SACCALC JUNCTION
- SACCALC ROUTING
- J30 LOCATION OF HYDROGRAPH INPUT

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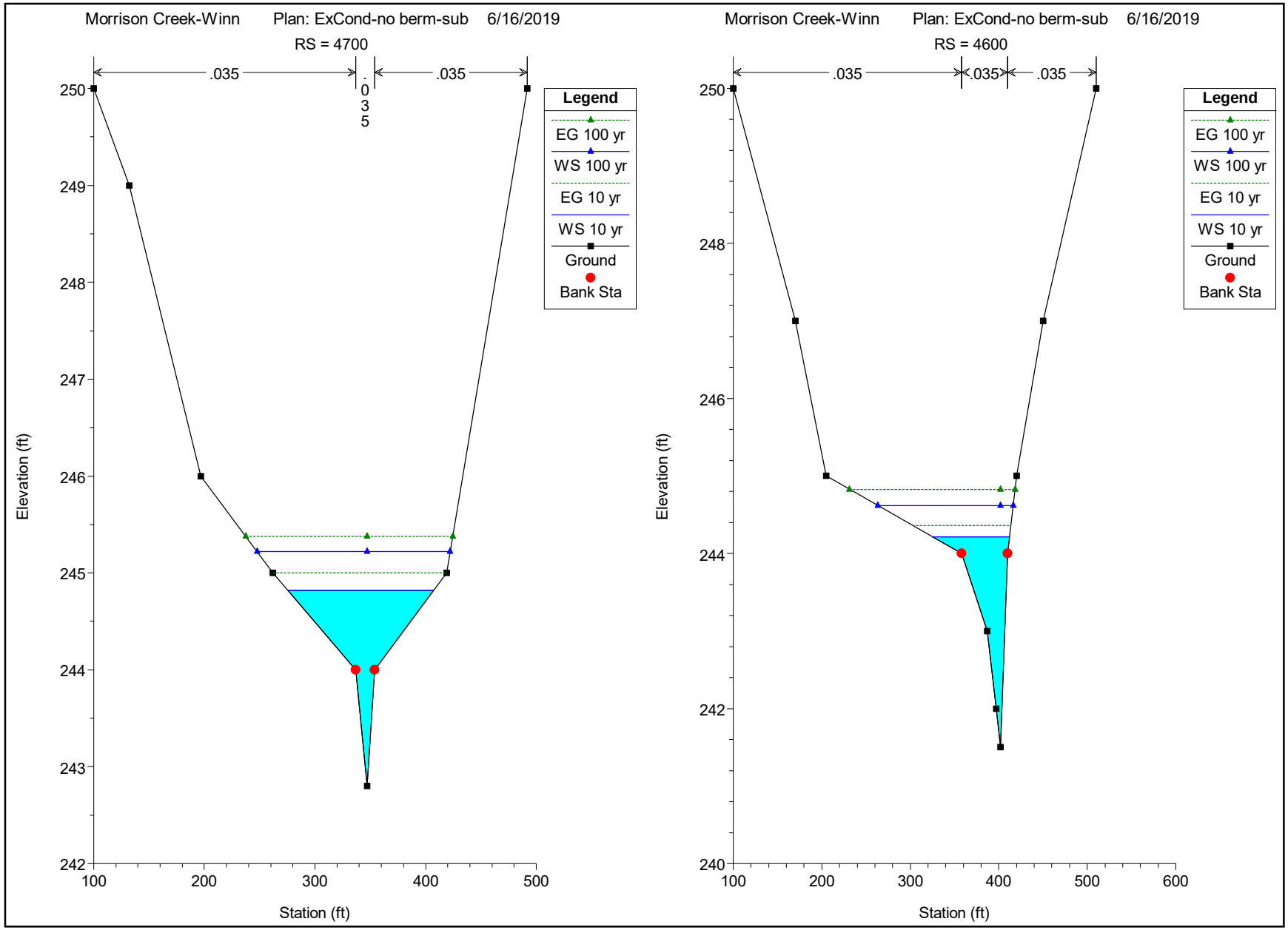
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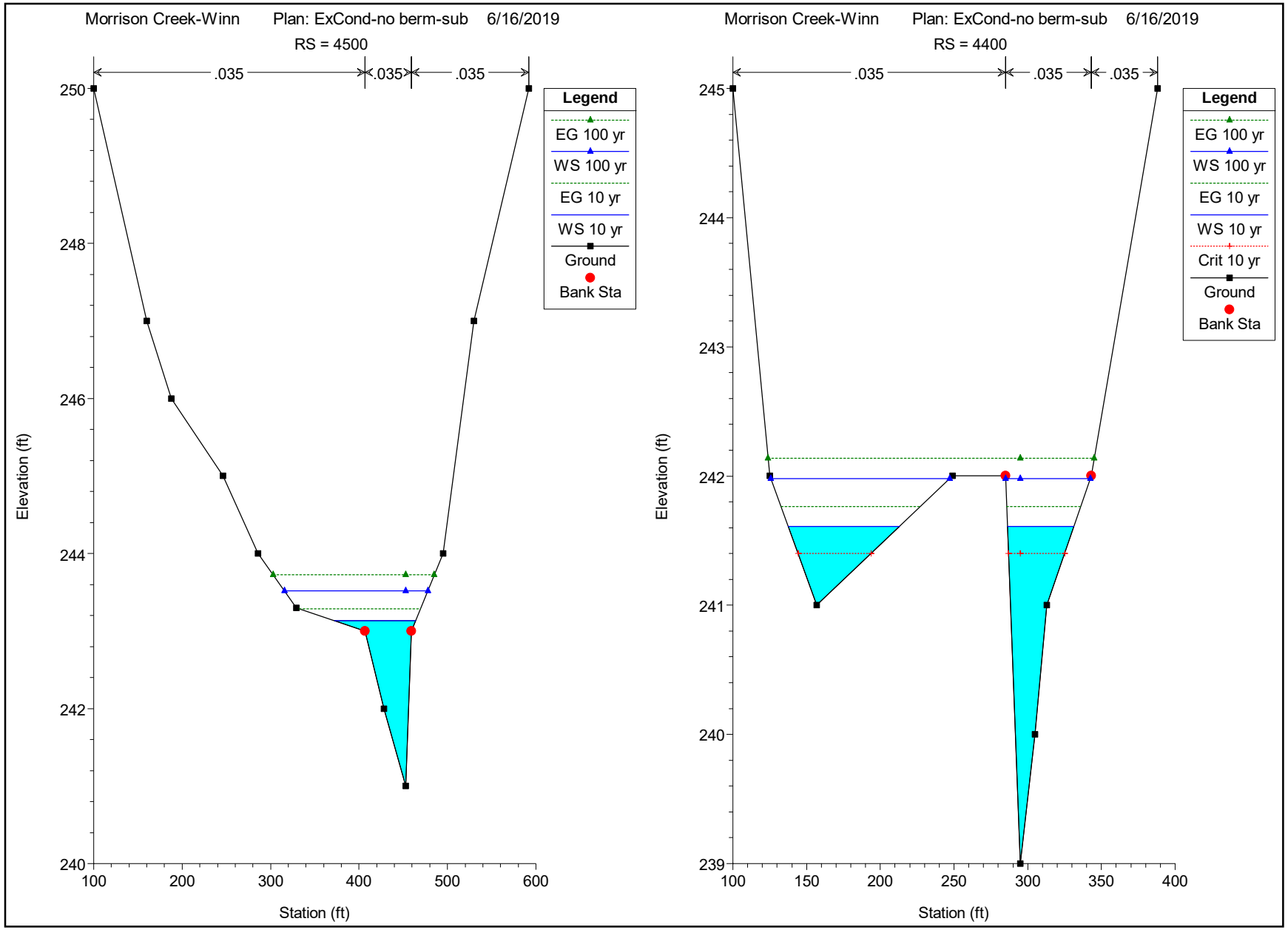
HEC-RAS Plan: no berm-sub River: Morrison Creek Reach: Winn

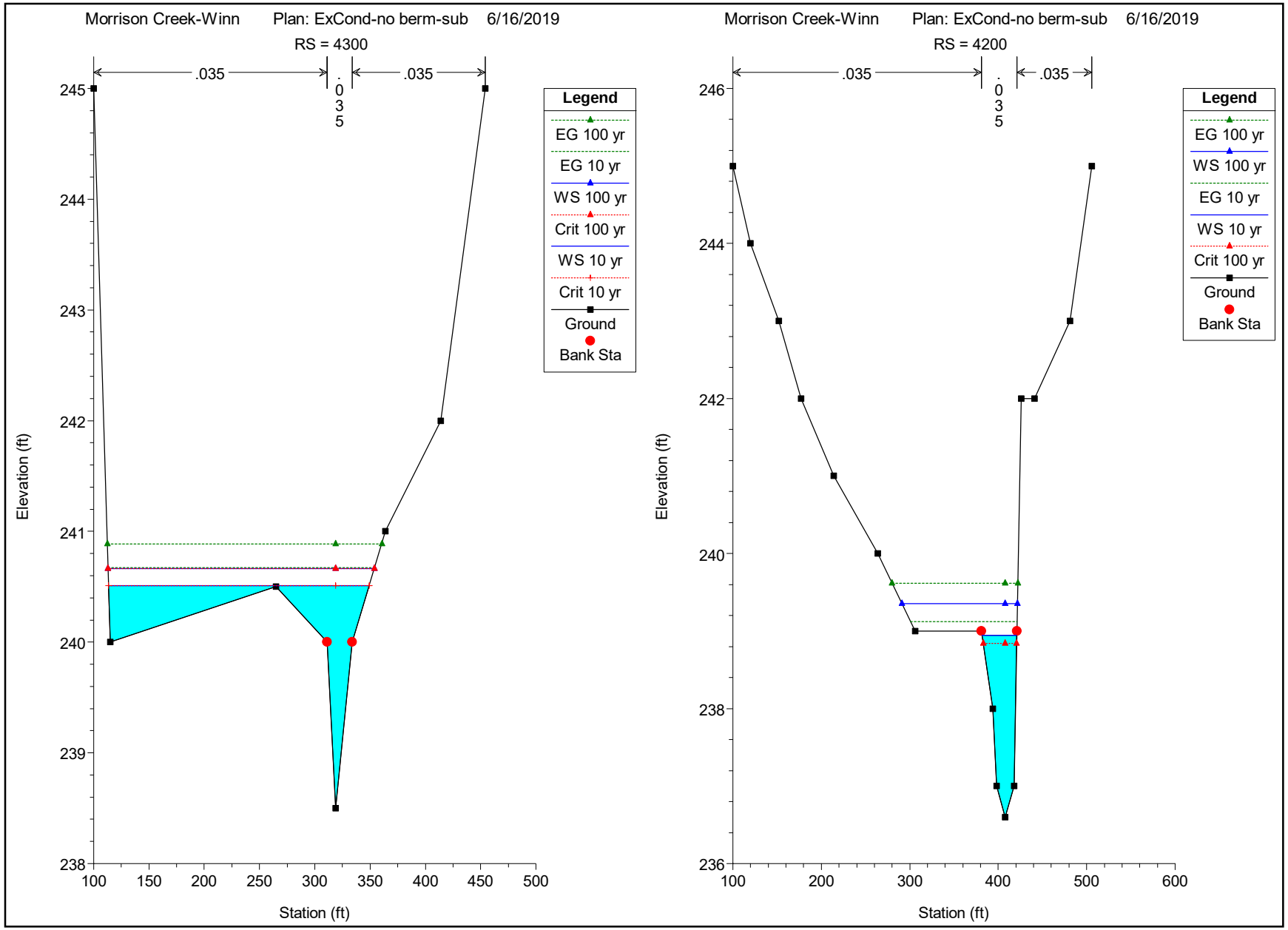
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Winn	4700	10 yr	194.00	242.80	244.82		245.00	0.006635	4.34	71.02	131.60	0.64
Winn	4700	100 yr	361.00	242.80	245.22		245.38	0.004758	4.34	133.74	174.55	0.57
Winn	4600	10 yr	194.00	241.50	244.22		244.36	0.004251	3.09	65.75	87.15	0.50
Winn	4600	100 yr	361.00	241.50	244.62		244.83	0.004475	3.86	114.41	153.16	0.54
Winn	4500	10 yr	194.00	241.00	243.13		243.29	0.004545	3.17	63.51	91.30	0.52
Winn	4500	100 yr	361.00	241.00	243.52		243.73	0.004636	3.87	116.20	162.20	0.55
Winn	4400	10 yr	194.00	239.00	241.61	241.40	241.76	0.006179	3.40	69.74	120.32	0.59
Winn	4400	100 yr	361.00	239.00	241.98		242.14	0.006118	3.62	125.36	178.82	0.60
Winn	4300	10 yr	194.00	238.50	240.51	240.51	240.67	0.006657	4.02	84.14	235.82	0.63
Winn	4300	100 yr	361.00	238.50	240.66	240.66	240.89	0.009180	5.09	120.44	240.84	0.75
Winn	4200	10 yr	194.00	236.60	238.95		239.12	0.003923	3.38	57.36	39.22	0.49
Winn	4200	100 yr	361.00	236.60	239.35	238.84	239.62	0.004816	4.36	102.53	130.32	0.57
Winn	4100	10 yr	194.00	236.20	237.81		237.93	0.006772	3.95	82.96	170.42	0.63
Winn	4100	100 yr	361.00	236.20	238.06	237.92	238.22	0.008258	4.93	132.32	246.87	0.72
Winn	4000	10 yr	194.00	235.00	236.42	236.42	236.58	0.009233	4.34	79.10	235.56	0.72
Winn	4000	100 yr	361.00	235.00	236.60	236.60	236.78	0.009896	4.92	127.05	268.66	0.76
Winn	3900	10 yr	194.00	233.80	235.48		235.53	0.003623	2.65	116.23	231.03	0.45
Winn	3900	100 yr	361.00	233.80	235.75		235.82	0.003082	2.85	180.26	234.49	0.43
Winn	3800	10 yr	194.00	232.90	234.57		234.72	0.006032	3.55	79.27	178.11	0.59
Winn	3800	100 yr	361.00	232.90	234.76	234.72	234.99	0.008654	4.71	117.46	225.83	0.73
Winn	3700	10 yr	194.00	232.70	234.15	234.08	234.22	0.006455	2.74	102.33	296.72	0.57
Winn	3700	100 yr	361.00	232.70	234.30	234.19	234.41	0.007356	3.33	149.79	307.25	0.63
Winn	3600	10 yr	194.00	230.50	232.74	232.69	232.95	0.006869	4.48	66.39	124.16	0.65
Winn	3600	100 yr	361.00	230.50	233.10		233.31	0.006080	4.88	120.11	171.83	0.64
Winn	3500	10 yr	194.00	230.10	231.84		231.95	0.006311	2.79	72.61	103.09	0.57
Winn	3500	100 yr	361.00	230.10	232.21		232.35	0.006507	3.50	128.36	189.72	0.61
Winn	3400	10 yr	194.00	226.50	228.53	228.53	228.80	0.007440	4.67	61.45	133.28	0.68
Winn	3400	100 yr	361.00	226.50	228.84	228.84	229.12	0.007508	5.33	113.26	199.07	0.71
Winn	3300	10 yr	194.00	223.00	225.11	224.70	225.17	0.003367	2.06	109.09	304.11	0.42
Winn	3300	100 yr	361.00	223.00	225.35	225.11	225.43	0.003248	2.43	182.95	312.97	0.43
Winn	3200	10 yr	194.00	222.00	223.38	223.38	223.58	0.017714	4.04	57.84	134.43	0.91
Winn	3200	100 yr	361.00	222.00	223.60	223.60	223.86	0.019004	4.47	89.09	156.25	0.96
Winn	3100	10 yr	194.00	220.40	222.47		222.53	0.002518	2.20	108.68	187.49	0.38
Winn	3100	100 yr	361.00	220.40	222.88		222.95	0.001901	2.38	200.52	257.64	0.35
Winn	3000	10 yr	194.00	219.70	221.60		221.79	0.006384	3.42	57.02	63.89	0.60
Winn	3000	100 yr	361.00	219.70	221.90	221.72	222.24	0.009807	4.75	80.44	93.45	0.76
Winn	2900	10 yr	194.00	219.00	221.26	220.91	221.34	0.002667	3.17	119.31	256.81	0.42
Winn	2900	100 yr	361.00	219.00	221.45	220.97	221.56	0.003748	4.03	170.78	283.01	0.51
Winn	2800	10 yr	194.00	217.70	219.77	219.77	220.21	0.019561	5.37	36.15	41.54	1.01
Winn	2800	100 yr	361.00	217.70	220.29	220.29	220.54	0.008714	4.46	114.79	253.35	0.71
Winn	2700	10 yr	194.00	216.60	219.04	218.51	219.08	0.001819	2.39	143.94	255.88	0.34
Winn	2700	100 yr	361.00	216.60	219.32		219.37	0.001860	2.63	217.45	267.17	0.35
Winn	2600	10 yr	194.00	216.00	217.79	217.79	218.22	0.019531	5.30	36.63	43.22	1.01
Winn	2600	100 yr	361.00	216.00	218.37	218.37	218.70	0.009397	4.93	91.68	166.93	0.76
Winn	2500	10 yr	194.00	214.60	217.94		217.95	0.000108	0.74	345.48	317.88	0.09
Winn	2500	100 yr	361.00	214.60	218.20		218.22	0.000209	1.11	430.33	331.92	0.13
Winn	2400	10 yr	194.00	215.00	217.94		217.94	0.000081	0.62	382.71	296.35	0.08
Winn	2400	100 yr	361.00	215.00	218.19		218.20	0.000167	0.97	458.71	306.56	0.11
Winn	2300	10 yr	194.00	217.20	217.76	217.76	217.92	0.026288	3.23	59.98	186.18	1.00
Winn	2300	100 yr	361.00	217.20	218.02		218.17	0.016717	3.19	113.32	256.32	0.84
Winn	2200	10 yr	194.00	215.20	217.27		217.37	0.001930	2.57	80.25	89.80	0.35

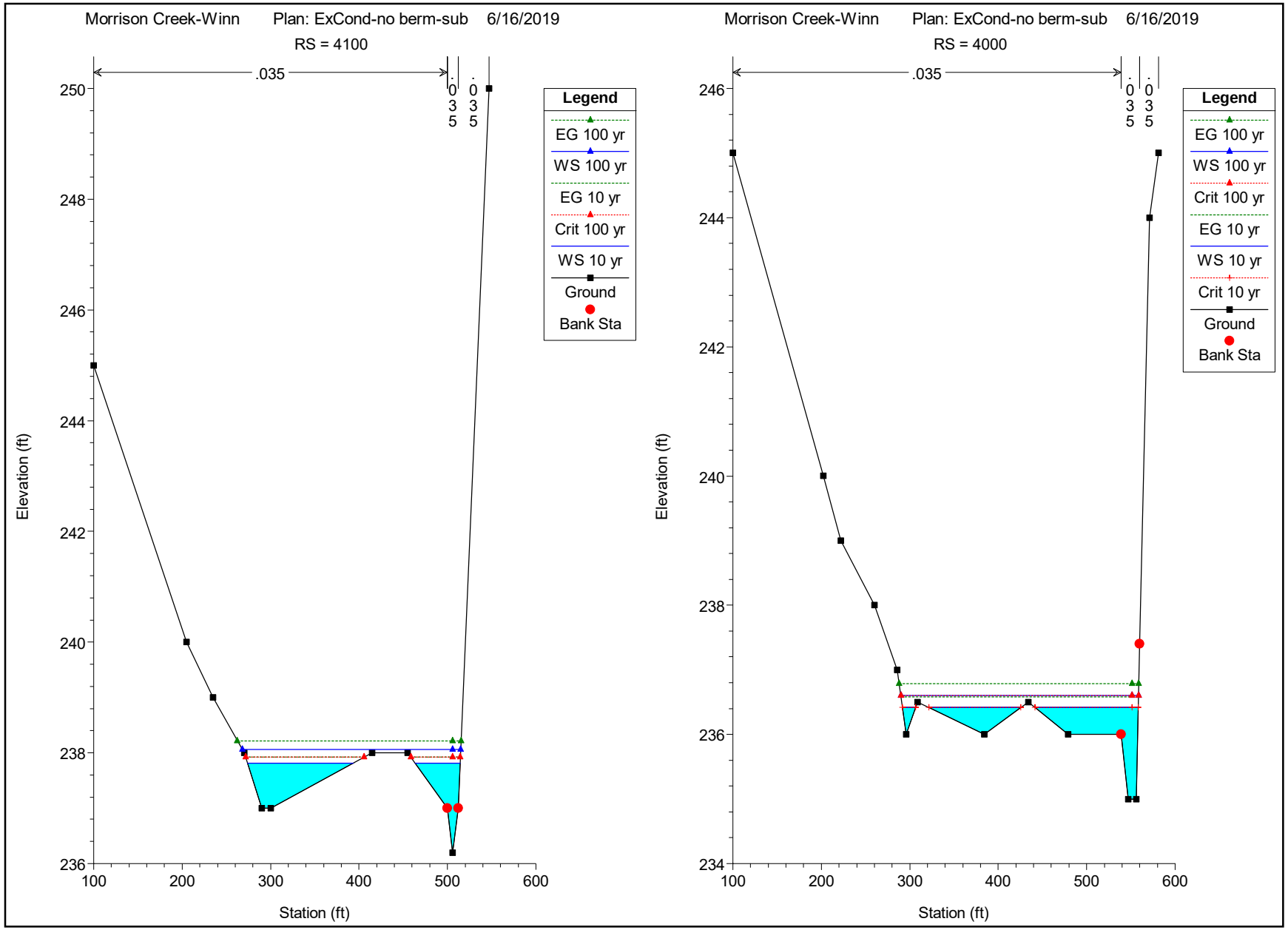
HEC-RAS Plan: no berm-sub River: Morrison Creek Reach: Winn (Continued)

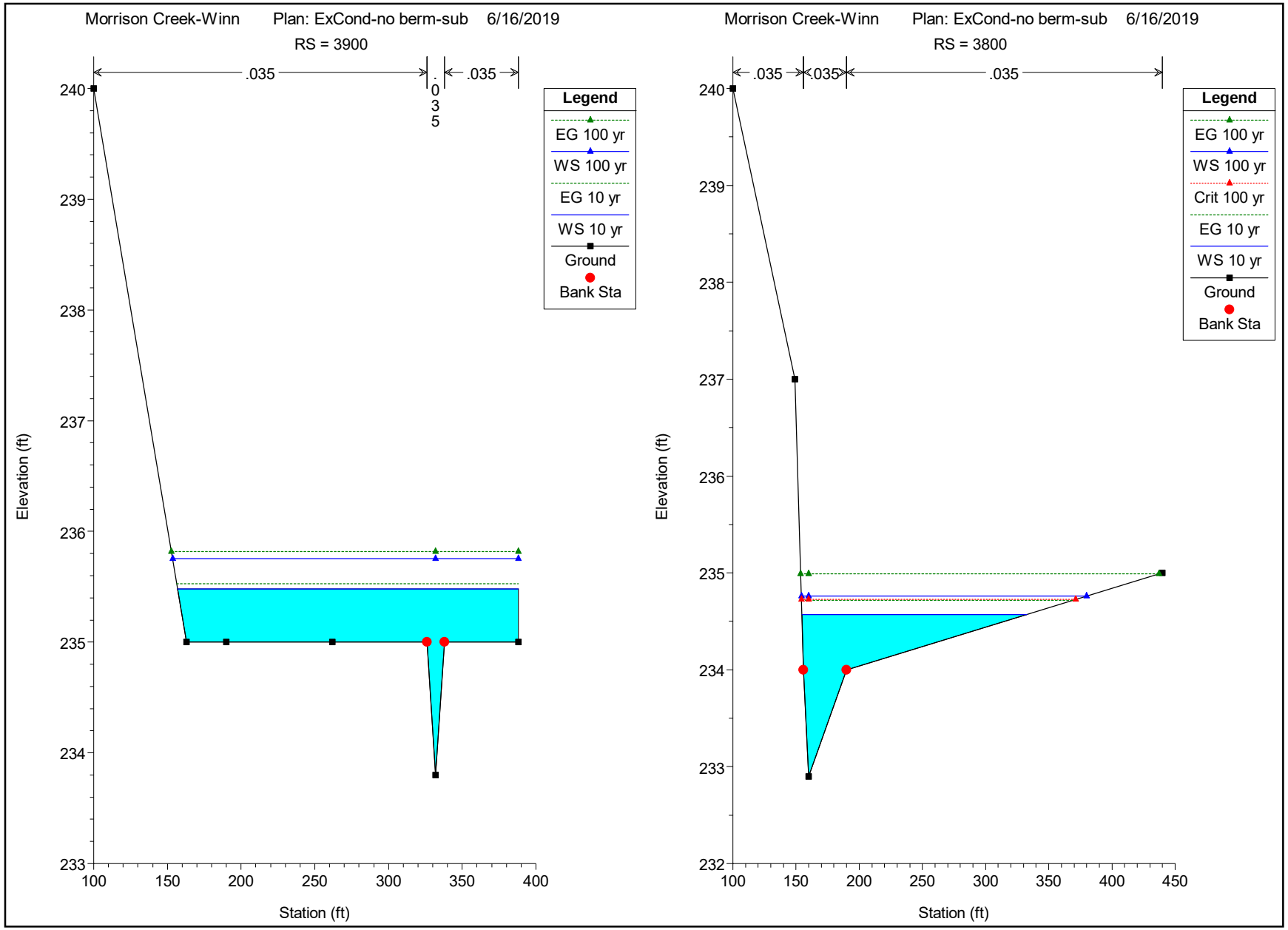
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Winn	2200	100 yr	361.00	215.20	217.71		217.86	0.002662	3.29	136.48	159.71	0.42
Winn	2100	10 yr	194.00	215.20	217.31		217.32	0.000085	0.62	325.15	243.36	0.08
Winn	2100	100 yr	361.00	215.20	217.77		217.78	0.000133	0.87	467.29	332.38	0.10
Winn	2050	10 yr	194.00	215.20	217.31		217.31	0.000054	0.48	436.49	261.28	0.06
Winn	2050	100 yr	361.00	215.20	217.77		217.78	0.000089	0.70	560.59	277.50	0.08
Winn	2025	10 yr	194.00	215.20	217.30		217.31	0.000114	0.68	287.02	157.78	0.09
Winn	2025	100 yr	361.00	215.20	217.75		217.76	0.000202	1.00	360.17	167.67	0.12
Winn	2000	10 yr	194.00	216.00	216.95	216.95	217.27	0.027881	4.54	42.76	68.10	1.01
Winn	2000	100 yr	361.00	216.00	217.30	217.30	217.71	0.025756	5.15	70.09	86.92	1.01
Winn	1950	10 yr	194.00	213.60	214.78		214.86	0.005460	2.83	91.32	172.62	0.54
Winn	1950	100 yr	361.00	213.60	215.26		215.32	0.002358	2.49	202.98	271.48	0.38
Winn	1900	10 yr	194.00	213.20	214.54	214.54	214.72	0.011302	4.23	68.31	170.21	0.78
Winn	1900	100 yr	361.00	213.20	215.24		215.28	0.001554	2.29	239.17	301.37	0.32
Winn	1800	10 yr	194.00	210.50	213.77		213.83	0.001521	1.88	103.15	84.51	0.30
Winn	1800	100 yr	361.00	210.50	215.09		215.11	0.000477	1.28	314.57	398.02	0.18
Winn	1700	10 yr	194.00	210.50	213.80		213.80	0.000058	0.63	341.65	281.15	0.07
Winn	1700	100 yr	361.00	210.50	215.10		215.10	0.000029	0.57	868.23	473.81	0.05
Winn	1600	10 yr	194.00	210.50	213.79		213.80	0.000023	0.40	489.05	179.95	0.04
Winn	1600	100 yr	361.00	210.50	215.09		215.10	0.000024	0.49	740.36	215.23	0.05
Winn	1500	10 yr	194.00	210.50	213.79		213.79	0.000016	0.34	577.59	202.82	0.04
Winn	1500	100 yr	361.00	210.50	215.09		215.09	0.000016	0.42	861.36	224.44	0.04
Winn	1400	10 yr	194.00	210.50	213.79		213.79	0.000024	0.41	477.99	174.68	0.04
Winn	1400	100 yr	361.00	210.50	215.09		215.09	0.000024	0.48	754.39	221.52	0.05
Winn	1300	10 yr	194.00	210.50	213.79		213.79	0.000024	0.40	483.62	178.20	0.04
Winn	1300	100 yr	361.00	210.50	215.09		215.09	0.000028	0.49	736.46	231.46	0.05
Winn	1200	10 yr	194.00	210.50	213.79		213.79	0.000012	0.31	622.14	204.48	0.03
Winn	1200	100 yr	361.00	210.50	215.09		215.09	0.000014	0.40	895.99	216.48	0.03
Winn	1100	10 yr	194.00	210.50	213.79		213.79	0.000020	0.38	512.91	179.15	0.04
Winn	1100	100 yr	361.00	210.50	215.09		215.09	0.000021	0.48	758.45	198.21	0.04
Winn	1000	10 yr	194.00	209.90	213.33		213.74	0.010026	5.15	37.64	17.38	0.62
Winn	1000	100 yr	361.00	209.90	214.52		215.03	0.010165	5.75	62.73	25.05	0.64
Winn	900	10 yr	194.00	209.20	212.39	212.39	213.37	0.028195	7.93	24.47	12.54	1.00
Winn	900	100 yr	361.00	209.20	213.58	213.58	214.66	0.026576	8.35	43.24	19.95	1.00
Winn	800	10 yr	194.00	205.80	209.47	208.82	209.80	0.009092	4.62	42.03	21.79	0.59
Winn	800	100 yr	361.00	205.80	210.11	209.59	210.74	0.013056	6.36	56.79	23.69	0.72
Winn	700	10 yr	194.00	206.00	207.31	207.31	207.50	0.016310	3.89	58.67	136.30	0.88
Winn	700	100 yr	361.00	206.00	207.52	207.52	207.78	0.018395	4.56	91.70	171.47	0.96
Winn	600	10 yr	194.00	204.10	206.28		206.35	0.002505	2.08	93.15	95.64	0.37
Winn	600	100 yr	361.00	204.10	206.70		206.80	0.003055	2.64	136.58	113.84	0.43
Winn	500	10 yr	194.00	203.70	205.89		205.97	0.004180	2.27	85.63	113.58	0.46
Winn	500	100 yr	361.00	203.70	206.22		206.34	0.005095	2.76	130.62	149.32	0.52
Winn	400	10 yr	194.00	203.40	205.33	205.05	205.42	0.006844	2.33	83.27	153.69	0.56
Winn	400	100 yr	361.00	203.40	205.61		205.72	0.006836	2.77	130.39	185.62	0.58
Winn	300	10 yr	194.00	203.00	204.62	204.22	204.70	0.004005	2.27	93.10	178.15	0.45
Winn	300	100 yr	361.00	203.00	204.91	204.59	205.01	0.004001	2.75	151.20	220.08	0.48

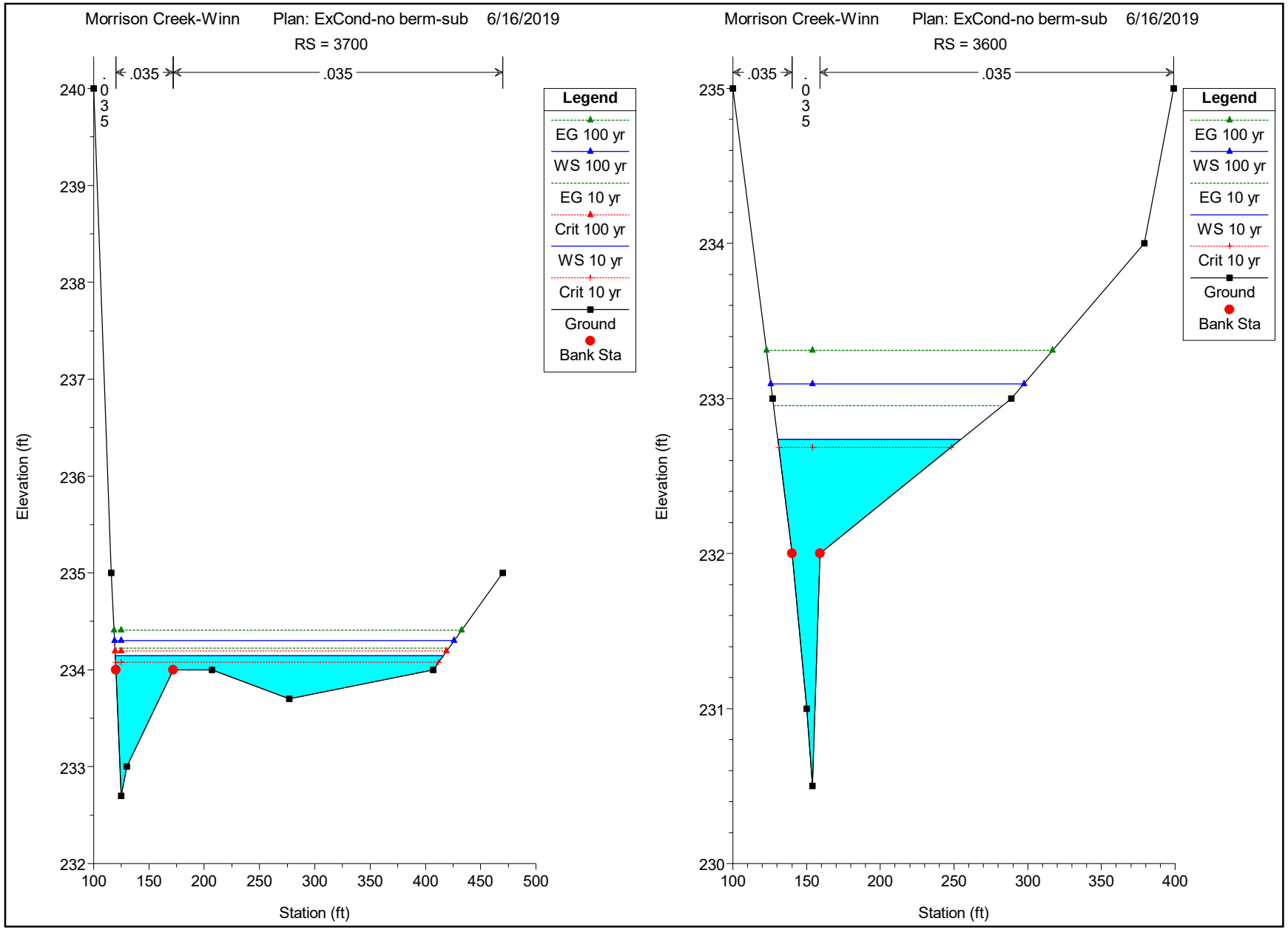

Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 4700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 4600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

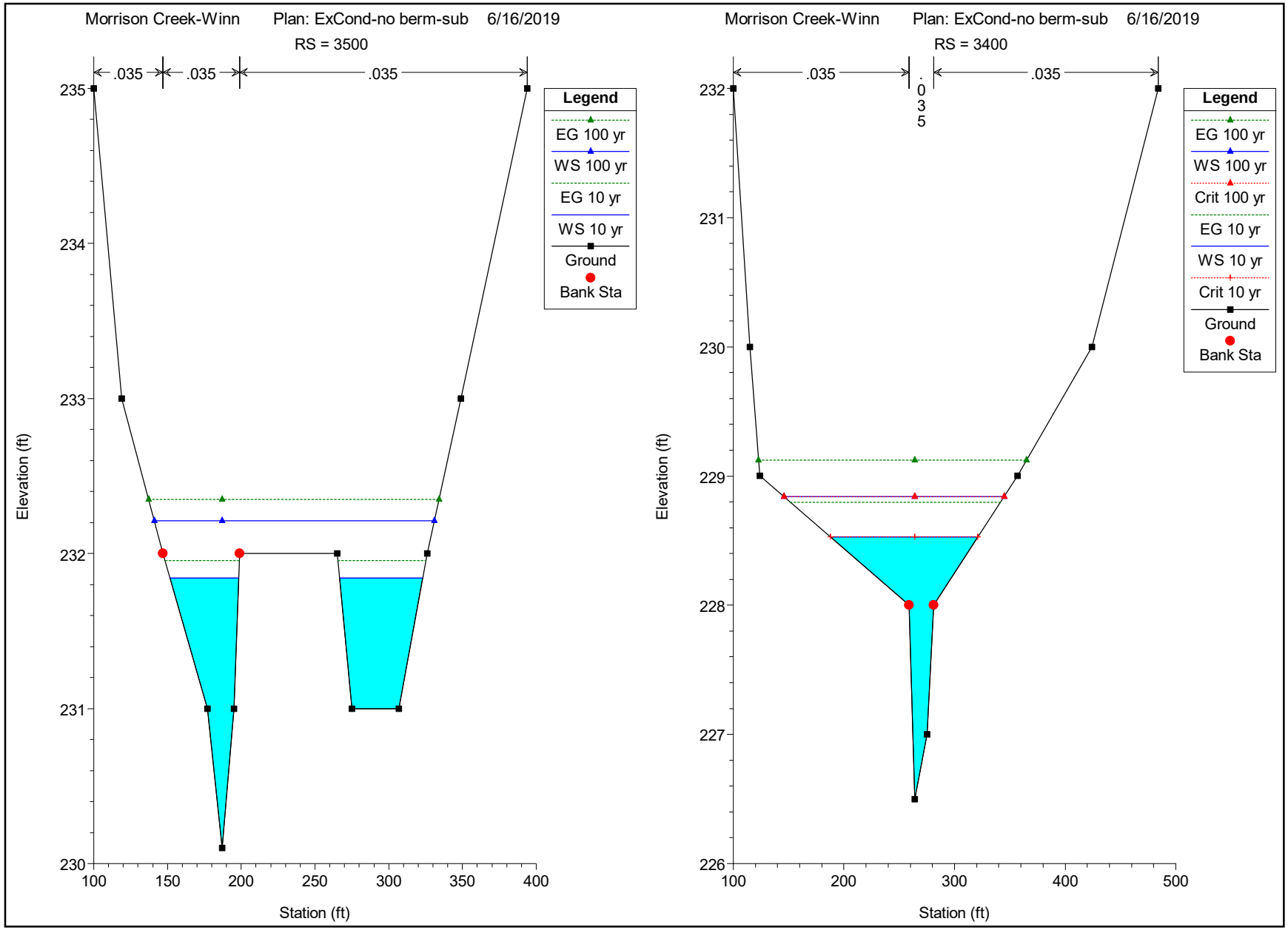

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 4500
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.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 4400
.035
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.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

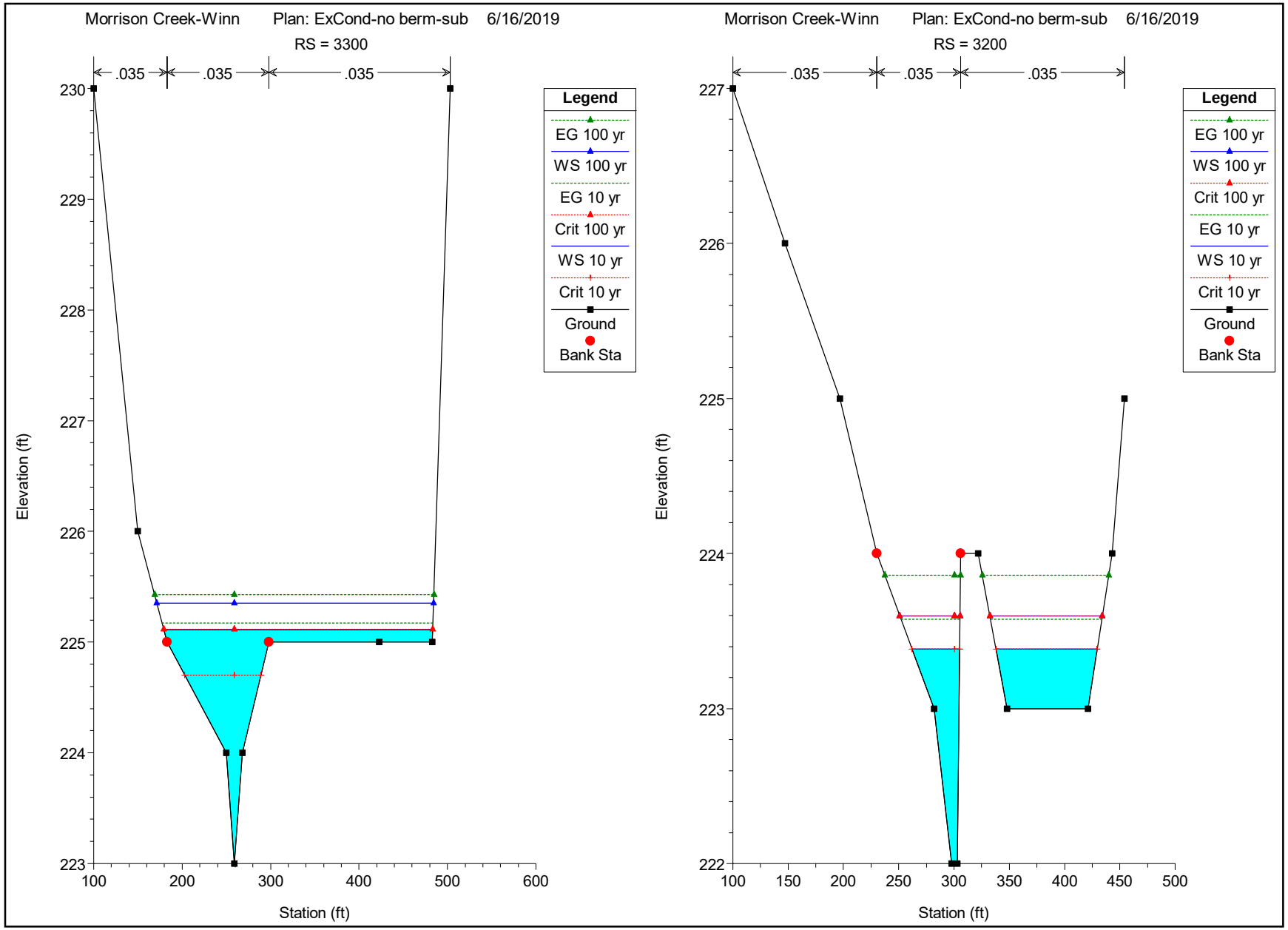

Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 4300
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.035
.035
Legend
EG 100 yr
EG 10 yr
WS 100 yr
Crit 100 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 4200
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.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 100 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

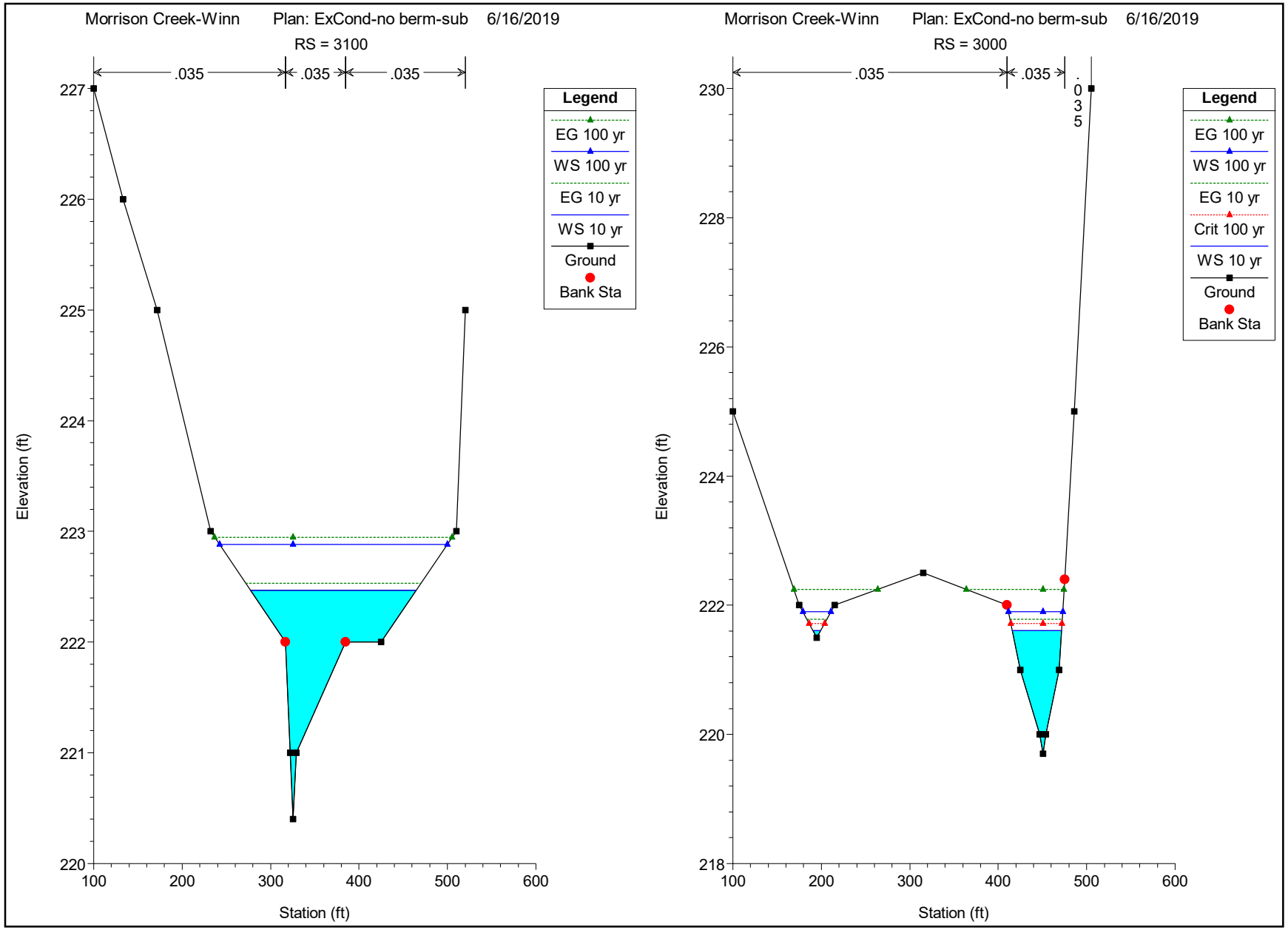

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 4100
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
250
248
246
244
242
240
238
236
100
200
300
400
500
600
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 4000
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
246
244
242
240
238
236
234
100
200
300
400
500
600

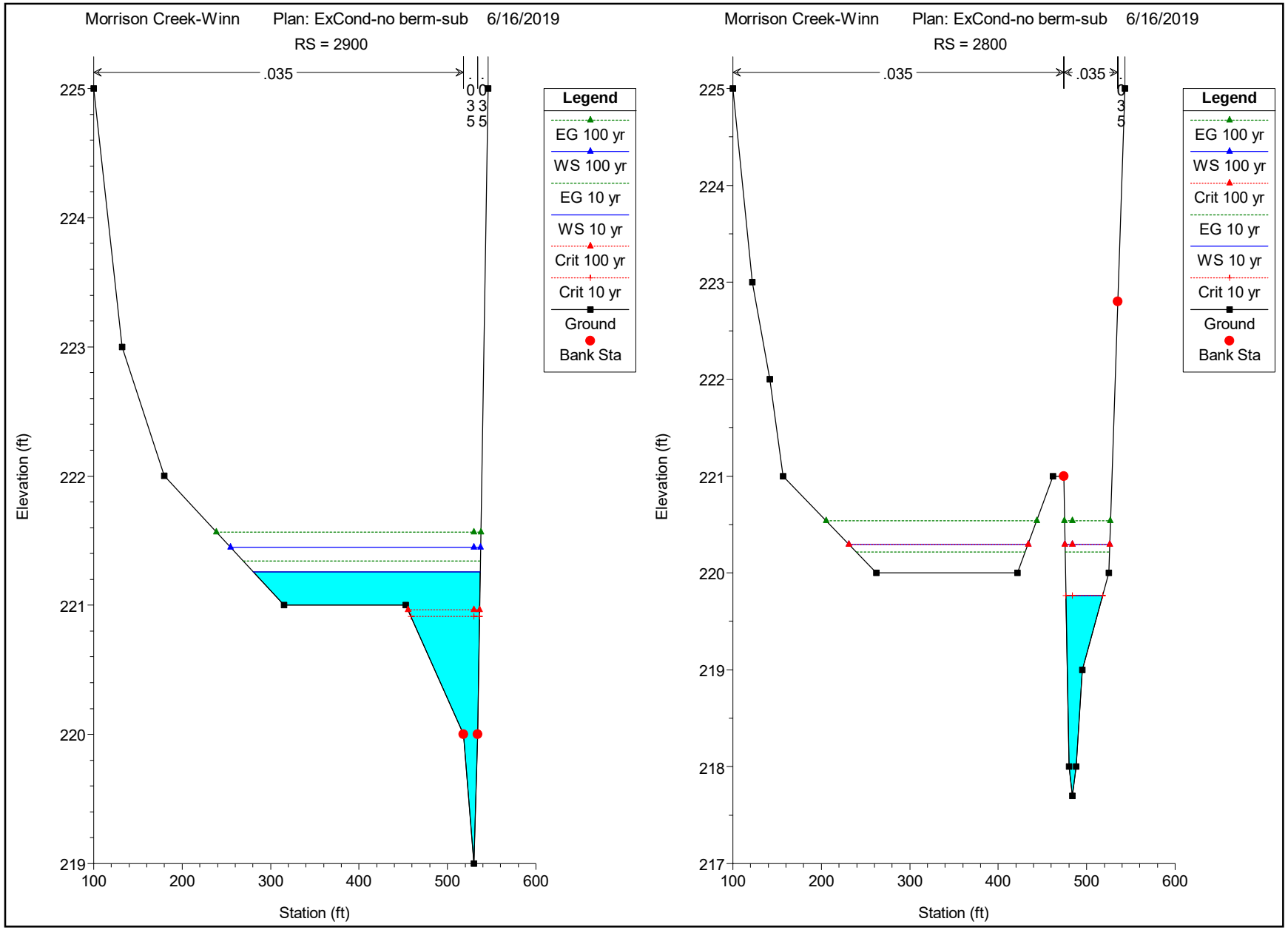

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3900
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
239
238
237
236
235
234
233
100
150
200
250
300
350
400
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3800
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
239
238
237
236
235
234
233
232
100
150
200
250
300
350
400
450

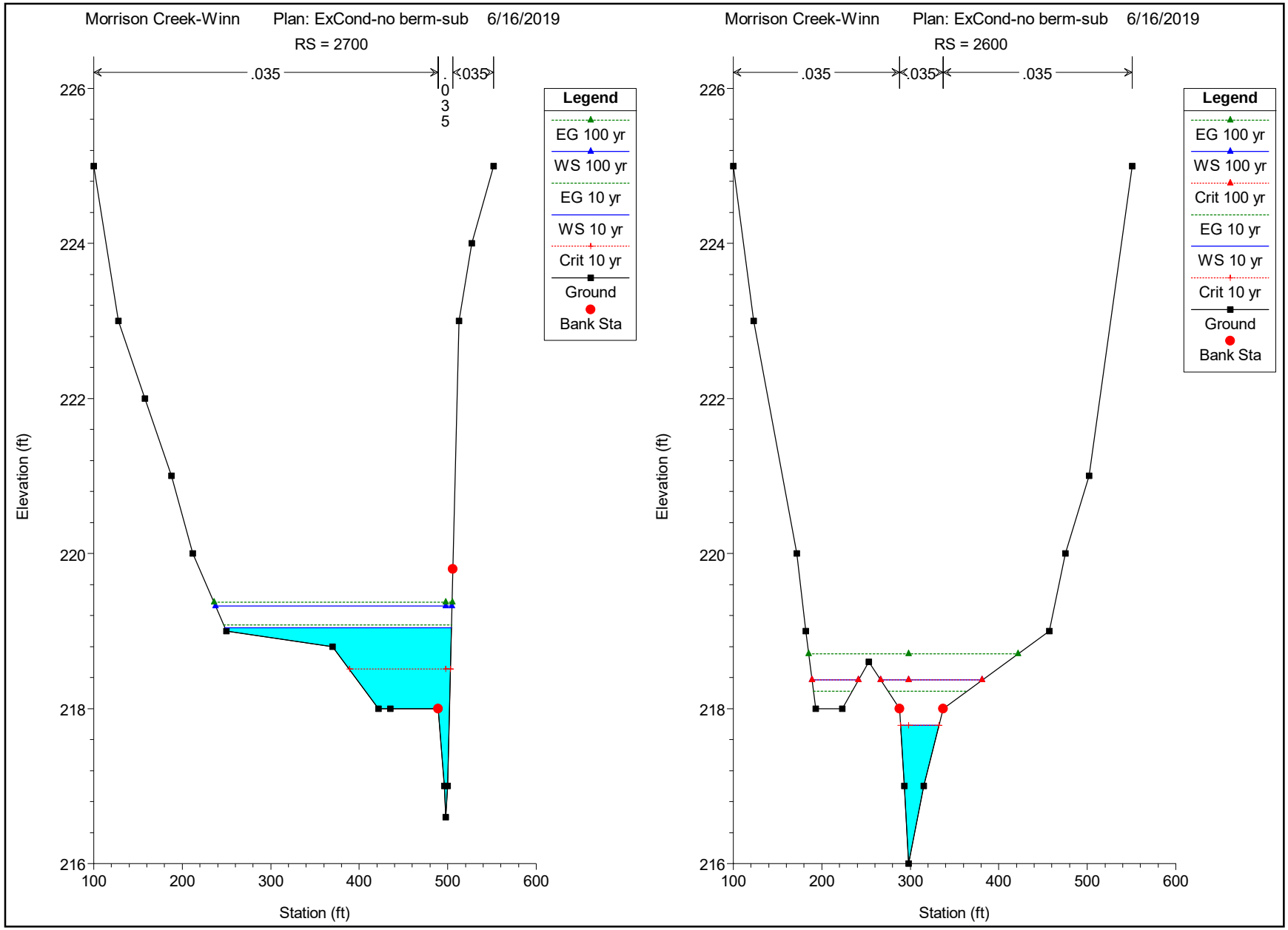

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
239
238
237
236
235
234
233
232
100
150
200
250
300
350
400
450
500
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
235
234
233
232
231
230
100
150
200
250
300
350
400

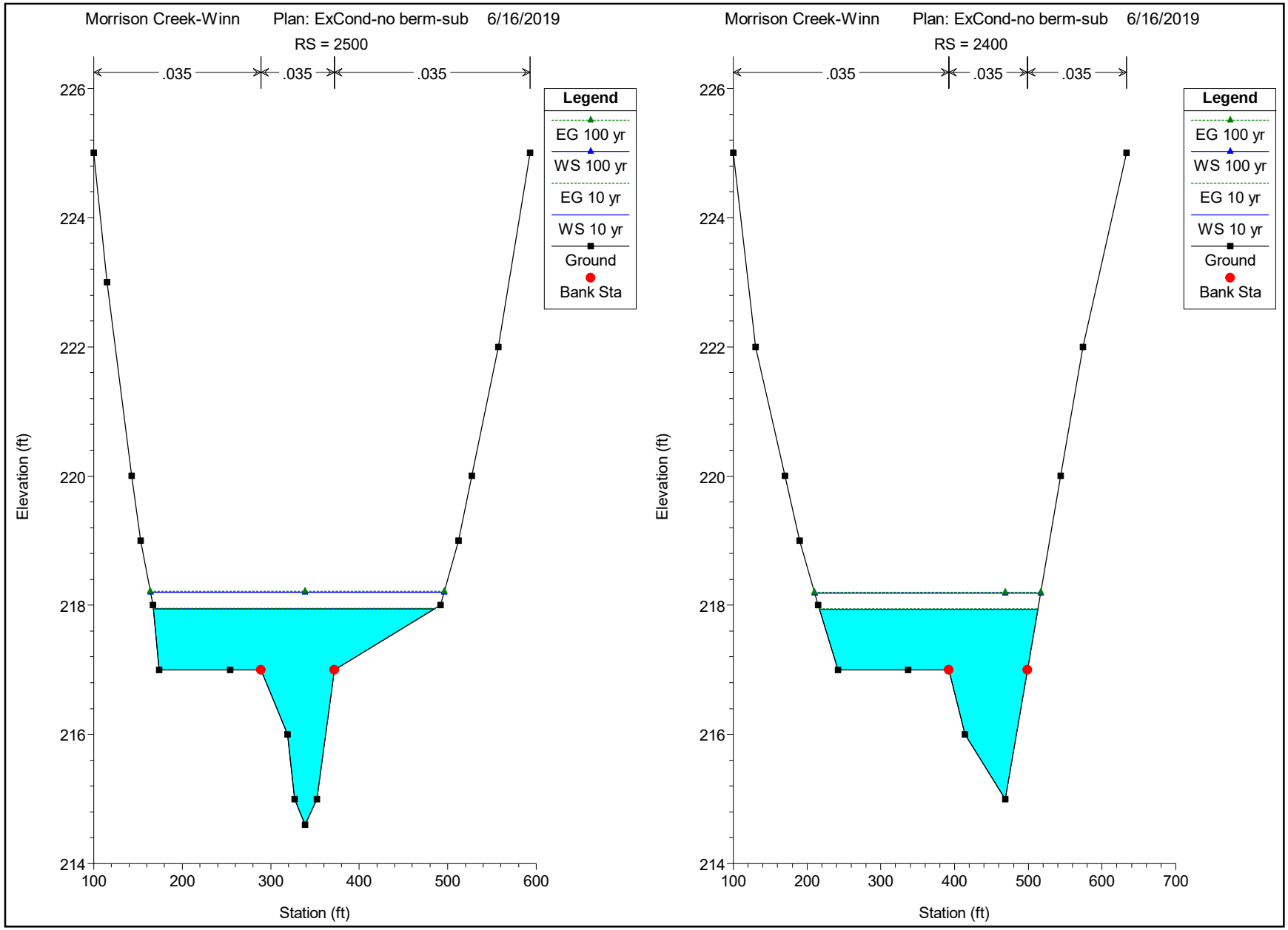

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

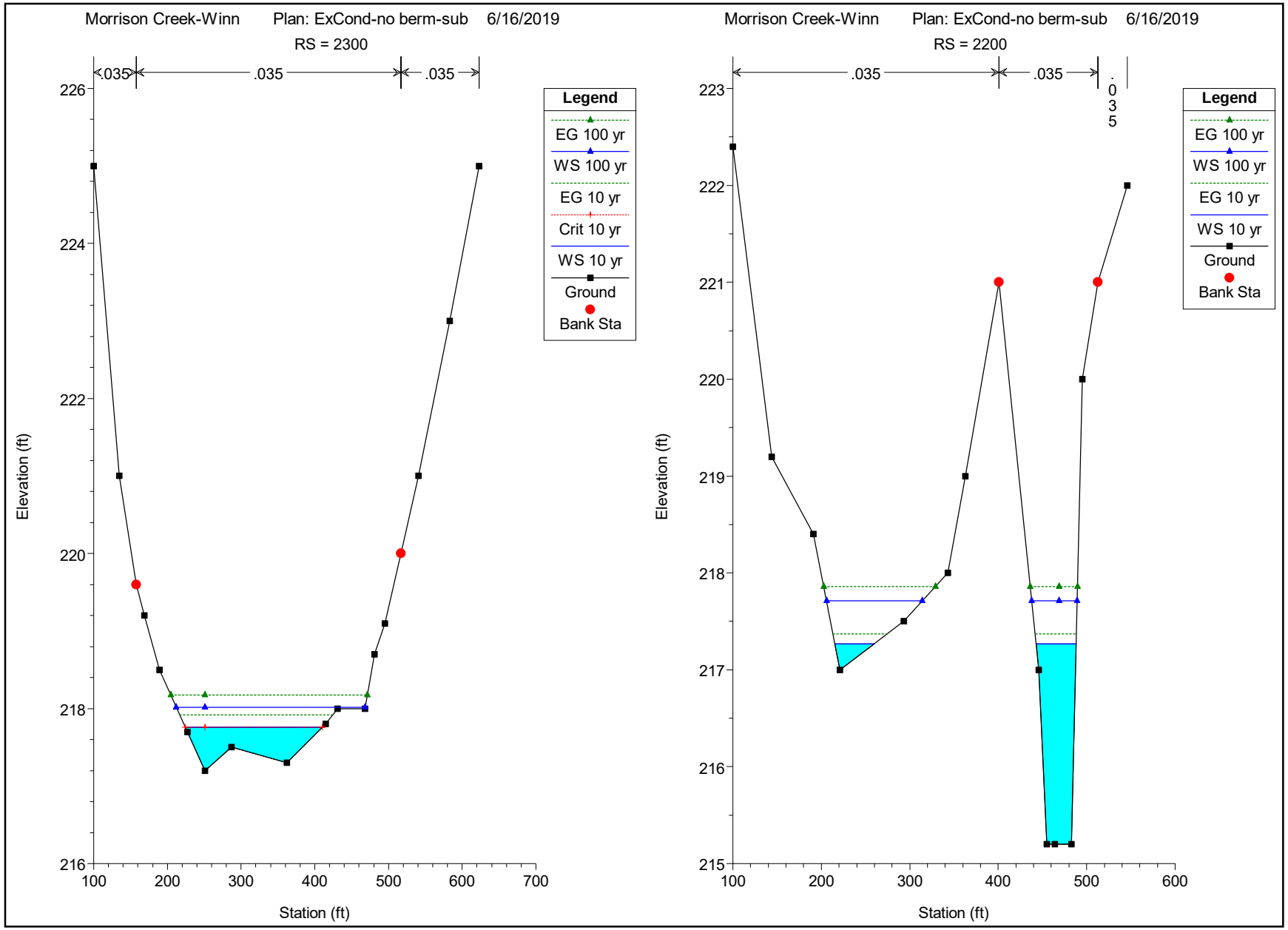

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 3200
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

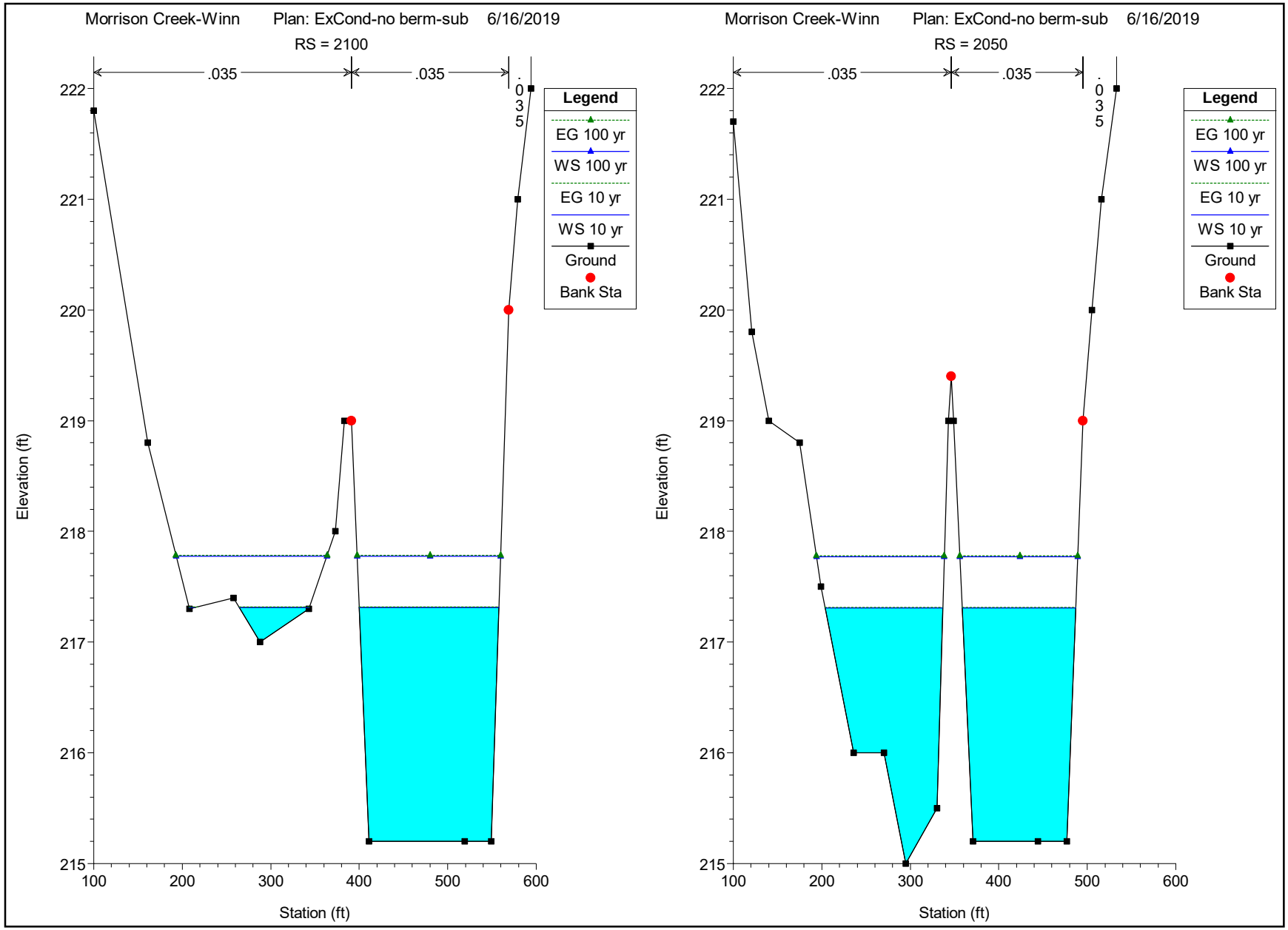

Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 3100
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 3000
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

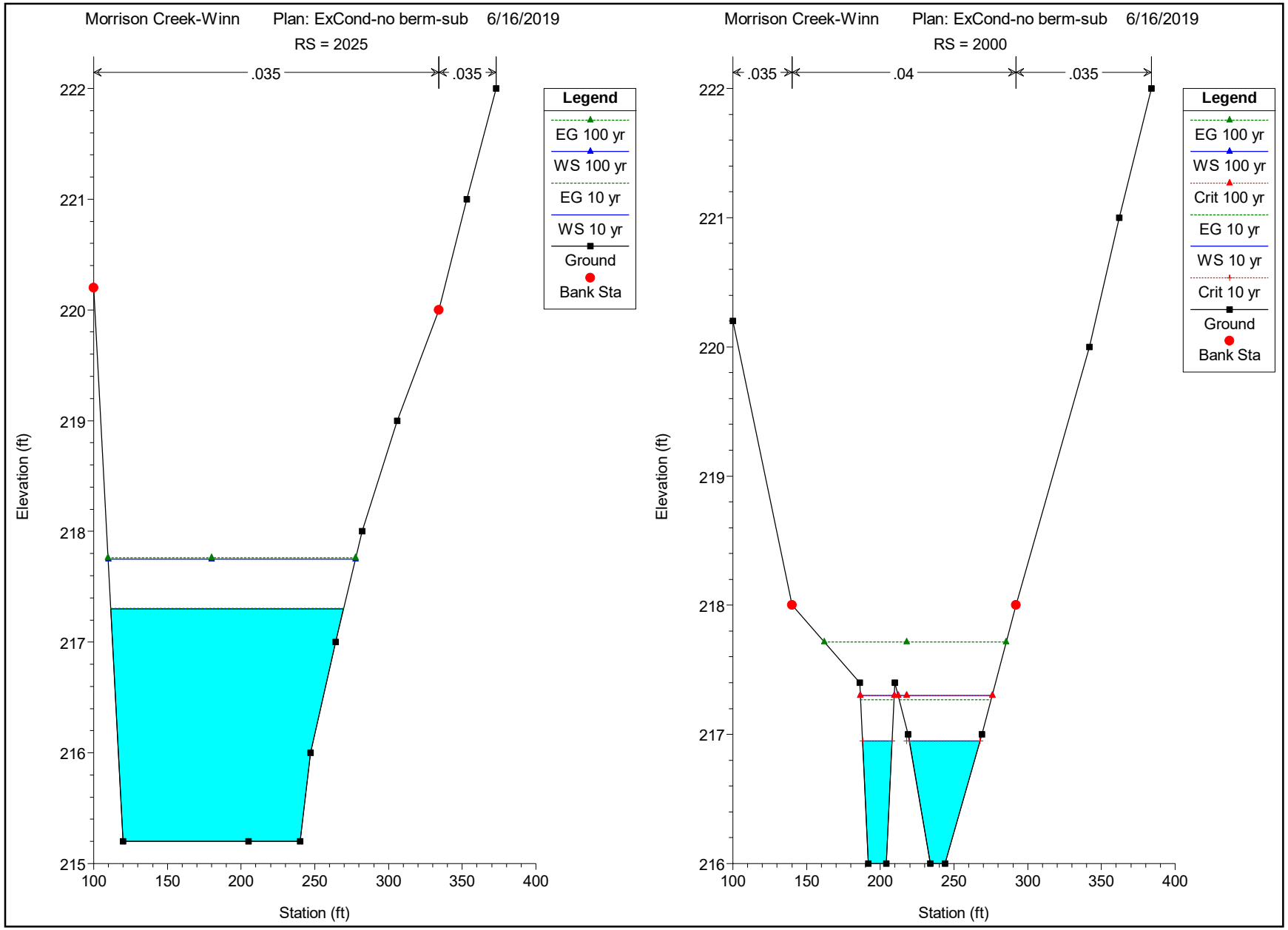

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2900
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 100 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
225
224
223
222
221
220
219
100
200
300
400
500
600
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2800
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
225
224
223
222
221
220
219
218
217
100
200
300
400
500
600

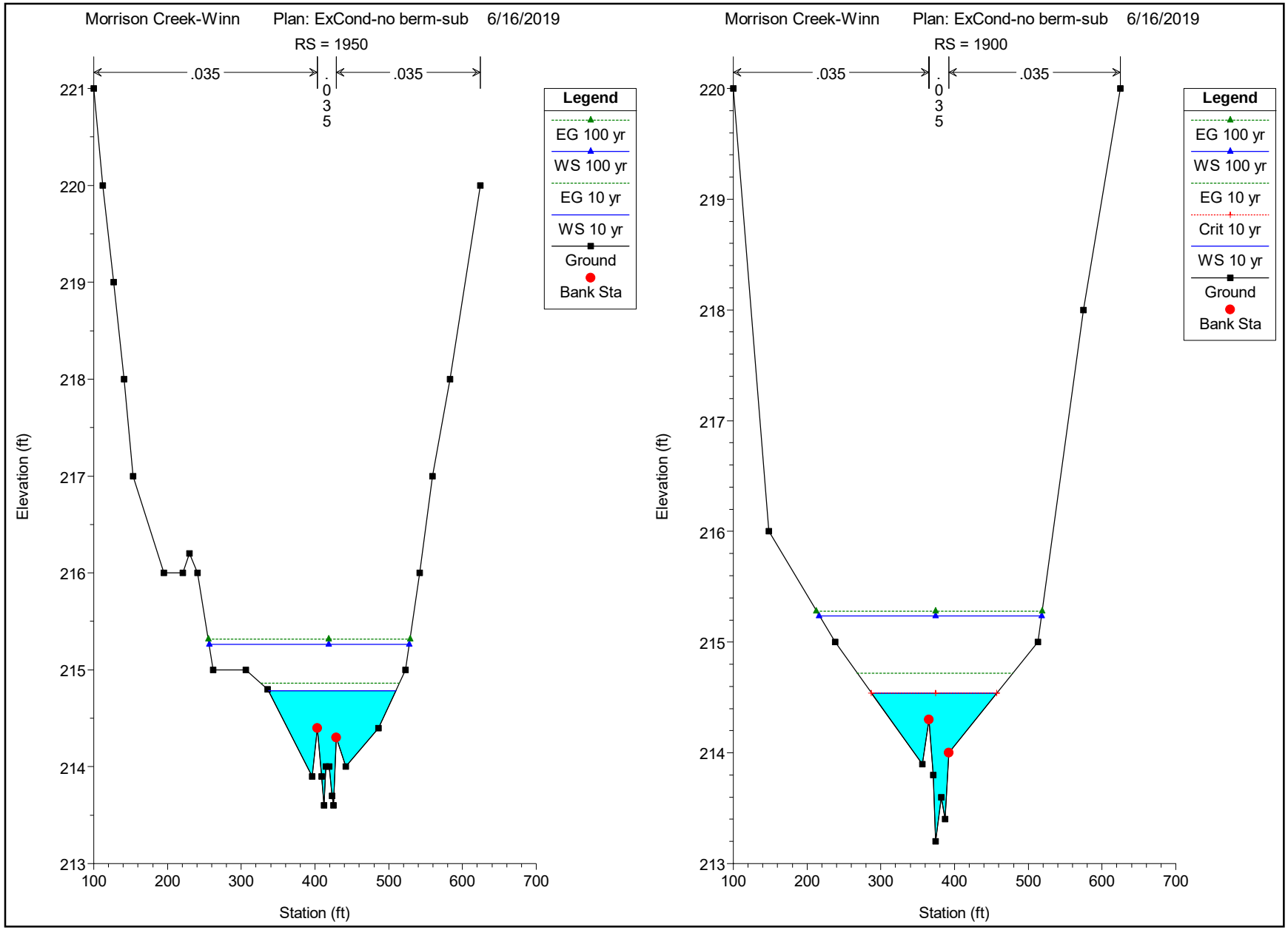

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

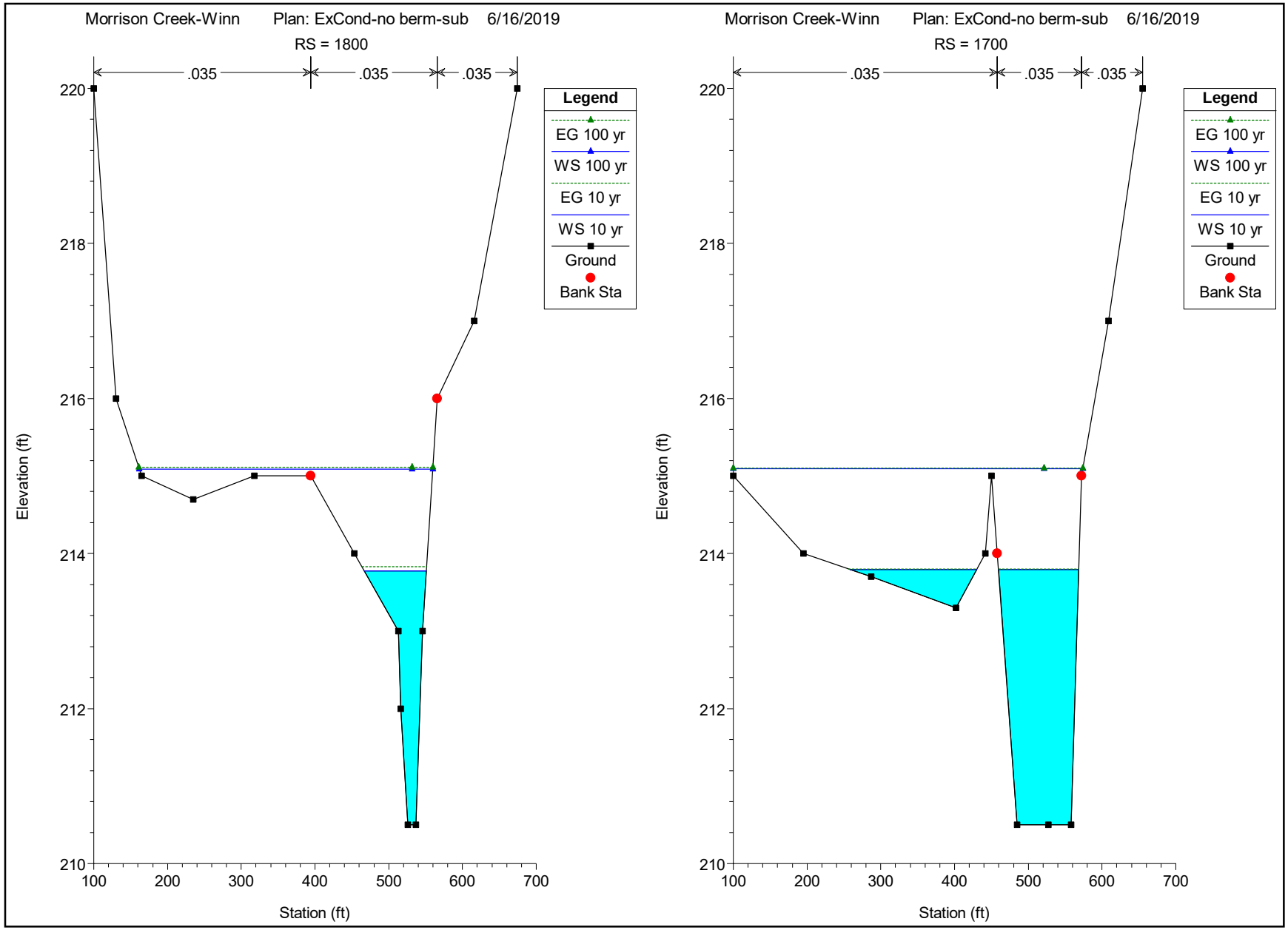

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

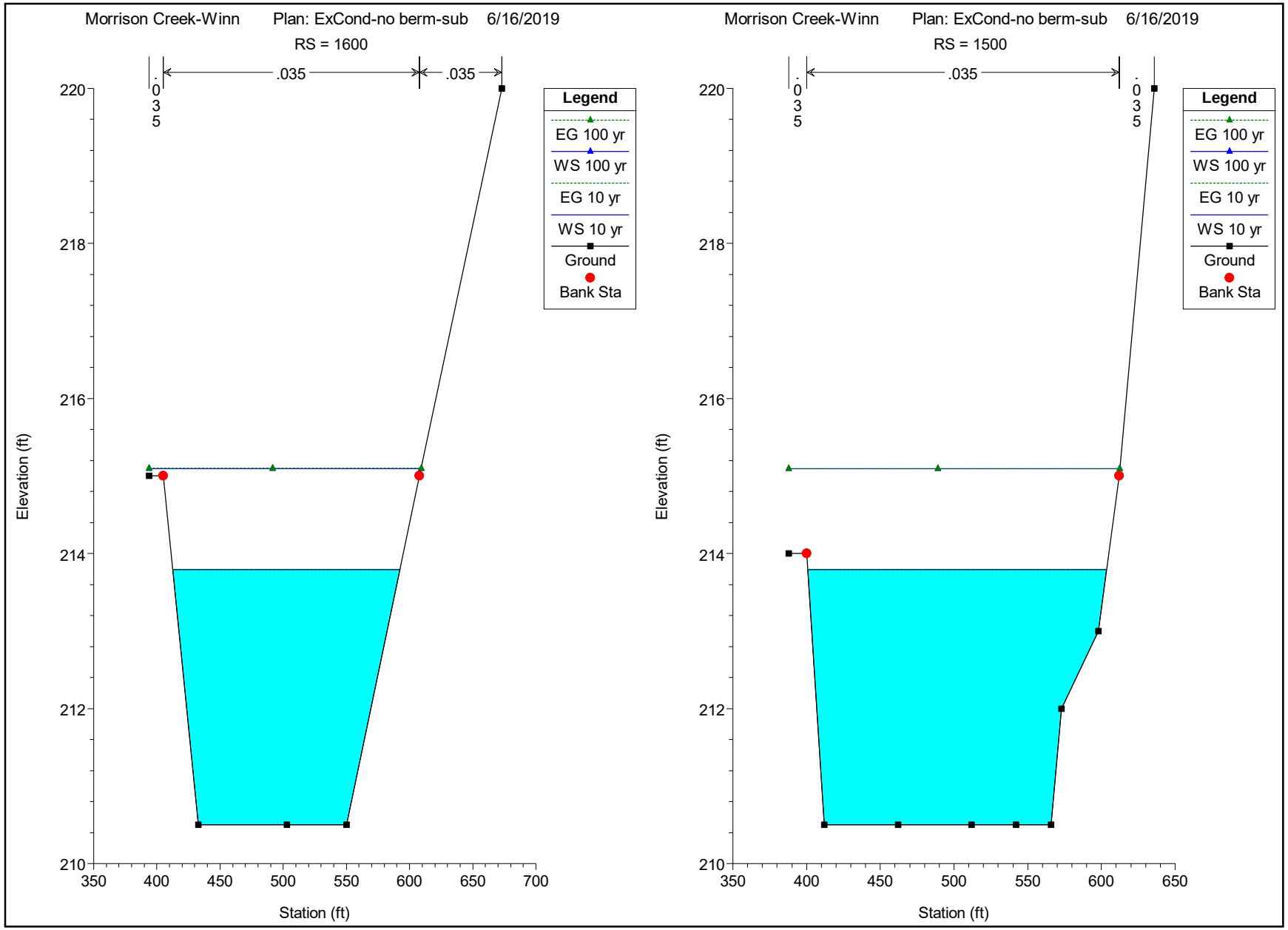

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2200
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

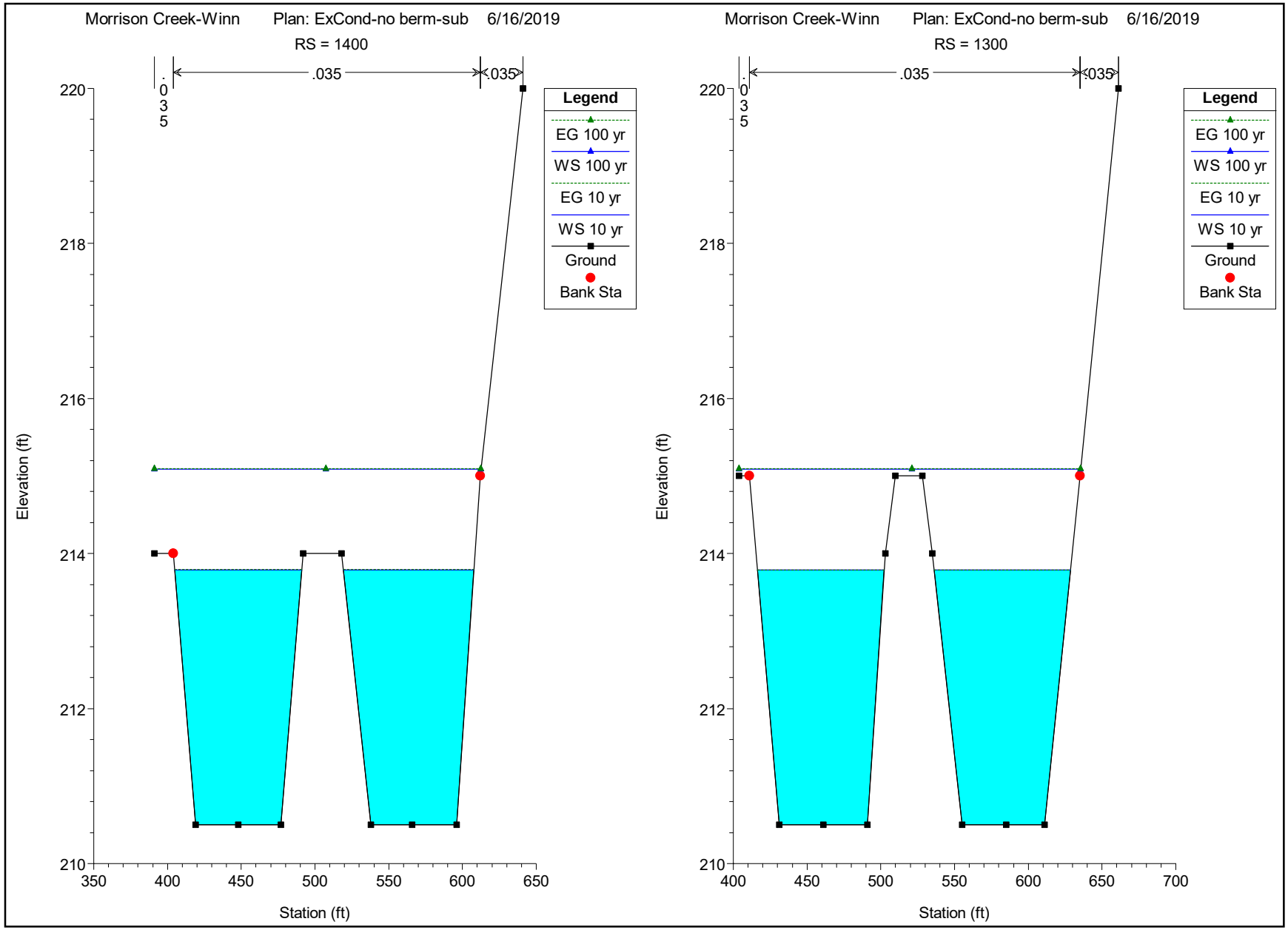

Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 2100
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
222
221
220
219
218
217
216
215
100
200
300
400
500
600
Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 2050
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

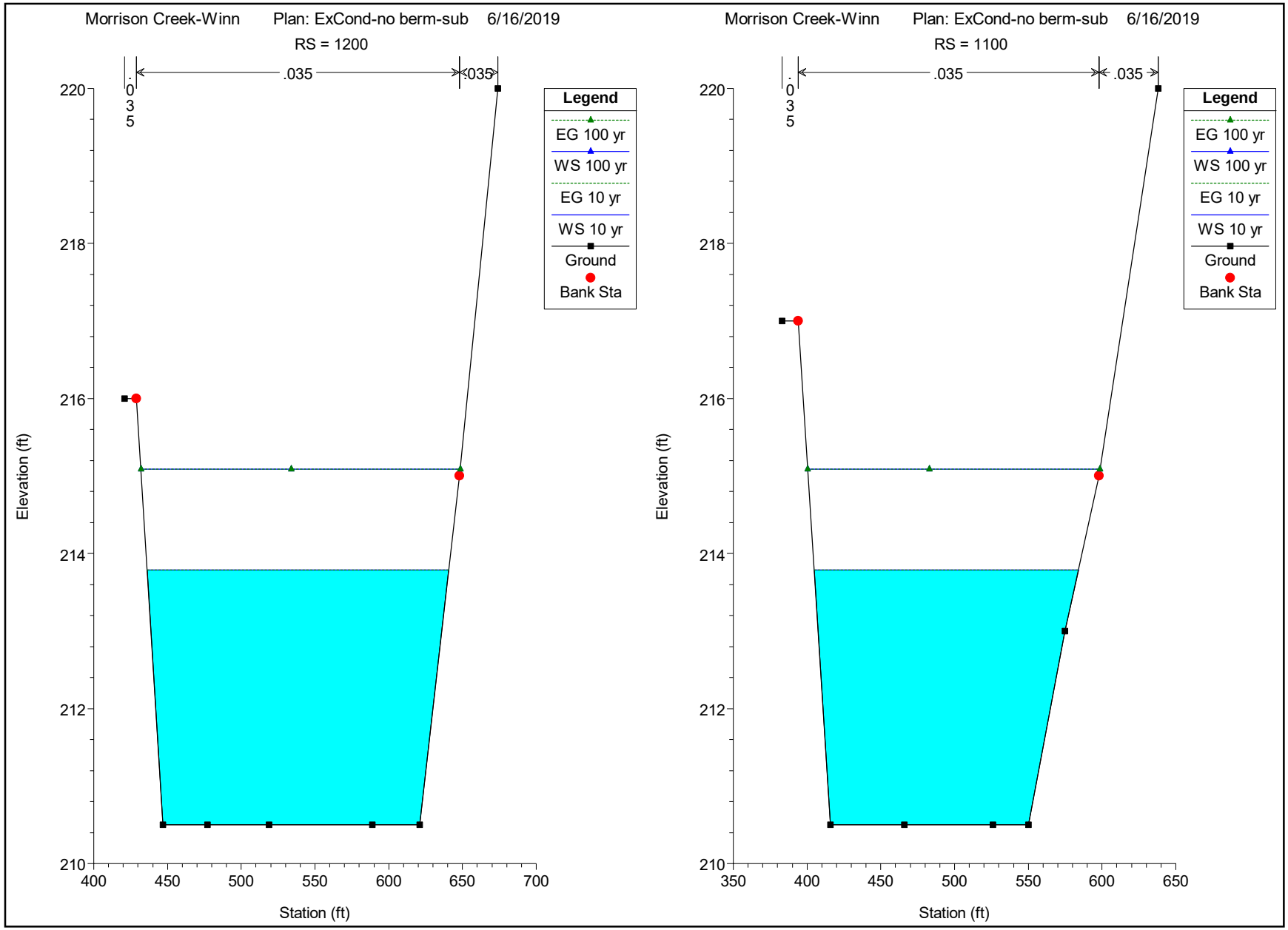

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2025
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 2000
.035
.04
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

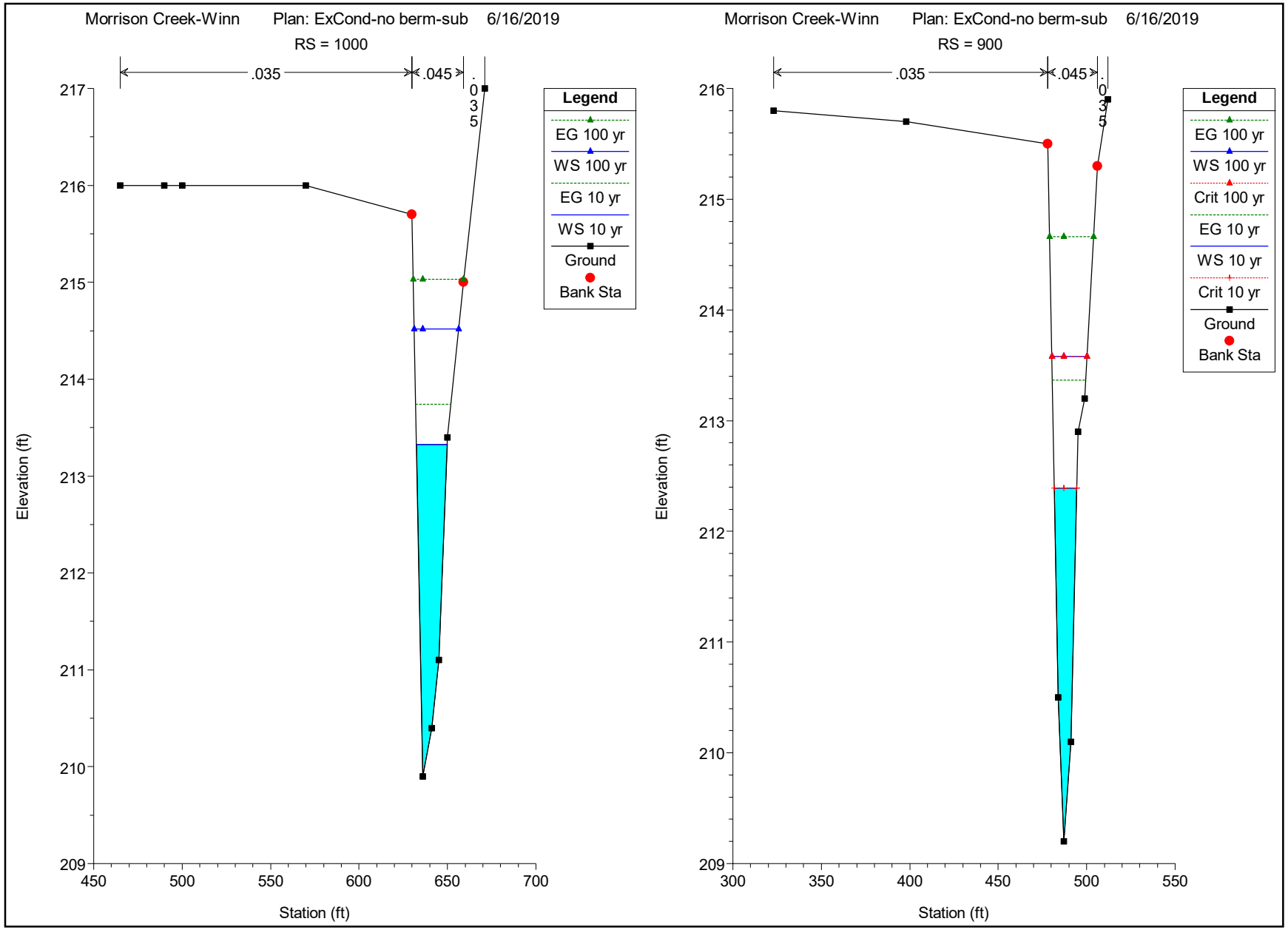

Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 1950
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 1900
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

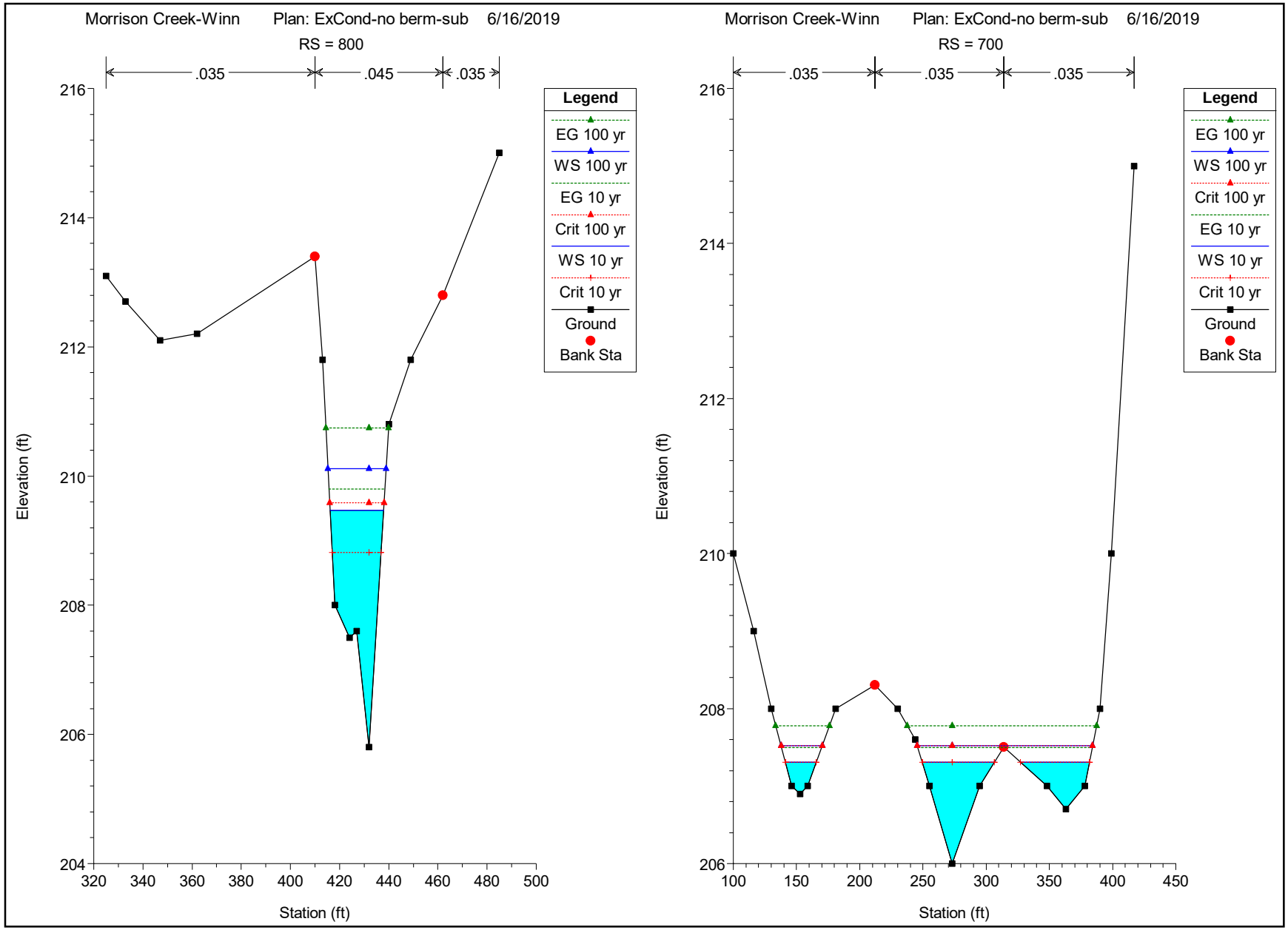

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 1800
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
100
200
300
400
500
600
700
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 1700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

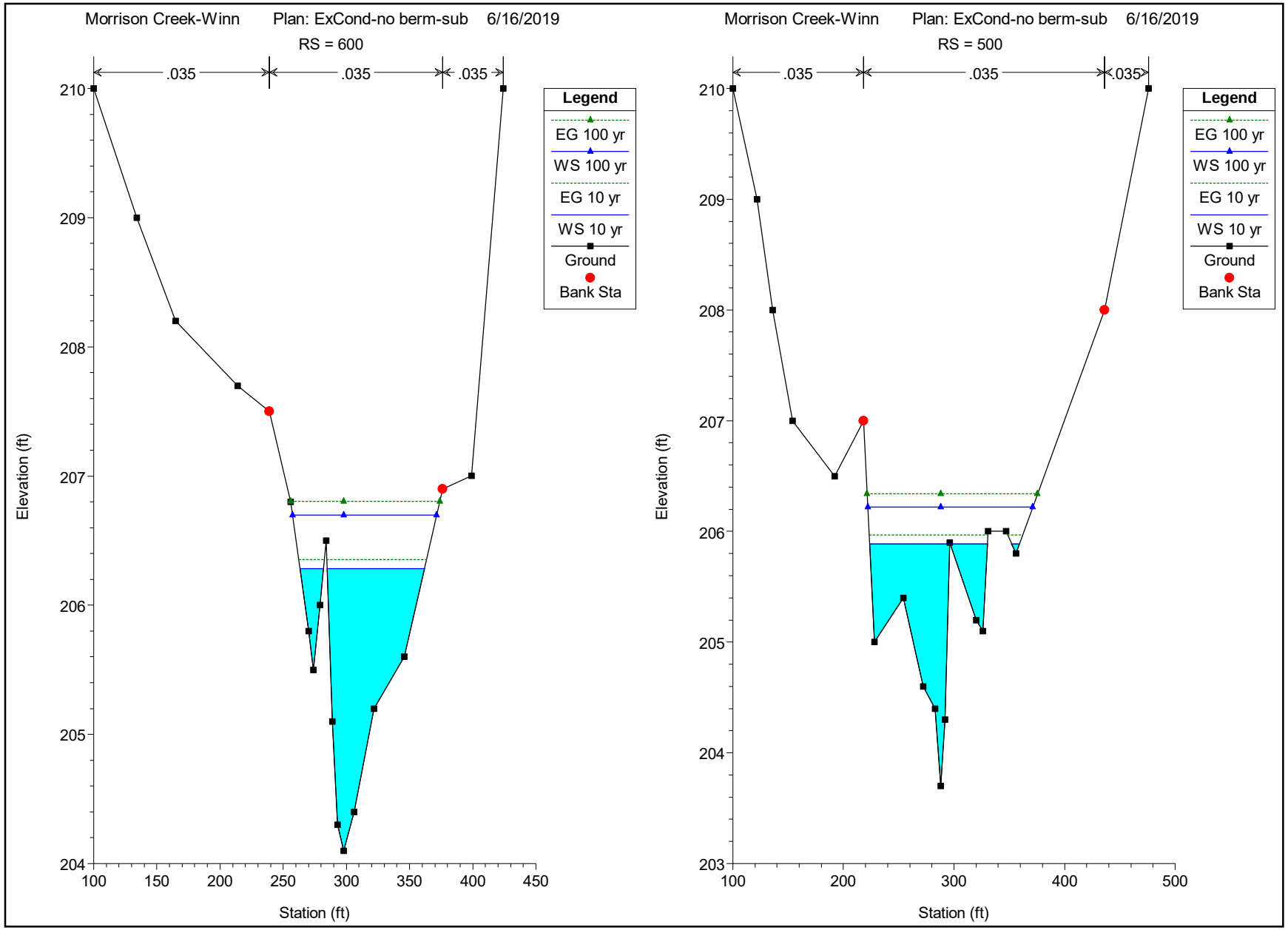

Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 1600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
350
400
450
500
550
600
650
700
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 1500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
350
400
450
500
550
600
650

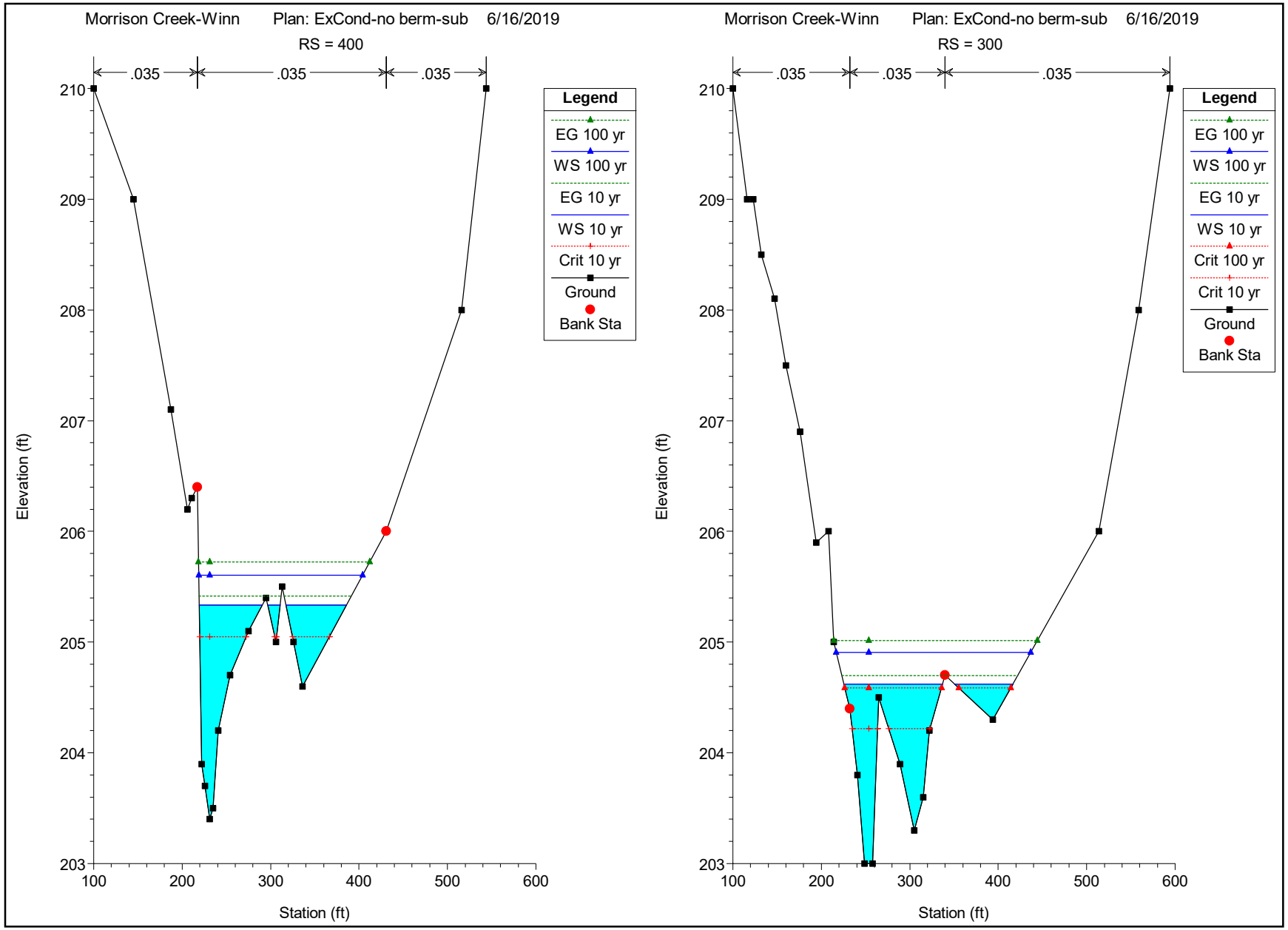

Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 1400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
350
400
450
500
550
600
650
Morrison Creek-Winn
Plan: ExCond-no berm-sub
6/16/2019
RS = 1300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
400
450
500
550
600
650
700


Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 1200
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
400
450
500
550
600
650
700
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 1100
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
350
400
450
500
550
600
650


Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 1000
.035
.045
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 900
.035
.045
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)


Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 800
.035
.045
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)


Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
210
209
208
207
206
205
204
100
150
200
250
300
350
400
450
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
210
209
208
207
206
205
204
203
100
200
300
400
500


Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
210
209
208
207
206
205
204
203
100
200
300
400
500
600
Morrison Creek-Winn Plan: ExCond-no berm-sub 6/16/2019
RS = 300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 100 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

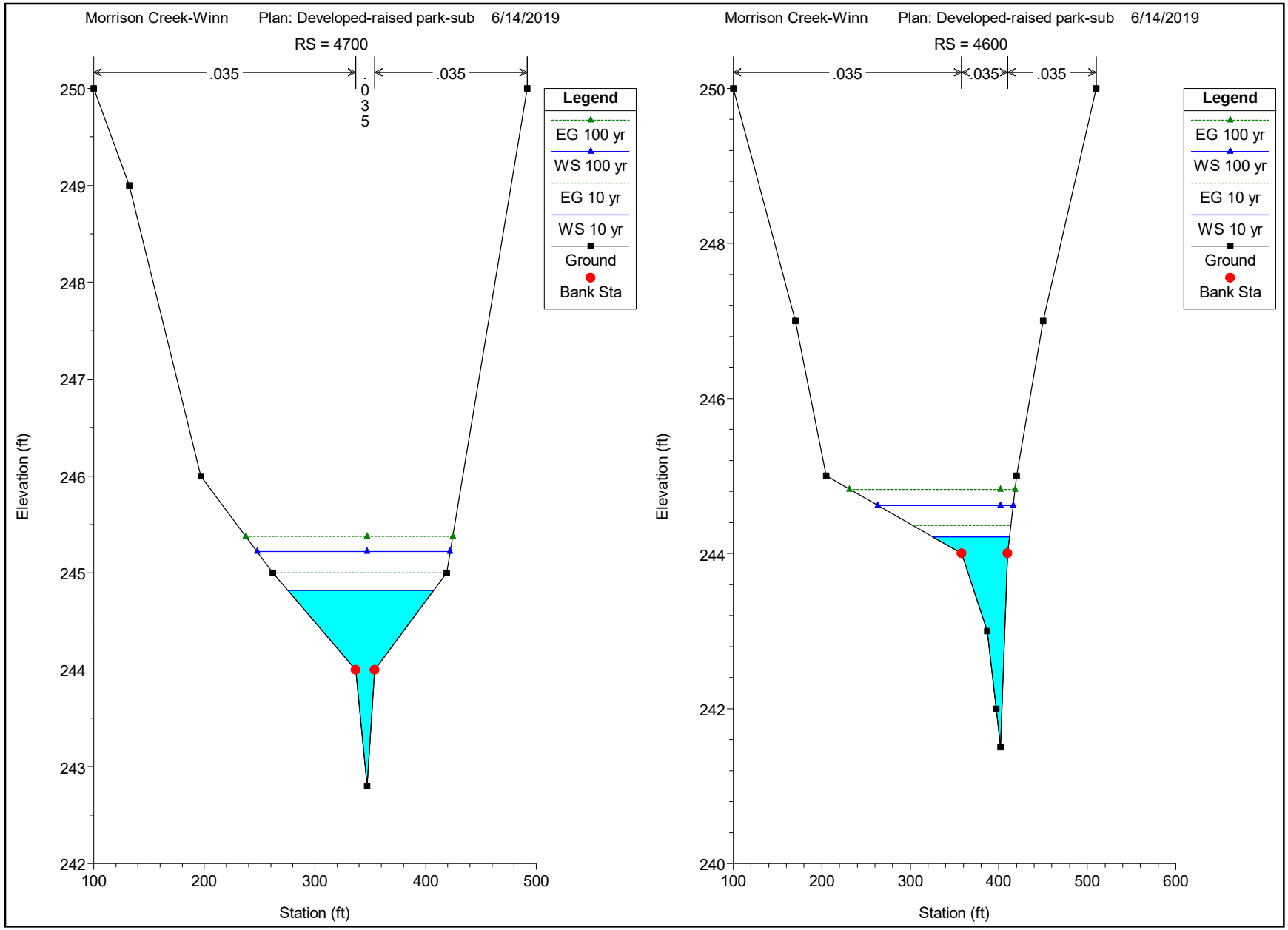
Appendix 8 - HEC-RAS Output for Developed Condition 10-year storm and 100-year storm

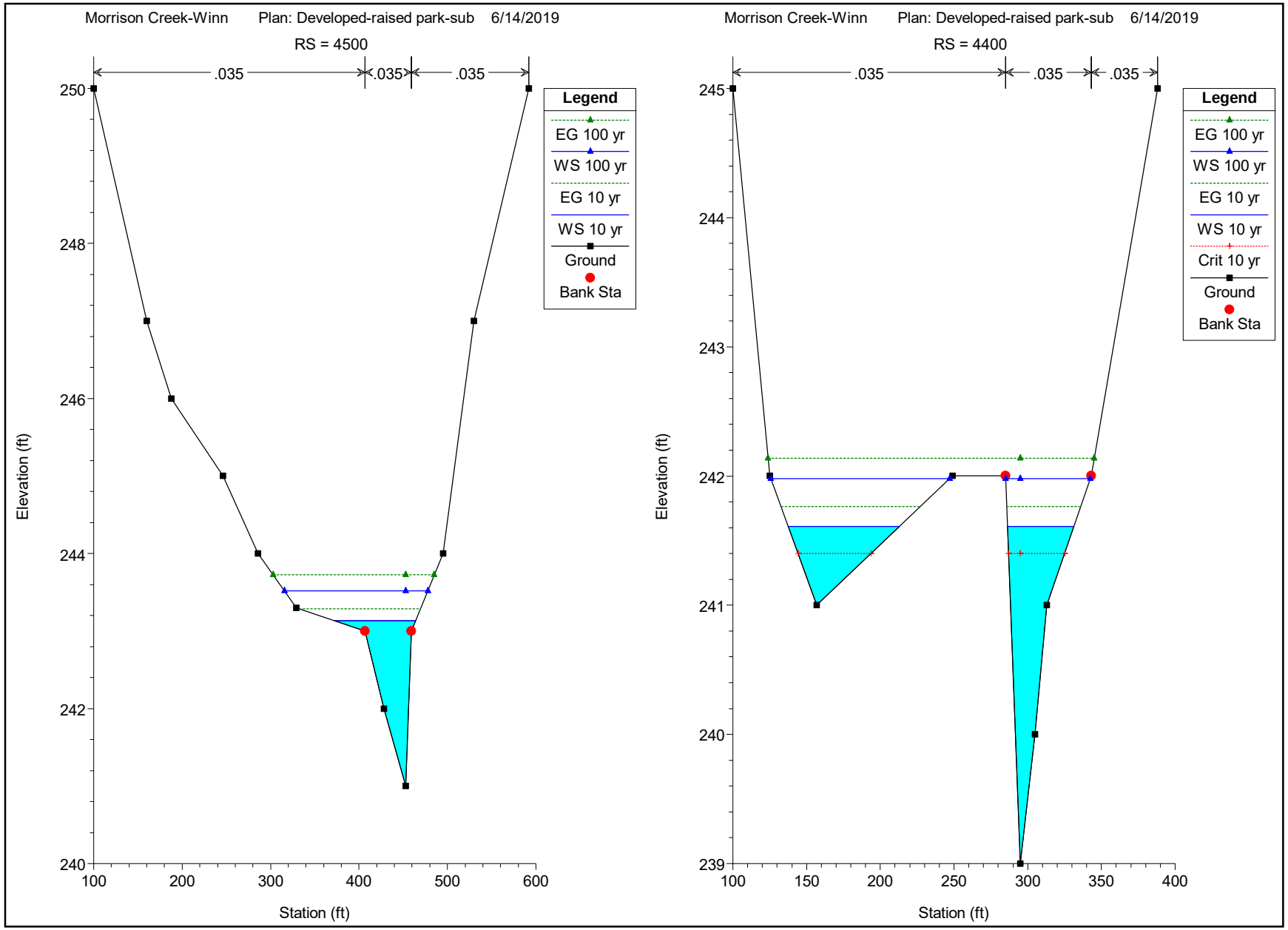
HEC-RAS Plan: park-sub River: Morrison Creek Reach: Winn

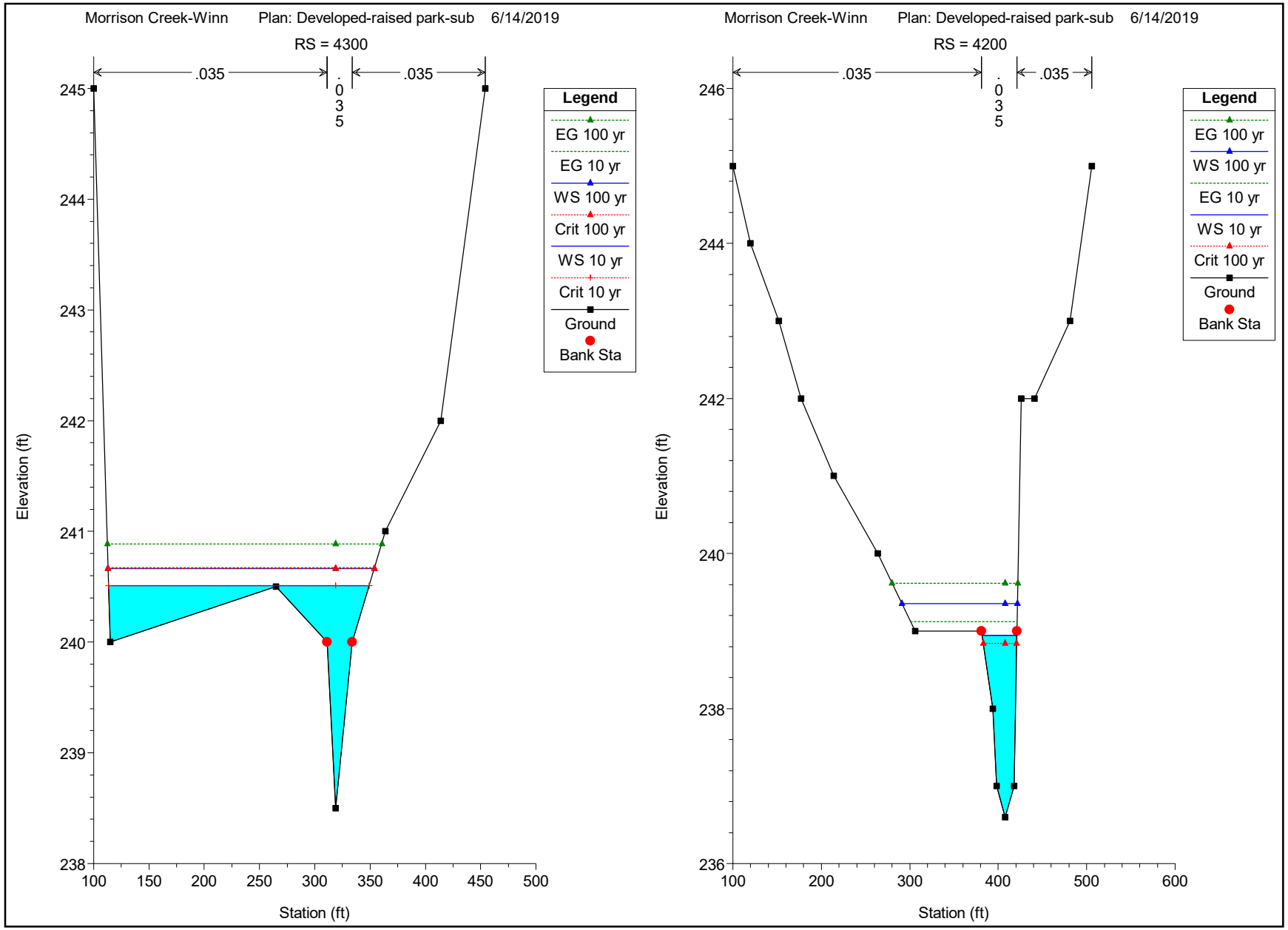
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Winn	4700	10 yr	194.00	242.80	244.82		245.00	0.006635	4.34	71.02	131.60	0.64
Winn	4700	100 yr	361.00	242.80	245.22		245.38	0.004758	4.34	133.74	174.55	0.57
Winn	4600	10 yr	194.00	241.50	244.22		244.36	0.004251	3.09	65.75	87.15	0.50
Winn	4600	100 yr	361.00	241.50	244.62		244.83	0.004475	3.86	114.41	153.16	0.54
Winn	4500	10 yr	194.00	241.00	243.13		243.29	0.004545	3.17	63.51	91.30	0.52
Winn	4500	100 yr	361.00	241.00	243.52		243.73	0.004636	3.87	116.20	162.20	0.55
Winn	4400	10 yr	194.00	239.00	241.61	241.40	241.76	0.006179	3.40	69.74	120.32	0.59
Winn	4400	100 yr	361.00	239.00	241.98		242.14	0.006118	3.62	125.36	178.82	0.60
Winn	4300	10 yr	194.00	238.50	240.51	240.51	240.67	0.006657	4.02	84.14	235.82	0.63
Winn	4300	100 yr	361.00	238.50	240.66	240.66	240.89	0.009180	5.09	120.44	240.84	0.75
Winn	4200	10 yr	194.00	236.60	238.95		239.12	0.003923	3.38	57.35	39.21	0.49
Winn	4200	100 yr	361.00	236.60	239.35	238.84	239.62	0.004815	4.36	102.53	130.32	0.57
Winn	4100	10 yr	194.00	236.20	237.81		237.93	0.006768	3.95	82.98	170.44	0.63
Winn	4100	100 yr	361.00	236.20	238.06	237.92	238.22	0.008260	4.93	132.31	246.86	0.72
Winn	4000	10 yr	194.00	235.00	236.42	236.42	236.58	0.009233	4.34	79.10	235.56	0.72
Winn	4000	100 yr	361.00	235.00	236.60	236.60	236.78	0.009896	4.92	127.05	268.66	0.76
Winn	3900	10 yr	194.00	233.80	235.48		235.53	0.003682	2.67	115.65	230.99	0.45
Winn	3900	100 yr	361.00	233.80	235.75		235.82	0.003090	2.85	180.12	234.48	0.43
Winn	3800	10 yr	194.00	232.90	234.58		234.72	0.005759	3.49	80.96	180.50	0.58
Winn	3800	100 yr	361.00	232.90	234.76	234.72	234.99	0.008609	4.70	117.73	226.12	0.72
Winn	3700	10 yr	194.00	232.70	234.13	234.08	234.22	0.007120	2.84	98.83	295.93	0.60
Winn	3700	100 yr	361.00	232.70	234.30	234.19	234.41	0.007437	3.35	149.24	307.13	0.63
Winn	3600	10 yr	194.00	230.50	232.76	232.69	232.96	0.006235	4.31	69.40	127.58	0.62
Winn	3600	100 yr	361.00	230.50	233.10		233.31	0.006000	4.86	120.75	172.22	0.63
Winn	3500	10 yr	194.00	230.10	231.79		231.92	0.007910	3.06	66.86	99.52	0.63
Winn	3500	100 yr	361.00	230.10	232.20	231.89	232.35	0.006693	3.54	127.16	189.40	0.61
Winn	3400	10 yr	194.00	226.50	228.54	228.54	228.75	0.006031	4.23	72.19	161.30	0.61
Winn	3400	100 yr	361.00	226.50	228.77	228.77	229.04	0.007675	5.25	110.48	179.03	0.71
Winn	3300	10 yr	194.00	223.00	225.11	224.70	225.17	0.003368	2.06	109.06	303.92	0.42
Winn	3300	100 yr	361.00	223.00	225.35	225.11	225.43	0.003249	2.43	182.86	312.36	0.43
Winn	3200	10 yr	194.00	222.00	223.38	223.38	223.58	0.017714	4.04	57.84	134.43	0.91
Winn	3200	100 yr	361.00	222.00	223.60	223.60	223.86	0.019004	4.47	89.09	156.25	0.96
Winn	3100	10 yr	194.00	220.40	222.47		222.53	0.002501	2.19	108.98	187.76	0.38
Winn	3100	100 yr	361.00	220.40	222.89		222.95	0.001846	2.35	202.87	259.18	0.34
Winn	3000	10 yr	194.00	219.70	221.58		221.77	0.006710	3.55	55.28	61.11	0.62
Winn	3000	100 yr	361.00	219.70	221.85	221.72	222.24	0.010877	5.05	75.76	88.31	0.81
Winn	2900	10 yr	194.00	219.00	221.27		221.33	0.002547	2.10	109.68	191.62	0.38
Winn	2900	100 yr	361.00	219.00	221.58		221.67	0.002572	2.54	169.52	195.26	0.40
Winn	2800	10 yr	194.00	217.70	219.77	219.77	220.21	0.019219	5.33	36.41	41.74	1.01
Winn	2800	100 yr	361.00	217.70	220.31	220.31	220.71	0.011644	5.28	79.34	112.62	0.83
Winn	2700	10 yr	194.00	216.60	219.06	218.44	219.10	0.001542	1.68	115.52	113.64	0.29
Winn	2700	100 yr	361.00	216.60	219.44		219.52	0.001886	2.27	159.34	116.20	0.34
Winn	2600	10 yr	194.00	216.00	217.79	217.79	218.22	0.019565	5.30	36.61	43.21	1.01
Winn	2600	100 yr	361.00	216.00	218.37	218.37	218.70	0.009400	4.92	91.80	167.17	0.76
Winn	2500	10 yr	194.00	214.60	218.02		218.03	0.000102	0.74	334.36	279.17	0.09
Winn	2500	100 yr	361.00	214.60	218.31		218.32	0.000197	1.11	415.07	285.95	0.12
Winn	2400	10 yr	194.00	215.00	218.02		218.02	0.000087	0.66	337.10	219.40	0.08
Winn	2400	100 yr	361.00	215.00	218.29		218.31	0.000183	1.04	398.81	226.74	0.12
Winn	2300	10 yr	194.00	217.30	217.81	217.81	218.00	0.025350	3.37	56.68	158.62	1.00
Winn	2300	100 yr	361.00	217.30	218.02	218.02	218.27	0.018813	3.97	92.89	212.41	0.93
Winn	2200	10 yr	194.00	215.20	217.27		217.37	0.001817	2.50	85.85	93.35	0.34

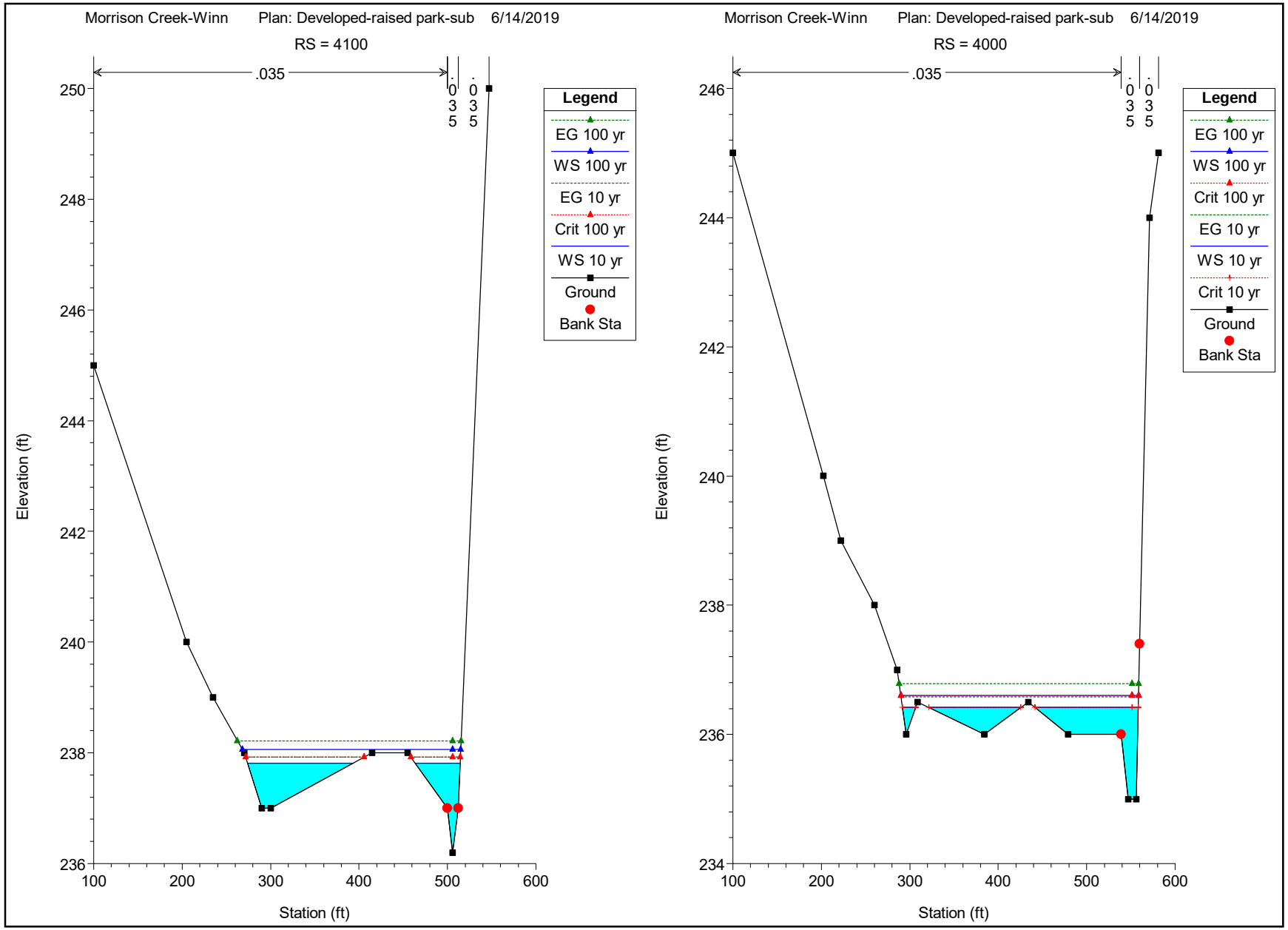
HEC-RAS Plan: park-sub River: Morrison Creek Reach: Winn (Continued)

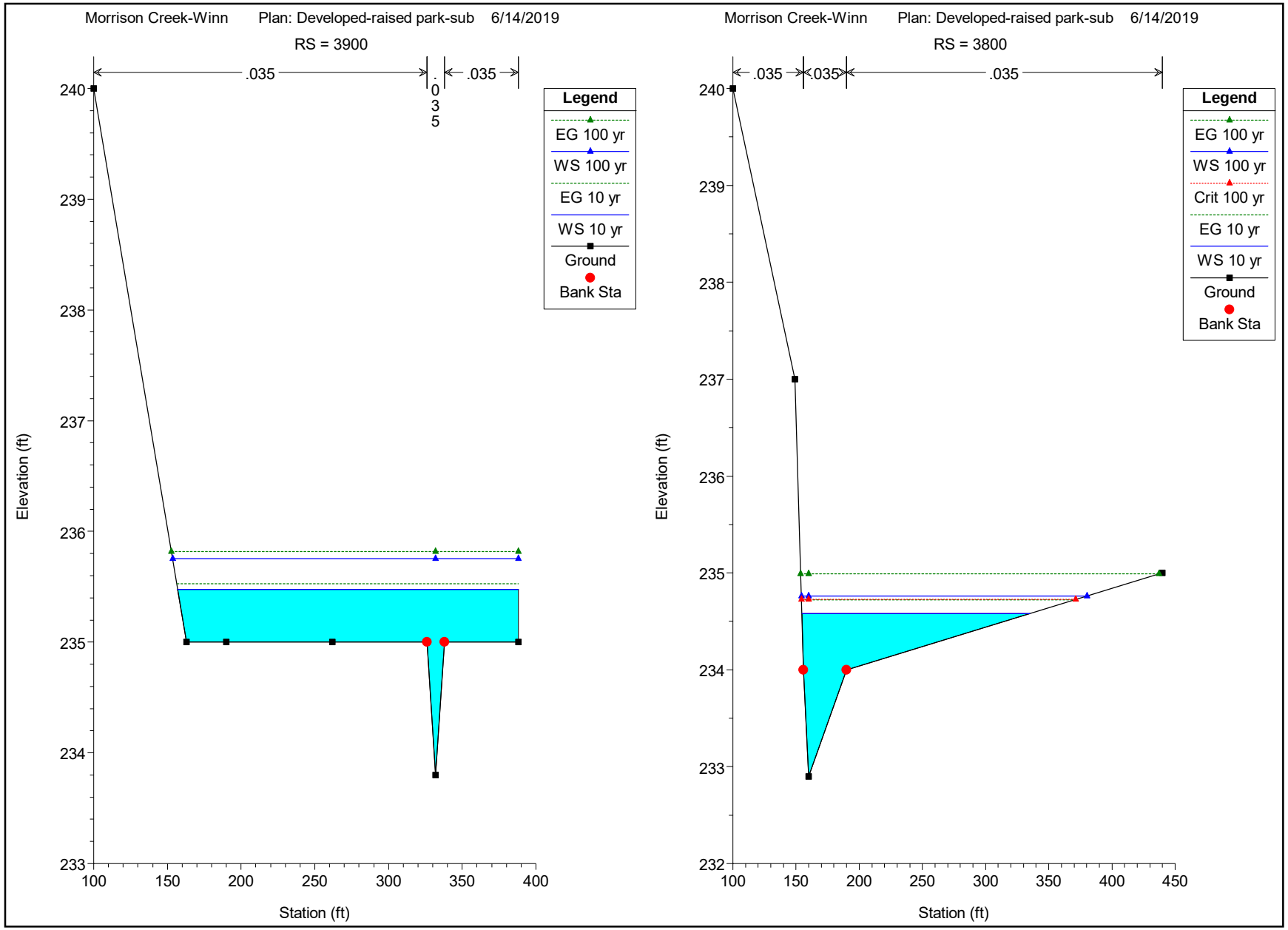
Reach	River Sta	Profile	Q Total	Min Ch El	W.S. Elev	Crit W.S.	E.G. Elev	E.G. Slope	Vel Chnl	Flow Area	Top Width	Froude # Chl
			(cfs)	(ft)	(ft)	(ft)	(ft)	(ft/ft)	(ft/s)	(sq ft)	(ft)	
Winn	2200	100 yr	361.00	215.20	217.72		217.86	0.002525	3.20	138.55	145.24	0.41
Winn	2100	10 yr	194.00	215.20	217.31		217.32	0.000085	0.61	329.99	268.50	0.08
Winn	2100	100 yr	361.00	215.20	217.77		217.78	0.000132	0.87	466.26	310.56	0.10
Winn	2050	10 yr	194.00	215.20	217.31		217.31	0.000052	0.47	435.01	248.61	0.06
Winn	2050	100 yr	361.00	215.20	217.77		217.78	0.000086	0.69	551.34	257.28	0.08
Winn	2025	10 yr	194.00	215.20	217.30		217.31	0.000114	0.68	287.01	157.78	0.09
Winn	2025	100 yr	361.00	215.20	217.75		217.76	0.000202	1.00	360.17	167.67	0.12
Winn	2000	10 yr	194.00	216.00	216.95	216.95	217.27	0.027857	4.54	42.78	68.11	1.01
Winn	2000	100 yr	361.00	216.00	217.30	217.30	217.71	0.025756	5.15	70.09	86.92	1.01
Winn	1950	10 yr	194.00	213.60	214.74		214.83	0.006928	3.07	83.83	166.97	0.60
Winn	1950	100 yr	361.00	213.60	215.25		215.31	0.002467	2.54	199.97	271.03	0.39
Winn	1900	10 yr	194.00	213.20	214.51	214.51	214.68	0.011150	4.11	71.64	188.11	0.77
Winn	1900	100 yr	361.00	213.20	215.23		215.27	0.001302	2.09	236.58	254.55	0.29
Winn	1800	10 yr	194.00	210.50	213.77		213.83	0.001520	1.88	103.17	84.53	0.30
Winn	1800	100 yr	361.00	210.50	215.09		215.12	0.000482	1.29	302.56	312.31	0.18
Winn	1700	10 yr	194.00	210.50	213.80		213.80	0.000059	0.64	321.75	169.29	0.07
Winn	1700	100 yr	361.00	210.50	215.10		215.10	0.000048	0.70	574.14	210.20	0.06
Winn	1600	10 yr	194.00	210.50	213.79		213.80	0.000024	0.40	480.61	174.82	0.04
Winn	1600	100 yr	361.00	210.50	215.09		215.10	0.000024	0.50	722.88	197.67	0.05
Winn	1500	10 yr	194.00	210.50	213.79		213.79	0.000016	0.34	577.59	202.82	0.04
Winn	1500	100 yr	361.00	210.50	215.09		215.09	0.000016	0.42	861.33	224.44	0.04
Winn	1400	10 yr	194.00	210.50	213.79		213.79	0.000024	0.41	477.99	174.68	0.04
Winn	1400	100 yr	361.00	210.50	215.09		215.09	0.000024	0.48	754.36	221.52	0.05
Winn	1300	10 yr	194.00	210.50	213.79		213.79	0.000024	0.40	483.62	178.20	0.04
Winn	1300	100 yr	361.00	210.50	215.09		215.09	0.000028	0.49	736.43	231.46	0.05
Winn	1200	10 yr	194.00	210.50	213.79		213.79	0.000012	0.31	622.14	204.48	0.03
Winn	1200	100 yr	361.00	210.50	215.09		215.09	0.000014	0.40	895.96	216.48	0.03
Winn	1100	10 yr	194.00	210.50	213.79		213.79	0.000020	0.38	512.91	179.15	0.04
Winn	1100	100 yr	361.00	210.50	215.09		215.09	0.000021	0.48	758.42	198.20	0.04
Winn	1000	10 yr	194.00	209.90	213.33		213.74	0.010026	5.15	37.64	17.38	0.62
Winn	1000	100 yr	361.00	209.90	214.52		215.03	0.010167	5.76	62.72	25.05	0.64
Winn	900	10 yr	194.00	209.20	212.39	212.39	213.37	0.028195	7.93	24.47	12.54	1.00
Winn	900	100 yr	361.00	209.20	213.58	213.58	214.66	0.026556	8.35	43.25	19.96	1.00
Winn	800	10 yr	194.00	205.80	209.64	208.82	209.92	0.007037	4.23	45.85	22.30	0.52
Winn	800	100 yr	361.00	205.80	210.28	209.57	210.83	0.010765	5.95	60.71	24.16	0.66
Winn	700	10 yr	194.00	206.00	207.28	207.28	207.52	0.024468	3.94	49.30	107.99	1.03
Winn	700	100 yr	361.00	206.00	207.55	207.55	207.84	0.020612	4.32	83.50	139.69	0.99
Winn	600	10 yr	194.00	204.10	206.27		206.34	0.002611	2.12	91.71	94.87	0.38
Winn	600	100 yr	361.00	204.10	206.66		206.77	0.003347	2.73	132.22	112.41	0.44
Winn	500	10 yr	194.00	203.70	205.88		205.96	0.003931	2.25	86.42	116.68	0.45
Winn	500	100 yr	361.00	203.70	206.17		206.31	0.004534	2.96	127.96	160.60	0.51
Winn	400	10 yr	194.00	203.40	205.33	205.05	205.42	0.006844	2.33	83.27	153.69	0.56
Winn	400	100 yr	361.00	203.40	205.61		205.72	0.006836	2.77	130.39	185.62	0.58
Winn	300	10 yr	194.00	203.00	204.62	204.22	204.70	0.004005	2.27	93.10	178.15	0.45
Winn	300	100 yr	361.00	203.00	204.91	204.59	205.01	0.004001	2.75	151.20	220.08	0.48

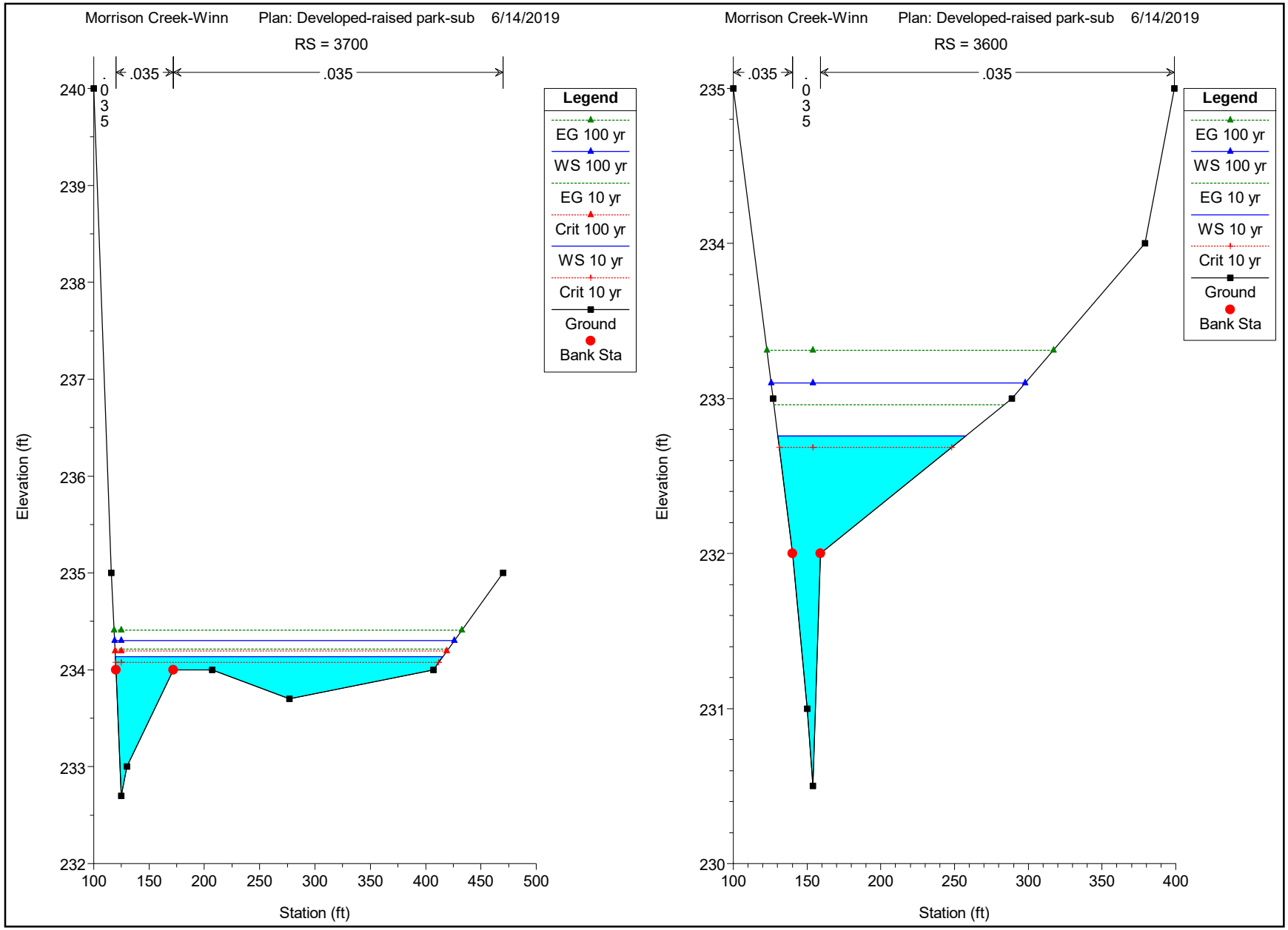

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 4700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 4600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

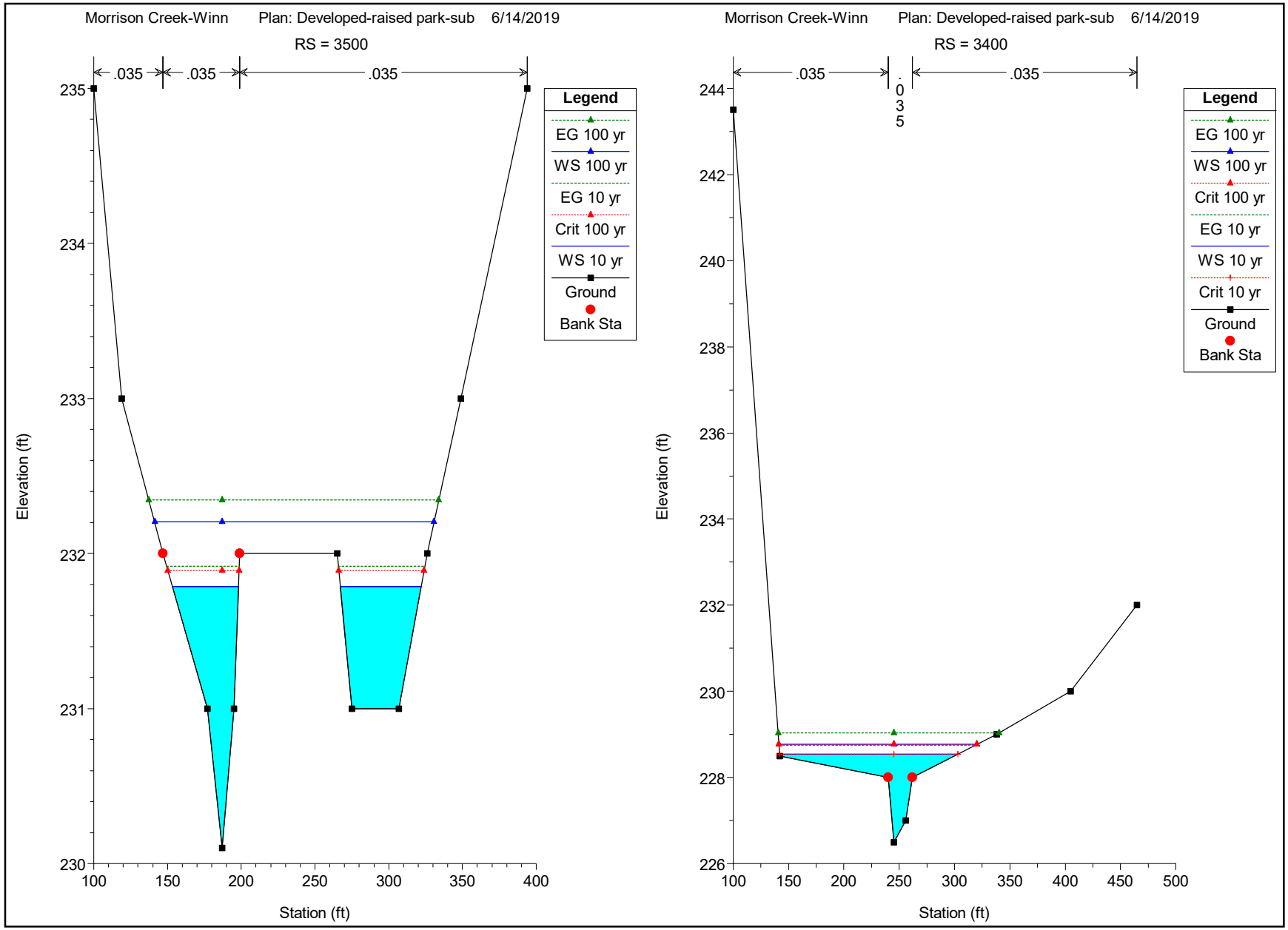

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 4500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 4400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

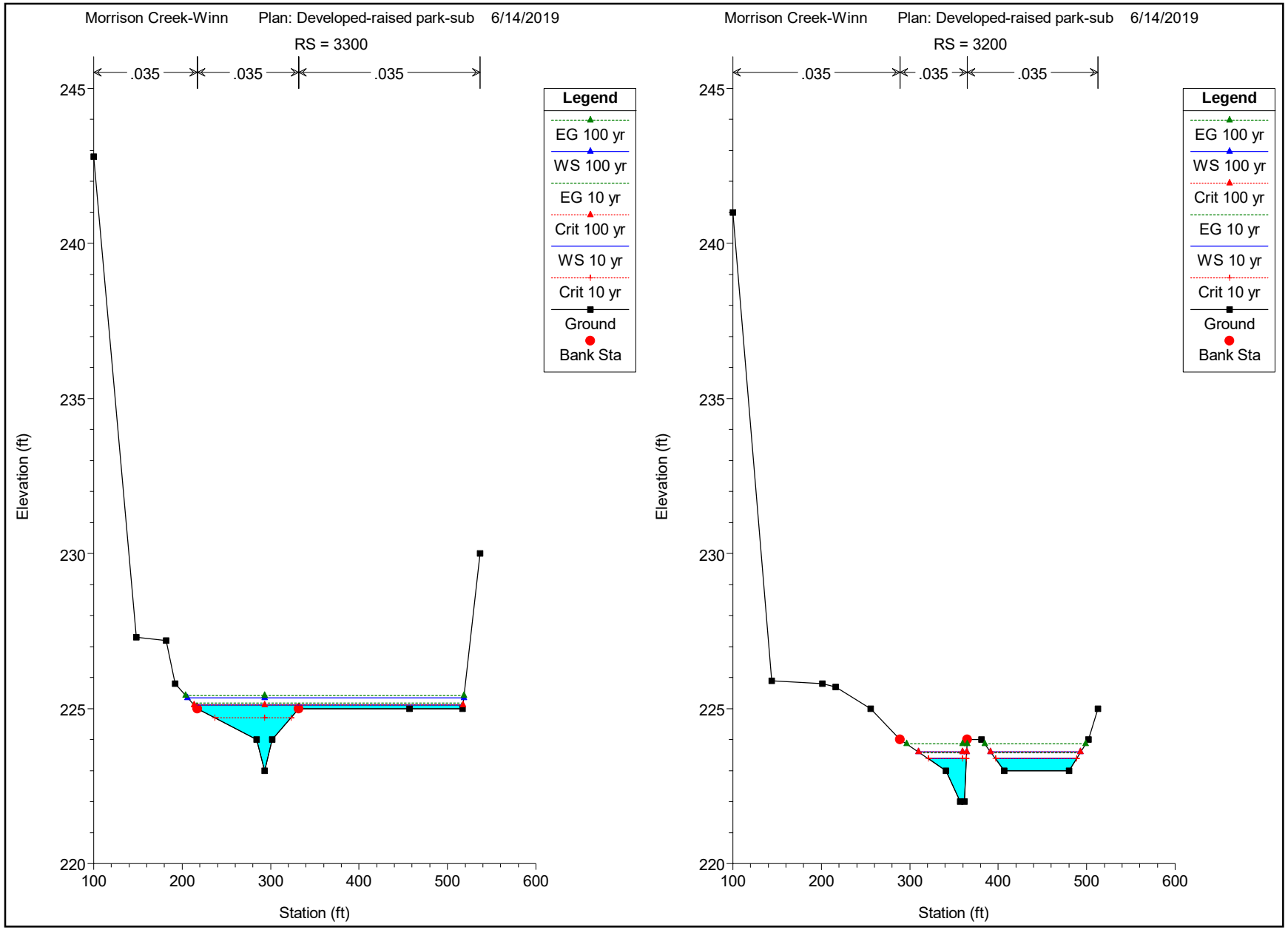

Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 4300
.035
.035
.035
Legend
EG 100 yr
EG 10 yr
WS 100 yr
Crit 100 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 4200
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 100 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

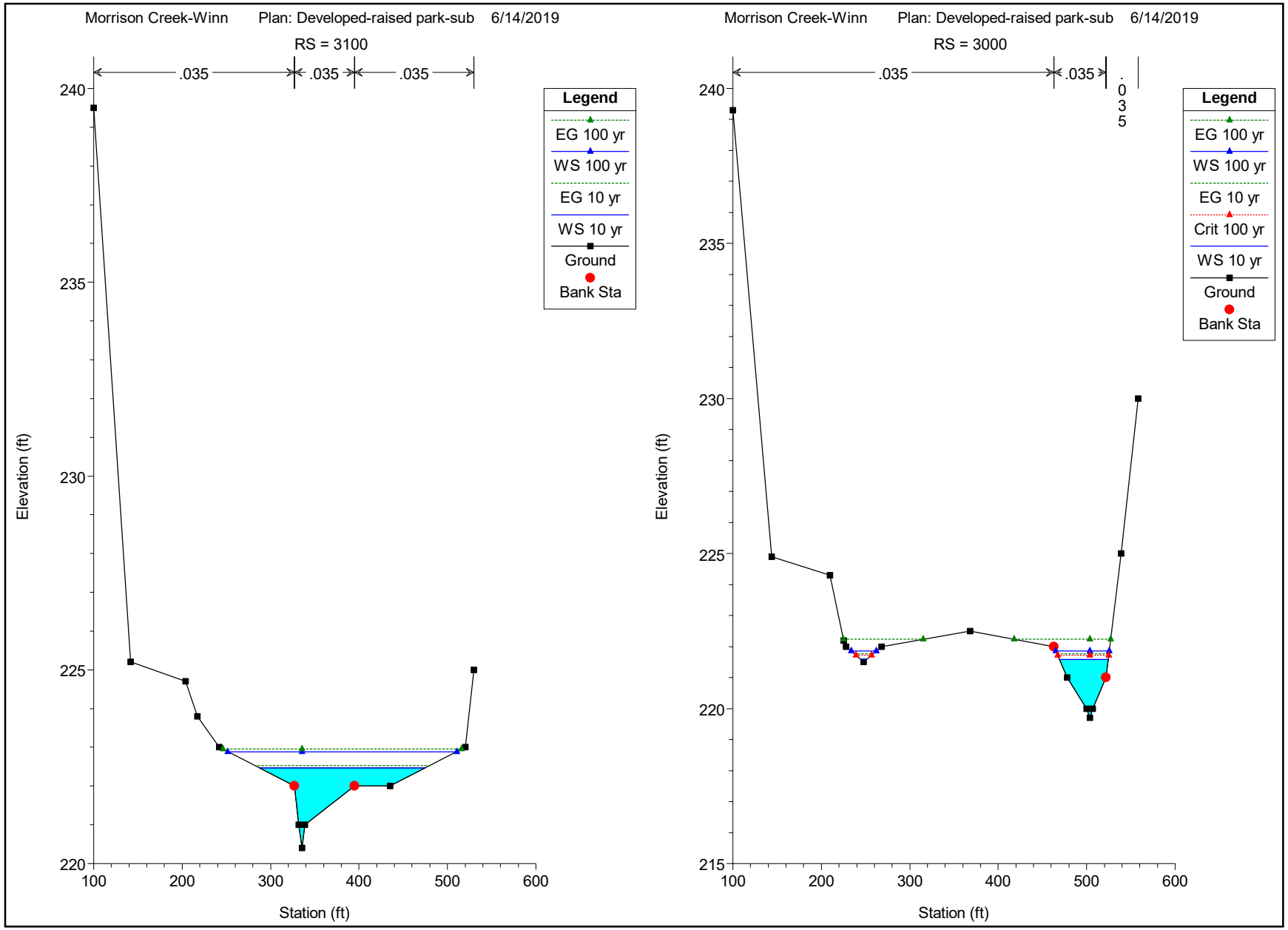

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 4100
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
250
248
246
244
242
240
238
236
100
200
300
400
500
600
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 4000
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
246
244
242
240
238
236
234
100
200
300
400
500
600

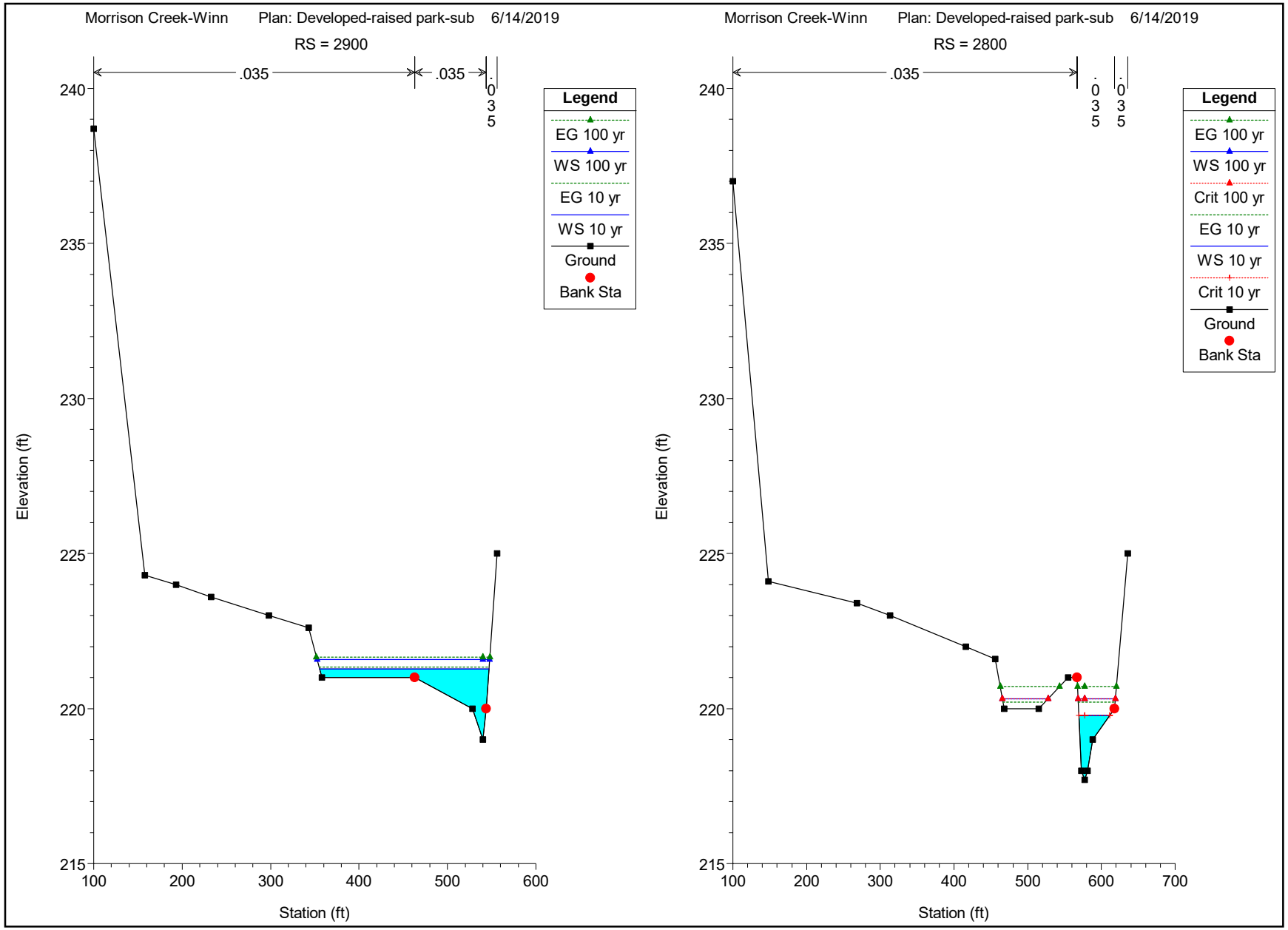

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 3900
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 3800
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

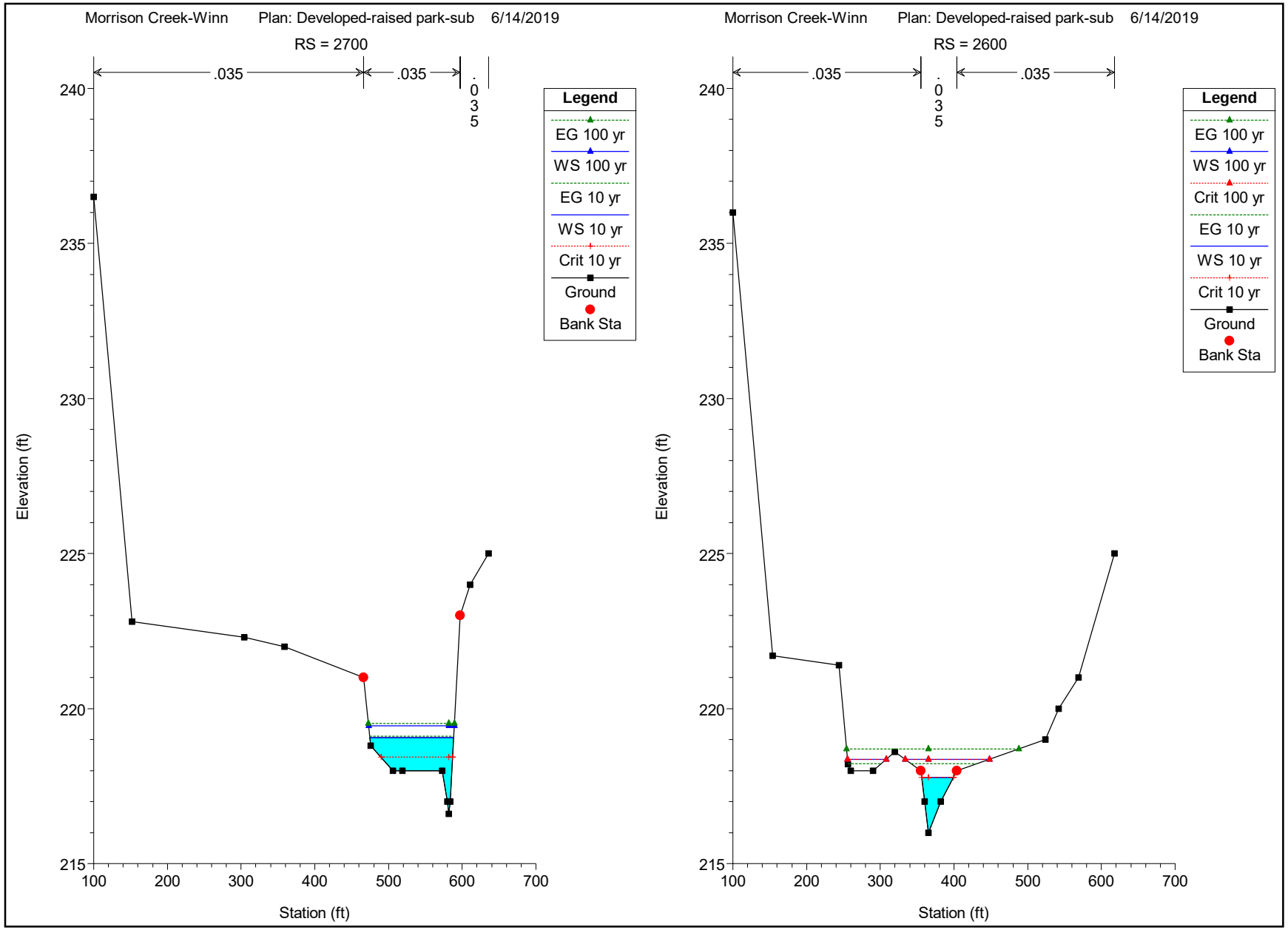

Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 3700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
239
238
237
236
235
234
233
232
100
150
200
250
300
350
400
450
500
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 3600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
235
234
233
232
231
230
100
150
200
250
300
350
400

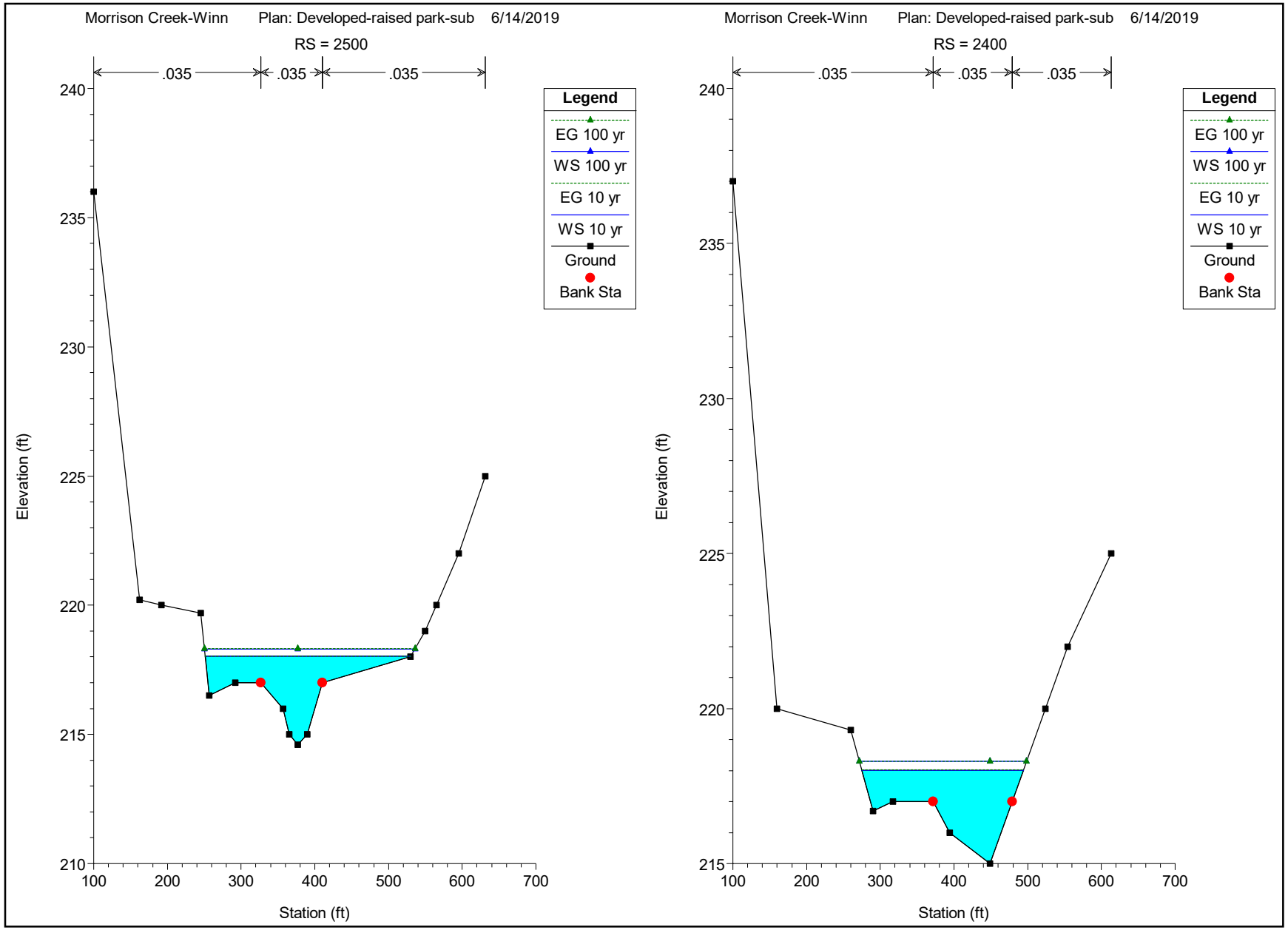

Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 3500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 3400
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

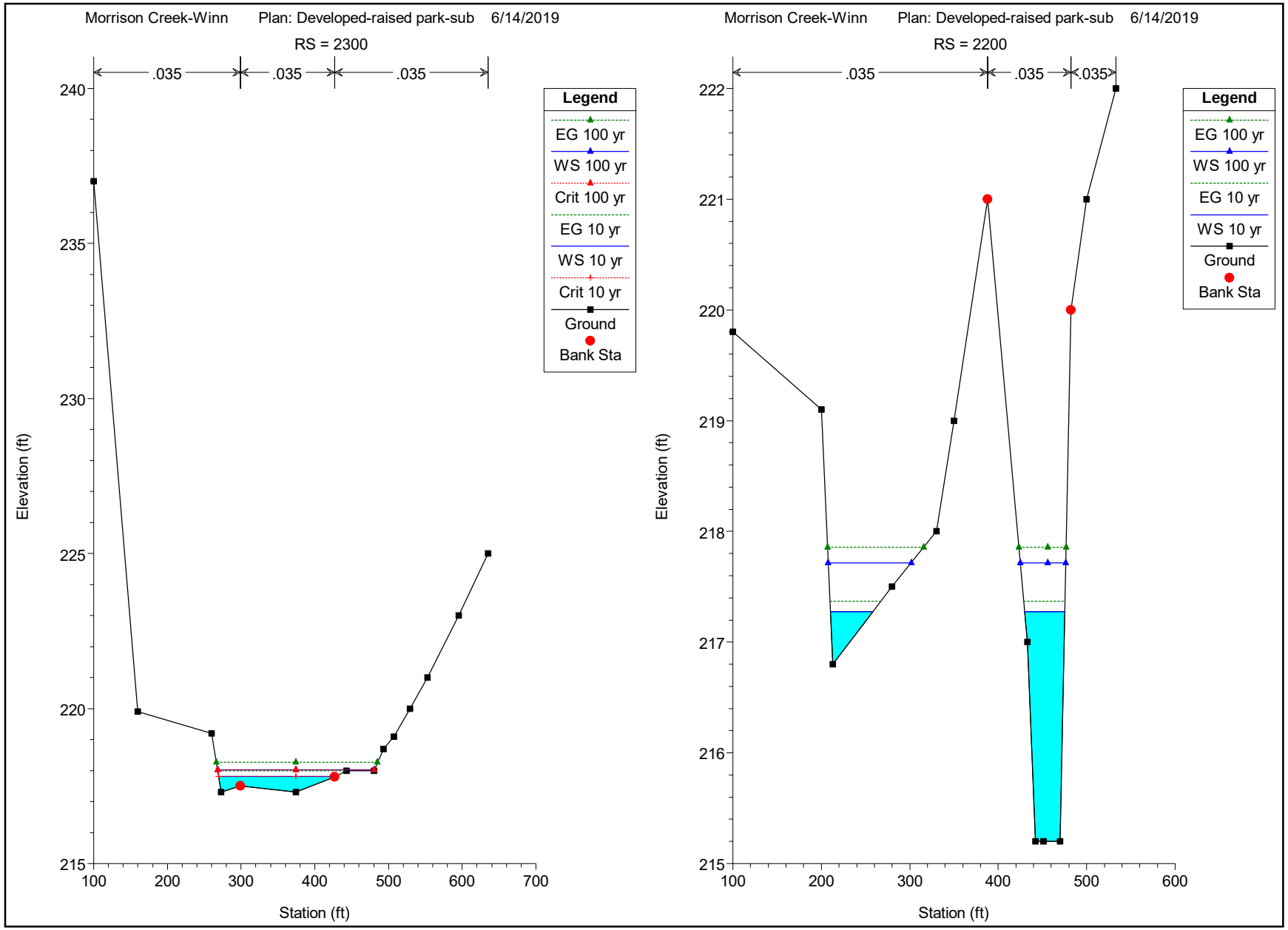

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 3300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
245
240
235
230
225
220
100
200
300
400
500
600
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 3200
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

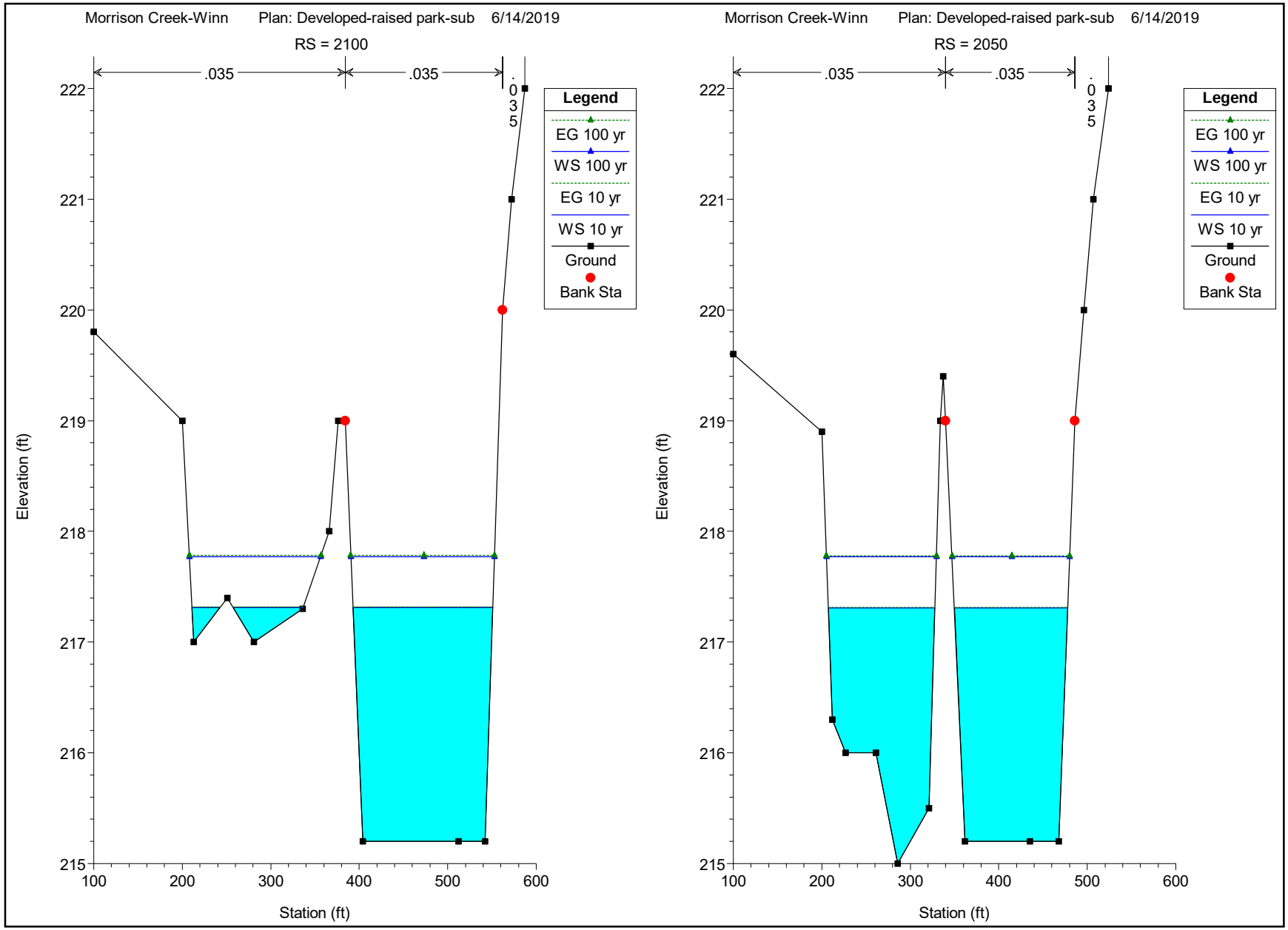

Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 3100
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
235
230
225
220
100
200
300
400
500
600
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 3000
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 100 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
235
230
225
220
215
100
200
300
400
500
600

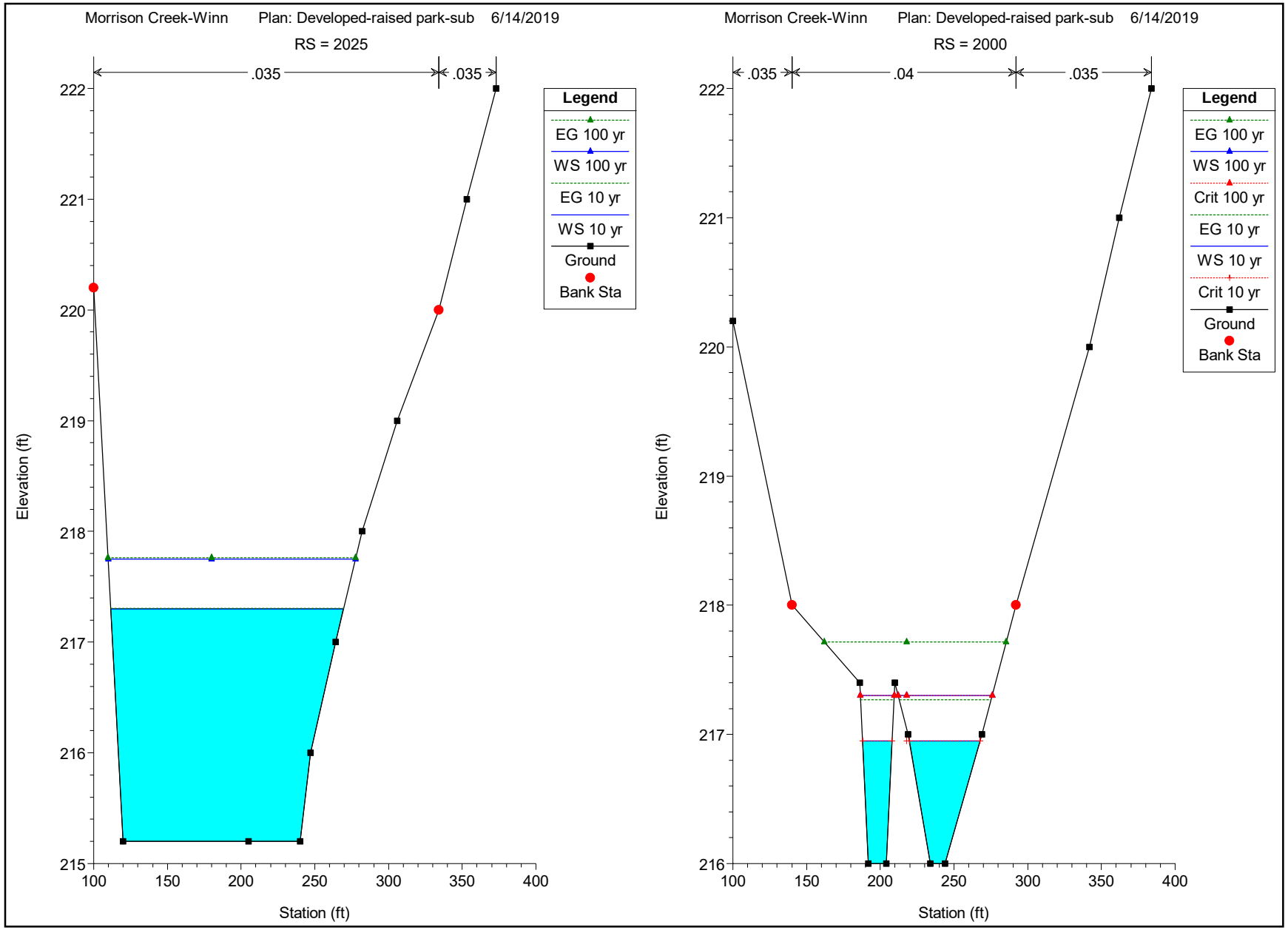

Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 2900
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
235
230
225
220
215
100
200
300
400
500
600
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 2800
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
235
230
225
220
215
100
200
300
400
500
600
700

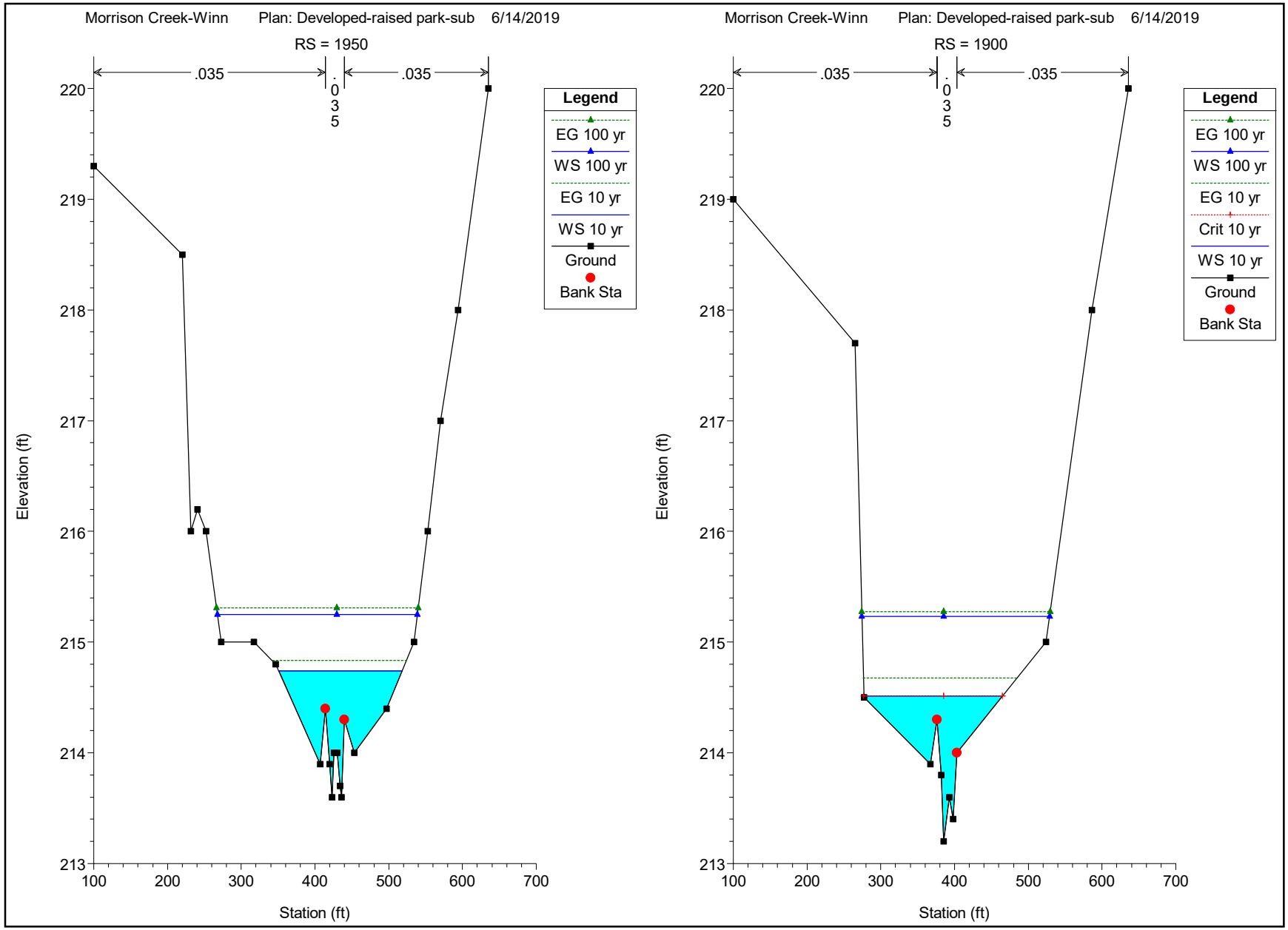

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
235
230
225
220
215
100
200
300
400
500
600
700
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

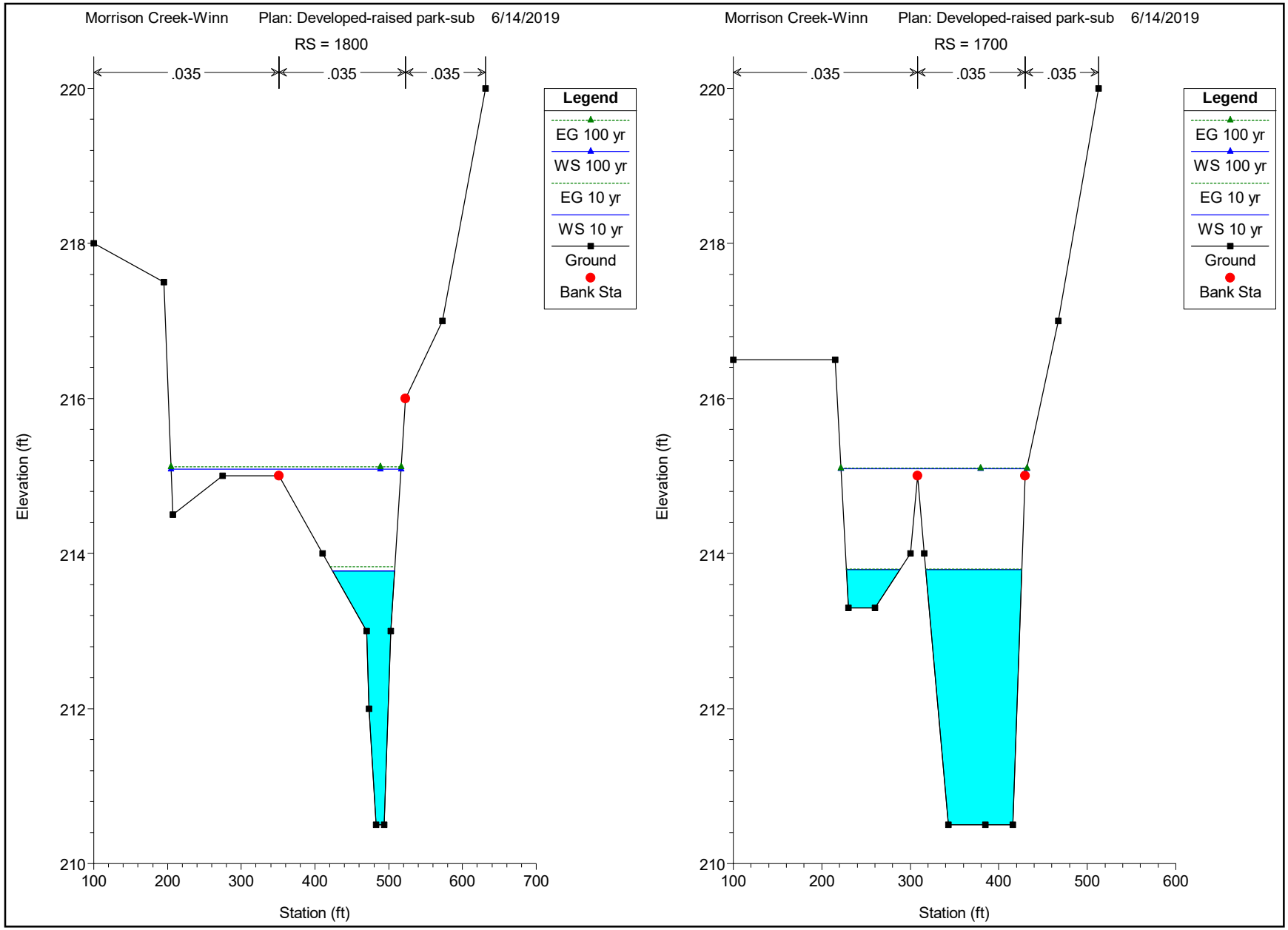

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
235
230
225
220
215
210
100
200
300
400
500
600
700
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
240
235
230
225
220
215
100
200
300
400
500
600
700

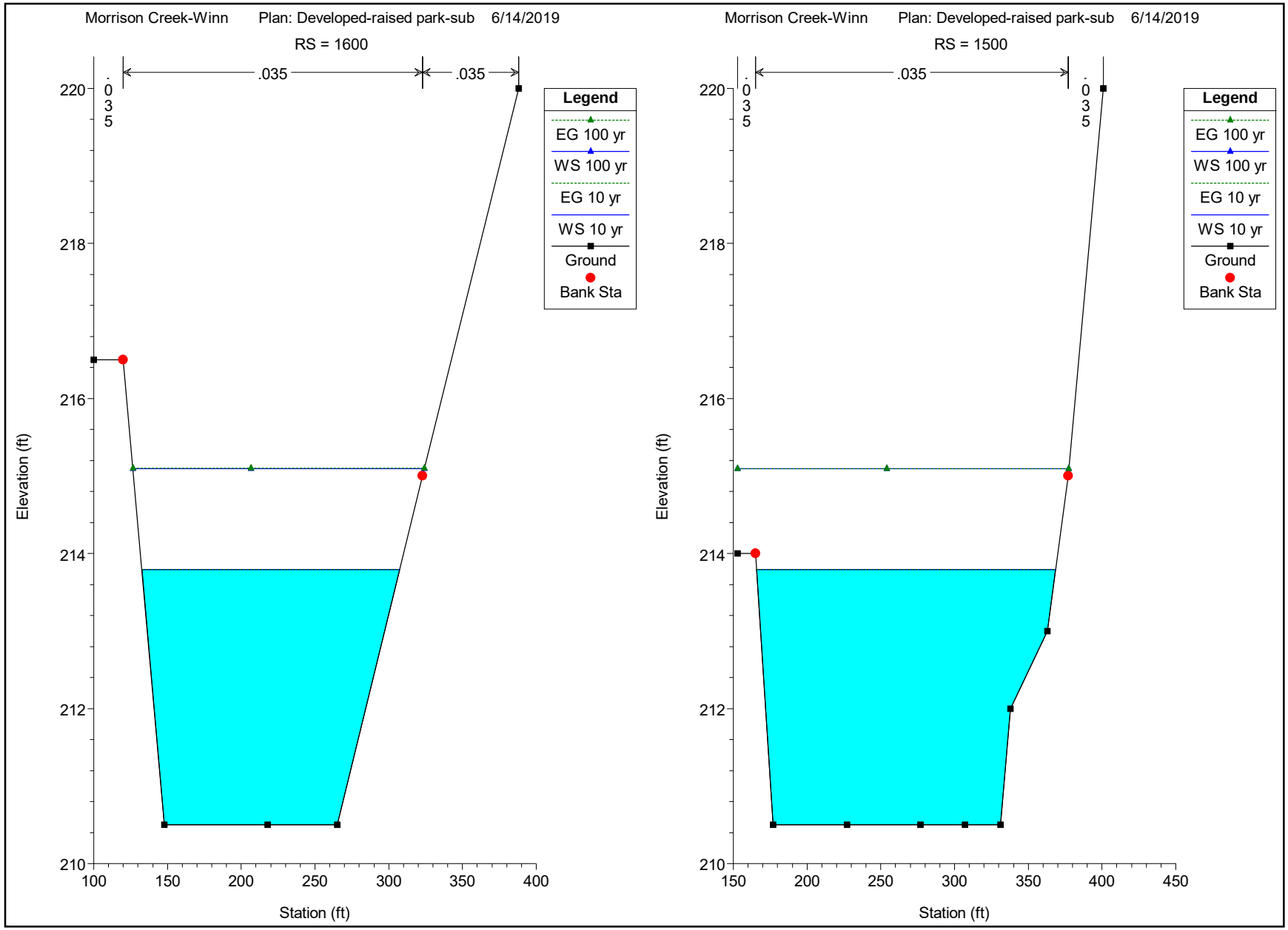

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2200
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

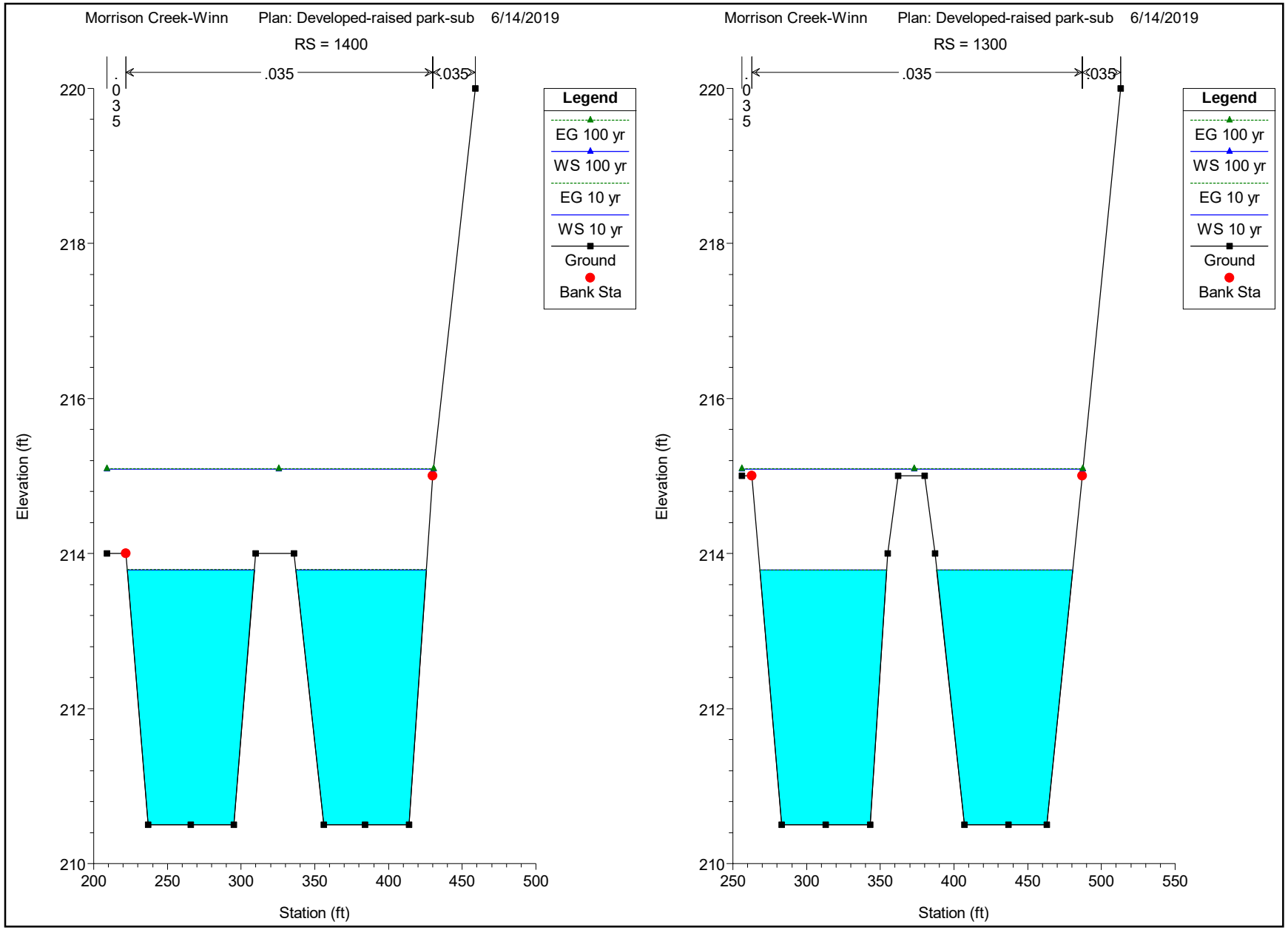

Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 2100
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
222
221
220
219
218
217
216
215
100
200
300
400
500
600
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 2050
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

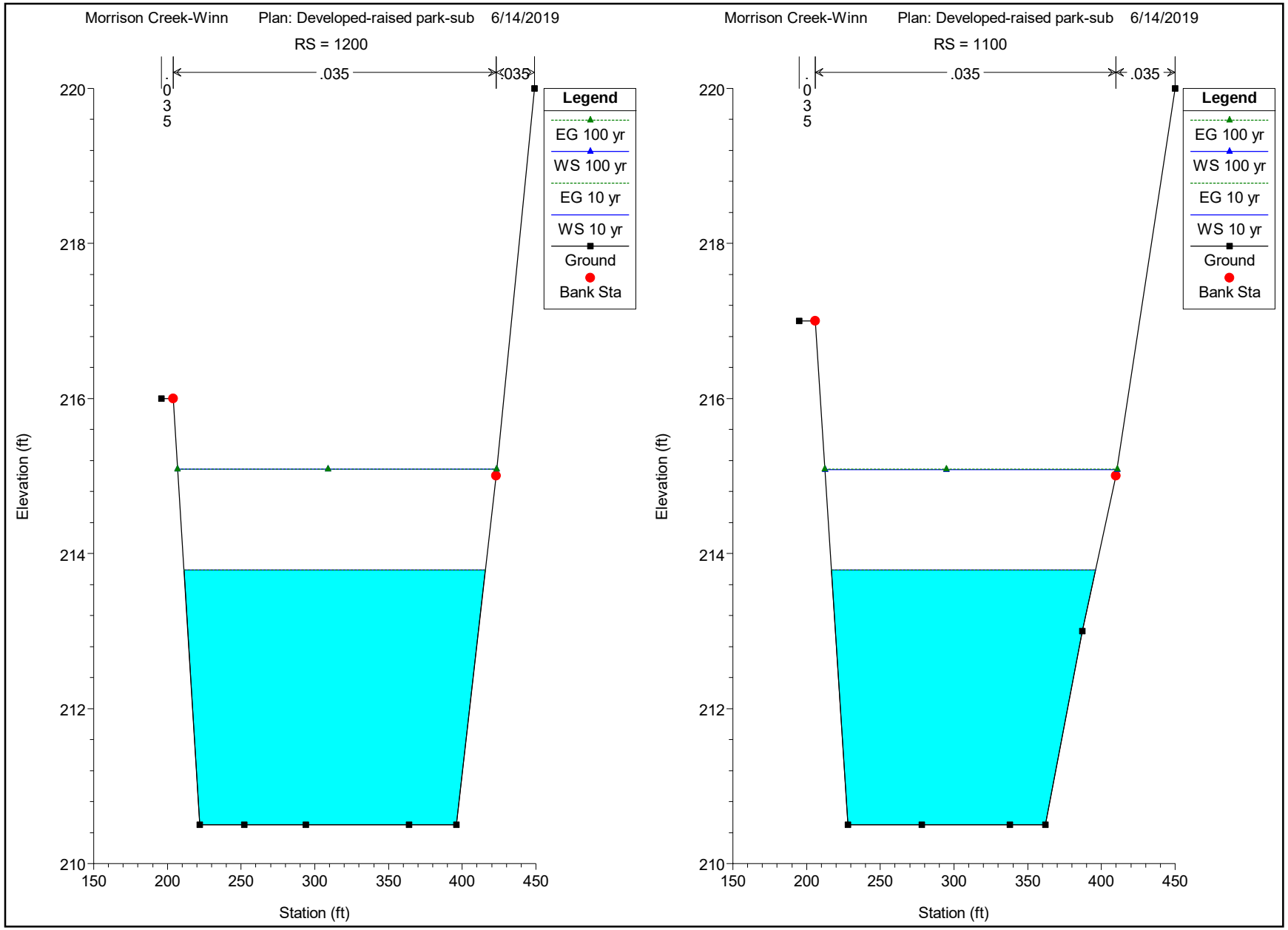

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2025
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 2000
.035
.04
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

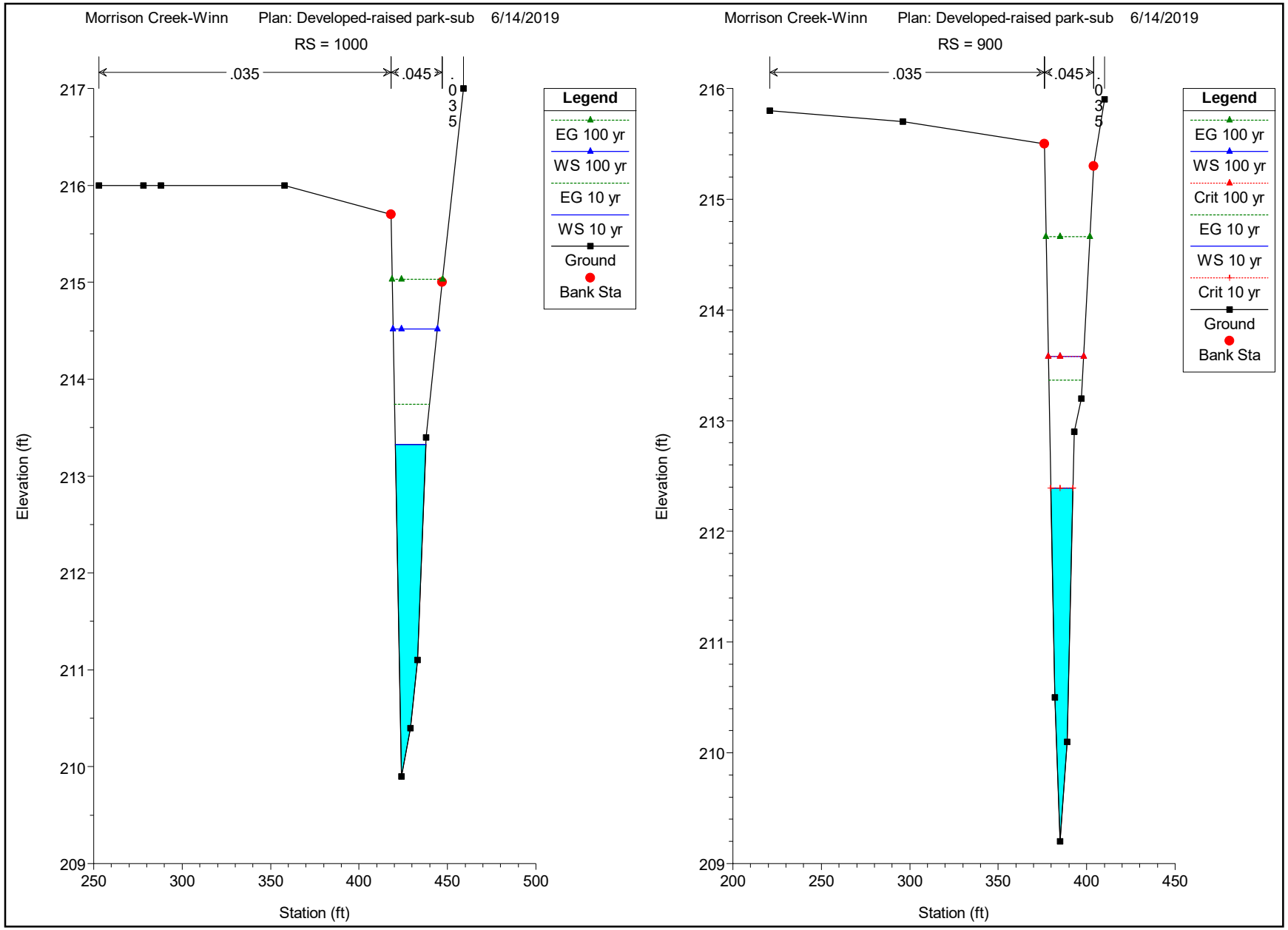

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 1950
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 1900
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
Crit 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

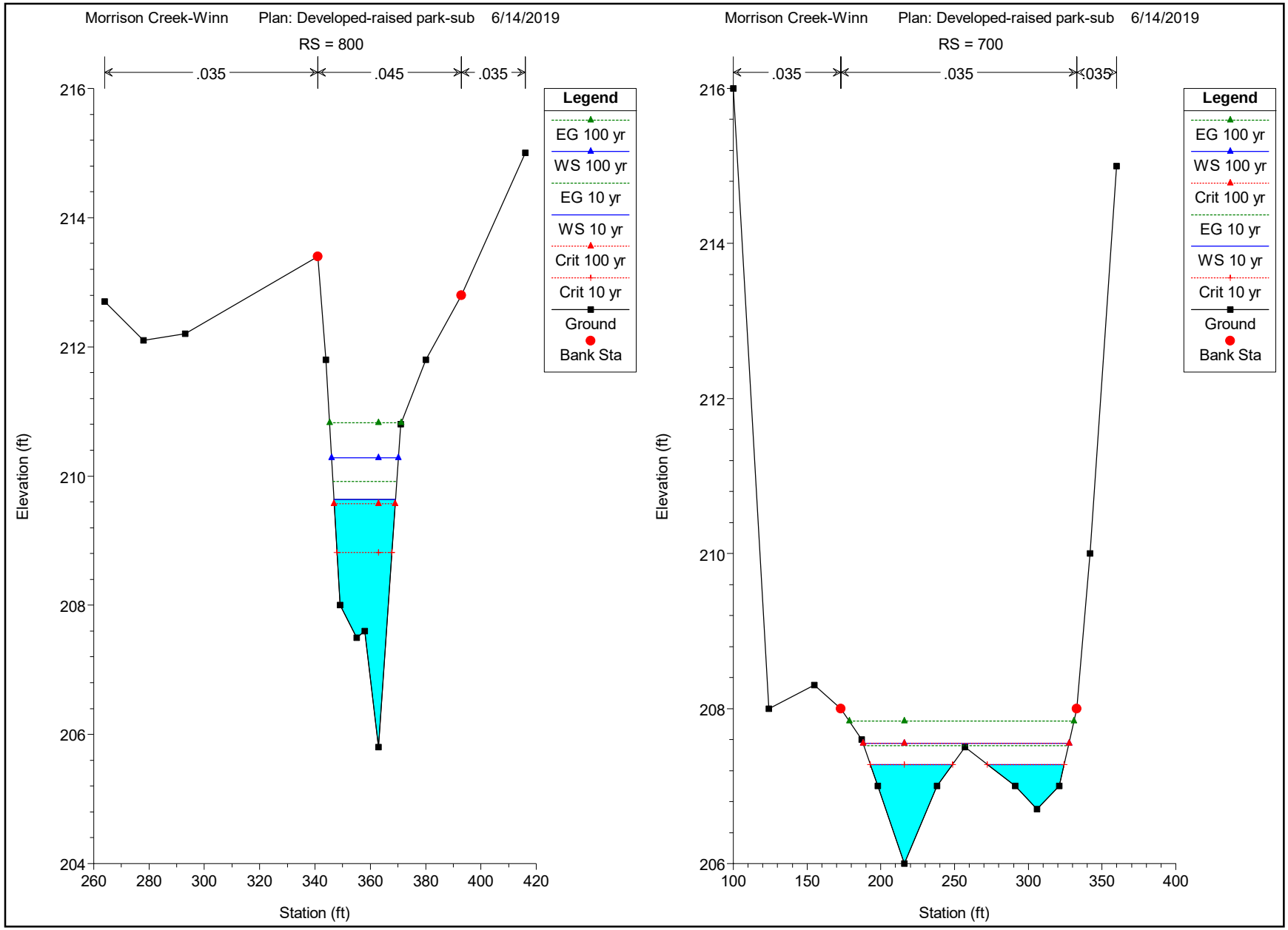

Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 1800
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 1700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

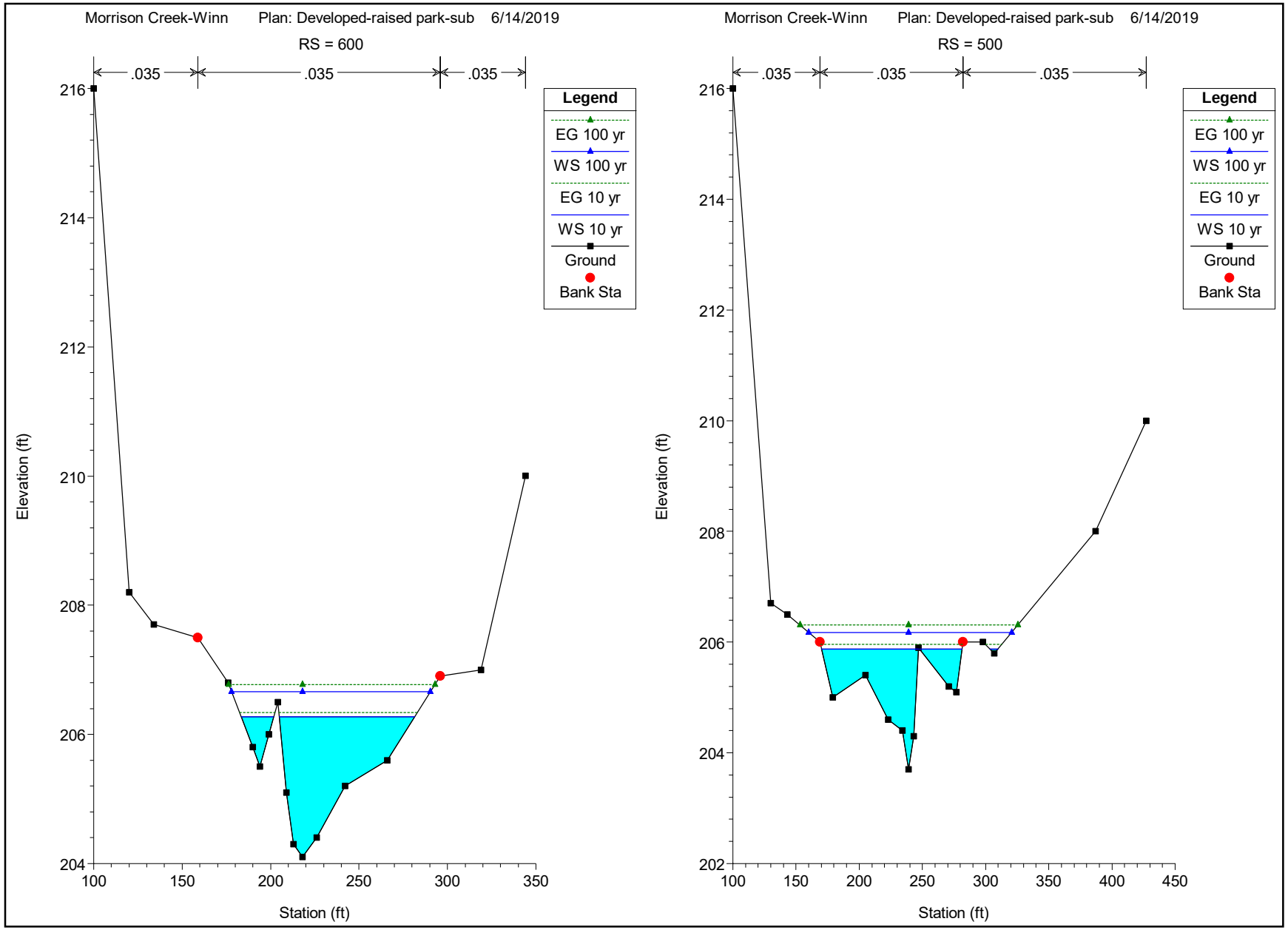

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 1600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
100
150
200
250
300
350
400
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 1500
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
150
200
250
300
350
400
450

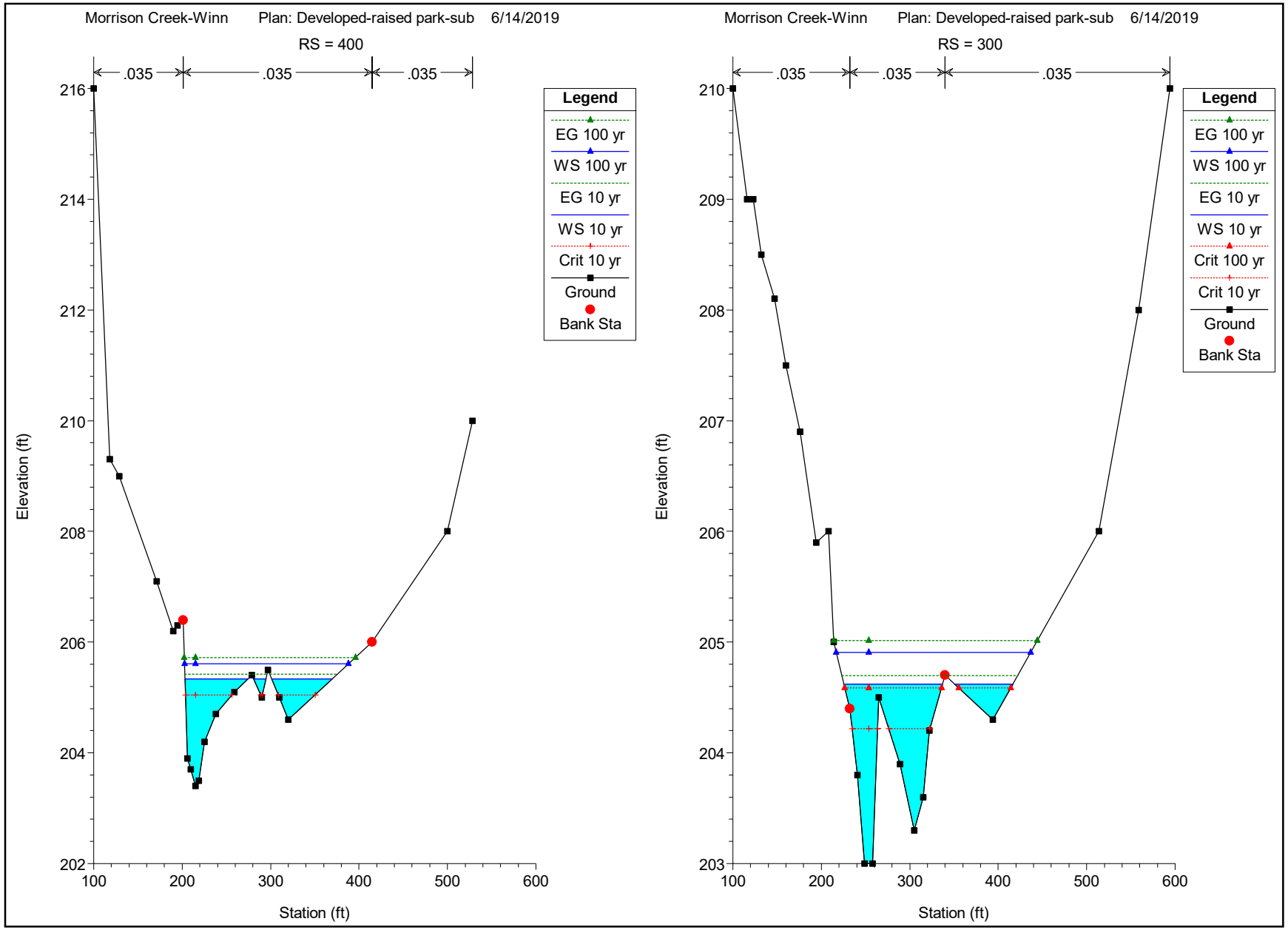

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 1400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
200
250
300
350
400
450
500
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 1300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
250
300
350
400
450
500
550


Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 1200
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
220
218
216
214
212
210
150
200
250
300
350
400
450
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 1100
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)


Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 1000
.035
.045
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
217
216
215
214
213
212
211
210
209
250
300
350
400
450
500
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 900
.035
.045
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
216
215
214
213
212
211
210
209
200
250
300
350
400
450


Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 800
.035
.045
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 100 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 700
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
Crit 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)


Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 600
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn Plan: Developed-raised park-sub 6/14/2019
RS = 500
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

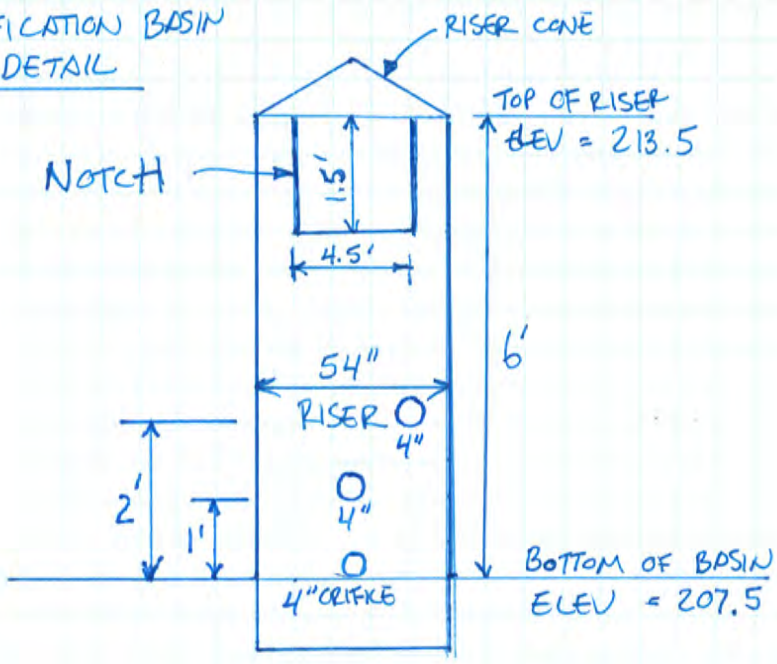

Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 400
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)
Morrison Creek-Winn
Plan: Developed-raised park-sub
6/14/2019
RS = 300
.035
.035
.035
Legend
EG 100 yr
WS 100 yr
EG 10 yr
WS 10 yr
Crit 100 yr
Crit 10 yr
Ground
Bank Sta
Elevation (ft)
Station (ft)

Appendix 9 - Bioretention Basin and Hydromodification Basin Outlet Details

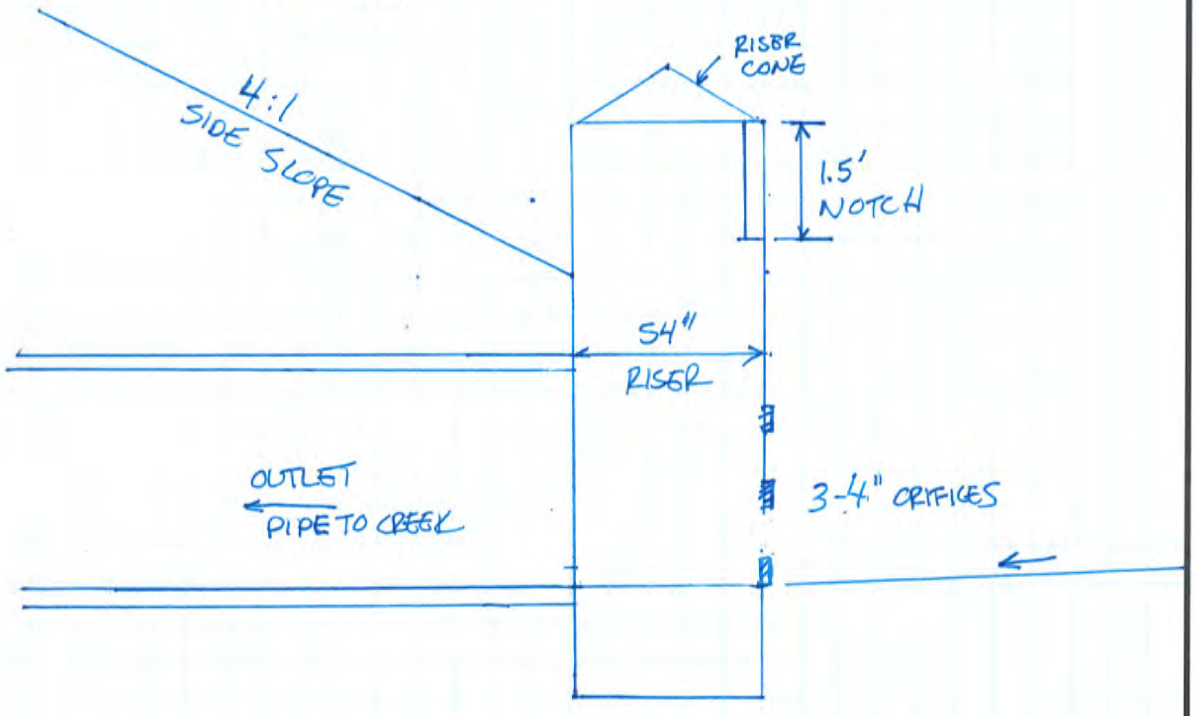
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS

JOB NO: The Preserve (5518
JOB NAME:
DATE: 10/14/19
PREPARED BY:
SHEET NO. OF

HYDROMODIFICATION BASIN OUTLET DETAIL



RISER ELEVATION
NTS



RISER SECTION
NTS

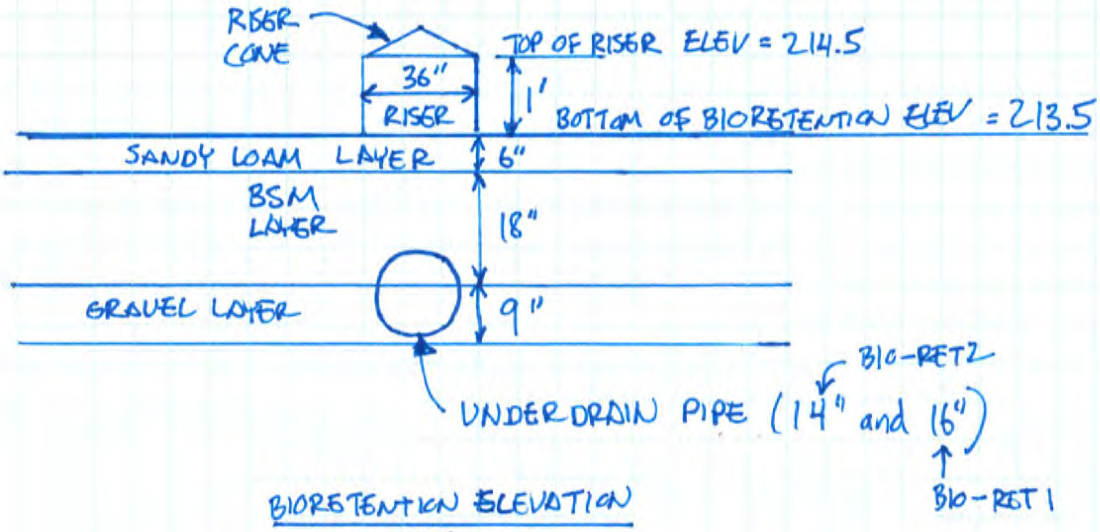
☐ Gilroy
Phone (408) 848-0300
FAX (408) 848-0302

☐ Pleasanton
Phone (925) 227-9100
FAX (925) 227-9300

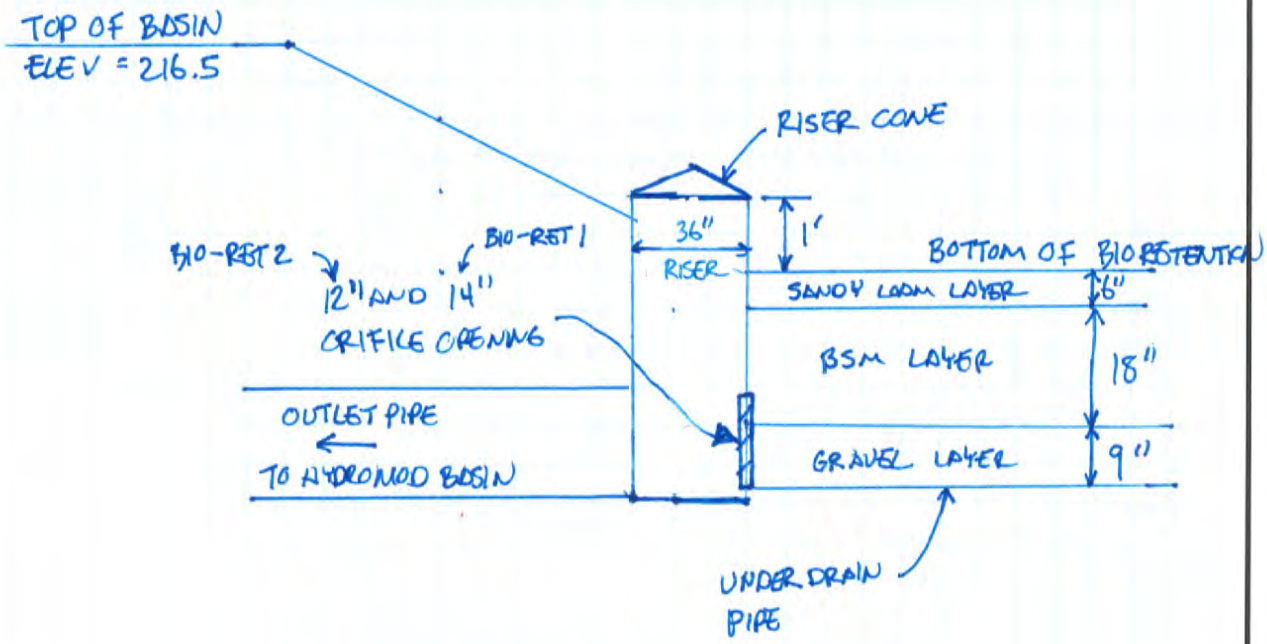
☐ Rocklin
Phone (916) 630-8900
FAX (916) 630-8922

RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS

JOB NO: The Preserve (5218
JOB NAME:
DATE: 10/18/19
PREPARED BY:
SHEET NO. OF



BIORETENTION ELEVATION
NTS



BIORETENTION SECTION
NTS

☐ Gilroy
Phone (408) 848-0300
FAX (408) 848-0302

☐ Pleasanton
Phone (925) 227-9100
FAX (925) 227-9300

☐ Rocklin
Phone (916) 630-8900
FAX (916) 630-8908

Appendix 10 - Drawdown Calculations

Water Quality

Drawdown Time Results

Pond: Water Quality Basin 1

Days	Stage(feet)	Percent of Total Run Time
1	0.950	6.9747
2	4.662	0.4361
3	8.000	N/A
4	8.000	N/A
5	8.000	N/A

Maximum Stage: 8.000 Drawdown Time: 02 01:41:30

Appendix 11 - Preliminary Grading Plan included with Tentative Map package



NOTES:
1. ALL STORM DRAIN PIPE SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE UPON DESIGN OF IMPROVEMENT PLANS
2. ALL INLETS SHALL BE 12" DIAMETER PIPES UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN LIMIT OF GRADING WILL BE REMOVED. ALL EXISTING TREES OUTSIDE OF LIMIT OF GRADING SHALL BE PROTECTED. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
4. PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN.

THE PRESERVE

GRADING PLAN - G.1

CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 8 OF 20
JOB NO. 165018
OCTOBER 22, 2019

N

0 50 100 150

1 inch = 50 ft.

NOTES:
1. ALL STORM DRAIN PIPE SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE UPON DESIGN OF IMPROVEMENT PLANS
2. ALL INLETS SHALL BE 12" DIAMETER PIPES UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN LIMIT OF GRADING WILL BE REMOVED. ALL EXISTING TREES OUTSIDE OF LIMIT OF GRADING SHALL BE PROTECTED. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
4. PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN.

PARCEL 4
29 PM 28
±42.68 AC

PARCEL B
±8.61 AC

PARCEL C
±5.74 AC

PARCEL G
±2.05 AC

PARCEL H
±8.26 AC

PARCEL N
±0.14 AC

PARCEL I
±0.12 AC

CRPD NEIGHBORHOOD PARK 2
PARCEL F
±5.80 AC

EXISTING POND (EX-1)

EXISTING POND (EX-2)

100-YEAR WATER SURFACE Q=361 cfs.

CREEK CENTERLINE MORRISON CREEK

MORRISON CREEK TRAIL

CREEK SETBACK 100'

LIMIT OF GRADING (TYP)

PROVIDE STUB FOR FUTURE PARK STORM DRAIN CONNECTION

BIORETENTION AREA

HYDROMODIFICATION AREA

DIVERSION STRUCTURE

OUTLET STRUCTURE

OUTLET INV 207.0

100-YEAR WSEL = 207.0

STREET 'A'

STREET 'E'

STREET 'H'

STREET 'P'

EDINGTON DRIVE -EXTENSION

SEE SHEET 12

SEE SHEET 11

SEE SHEET 8

THE PRESERVE

GRADING PLAN - G.2

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 9 OF 20
JOB NO. 165018
OCTOBER 22, 2019

SEE SHEET 11

SEE SHEET 8

STREET 'I'

STREET 'J'

STREET 'D'

STREET 'G'

STREET 'M'

RAYMER WAY

EVANSTON WAY

BARKSDALE WAY

DOUGLAS VILLAGE 2 (351 M 4)

REINHEIMER TRUST

PARCEL K
±0.76 AC

PARCEL L
±0.11 AC

PROVIDE STUB FOR FUTURE PARK STORM DRAIN CONNECTION

N

0 50 100 150

1 inch = 50 ft.

NOTES:
1. ALL STORM DRAIN PIPE SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE UPON DESIGN OF IMPROVEMENT PLANS
2. ALL INLETS SHALL BE 12" DIAMETER PIPES UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN LIMIT OF GRADING WILL BE REMOVED. ALL EXISTING TREES OUTSIDE OF LIMIT OF GRADING SHALL BE PROTECTED. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
4. PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN.

THE PRESERVE

GRADING PLAN - G.3

CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 10 OF 20
JOB NO. 165018
OCTOBER 22, 2019

SEE SHEET 12

SEE SHEET 9

SEE SHEET 8

SEE SHEET 10

PARCEL B
±8.61 AC

PARCEL E
±3.84 AC

PARK 2
PARCEL F
±5.80 AC

PARK 1
PARCEL D
±5.43 AC

REINHEIMER TRUST

100 YEAR WATER SURFACE ELEVATION Q=361 cfs.

CREEK CENTERLINE
MORRISON CREEK

100' CREEK SETBACK

MORRISON CREEK TRAIL

LIMIT OF GRADING (TYP)

PROVIDE STUB FOR FUTURE PARK STORM DRAIN CONNECTION

TREE INFORMATION (TYP). SEE NOTE 3 FOR MORE INFORMATION.

STREET 'A'
STREET 'H'
STREET 'I'
STREET 'J'
STREET 'K'
STREET 'L'
STREET 'M'
STREET 'G'
RAYMER WAY



NOTES:
1. ALL STORM DRAIN PIPE SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE UPON DESIGN OF IMPROVEMENT PLANS
2. ALL INLETS SHALL BE 12" DIAMETER PIPES UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN LIMIT OF GRADING WILL BE REMOVED. ALL EXISTING TREES OUTSIDE OF LIMIT OF GRADING SHALL BE PROTECTED. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
4. PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN.

THE PRESERVE

GRADING PLAN - G.4

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 11 OF 20
JOB NO. 165018
OCTOBER 22, 2019

PARCEL A
±83.47 AC

PARCEL 5
29 PM 28
±40.19 AC

PARCEL B
±8.61 AC

PARCEL E
±3.84 AC

PARK 1
PARCEL D
±5.43 AC

REINHEIMER TRUST

100 YEAR WATER SURFACE ELEVATION Q=361 cfs.

CREEK CENTERLINE MORRISON CREEK

100' CREEK SETBACK

LIMIT OF GRADING (TYP)

MORRISON CREEK TRAIL

PROVIDE STUB FOR FUTURE PARK STORM DRAIN CONNECTION

STREET "K"

STREET "L"

STREET "M"

SEE SHEET 9

SEE SHEET 11

N

0 50 100 150

1 inch = 50 ft.

NOTES:
1. ALL STORM DRAIN PIPE SIZES ARE PRELIMINARY AND SUBJECT TO CHANGE UPON DESIGN OF IMPROVEMENT PLANS
2. ALL INLETS SHALL BE 12" DIAMETER PIPES UNLESS OTHERWISE NOTED.
3. ALL EXISTING TREES WITHIN LIMIT OF GRADING WILL BE REMOVED. ALL EXISTING TREES OUTSIDE OF LIMIT OF GRADING SHALL BE PROTECTED. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
4. PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN.

THE PRESERVE

GRADING PLAN -G .5

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 12 OF 20
JOB NO. 165018
OCTOBER 22, 2019

Appendix 12 - Existing Conditions Plan included with Tentative Map package

1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2547"(3)(4)(9) SFNF

5/8" REBAR (4) SFNF

5/8" REBAR (4)

N89°05'58"E 956.39'

1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2457"(3)(4)(9)

5/8" REBAR & CAP LS 3680 (9)

N89°03'01"E 2352.30'

SACRAMENTO COUNTY
CITY LIMITS RANCHO CORDOVA

1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2457"

HELD RECORD ANGLE OF 60°27'30" PER (2)(3)

GRANT LINE ROAD

N28°35'31"E 696.04'

EX CATTLE FENCE (TYP)

SMUD
10' X 10' POLE BARRIER EASEMENT
20170725-1091

1-1/4" IP W/PLUG, LEANING (NR)
N12°38'38"W 0.78' M-COR

HELD RECORD ANGLE OF 150°39'49" PER (3)

N00°44'40"W 40.81' HELD RECORD DISTANCE PER (1)(3)(5)

1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2457"(3) SFNF

EX BUILDING

PARCEL 5
29 PM 28

EX DIRT ROAD (TYP)

N00°55'15"W 1341.90'

N00°56'16"W 1821.79'

TDW ENTERPRISES LP
20121214-0851
APNS 073-0010-010 AND 073-0010-011
PORTION OF TRACT 3
12 RS 27

PARCEL 4
29 PM 28

R=500.00'
Δ=34°06'21"
L=297.63'

EX CATTLE FENCE (TYP)

EX DIRT ROAD (TYP)

5/8" REBAR, NO TAG(4)

COUNTY OF SACRAMENTO 40' WIDE DRAINAGE EASEMENT TO CITY OF RANCHO CORDOVA (20150122-0971)

5/8" REBAR, NO TAG(4)
S38°28'53"W 0.56'
PL-ESMT INTX TO REBAR

N89°03'49"E 1043.02'

5' WIDE PRIVATE UTILITY EASEMENT
IN FAVOR OF BRADLEY ET AL
770630-1450

5/8" REBAR, NO TAG(4)

EX BUILDING (TYP)

5/8" REBAR, NO TAG(4)

MORRISON CREEK

EX MAN MADE POND

WELL

5/8" REBAR, NO TAG(4)

N89°04'28"E 1129.58'

15' WIDE PT&T EASEMENT
771107-874

5/8" REBAR, NO TAG(4)

IOD
COUNTY OF SCARAMENTO
60' WIDE PUBLIC RIGHT OF WAY
761215-632
ROAD MAINTENANCE CONDITIONS AND RESTRICTIONS
770630-1446

30'

30'

EX DIRT ROAD (TYP)

SEPTIC

WELL

EX DIRT ROAD (TYP)

N00°55'35"W 1592.94'

N00°55'15"W 1319.28'

WHITLOW AND DHILLON
APN 072-0300-005
PARCEL 3
29 PM 28

EX DIRT ROAD (TYP)

EX BUILDING (TYP)
(TO BE DEMOLISHED)

WELL

EX CATTLE FENCE (TYP)

SEPTIC

EX BUILDING (TYP)
(TO BE DEMOLISHED)

N00°55'13"W 1599.82'

DAVID AND ALAINA FAMILY
1985 REVOCABLE TRUST
APN 072-0300-002
PARCEL 6
29 PM 28

30' WIDE PT&T EASEMENT
780222-958

SEE SHEET 19

EX MISCELLANEOUS STRUCTURE

MORRISON CREEK

CITY LIMITS
RANCHO CORDOVA
SACRAMENTO COUNTY

N28°36'41"E 4174.92'

RAYMER WAY

GRANT LINE ROAD

ENVIRONMENTAL/BIOLOGICAL

- VERNAL POOL
- SWALE
- STREAM/CREEK
- OPEN WATER

NOTES:
1. NO OAK TREES ARE LOCATED IN LIMITS OF DEVELOPED AREA. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
2. ALL BIOLOGICAL RESOURCE INFORMATION SOUTH OF MORRISON CREEK IS PER AQUATIC RESOURCES DELINEATION EXHIBITS PREPARED BY ECORP CONSULTING, INC. DATED 10-18-2018.
3. ALL BIOLOGICAL RESOURCE INFORMATION NORTH OF MORRISON CREEK IS PER FOOTHILL ASSOCIATES, DATED 06-24-2014.

N

0 150 300 450

1 inch = 150 ft.

TENTATIVE MAP REFERENCE SHEETS

FIRM MAP

FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012

THE PRESERVE

EXISTING CONDITIONS PLAN

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 18 OF 20
JOB NO. 165018
OCTOBER 22, 2019

SEE SHEET 18

15' WIDE PT&T EASEMENT
771107-874

5/8" REBAR, NO TAG (4)

30'

30'

IOD
COUNTY OF SCARAMENTO
60' WIDE PUBLIC RIGHT OF WAY
761215-632
ROAD MAINTENANCE CONDITIONS AND RESTRICTIONS
770630-1446

EX DIRT ROAD (TYP)

SEPTIC

WELL

EX DIRT ROAD (TYP)

EX DIRT ROAD (TYP)

EX BUILDING (TYP)
(TO BE DEMOLISHED)

N00°55'35"W 1598.94'

N00°55'15"W 1319.29'

N00°55'13"W 1599.82'

WHITLOW AND DHILLON
APN 072-0300-005
PARCEL 3
29 PM 28

EX DIRT ROAD (TYP)

EX BUILDING (TYP)
(TO BE DEMOLISHED)

WELL

EX CATTLE FENCE (TYP)

SEPTIC

DAVID AND ALAINA FAMILY
1985 REVOCABLE TRUST
APN 072-0300-002
PARCEL 6
29 PM 28

30' WIDE PT&T EASEMENT
780222-958

N89°04'52"E 1128.90'

TDW ENTERPRISES LP
20121214-0851
APNS 073-0010-010 AND 073-0010-011
PORTION OF TRACT 3
12 RS 27

N28°36'41"E 4114.92'

GRANT LINE ROAD

RAYMER WAY

N00°55'35"W 1598.94'

RANCHO CORDOVA
DRAINAGE EASEMENT
(20051213-585)

N00°55'48"W 498.05'

140.00'(5)(6)'

EVANSTON WAY

NORTH DOUGLAS VILLAGE 2
(351 M 4)

EDINGTON DRIVE

BARKSDALE WAY

NORTH DOUGLAS VILLAGE 2
(351 M 4)

EX CATTLE
FENCE (TYP)

N00°56'05"W 769.24'

SACRAMENTO COUNTY

5/8" REBAR & CAP LS 7944 (NR)

N89°05'59"E 1129.50'

N00°56'01"W 640.00'

THORNBERG WAY

NORTH DOUGLAS VILLAGE 1
(351 M 3)

SOLSBERRY WAY

GOLDEN BOUGH

RAYMAR WAY

ROCKDALE DRIVE

MANZANOLA WAY

NORTH DOUGLAS VILLAGE 3

EVANSTON WAY

CITY OF RANCHO CORDOVA
EASEMENT FOR RIGHT-OF-WAY
20060427-2218 & 20060811-0433

5/8" REBAR & CAP LS 6815 (NR)

N28°37'03"E 1005.44'

3/4" IP WITH PLUG LS 7944
S39°09'34"E 0.21' M-TL

PARCEL 2
29 PM 28

ENVIRONMENTAL/BIOLOGICAL

- VERNAL POOL
- SWALE
- STREAM/CREEK
- OPEN WATER

NOTES:
1. NO OAK TREES ARE LOCATED IN LIMITS OF DEVELOPED AREA. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
2. ALL BIOLOGICAL RESOURCE INFORMATION SOUTH OF MORRISON CREEK IS PER AQUATIC RESOURCES DELINEATION EXHIBITS PREPARED BY ECORP CONSULTING, INC. DATED 10-18-2018.
3. ALL BIOLOGICAL RESOURCE INFORMATION NORTH OF MORRISON CREEK IS PER FOOTHILL ASSOCIATES, DATED 06-24-2014.

N

FIRM MAP

FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012

0 150 300 450
SCALE: 1" = 150'-0"

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

EXISTING CONDITIONS PLAN

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
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SHEET 19 OF 20
JOB NO. 165018
OCTOBER 22, 2019

Appendix I

Environmental Noise & Vibration Assessment

The Preserve Residential Development

Rancho Cordova, California

BAC Job # 2019-085

Prepared For:

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Dario Gotchet, Senior Consultant

September 3, 2020

BOLLARD
Acoustical Consultants

Introduction

The proposed The Preserve Residential Development (project) is located north of Douglas Road, in between Security Park Drive and Raymer Way in Rancho Cordova, California. The project proposes the development of 434 single-family residential lots, public parks, and preserve area on a currently undeveloped 284-acre parcel. The proposed development is located within the Sunrise Douglas Community Plan. Existing land uses in the project vicinity include residential to the south, undeveloped residential to the west, and agricultural to the north and east. The project site location and site plan are shown on Figures 1 and 2, respectively.

The purposes of this assessment are to quantify the existing noise and vibration environments, identify potential noise and vibration impacts resulting from the project, identify appropriate mitigation measures, and provide quantitative and qualitative analyses of impacts associated with the project. Specifically, impacts are identified if project-related activities would cause a substantial increase in ambient noise or vibration levels at existing sensitive uses in the project vicinity, or if traffic or project generated noise or vibration levels would exceed applicable Rancho Cordova standards at existing or proposed sensitive uses within the project vicinity.

Noise and Vibration Fundamentals

Noise

Noise is often described as unwanted sound. Sound is defined as any pressure variation in air that the human ear can detect. If the pressure variations occur frequently enough (at least 20 times per second), they can be heard and are designated as sound. The number of pressure variations per second is called the frequency of sound and is expressed as cycles per second, or Hertz (Hz). Definitions of acoustical terminology are provided in Appendix A.

Measuring sound directly in terms of pressure would require a very large and awkward range of numbers. To avoid this, the decibel scale was devised. The decibel scale uses the hearing threshold (20 micropascals of pressure) as a point of reference, defined as 0 dB. Other sound pressures are then compared to the reference pressure, and the logarithm is taken to keep the numbers in a practical range. The decibel scale allows a million-fold increase in pressure to be expressed as 120 dB. Another useful aspect of the decibel scale is that changes in decibel levels correspond closely to human perception of relative loudness. Noise levels associated with common noise sources are provided in Figure 3.

The perceived loudness of sounds is dependent upon many factors, including sound pressure level and frequency content. However, within the usual range of environmental noise levels, perception of loudness is relatively predictable and can be approximated by filtering the frequency response of a sound level meter by means of the standardized A-weighting network. There is a strong correlation between A-weighted sound levels (expressed as dBA) and community response to noise. For this reason, the A-weighted sound level has become the standard tool of environmental noise assessment. All noise levels reported in this section are in terms of A-weighted levels.

Community noise is commonly described in terms of the ambient noise level, which is defined as the all-encompassing noise level associated with a given noise environment. A common statistical tool to measure the ambient noise level is the average, or equivalent, sound level (L_{eq}). The L_{eq} is the foundation of the day-night average noise descriptor, DNL (or L_{dn}), and shows very good correlation with community response to noise.

The day-night average sound level (DNL) is based on the average noise level over a 24-hour day, with a +10-decibel weighting applied to noise occurring during nighttime (10:00 PM to 7:00 AM) hours. The nighttime penalty is based on the assumption that people react to nighttime noise exposures as though they were twice as loud as daytime exposures. Because DNL represents a 24-hour average, it tends to disguise short-term variations in the noise environment.

Vibration

Vibration is like noise in that it involves a source, a transmission path, and a receiver. While vibration is related to noise, it differs in that noise is generally considered to be pressure waves transmitted through air, while vibration is usually associated with transmission through the ground or structures. As with noise, vibration consists of an amplitude and frequency. A person's response to vibration will depend on their individual sensitivity as well as the amplitude and frequency of the source.

Vibration can be described in terms of acceleration, velocity, or displacement. A common practice is to monitor vibration in terms of velocity in inches per second peak particle velocity (IPS, PPV) or root-mean-square (VdB, RMS). Standards pertaining to perception as well as damage to structures have been developed for vibration in terms of peak particle velocity as well as RMS velocities.

As vibrations travel outward from the source, they excite the particles of rock and soil through which they pass and cause them to oscillate. Differences in subsurface geologic conditions and distance from the source of vibration will result in different vibration levels characterized by different frequencies and intensities. In all cases, vibration amplitudes will decrease with increasing distance. The maximum rate, or velocity of particle movement, is the commonly accepted descriptor of the vibration "strength".

Human response to vibration is difficult to quantify. Vibration can be felt or heard well below the levels that produce any damage to structures. The duration of the event has an effect on human response, as does frequency. Generally, as the duration and vibration frequency increase, the potential for adverse human response increases.

According to the Transportation and Construction-Induced Vibration Guidance Manual (Caltrans, June 2004), operation of construction equipment and construction techniques generate ground vibration. Traffic traveling on roadways can also be a source of such vibration. At high enough amplitudes, ground vibration has the potential to damage structures and/or cause cosmetic damage. Ground vibration can also be a source of annoyance to individuals who live or work close to vibration-generating activities. However, traffic, rarely generates vibration amplitudes high enough to cause structural or cosmetic damage.



Legend

- Project Boundary (Approximate)
- Long-Term Noise Survey Locations
- Short-Term Noise Survey Location
- Vibration Survey Locations

N

Scale (Feet)

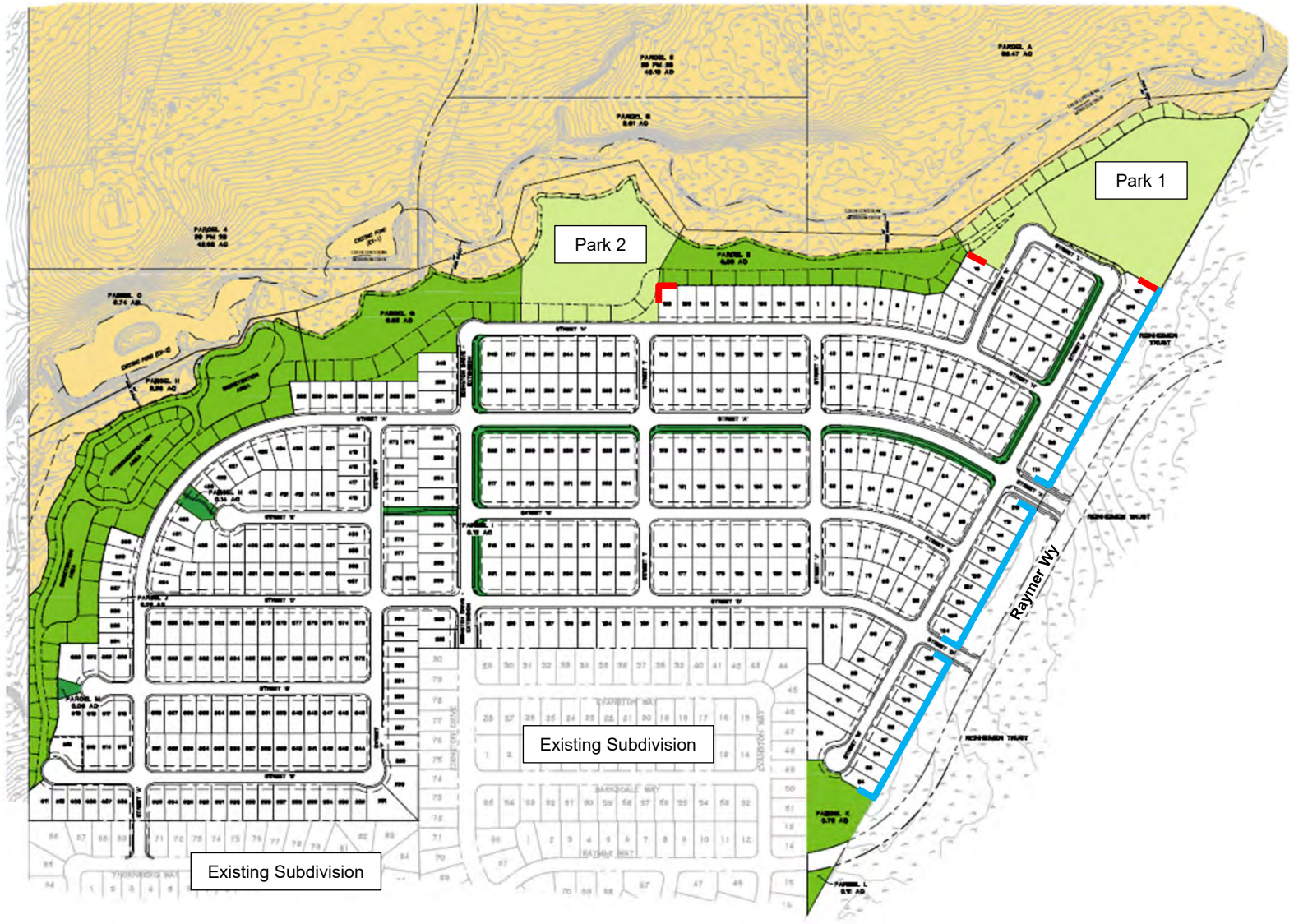
0 400 800

The Preserve Residential Development
Rancho Cordova, California

Project Area

Figure 1

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Legend

- Proposed Public Park Areas
- Proposed Open Space Preserve Areas
- Proposed Community Space and Bioretention and Hydromodification Areas
- Recommended 6' Solid Noise Barriers (Mitigation Measure MM 6: Traffic Noise)
- Recommended 6' Solid Noise Barriers (Mitigation Measure MM 8: Park Noise)

N

Scale (Feet)

0 300 600

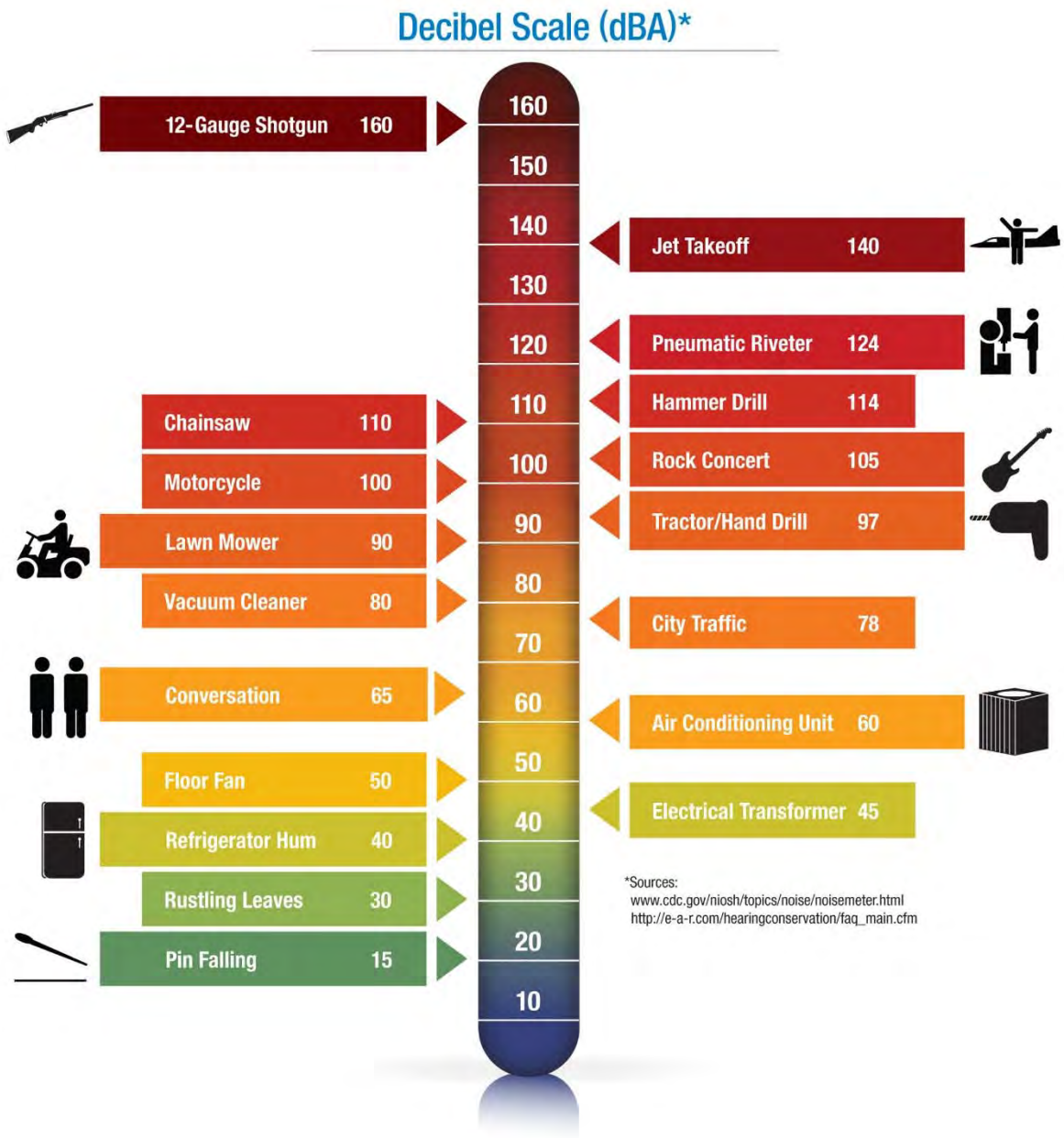
The Preserve Residential Development
Rancho Cordova, California

Project Site Plan – Parks Exhibit

Figure 2

BOLLARD Acoustical Consultants

Figure 3
Noise Levels Associated with Common Noise Sources



Environmental Setting – Existing Ambient Noise and Vibration Environment

Existing Noise-Sensitive Land Uses in the Project Vicinity

Noise-sensitive land uses are generally defined as locations where people reside or where the presence of unwanted sound could adversely affect the primary intended use of the land. Places where people live, sleep, recreate, worship, and study are generally considered to be sensitive to noise because intrusive noise can be disruptive to these activities.

The existing noise-sensitive land uses which would potentially be affected by the project consist of residential uses. Specifically, existing single-family residential land uses are located to the south the proposed development (within a subdivision). In addition, existing residences are sparsely located on agriculturally zoned properties north of the project. Although agricultural uses are typically not considered to be noise-sensitive, residences located on agricultural lands would be. The project area and surrounding land uses are shown on Figure 1.

Existing Traffic Noise Levels along Project Area Roadway Network

The FHWA Traffic Noise Model (FHWA-RD-77-108) was used to develop existing noise contours expressed in terms of DNL for major roadways within the project study area. The FHWA Model predicts hourly L_{eq} values for free-flowing traffic conditions. Estimates of the hourly distribution of traffic for a typical 24-hour period were used to develop DNL values from L_{eq} values.

Traffic data in the form of AM and PM peak hour movements for existing conditions were obtained from the client prepared by Kimley-Horn & Associates, Inc. Average daily traffic volumes were conservatively estimated by applying a factor of 5 to the sum of AM and PM peak hour conditions. Using these data and the FHWA Model, traffic noise levels were calculated. The traffic noise level at 100 feet from the roadway centerline and distances from the centerlines of selected roadways to the 60 dB, 65 dB, and 70 dB DNL contours are summarized in Table 1.

In many cases, the actual distances to noise level contours may vary from the distances predicted by the FHWA Model. Factors such as roadway curvature, roadway grade, shielding from local topography or structures, elevated roadways, or elevated receivers may affect actual sound propagation. It is also recognized that existing sensitive land uses within the project vicinity are located varying distances from the centerlines of the local roadway network. The 100-foot reference distance is utilized in this assessment to provide a reference position at which changes in existing and future traffic noise levels resulting from the project can be evaluated. Appendix B contains the FWHA Model inputs for existing conditions.

Table 1
Existing (2019) Traffic Noise Modeling Results

Seg.	Intersection	Direction	DNL 100 Feet from Roadway	Distance to Contour (feet) 70 dB DNL	65 dB DNL	60 dB DNL
1	1-Mather Field Rd / US 50 WB Ramp	North	68	70	150	323
2		South	69	84	180	388
3		East	70	102	220	475
4		West	64	37	81	174
5	2-Mather Field Rd / US 50 EB Ramp	North	69	83	180	387
6		South	70	96	207	446
7		East	65	47	101	217
8		West	70	97	210	452
9	3-Mather Field Rd / International Dr	North				
10		South	60	23	49	106
11		East	67	61	132	284
12		West	68	78	168	362
13	4-Zinfandel Dr / US 50 WB Ramp	North	68	79	170	367
14		South	70	100	215	463
15		East	71	119	256	552
16		West	64	42	91	196
17	5-Zinfandel Dr / US 50 EB Ramp	North	70	101	218	471
18		South	70	104	225	484
19		East	70	93	200	430
20		West	71	117	252	542
21	6-Zinfandel Dr / White Rock Rd	North	70	104	225	484
22		South	68	73	157	339
23		East	65	48	104	223
24		West	65	45	97	209
25	7-Zinfandel Dr / International Dr	North	67	63	135	291
26		South	67	60	128	277
27		East	65	46	99	214
28		West	66	52	112	242
29	8-Sunrise Blvd / Zinfandel Dr	North	71	124	268	577
30		South	72	127	274	590
31		East	53	7	15	32
32		West	60	20	44	95
33	9-Sunrise Blvd / US 50 WB Ramp	North	72	128	275	594
34		South	71	113	244	525
35		East	68	79	170	366
36		West	69	88	189	407
37	10-Sunrise Blvd / US 50 EB Ramp	North	71	113	244	527
38		South	70	103	223	480
39		East	64	42	90	195
40		West	71	114	246	530
41	11-Sunrise Blvd / Folsom Blvd	North	70	103	221	476
42		South	70	95	205	442
43		East	65	48	104	224
44		West	65	47	102	219
45	12-Sunrise Blvd / White Rock Rd	North	69	80	173	372

Table 1
Existing (2019) Traffic Noise Modeling Results

Seg.	Intersection	Direction	DNL 100 Feet from Roadway	Distance to Contour (feet) 70 dB DNL	65 dB DNL	60 dB DNL
46		South	68	79	171	368
47		East	65	50	107	231
48		West	66	52	112	240
49	13-Zinfandel Dr / Douglas Rd	North	65	49	105	227
50		South	59	18	38	83
51		East	65	49	105	225
52		West	64	38	82	177
53	14-Sunrise Blvd / Douglas Rd	North	68	77	165	356
54		South	70	93	200	432
55		East	64	41	88	190
56		West	65	49	105	227
57	15-Americanos Blvd / Douglas Rd	North	53	8	17	36
58		South				
59		East	60	22	46	100
60		West	61	26	56	121
61	16-Sunrise Blvd / Jackson Rd/SR 16	North	69	83	179	385
62		South	68	69	149	321
63		East	66	57	123	265
64		West	65	46	99	212
65	17-Grant Line Rd / Jackson Rd/SR 16	North	65	46	98	212
66		South	64	41	89	191
67		East	67	59	126	272
68		West	66	58	125	269
69	18-Grant Line Rd / Keifer Blvd	North	66	52	113	244
70		South	65	46	99	213
71		East	58	15	32	68
72		West	37	1	1	3
73	19-Grant Line Rd / Douglas Rd	North	66	57	124	267
74		South	66	51	111	238
75		East				
76		West	60	22	47	102
77	20-Grant Line Rd / Raymer Wy	North	68	69	150	322
78		South	67	60	130	281
79		East				
80		West	56	12	26	55
81	21-Grant Line Rd / White Rock Rd	North	68	78	168	363
82		South	67	63	136	294
83		East				
84		West	61	26	57	122
85	22-Prairie City Rd / White Rock Rd	North	66	51	109	235
86		South				
87		East	65	43	94	202
88		West	66	57	122	263

Note: Blank entries are roadway segments for which no traffic data was provided.
Sources: FHWA-RD-77-108 and Kimley Horn & Associates

Existing Overall Ambient Noise Environment within the Project Area

The existing ambient noise environment within the project area is defined primarily by noise from traffic on Grant Line Road and Raymer Way. To generally quantify existing ambient noise levels within the project area, two long-term (48-hour) ambient noise surveys were conducted from July 10-12, 2019 and one short-term (15-minute) ambient noise survey was conducted on July 10, 2019. The ambient noise measurement locations are shown on Figure 1. Photographs of the noise survey locations are provided in Appendix C.

Larson Davis Laboratories (LDL) Model 820 precision integrating sound level meters were used to complete the noise level measurement surveys. The meters were calibrated before use with an LDL Model CA200 acoustical calibrator to ensure the accuracy of the measurements. The equipment used meets all specifications of the American National Standards Institute requirements for Type 1 sound level meters (ANSI S1.4).

The long-term ambient noise survey results are summarized in Table 2. The detailed results of the long-term noise survey are contained in Appendix D in tabular format and graphically in Appendix E. A summary of the short-term noise measurement results is provided in Table 3.

Table 2
Long-Term Noise Level Measurement Results – July 10-12, 2019[1]

				Average Measured Hourly Noise Levels, dB			
				Daytime[3]		Nighttime[4]	
Site[2]	Description	Date	DNL	L_{eq}	L_{max}	L_{eq}	L_{max}
LT-1	Centrally located on project site, near terminus of Edington Drive	7/10-7/11	47	45	62	40	51
		7/11-7/12	47	45	60	39	53
LT-2	Eastern end of project site, approximately 90 feet from centerline of Raymer Way	7/10-7/11	55	50	69	49	65
		7/11-7/12	55	51	72	48	65

[1] Detailed summaries of the noise monitoring results are provided in Appendices D and E.
[2] Ambient noise monitoring locations are identified on Figure 1.
[3] Daytime hours: 7:00 a.m. to 10:00 p.m.
[4] Nighttime hours: 10:00 p.m. to 7:00 a.m.
Source: Bollard Acoustical Consultants, Inc. (2019)

Table 3
Short-Term Noise Level Measurement Results – July 10, 2019

			Measured Noise Levels, dB[3]	
Site[1]	Description	Time of Day	L_{eq}	L_{max}
ST-1	Southwestern end of the project site	12:23 PM	42	58

[1] Ambient noise monitoring location is identified on Figure 1.
Source: Bollard Acoustical Consultants, Inc. (2019)

The Table 2 data indicate that existing ambient noise levels at the project site were satisfactory relative to the Rancho Cordova General Plan normally acceptable and conditionally acceptable exterior traffic noise level standards of 60 and 65 dB DNL for new residential land uses, respectively. Results from the short-term noise survey indicate that the measured average and maximum noise levels at site ST-1 were 42 dB L_{eq} and 58 dB L_{max}, respectively (Table 3).

Existing Ambient Vibration Environment

During a site visit on July 10, 2019, vibration levels were below the threshold of perception at the project site. Nonetheless, to quantify existing vibration levels at the project site, BAC conducted short-term (15-minute) vibration measurements at the project site on July 10, 2019. The vibration measurement sites are shown on Figure 1. Photographs of the vibration measurement sites are shown in Appendix C.

A Larson-Davis Laboratories Model LxT precision integrating sound level meter equipped with a vibration transducer was used to complete the measurements. The results are summarized below in Table 4.

Table 4
Ambient Vibration Monitoring Results – July 10, 2019

Site[2]	Description	Time	Average Measured Vibration Level, PPV (in. sec)[1]
V-1	Eastern end of the project site	11:36 AM	<0.001
V-2	Centrally located on the project site	12:23 PM	<0.001
V-3	Southwestern end of the project site	12:58 PM	<0.001

[1] PPV = Peak Particle Velocity (inches/second)
Source: Bollard Acoustical Consultants, Inc. (2019)

The Table 4 data indicate that measured average vibration levels within the project area were less than 0.001 in/sec PPV.

Regulatory Setting: Criteria for Acceptable Noise and Vibration Exposure

Federal

The City of Rancho Cordova General Plan establishes criteria for assessing noise impacts associated with increases in ambient noise levels from new roadway projects. However, the City does not currently have criteria for assessing noise impacts associated with increases in ambient noise levels from project-generated traffic within the project vicinity. As a result, the following federal noise criteria established by the Federal Interagency Commission on Noise (FICON) was applied to the project.

Federal Interagency Commission on Noise (FICON)

The Federal Interagency Commission on Noise (FICON) has developed a graduated scale for use in the assessment of project-related noise level increases. The criteria shown in Table 5 was developed by FICON as a means of developing thresholds for impact identification for project-related noise level increases. The FICON standards have been used extensively in recent years by the authors of this section in the preparation of the noise sections of Environmental Impact Reports that have been certified in many California cities and counties.

The use of the FICON standards are considered conservative relative to thresholds used by other agencies in the State of California. For example, the California Department of Transportation (Caltrans) requires a project-related traffic noise level increase of 12 dB for a finding of significance, and the California Energy Commission (CEC) considers project-related noise level increases between 5 to 10 dB significant, depending on local factors. Therefore, the use of the FICON standards, which set the threshold for finding of significant noise impacts as low as 1.5 dB, provides a very conservative approach to impact assessment for this project.

Table 5
Significance of Changes in Cumulative Noise Exposure

Ambient Noise Level Without Project (L_{dn} or CNEL)	Change in Ambient Noise Level Due to Project
<60 dB	+5.0 dB or more
60 to 65 dB	+3.0 dB or more
>65 dB	+1.5 dB or more
Source: Federal Interagency Committee on Noise (FICON)	

Based on the FICON research, as shown in Table 5, a 5 dB increase in noise levels due to a project is required for a finding of significant noise impact where ambient noise levels without the project are less than 60 dB. Where pre-project ambient conditions are between 60 and 65 dB, a 3 dB increase is applied as the standard of significance. Finally, in areas already exposed to higher noise levels, specifically pre-project noise levels in excess of 65 dB, a 1.5 dB increase is considered by FICON as the threshold of significance.

State of California

California Environmental Quality Act (CEQA)

The State of California has established regulatory criteria that are applicable to this assessment. Specifically, Appendix G of the State of California Environmental Quality Act (CEQA) Guidelines are used to assess the potential significance of impacts pursuant to local General Plan policies, Municipal Code standards, or the applicable standards of other agencies. According to Appendix G of the CEQA guidelines, the project would result in a significant noise or vibration impact if the following occur:

A. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies?

B. Generation of excessive groundborne vibration or groundborne noise levels?

C. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

It should be noted that audibility is not a test of significance according to CEQA. If this were the case, any project which added any audible amount of noise to the environment would be considered significant according to CEQA. Because every physical process creates noise, the use of audibility alone as significance criteria would be unworkable. CEQA requires a substantial increase in noise levels before noise impacts are identified, not simply an audible change.

California Department of Transportation (Caltrans)

The City of Rancho Cordova does not currently have adopted standards for groundborne vibration. As a result, the vibration impact criteria developed by the California Department of Transportation (Caltrans) was applied to the project. The Caltrans criteria applicable to damage and annoyance from transient and continuous vibration typically associated with construction activities are presented in Tables 6 and 7. Equipment or activities typical of continuous vibration include: excavation equipment, static compaction equipment, tracked vehicles, traffic on a highway, vibratory pile drivers, pile-extraction equipment, and vibratory compaction equipment. Equipment or activities typical of single-impact (transient) or low-rate repeated impact vibration include impact pile drivers, blasting, drop balls, “pogo stick” compactors, and crack-and-seat equipment (California Department of Transportation 2013).

Table 6
Guideline Vibration Damage Potential Threshold Criteria

Structure and Condition	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV = Peak Particle Velocity

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual (2013).

Table 7
Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (inches/second)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.40	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.40

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

PPV = Peak Particle Velocity

Source: California Department of Transportation, Transportation and Construction Vibration Guidance Manual (2013).

Local

Rancho Cordova General Plan

The Noise Element of the Rancho Cordova General Plan contains the County's noise-related goals, policies, and actions. The specific noise-related criteria which are generally applicable to this project are reproduced below:

GOAL N.1 **Ensure that all new development will be free of noise disturbances.**

Policy N.1.1 Establish standards and policies consistent with those in Tables 7 and 8 (General Plan Tables N-1 and N-2) to govern maximum sound levels in new development.

Action N.1.1.1: Adopt a noise ordinance with noise level performance standards, including maximum allowable noise exposure, ambient versus nuisance noise, method of measuring noise, and enforcement procedures.

Policy N.1.2 Ensure that the indoor and outdoor areas of new projects will be located, constructed, and/or shielded from noise sources in compliance with the City's noise standards to the maximum extent feasible.

Action N.1.2.1: Require new development of noise-creating uses to conform to the City's maximum noise levels.

Action N.1.2.2: Require an acoustical analysis as part of the environmental review process when noise-sensitive land uses are proposed in areas where current or projected exterior noise levels exceed the City's standards.

Action N.1.2.3: Require any potential noise impacts identified during the acoustical analysis to be mitigated in the project design to the maximum extent feasible.

Policy N.1.4 Mitigate noise created by proposed non-transportation noise sources to comply with the City's noise standards to the maximum extent feasible.

Action N.1.4.1: Limit construction activity to the hours of 7:00 AM to 7:00 PM weekdays and 8:00 AM to 6:00 PM weekends when construction is conducted in proximity to residential uses.

Action N.1.4.3: Require stationary construction equipment and construction staging areas to be set back from existing noise-sensitive land uses.

Policy N.1.5 Mitigate noise created by the construction of new transportation noise sources (such as roadways or new light rail service) to the maximum extent feasible to comply with the City's standards.

Policy N.1.7 To the extent feasible and appropriate, the City shall require the use of temporary construction noise control measures for public and private projects that may include the use of temporary noise barriers, temporary relocation of noise-sensitive land uses or other appropriate measures.

Table 8
Noise Level Performance Standards for New Projects
Affected by or Including Non-Transportation Noise Sources[1]

Stationary Noise Source	Noise Level Descriptor	Daytime (7 AM to 10 PM)	Nighttime (10 PM to 7 AM)
Typical	Hourly L_{eq}, dB	55	45
Tonal, impulsive, repetitive, or consist primarily of speech or music	Hourly L_{eq}, dB	50	40

[1] The City may impose noise level standards which are more or less restrictive than those specified above based upon determination of existing low or high ambient noise levels.

Source: Rancho Cordova General Plan, Noise Element, Table N-1

Table 9
Maximum Transportation Noise Exposure

Land Use	Outdoor Activity Areas[2] L_{dn}/CNEL, dB	Interior Spaces L_{dn}/CNEL, dB	Interior Spaces L_{eq}, dB[2]
Residential	60[3]	45	--
Residential subject to noise from railroad tracks, aircraft overflights, or similar noise sources which produce clearly identifiable, discrete noise events (e.g., the passing of a single train)	60[3]	40[5]	--
Transient lodging	60[4]	45	--
Hospitals, nursing homes	60[4]	45	--
Theatres, auditoriums, music halls	--	--	35
Churches, meeting halls	60[3]	--	40
Office buildings	--	--	45
Schools, libraries, museums	--	--	45
Playgrounds, neighborhood parks	70	--	--

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

[2] As determined for a typical worst-case hour during periods of use.

[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB Ldn/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB Ldn/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

[4] In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

[5] The intent of this noise standard is to provide increased protection against sleep disturbance for residences located near railroad tracks.

Source: Rancho Cordova General Plan Noise Element, Table N-2

Rancho Cordova Municipal Code (Noise Ordinance)

Section 6.68.070 of the Rancho Cordova Noise Ordinance contains criteria that would be applicable to the project. The code sections which are generally applicable to this project are reproduced below.

6.68.070 Exterior noise standards.

A. The following noise standards, unless otherwise specifically indicated in this chapter, shall apply to all properties within a designated noise area:

Table 10

Noise Area	City Zoning Districts	Time Period	Exterior Noise Standard
1	RE-1, RD-1, RE-2, RD-2, RE-3, RD-3, RD-4, R-1-A, RD-5, R-2, RD-10, R-2A, RD-20, R-3, RD-30, RD-40, RM-1, RM-2, A-1-B, AR-1, A-2, AR-2, AR-5	7:00 a.m. – 10:00 p.m.	55 dBA
		10:00 p.m. – 7:00 a.m.	50 dBA
Source: Rancho Cordova Municipal Code, Chapter 6.68, Code Section 6.68.070(A)			

B. It is unlawful for any person at any location within the city to create any noise which causes the noise levels on an affected property, when measured in the designated noise area, to exceed for the duration of time set forth following, the specified exterior noise standards in any one hour by:

Table 11

Cumulative Duration of the Intrusive Sound	Allowable Decibels
1. Cumulative period of 30 minutes per hour	0
2. Cumulative period of 15 minutes per hour	+5
3. Cumulative period of 5 minutes per hour	+10
4. Cumulative period of 1 minute per hour	+15
5. Level no to be exceeded for any time per hour	+20
Source: Rancho Cordova Municipal Code, Chapter 6.68, Code Section 6.68.070(B)	

C. Each of the noise limits specified in subsection (B) of this section shall be reduced by 5 dBA for impulsive or simple tone noises, or for noises consisting of speech or music.

D. If the ambient noise level exceeds that permitted by any of the first four noise-limit categories specified in subsection (B) of this section, the allowable noise limit shall be increased in 5 dBA increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

6.68.090 Exemptions.

The following activities shall be exempted from the provisions of this chapter:

E. Noise sources associated with construction, repair, remodeling, demolition, paving or grading of any real property, provided said activities do not take place between the hours of 8:00 p.m. and 6:00 a.m. on weekdays and Friday commencing at 8:00 p.m. through and including 7:00 a.m. on Saturday, Saturdays commencing at 8:00 p.m. through and including 7:00 a.m. on the next following Sunday, and on each Sunday after the hour of 8:00 p.m.; provided, however when an unforeseen or unavoidable condition occurs during a construction project and the nature of the project necessitates that work in process be continued until a specific phase is completed, the contractor or owner shall be allowed to

continue work after 8:00 p.m., and to operate machinery and equipment necessary until completion of the specific work in progress can be brought to conclusion under conditions which will not jeopardize inspection acceptance or create undue financial hardships for the contractor or owner.

It should be noted that although not specifically identified in the Rancho Cordova Municipal Code, the Noise Element of the Rancho Cordova General Plan states that activities conducted on public parks are generally considered to be exempt from the noise standards established in the City's Noise Ordinance.

Impacts and Mitigation Measures

Thresholds of Significance

For the purposes of this report, a noise and vibration impact is considered significant if the project would result in:

- Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or other applicable standards of other agencies; or

- Generation of excessive groundborne vibration or groundborne noise levels; or

- For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

The project site is not within the vicinity of a private airstrip, an airport land use plan, or within two miles of a public airport. Therefore, the last threshold listed above is not discussed further.

The following criteria based on standards established by the Federal Interagency Commission on Noise (FICON), California Department of Transportation (Caltrans), Rancho Cordova General Plan and Rancho Cordova Municipal Code were used to evaluate the significance of environmental noise and vibration resulting from the project:

- A significant noise impact would be identified if the project would expose persons to or generate noise levels that would exceed applicable noise standards presented in the Rancho Cordova General Plan or Rancho Cordova Municipal Code.

- A significant impact would be identified if off-site traffic noise exposure or on-site activities generated by the project would substantially increase noise levels at existing sensitive receptors in the vicinity. A substantial increase would be identified relative to the FICON standards provided in Table 5.

- A significant impact would be identified if project construction activities or proposed on-site operations would expose noise-sensitive receptors to excessive groundborne

vibration levels. Specifically, an impact would be identified if groundborne vibration levels due to these sources would exceed the Caltrans vibration impact criteria.

Noise Impacts Associated with Project-Generated Increases in Off-Site Traffic

With development of the project, traffic volumes on the local roadway network will increase. Those increases in daily traffic volumes will result in a corresponding increase in traffic noise levels at existing uses located along those roadways. The FHWA Model was used with traffic input data from the traffic impact analysis (prepared by Kimley-Horn & Associates, Inc.) to predict project traffic noise level increases relative to Existing (2019) and Cumulative (2035) conditions.

Impact 1: Increases in Existing Traffic Noise Levels due to the Project

Traffic data in the form of AM and PM peak hour movements for Existing and Existing Plus Project conditions in the project area roadway network were obtained from the project transportation impact analysis completed by Kimley-Horn & Associates, Inc. Average daily traffic (ADT) volumes were conservatively estimated by applying a factor of 5 to the sum of AM and PM peak hour conditions.

Existing versus Existing Plus Project traffic noise levels on the local roadway network are shown in Table 12. The following section includes an assessment of predicted traffic noise levels relative to the FICON increase significance noise criteria identified in Table 5. The Table 12 data are provided in terms of DNL (L_{dn}) at a standard distance of 100 feet from the centerlines of the project-area roadways. Appendix B contains the FWHA Model inputs.

Table 12
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing vs. Existing Plus Project Conditions

			Traffic Noise Level at 100 feet, dB (DNL)			Substantial
Segment	Intersection	Direction	E	E+P	Increase	Increase?
1	1-Mather Field Rd / US 50 WB Ramp	North	67.6	67.6	0.0	No
2		South	68.8	68.8	0.0	No
3		East	70.1	70.1	0.0	No
4		West	63.6	63.6	0.0	No
5	2-Mather Field Rd / US 50 EB Ramp	North	68.8	68.8	0.0	No
6		South	69.7	69.7	0.0	No
7		East	65.0	65.0	0.0	No
8		West	69.8	69.8	0.0	No
9	3-Mather Field Rd / International Dr	North	--	--	--	--
10		South	60.4	63.0	2.6	No
11		East	66.8	66.8	0.0	No
12		West	68.4	69.7	1.3	No
13	4-Zinfandel Dr / US 50 WB Ramp	North	68.5	68.5	0.0	No
14		South	70.0	70.0	0.0	No
15		East	71.1	71.2	0.1	No
16		West	64.4	64.4	0.0	No
17	5-Zinfandel Dr / US 50 EB Ramp	North	70.1	70.1	0.0	No
18		South	70.3	70.3	0.0	No

Table 12
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing vs. Existing Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (DNL)			Substantial Increase?
			E	E+P	Increase	
19		East	69.5	69.5	0.0	No
20		West	71.0	71.0	0.0	No
21	6-Zinfandel Dr / White Rock Rd	North	70.3	70.3	0.0	No
22		South	67.9	67.9	0.0	No
23		East	65.2	65.4	0.2	No
24		West	64.8	64.8	0.0	No
25	7-Zinfandel Dr / International Dr	North	67.0	67.0	0.0	No
26		South	66.6	66.6	0.0	No
27		East	65.0	65.0	0.0	No
28		West	65.8	65.8	0.0	No
29	8-Sunrise Blvd / Zinfandel Dr	North	71.4	71.5	0.1	No
30		South	71.6	71.6	0.0	No
31		East	52.6	52.6	0.0	No
32		West	59.6	59.6	0.0	No
33	9-Sunrise Blvd / US 50 WB Ramp	North	71.6	71.6	0.0	No
34		South	70.8	70.8	0.0	No
35		East	68.5	68.5	0.0	No
36		West	69.1	69.1	0.0	No
37	10-Sunrise Blvd / US 50 EB Ramp	North	70.8	70.9	0.1	No
38		South	70.2	70.3	0.1	No
39		East	64.3	64.3	0.0	No
40		West	70.9	70.9	0.0	No
41	11-Sunrise Blvd / Folsom Blvd	North	70.2	70.2	0.0	No
42		South	69.7	69.7	0.0	No
43		East	65.2	65.3	0.1	No
44		West	65.1	65.1	0.0	No
45	12-Sunrise Blvd / White Rock Rd	North	68.6	68.6	0.0	No
46		South	68.5	68.5	0.0	No
47		East	65.5	65.8	0.3	No
48		West	65.7	65.9	0.2	No
49	13-Zinfandel Dr / Douglas Rd	North	65.3	65.3	0.0	No
50		South	58.8	58.8	0.0	No
51		East	65.3	65.3	0.0	No
52		West	63.7	63.7	0.0	No
53	14-Sunrise Blvd / Douglas Rd	North	68.3	68.2	-0.1	No
54		South	69.5	69.5	0.0	No
55		East	64.2	64.2	0.0	No
56		West	65.3	65.3	0.0	No
57	15-Americanos Blvd / Douglas Rd	North	53.4	54.2	0.8	No
58		South	--	--	--	--
59		East	60.0	60.0	0.0	No
60		West	61.3	61.5	0.2	No
61	16-Sunrise Blvd / Jackson Rd/SR 16	North	68.8	68.8	0.0	No
62		South	67.6	67.6	0.0	No
63		East	66.4	66.4	0.0	No

Table 12
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Existing vs. Existing Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (DNL)			Substantial Increase?
			E	E+P	Increase	
64		West	64.9	64.9	0.0	No
65	17-Grant Line Rd / Jackson Rd/SR 16	North	64.9	65.2	0.3	No
66		South	64.2	64.5	0.3	No
67		East	66.5	66.5	0.0	No
68		West	66.5	66.5	0.0	No
69	18-Grant Line Rd / Keifer Blvd	North	65.8	66.1	0.3	No
70		South	64.9	65.2	0.3	No
71		East	57.5	57.9	0.4	No
72		West	37.5	37.5	0.0	No
73	19-Grant Line Rd / Douglas Rd	North	66.4	66.7	0.3	No
74		South	65.7	66.0	0.3	No
75		East	--	--	--	--
76		West	60.1	60.1	0.0	No
77	20-Grant Line Rd / Raymer Wy	North	67.6	67.8	0.2	No
78		South	66.7	67.0	0.3	No
79		East	--	--	--	--
80		West	56.1	57.7	1.6	No
81	21-Grant Line Rd / White Rock Rd	North	68.4	68.7	0.3	No
82		South	67.0	67.8	0.8	No
83		East	--	--	--	--
84		West	61.3	62.2	0.9	No
85	22-Prairie City Rd / White Rock Rd	North	65.6	66.0	0.4	No
56		South	--	--	--	--
87		East	64.6	64.8	0.2	No
88		West	66.3	66.6	0.3	No

Blank cell = no traffic data was provided

Source: FHWA-RD-77-108 with inputs from Kimley-Horn. Appendix B contains the FHWA Model inputs.

As indicated in Table 12, project-generated traffic would not result in a substantial increase of traffic noise levels on the local roadway network relative to the FICON significance criteria identified in Table 5. As a result, off-site traffic noise impacts related to increases in traffic resulting from the implementation of the project (Existing vs. Existing Plus Project conditions) are identified as being ***less than significant***.

Impact 2: Increases in Cumulative Traffic Noise Levels due to the Project

Traffic data in the form of AM and PM peak hour movements for Cumulative and Cumulative Plus Project conditions in the project area roadway network were obtained from the project transportation impact analysis completed by Kimley-Horn & Associates, Inc. Average daily traffic (ADT) volumes were conservatively estimated by applying a factor of 5 to the sum of AM and PM peak hour conditions.

Cumulative versus Cumulative Plus Project traffic noise levels on the local roadway network are shown in Table 13. The following section includes an assessment of predicted traffic noise levels relative to the FICON increase significance noise criteria identified in Table 5. The Table 13 data are provided in terms of DNL (L_{dn}) at a standard distance of 100 feet from the centerlines of the project-area roadways. Appendix B contains the FWHA Model inputs.

Table 13
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Cumulative vs. Cumulative Plus Project Conditions

			Traffic Noise Level at 100 feet, dB (DNL)			
Segment	Intersection	Direction	C	C+P	Increase	Substantial Increase?
1	1-Mather Field Rd / US 50 WB Ramp	North	69.5	69.5	0.0	No
2		South	70.8	70.8	0.0	No
3		East	72.0	72.0	0.0	No
4		West	65.9	65.9	0.0	No
5	2-Mather Field Rd / US 50 EB Ramp	North	70.4	70.4	0.0	No
6		South	71.2	71.2	0.0	No
7		East	66.0	66.0	0.0	No
8		West	70.5	70.5	0.0	No
9	3-Mather Field Rd / International Dr	North	--	--	--	--
10		South	62.0	62.0	0.0	No
11		East	70.6	70.6	0.0	No
12		West	71.4	71.4	0.0	No
13	4-Zinfandel Dr / US 50 WB Ramp	North	69.5	69.5	0.0	No
14		South	71.1	71.1	0.0	No
15		East	72.5	72.5	0.0	No
16		West	64.8	64.8	0.0	No
17	5-Zinfandel Dr / US 50 EB Ramp	North	70.8	70.8	0.0	No
18		South	71.0	71.0	0.0	No
19		East	69.9	69.9	0.0	No
20		West	71.9	72.0	0.1	No
21	6-Zinfandel Dr / White Rock Rd	North	71.4	71.4	0.0	No
22		South	69.3	69.3	0.0	No
23		East	66.7	66.8	0.1	No
24		West	65.8	65.8	0.0	No
25	7-Zinfandel Dr / International Dr	North	69.8	69.8	0.0	No
26		South	70.9	70.9	0.0	No
27		East	69.7	69.7	0.0	No
28		West	70.7	70.7	0.0	No
29	8-Sunrise Blvd / Zinfandel Dr	North	72.3	72.3	0.0	No
30		South	72.4	72.5	0.1	No
31		East	53.2	53.2	0.0	No
32		West	60.1	60.1	0.0	No
33	9-Sunrise Blvd / US 50 WB Ramp	North	72.4	72.4	0.0	No
34		South	71.8	71.7	-0.1	No
35		East	69.5	69.0	-0.5	No
36		West	69.6	69.6	0.0	No
37	10-Sunrise Blvd / US 50 EB Ramp	North	71.7	71.7	0.0	No
38		South	71.3	71.3	0.0	No
39		East	65.2	65.2	0.0	No

Table 13
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Cumulative vs. Cumulative Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (DNL)			Substantial Increase?
			C	C+P	Increase	
40		West	71.0	71.0	0.0	No
41	11-Sunrise Blvd / Folsom Blvd	North	70.7	70.7	0.0	No
42		South	70.3	70.3	0.0	No
43		East	66.3	66.3	0.0	No
44		West	66.4	66.4	0.0	No
45	12-Sunrise Blvd / White Rock Rd	North	69.5	69.5	0.0	No
46		South	69.4	69.4	0.0	No
47		East	68.6	68.7	0.1	No
48		West	68.2	68.3	0.1	No
49	13-Zinfandel Dr / Douglas Rd	North	69.6	69.6	0.0	No
50		South	65.6	65.6	0.0	No
51		East	69.3	69.3	0.0	No
52		West	66.7	66.7	0.0	No
53	14-Sunrise Blvd / Douglas Rd	North	70.8	70.8	0.0	No
54		South	71.8	71.8	0.0	No
55		East	68.3	68.3	0.0	No
56		West	69.2	69.2	0.0	No
57	15-Americanos Blvd / Douglas Rd	North	61.5	61.8	0.3	No
58		South	60.2	60.2	0.0	No
59		East	65.2	65.2	0.0	No
60		West	65.8	66.0	0.2	No
61	16-Sunrise Blvd / Jackson Rd/SR 16	North	72.1	72.1	0.0	No
62		South	71.0	71.0	0.0	No
63		East	69.0	69.0	0.0	No
64		West	69.0	69.0	0.0	No
65	17-Grant Line Rd / Jackson Rd/SR 16	North	70.2	70.3	0.1	No
66		South	68.7	68.7	0.0	No
67		East	68.8	68.8	0.0	No
68		West	69.0	69.0	0.0	No
69	18-Grant Line Rd / Keifer Blvd	North	70.1	70.1	0.0	No
70		South	69.7	69.8	0.1	No
71		East	59.1	59.1	0.0	No
72		West	58.2	58.3	0.1	No
73	19-Grant Line Rd / Douglas Rd	North	71.0	71.2	0.2	No
74		South	70.7	70.8	0.1	No
75		East	59.4	59.7	0.3	No
76		West	65.3	65.3	0.0	No
77	20-Grant Line Rd / Raymer Wy	North	72.2	72.4	0.2	No
78		South	71.4	71.6	0.2	No
79		East	60.6	60.6	0.0	No
80		West	61.0	62.3	1.3	No
81	21-Grant Line Rd / White Rock Rd	North	73.4	73.4	0.0	No
82		South	72.2	72.4	0.2	No
83		East	--	--	--	--
84		West	68.1	68.3	0.2	No

Table 13
Traffic Noise Modeling Results and Project-Related Traffic Noise Increases
Cumulative vs. Cumulative Plus Project Conditions

Segment	Intersection	Direction	Traffic Noise Level at 100 feet, dB (DNL)			Substantial Increase?
			C	C+P	Increase	
85	22-Prairie City Rd / White Rock Rd	North	69.7	69.7	0.0	No
56		South	--	--	--	--
87		East	70.2	70.3	0.1	No
88		West	71.3	71.4	0.1	No

Blank cell = no traffic data was provided

Source: FHWA-RD-77-108 with inputs from Kimley-Horn. Appendix B contains the FHWA Model inputs.

The Table 13 data indicate that project-generated traffic would not result in a substantial increase of traffic noise levels on the local roadway network relative to the FICON significance criteria identified in Table 5. As a result, off-site traffic noise impacts related to increases in traffic resulting from the implementation of the project (Cumulative vs. Cumulative Plus Project conditions) are identified as being ***less than significant***.

Noise Impacts Associated with Proposed Uses of the Development

The project proposes the development of approximately 434 single-family lots, public parks, and preserve area. Specifically, the proposed project would preserve approximately 180 acres of open space that would be deeded to a third-party conservation entity, as well as for include the creation of approximately 23 acres of public parks north of the proposed residences. The locations of the proposed park and preserve areas are shown on Figure 2. The primary noise sources associated with proposed uses of the development have been identified as public park activities. An assessment of project-related park activity noise levels at the nearest existing noise-sensitive uses follows. The nearest existing noise-sensitive uses to the development have been identified as a single-family residence located on an agriculturally zoned parcel to the northwest, and single-family residences located within a subdivision to the south (shown on Figure 1).

As noted previously, the Rancho Cordova General Plan Noise Element states that activities conducted on public parks are generally considered to be exempt from the noise standards established in the City's Municipal Code (Noise Ordinance). As a result, the following assessment of project-related public park activity noise level exposure at the nearest existing noise-sensitive uses focuses on compliance with applicable Rancho Cordova General Plan noise level criteria only.

Impact 3: Public Park Noise at Existing Noise-Sensitive Uses

According to the project site plans (Parks Exhibit, dated December 11, 2018), the project proposes two large parks at the north and northeast ends of the development. Figure 2 shows the locations of the proposed parks, identified as Parks 1 and 2. Noise generated by public parks vary depending on whether the parks are intended for passive or active use. Passive use includes picnic and sitting areas whereas active use incudes playing fields and play structures. Although the project site plans illustrate the locations of the proposed public parks, the specific park use

types are unknown at the time of writing this report. To provide a conservative estimate of project park noise exposure at existing noise-sensitive uses, it was assumed for the purposes of this analysis that the proposed public parks would have active uses. According to BAC file data, parks consisting of active uses (playing fields) have noise levels of approximately 50 dB L_{eq} and 70 dB L_{max} at a distance of 100 feet (Appendix F).

Based on the reference noise levels presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), park activity noise exposure at the nearest existing noise-sensitive uses (single-family residences) was calculated. The results of those calculations are provided in Table 14.

Because park activities would likely consist of human speech (i.e., shouting and cheering during activities), noise associated with park activities would be subject to the Rancho Cordova General Plan's more restrictive daytime and nighttime hourly average noise level standards of 50 and 40 dB L_{eq} (respectively) shown in Table 8. However, it is reasonable to assume that public park hours would be restricted to daytime hours only (7:00 a.m. to 10:00 p.m.). Therefore, project park noise exposure at the nearest existing noise-sensitive uses was assessed relative to the General Plan daytime hourly average noise level standard of 50 dB L_{eq}.

Table 14
Predicted Public Park Activity Noise Levels at Nearest Existing Noise-Sensitive Uses

Noise-Sensitive Receptor[1]	Nearest Park[2]	Distance (ft)[3]	Predicted Noise Levels, L_{eq} (dB)[4]	General Plan Daytime Noise Standard, L_{eq} (dB)
Residences in Subdivision – South	Park 2	1,000	<20	**50**
Residence on Ag. Property – Northwest	Park 2	1,300	28	

[1] Locations of existing noise-sensitive receptors are shown on Figure 1.
[2] Locations of proposed park areas are shown on Figure 2.
[3] Distances measured from center of nearest park area to receptors.
[4] Predicted park activity noise levels at the nearest residences in the subdivision to the south of the project take into consideration the shielding that would be provided by proposed intervening structures of the development (residences), have been conservatively adjusted by -15 dB to account for this screening.

Source: Bollard Acoustical Consultants, Inc. (2020)

As indicated in Table 14, project park noise level exposure is predicted to satisfy the applicable Rancho Cordova General Plan daytime noise level standard at the nearest existing noise-sensitive uses (single family residential uses to the south and northwest of the project site). Because project park activity noise level exposure is predicted to satisfy the applicable Rancho Cordova General Plan noise level criterion, this impact is identified as being ***less than significant.***

Noise Impacts Associated with Project Construction Activities

Impact 4: Project Construction Noise Levels at Existing Noise-Sensitive Uses

During project construction, heavy equipment would be used for grading excavation, paving, and building construction, which would increase ambient noise levels when in use. Noise levels would vary depending on the type of equipment used, how it is operated, and how well it is maintained.

Noise exposure at any single point outside the project work area would also vary depending upon the proximity of equipment activities to that point. The nearest existing noise-sensitive uses (single-family residential within the subdivision to the south) are located approximately 25 feet from where construction activities would occur within the development.

Table 15 includes the range of maximum noise levels for equipment commonly used in general construction projects at full-power operation at a distance of 50 feet. Not all of these construction activities would be required of this project. The Table 15 data also include predicted maximum equipment noise levels at the nearest existing residential uses located approximately 25 feet away, which assume a standard spherical spreading loss of 6 dB per doubling of distance.

Table 15
Construction Equipment Reference Noise Levels and Predicted Noise Levels at 25 Feet

Equipment Description	Maximum Noise Level at 50 Feet (dBA)	Predicted Maximum Noise Levels at 25 Feet (dBA)
Air compressor	80	86
Backhoe	80	86
Ballast equalizer	82	88
Ballast tamper	83	89
Compactor	82	88
Concrete mixer	85	91
Concrete pump	82	88
Concrete vibrator	76	82
Crane, mobile	83	89
Dozer	85	91
Excavator	85	91
Generator	82	88
Grader	85	91
Impact wrench	85	91
Loader	80	86
Paver	85	91
Pneumatic tool	85	91
Pump	77	83
Saw	76	82
Scarifier	83	89
Scraper	85	91
Shovel	82	88
Spike driver	77	83
Tie cutter	84	90
Tie handler	80	86
Tie inserter	85	91
Truck	84	90

Source: Federal Transit Administration Noise and Vibration Impact Assessment Manual, Table 7-1 (2018)

Based on the equipment noise levels in Table 15, worst-case on-site project construction equipment noise levels at the nearest existing residential uses located 25 feet away are expected to range from approximately 82 to 91 dB. Thus, it is possible that a portion of the project construction equipment could result in substantial short-term increases over ambient maximum noise levels at the nearest existing noise-sensitive uses. Furthermore, it is possible that those

noise levels could exceed the applicable Rancho Cordova General Plan and Municipal Code noise level limits.

As noted in the Regulatory Setting Section of this report, Section 6.68.090 of the Rancho Cordova Municipal Code exempts noise sources associated with construction provided such activities do not take place between specific hours. However, if construction activities are proposed during the hours not exempted by Municipal Code Section 6.68.090, noise levels generated by construction activities would likely exceed the maximum noise level standards identified in Table 15 at the nearest existing residential uses.

Because project construction equipment noise levels could potentially exceed the applicable Rancho Cordova General Plan and Municipal Code noise level standards at the closest existing noise-sensitive uses, noise impacts associated with construction activities are identified as being **potentially significant**.

Mitigation Impact 4:

In order to comply with applicable Rancho Cordova Municipal Code noise level standards, and in order to reduce to potential for an exceedance of applicable Rancho Cordova General Plan noise level criteria, the following measures should be incorporated into project construction operations:

MM 4: To the maximum extent practical, the following measures should be incorporated into the project construction operations:

- Noise-generating construction activities shall occur within the hours and days identified in Section 6.68.090 of the Rancho Cordova Municipal Code and Policy N.1.4 of the Rancho Cordova General Plan.
- Project construction operations shall comply with the construction related noise abatement measures contained Policies N.1.4, N.1.5, and N.1.7 of the Rancho Cordova General Plan.
- All noise-producing project equipment and vehicles using internal-combustion engines shall be equipped with manufacturers-recommended mufflers and be maintained in good working condition.
- All mobile or fixed noise-producing equipment used on the project site that are regulated for noise output by a federal, state, or local agency shall comply with such regulations while in the course of project activity.
- Electrically powered equipment shall be used instead of pneumatic or internal-combustion-powered equipment, where feasible.
- Material stockpiles and mobile equipment staging, parking, and maintenance areas shall be located as far as practicable from noise-sensitive uses.
- Project area and site access road speed limits shall be established and enforced during the construction period.

- Nearby residences shall be notified of construction schedules so that arrangements can be made, if desired, to limit their exposure to short-term increases in ambient noise levels.

Significance of Impact 4 after Mitigation: ***Less than Significant***

Vibration Impacts Associated with Project Activities

Impact 5: Vibration Generated by Project Construction and On-Site Operations

During project construction, heavy equipment would be used for grading, excavation, paving, and building construction, which would generate localized vibration in the immediate vicinity of the construction. The nearest existing sensitive structures (residences) are located approximately 30 feet from construction activities which would occur within the project site.

Table 16 includes the range of vibration levels for equipment commonly used in general construction projects at a distance of 25 feet. The Table 16 data also include predicted equipment vibration levels at the nearest existing residences to the project site located approximately 30 feet away.

Table 16
Vibration Source Levels for Construction Equipment and Predicted Levels at 30 Feet

Equipment	Maximum PPV (inches/second)[1]	
	Maximum PPV at 25 Feet[2]	Predicted PPV at 30 Feet
Large bulldozer	0.089	0.068
Hoe ram	0.089	0.068
Caisson drilling	0.089	0.068
Loaded trucks	0.076	0.058
Backhoe	0.051	0.039
Excavator	0.051	0.039
Grader	0.051	0.039
Loader	0.051	0.039
Jackhammer	0.035	0.027
Small bulldozer	0.003	0.002

[1] PPV = Peak Particle Velocity
[2] Reference vibration level obtained from the Federal Transit Administration (FTA), Transit Noise and Vibration Impact Assessment Manual (2018).

As indicated in Table 16, vibration levels generated from on-site construction activities at the nearest existing residence located approximately 30 feet away are predicted to be well below the strictest Caltrans thresholds for damage to residential structures of 0.30 in/sec PPV shown in Table 6. Further, the predicted vibration levels in Table 16 are well below the threshold for a severe human response as defined by Caltrans in Table 7. Therefore, on-site construction within the project area is not expected to result in excessive groundborne vibration levels at nearby existing residential uses.

Results from the ambient vibration level monitoring at the project site (Table 4) indicate that measured average vibration levels were well below the strictest Caltrans thresholds for damage

to structures and thresholds for annoyance. Therefore, it is expected that the project would not result in the exposure of persons to excessive groundborne vibration levels at proposed uses of the project.

The project proposes residential and park uses within the development. It is the experience of BAC that residential and park uses do not typically have equipment that generates appreciable vibration. Further, it is our understanding that the residential and park components of the project do not propose equipment that will produce appreciable vibration.

Because vibration levels due to and upon the proposed project are expected to satisfy the applicable Caltrans groundborne impact vibration criteria, this impact is considered to be ***less than significant***.

Noise Impacts Upon the Development

The California Supreme Court issued an opinion in *California Building Industry Association v. Bay Area Air Quality Management District (2015)* holding that CEQA is primarily concerned with the impacts of a project on the environment and generally does not require agencies to analyze the impact of existing conditions on a project's future users or residents. Nevertheless, the City of Rancho Cordova has policies that address existing/future conditions affecting the proposed project, which are discussed in the following section.

On-Site Traffic Noise Impacts

Impact 6: Future Exterior Traffic Noise Levels at Proposed Uses

The FHWA Model was used with future traffic data to predict future exterior traffic noise levels at the proposed residential and park uses of the development. The future (Cumulative Plus Project) average daily traffic (ADT) volumes for Grant Line Road and Raymer Way were calculated using data provided in the project traffic impact analysis prepared by Kimley-Horn & Associates, Inc. Specifically, future average daily traffic (ADT) volumes were conservatively estimated by applying a factor of 5 to the sum of AM and PM peak hour conditions. The predicted future Grant Line Road and Raymer Way traffic noise levels at the nearest proposed residential and park uses to the roadways are summarized in Table 17. Detailed FHWA Model inputs and results are provided in Appendix G.

Table 17
Predicted Future Exterior Traffic Noise Levels at Proposed Uses[1]

Roadway[2]	Location	Distance from Centerline (ft)[3]	Future Exterior DNL (dB)[4]
Grant Line Road	Nearest park (Park 1)	1,080	57
	Nearest residential backyards	1,050	57
	Nearest first-floor residential facades	1,060	57
	Nearest upper-floor residential facades	1,060	59
Raymer Way	Nearest park (Park 1)	450	53
	Nearest residential backyards	110	63
	Nearest first-floor residential facades	120	62
	Nearest upper-floor residential facades	120	64
Combined Roadways	Nearest park (Park 1)	--	59
	Nearest residential backyards	--	64
	Nearest first-floor residential facades	--	63
	Nearest upper-floor residential facades	--	65

[1] A complete listing of FHWA Model inputs and results are provided in Appendix G.
[2] Locations of proposed uses are shown on Figure 2.
[3] Distances measured from said locations to the roadway centerline.
[4] A +2 dB offset was applied to upper-floor facades for reduced ground absorption of sound at elevated locations.
Source: Bollard Acoustical Consultants, Inc. (2020)

As indicated in Table 17, predicted future combined Grant Line Road and Raymer Way traffic noise level exposure at the nearest proposed park use of the development (Park 1) would satisfy the applicable Ranch Cordova General Plan exterior noise level standard of 70 dB DNL for playgrounds and neighborhood park uses. However, at the nearest residential backyards, future combined traffic noise level exposure is predicted to exceed the General Plan exterior noise level standard of 60 dB DNL for residential uses. As a result, this impact is identified as being **potentially significant**.

Mitigation Impact 6:

In order to reduce future Grant Line Road and Raymer Way traffic noise level exposure to a state of compliance with the Rancho Cordova General Plan 60 dB DNL exterior noise level standard at the nearest backyards to the roadways, the following noise mitigation measure should be implemented:

MM 6: Solid traffic noise barriers measuring a minimum of 6-feet in height (relative to backyard elevation) should be constructed at the locations illustrated on Figure 2. The traffic noise barriers could take the form of masonry wall, earthen berm, or a combination of the two. Other materials may be acceptable but should be reviewed by an acoustical consultant prior to use.

Table 18 shows the predicted mitigated future combined Grant Line Road and Raymer Way traffic noise levels at the nearest backyards to the roadways. As

shown in Table 18, mitigated future combined traffic noise level exposure is predicted to satisfy the applicable Rancho Cordova General Plan 60 dB DNL exterior noise level standard at the backyards proposed nearest to the roadways.

Table 18
Predicted Future Exterior Traffic Noise Levels – Mitigated[1]

Roadway[2]	Location	Predicted Mitigated Noise Level, DNL (dB)[4]
Combined Roadways	Nearest backyards	58

[1] Predicted mitigated noise levels include consideration of the shielding provided by a 6-foot solid noise barrier at the locations illustrated on Figure 2.

Source: Bollard Acoustical Consultants, Inc. (2020)

Significance of Impact 6 after Mitigation: ***Less than Significant***

Impact 7: Future Interior Traffic Noise Levels at Proposed Residential Uses

After implementation of Mitigation Measure 6 (construction of 6-foot-tall traffic noise barriers), future combined exterior traffic noise levels from Grant Line Road and Raymer Way are predicted to be approximately 58 dB DNL at the first-floor facades of the residences constructed nearest to the roadways. Due to reduced ground absorption at elevated positions and lack of shielding by the noise barriers identified in Mitigation Measure 6, future combined traffic noise levels at the upper-floor facades of those residences are predicted to be approximately 65 dB DNL. In order to satisfy the Rancho Cordova General Plan 45 dB DNL interior noise level standard, minimum noise reductions of 13 dB and 20 dB would be required of the first- and upper-floor building facades (respectively) of the residences constructed adjacent to the roadway.

Standard building construction (stucco siding, STC-27 windows, door weather-stripping, exterior wall insulation, composition plywood roof), typically results in an exterior to interior noise reduction of approximately 25 dB with windows closed and approximately 15 dB with windows open. This level of noise reduction would be adequate to reduce future Grant Line Road and Raymer Way traffic noise levels within all residences in this development to 45 dB DNL or less. As a result, no consideration of additional building facade construction improvements would be required for residences of the proposed development provided mechanical ventilation (air conditioning) is included to allow occupants to close doors and windows as desired for additional acoustical isolation. As a result, this impact is considered to be ***less than significant***.

Impact 8: Public Park Noise at Proposed Residential Uses

According to the project site plan illustrated on Figure 2, public parks are proposed to be located adjacent to residential uses at the north end of the development. Public park activities have been identified as a primary noise source that could impact nearby residential uses proposed within the development.

As noted previously, the Rancho Cordova General Plan Noise Element states that activities conducted on public parks are generally considered to be exempt from the noise standards

established in the City's Municipal Code (Noise Ordinance). Because noise associated with parks is not exempted by the Rancho Cordova General Plan, project public park noise level exposure would be subject to General Plan noise criteria. Because park activities would likely consist of human speech (i.e., shouting and cheering during activities), noise associated with park activities would be subject to the General Plan's more restrictive daytime and nighttime hourly average noise level standards of 50 and 40 dB L_{eq} (respectively) shown in Table 8. However, it is reasonable to assume that public park hours would be restricted to daytime hours only (7:00 a.m. to 10:00 p.m.). Based on the above information, project park noise exposure at the nearest proposed uses was assessed relative to the Rancho Cordova General Plan daytime hourly average noise level standard of 50 dB L_{eq}.

An analysis of predicted public park noise exposure at existing noise-sensitive uses (residential uses) was presented in **Impact 3**. BAC file data referenced in that analysis indicate that parks consisting of active uses have noise levels of up to 50 dB L_{eq} and 70 dB L_{max} at a distance of 100 feet. The nearest proposed residential uses to a public park maintain a separation of approximately 70 feet from the center of the park. Based on the reference noise level presented above, and assuming standard spherical spreading loss (-6 dB per doubling of distance), park activity noise exposure at the nearest proposed residential uses located 70 feet away was calculated to be 53 dB L_{eq}. The predicted park activity noise level of 53 dB L_{eq} at the nearest residential uses would exceed the applicable Rancho Cordova General Plan daytime hourly average noise level standard of 50 dB L_{eq}. As a result, this impact is identified as being **potentially significant**.

Mitigation Impact 8:

In order to reduce to reduce the potential for an exceedance of the Rancho Cordova General Plan daytime hourly average noise level standard of 50 dB L_{eq} at adjacent proposed residential uses, the following public park noise mitigation measure should be implemented:

MM 8: Solid noise barriers measuring a minimum of 6-feet in height (relative to backyard elevation) should be constructed at the locations illustrated on Figure 2. The recommended noise barrier extension could take the form of a solid masonry wall or wood fence. Should the construction of a wood fence be selected as a barrier, the fence slats should overlap by a minimum of two inches and be screwed to the framing rather than nailed. The purpose of the overlapping slats and using screws rather than nails is to ensure that prolonged exposure to the elements does not result in visible gaps through the slats which would result in reduced noise barrier effectiveness. The final barrier design should be reviewed by an acoustical consultant prior to installation.

The construction of 6-foot tall noise barriers at the locations illustrated on Figure 2 would reduce predicted park noise level levels to 48 dB L_{eq} or less at the nearest residential uses, and would satisfy the Rancho Cordova General Plan hourly average daytime noise level standard of 50 dB L_{eq}.

Significance of Impact 8 after Mitigation: ***Less than Significant***

Appendix A
Acoustical Terminology

Acoustics The science of sound.

Ambient Noise The distinctive acoustical characteristics of a given space consisting of all noise sources audible at that location. In many cases, the term ambient is used to describe an existing or pre-project condition such as the setting in an environmental noise study.

Attenuation The reduction of an acoustic signal.

A-Weighting A frequency-response adjustment of a sound level meter that conditions the output signal to approximate human response.

Decibel or dB Fundamental unit of sound. A Bell is defined as the logarithm of the ratio of the sound pressure squared over the reference pressure squared. A Decibel is one-tenth of a Bell.

CNEL Community Noise Equivalent Level. Defined as the 24-hour average noise level with noise occurring during evening hours (7 - 10 p.m.) weighted by a factor of three and nighttime hours weighted by a factor of 10 prior to averaging.

Frequency The measure of the rapidity of alterations of a periodic signal, expressed in cycles per second or hertz.

IIC Impact Insulation Class (IIC): A single-number representation of a floor/ceiling partition's impact generated noise insulation performance. The field-measured version of this number is the FIIC.

L_{dn} Day/Night Average Sound Level. Similar to CNEL but with no evening weighting.

L_{eq} Equivalent or energy-averaged sound level.

L_{max} The highest root-mean-square (RMS) sound level measured over a given period of time.

Loudness A subjective term for the sensation of the magnitude of sound.

Masking The amount (or the process) by which the threshold of audibility is for one sound is raised by the presence of another (masking) sound.

Noise Unwanted sound.

Peak Noise The level corresponding to the highest (not RMS) sound pressure measured over a given period of time. This term is often confused with the "Maximum" level, which is the highest RMS level.

RT_{60} The time it takes reverberant sound to decay by 60 dB once the source has been removed.

STC Sound Transmission Class (STC): A single-number representation of a partition's noise insulation performance. This number is based on laboratory-measured, 16-band (1/3-octave) transmission loss (TL) data of the subject partition. The field-measured version of this number is the FSTC.



Appendix B-1
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 01 Existing
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Mather Field Rd / US 50 WB Ramp	North	22,840	80	20	2	2	45	100
2		South	30,105	80	20	2	2	45	100
3		East	16,940	80	20	2	2	65	100
4		West	3,745	80	20	2	2	65	100
5	(2) Mather Field Rd / US 50 EB Ramp	North	30,040	80	20	2	2	45	100
6		South	37,100	80	20	2	2	45	100
7		East	5,240	80	20	2	2	65	100
8		West	15,760	80	20	2	2	65	100
9	(3) Mather Field Rd / International Dr	North							
10		South	11,650	80	20	2	2	25	100
11		East	18,810	80	20	2	2	45	100
12		West	27,150	80	20	2	2	45	100
13	(4) Zinfandel Dr / US 50 WB Ramp	North	27,655	80	20	2	2	45	100
14		South	39,220	80	20	2	2	45	100
15		East	21,270	80	20	2	2	65	100
16		West	4,485	80	20	2	2	65	100
17	(5) Zinfandel Dr / US 50 EB Ramp	North	40,205	80	20	2	2	45	100
18		South	41,950	80	20	2	2	45	100
19		East	14,630	80	20	2	2	65	100
20		West	20,675	80	20	2	2	65	100
21	(6) Zinfandel Dr / White Rock Rd	North	42,000	80	20	2	2	45	100
22		South	24,540	80	20	2	2	45	100
23		East	13,140	80	20	2	2	45	100
24		West	11,870	80	20	2	2	45	100
25	(7) Zinfandel Dr / International Dr	North	19,585	80	20	2	2	45	100
26		South	18,130	80	20	2	2	45	100
27		East	12,335	80	20	2	2	45	100
28		West	14,840	80	20	2	2	45	100
29	(8) Sunrise Blvd / Zinfandel Dr	North	54,655	80	20	2	2	45	100
30		South	56,455	80	20	2	2	45	100
31		East	1,960	80	20	2	2	25	100
32		West	7,240	80	20	2	2	30	100
33	(9) Sunrise Blvd / US 50 WB Ramp	North	56,945	80	20	2	2	45	100
34		South	47,435	80	20	2	2	45	100

Appendix B-1
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 01 Existing
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
35		East	11,475	80	20	2	2	65	100
36		West	13,465	80	20	2	2	65	100
37	(10) Sunrise Blvd / US 50 EB Ramp	North	47,610	80	20	2	2	45	100
38		South	41,355	80	20	2	2	45	100
39		East	4,455	80	20	2	2	65	100
40		West	19,990	80	20	2	2	65	100
41	(11) Sunrise Blvd / Folsom Blvd	North	40,875	80	20	2	2	45	100
42		South	36,650	80	20	2	2	45	100
43		East	13,170	80	20	2	2	45	100
44		West	12,775	80	20	2	2	45	100
45	(12) Sunrise Blvd / White Rock Rd	North	28,255	80	20	2	2	45	100
46		South	27,780	80	20	2	2	45	100
47		East	13,845	80	20	2	2	45	100
48		West	14,670	80	20	2	2	45	100
49	(13) Zinfandel Dr / Douglas Rd	North	13,445	80	20	2	2	45	100
50		South	2,960	80	20	2	2	45	100
51		East	13,325	80	20	2	2	45	100
52		West	9,290	80	20	2	2	45	100
53	(14) Sunrise Blvd / Douglas Rd	North	26,425	80	20	2	2	45	100
54		South	27,715	80	20	2	2	50	100
55		East	10,325	80	20	2	2	45	100
56		West	13,475	80	20	2	2	45	100
57	(15) Americanos Blvd / Douglas Rd	North	1,480	80	20	2	2	35	100
58		South							
59		East	3,945	80	20	2	2	45	100
60		West	5,265	80	20	2	2	45	100
61	(16) Sunrise Blvd / Jackson Rd/SR 16	North	18,650	80	20	2	2	55	100
62		South	14,165	80	20	2	2	55	100
63		East	10,655	80	20	2	2	55	100
64		West	7,630	80	20	2	2	55	100
65	(17) Grant Line Rd / Jackson Rd/SR 16	North	7,610	80	20	2	2	55	100
66		South	6,520	80	20	2	2	55	100
67		East	11,090	80	20	2	2	55	100
68		West	10,900	80	20	2	2	55	100

ATTACHMENT 4

Appendix B-1
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 01 Existing
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
69	(18) Grant Line Rd / Keifer Blvd	North	9,385	80	20	2	2	55	100
70		South	7,645	80	20	2	2	55	100
71		East	2,230	80	20	2	2	45	100
72		West	60	80	20	2	2	25	100
73	(19) Grant Line Rd / Douglas Rd	North	10,755	80	20	2	2	55	100
74		South	9,075	80	20	2	2	55	100
75		East							
76		West	4,050	80	20	2	2	45	100
77	(20) Grant Line Rd / Raymer Wy	North	14,285	80	20	2	2	55	100
78		South	11,605	80	20	2	2	55	100
79		East							
80		West	2,780	80	20	2	2	35	100
81	(21) Grant Line Rd / White Rock Rd	North	17,045	80	20	2	2	55	100
82		South	12,440	80	20	2	2	55	100
83		East							
84		West	5,295	80	20	2	2	45	100
85	(22) Prarie City / White Rock Rd	North	8,900	80	20	2	2	55	100
86		South							
87		East	11,290	80	20	2	2	45	100
88		West	16,790	80	20	2	2	45	100

Note: Blank cells represent roadways for which no traffic data was provided.

Appendix B-2
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 02 Existing+Project
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Mather Field Rd / US 50 WB Ramp	North	22,840	80	20	2	2	45	100
2		South	30,105	80	20	2	2	45	100
3		East	16,940	80	20	2	2	65	100
4		West	3,745	80	20	2	2	65	100
5	(2) Mather Field Rd / US 50 EB Ramp	North	30,040	80	20	2	2	45	100
6		South	37,100	80	20	2	2	45	100
7		East	5,240	80	20	2	2	65	100
8		West	15,760	80	20	2	2	65	100
9	(3) Mather Field Rd / International Dr	North							
10		South	21,600	80	20	2	2	25	100
11		East	18,810	80	20	2	2	45	100
12		West	37,100	80	20	2	2	45	100
13	(4) Zinfandel Dr / US 50 WB Ramp	North	27,765	80	20	2	2	45	100
14		South	39,525	80	20	2	2	45	100
15		East	21,465	80	20	2	2	65	100
16		West	4,485	80	20	2	2	65	100
17	(5) Zinfandel Dr / US 50 EB Ramp	North	40,510	80	20	2	2	45	100
18		South	42,425	80	20	2	2	45	100
19		East	14,630	80	20	2	2	65	100
20		West	20,845	80	20	2	2	65	100
21	(6) Zinfandel Dr / White Rock Rd	North	42,475	80	20	2	2	45	100
22		South	24,540	80	20	2	2	45	100
23		East	13,615	80	20	2	2	45	100
24		West	11,870	80	20	2	2	45	100
25	(7) Zinfandel Dr / International Dr	North	19,585	80	20	2	2	45	100
26		South	18,130	80	20	2	2	45	100
27		East	12,335	80	20	2	2	45	100
28		West	14,840	80	20	2	2	45	100
29	(8) Sunrise Blvd / Zinfandel Dr	North	55,060	80	20	2	2	45	100
30		South	56,860	80	20	2	2	45	100
31		East	1,960	80	20	2	2	25	100
32		West	7,240	80	20	2	2	30	100
33	(9) Sunrise Blvd / US 50 WB Ramp	North	57,350	80	20	2	2	45	100
34		South	47,840	80	20	2	2	45	100

Appendix B-2
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 02 Existing+Project
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
35		East	11,475	80	20	2	2	65	100
36		West	13,465	80	20	2	2	65	100
37	(10) Sunrise Blvd / US 50 EB Ramp	North	48,015	80	20	2	2	45	100
38		South	41,760	80	20	2	2	45	100
39		East	4,455	80	20	2	2	65	100
40		West	19,990	80	20	2	2	65	100
41	(11) Sunrise Blvd / Folsom Blvd	North	40,825	80	20	2	2	45	100
42		South	36,675	80	20	2	2	45	100
43		East	13,245	80	20	2	2	45	100
44		West	12,775	80	20	2	2	45	100
45	(12) Sunrise Blvd / White Rock Rd	North	28,800	80	20	2	2	45	100
46		South	27,780	80	20	2	2	45	100
47		East	15,010	80	20	2	2	45	100
48		West	15,290	80	20	2	2	45	100
49	(13) Zinfandel Dr / Douglas Rd	North	13,445	80	20	2	2	45	100
50		South	2,995	80	20	2	2	45	100
51		East	13,400	80	20	2	2	45	100
52		West	9,330	80	20	2	2	45	100
53	(14) Sunrise Blvd / Douglas Rd	North	26,310	80	20	2	2	45	100
54		South	27,755	80	20	2	2	50	100
55		East	10,475	80	20	2	2	45	100
56		West	13,400	80	20	2	2	45	100
57	(15) Americanos Blvd / Douglas Rd	North	1,770	80	20	2	2	35	100
58		South							
59		East	3,945	80	20	2	2	45	100
60		West	5,555	80	20	2	2	45	100
61	(16) Sunrise Blvd / Jackson Rd/SR 16	North	18,650	80	20	2	2	55	100
62		South	14,275	80	20	2	2	55	100
63		East	10,840	80	20	2	2	55	100
64		West	7,705	80	20	2	2	55	100
65	(17) Grant Line Rd / Jackson Rd/SR 16	North	8,195	80	20	2	2	55	100
66		South	6,920	80	20	2	2	55	100
67		East	11,090	80	20	2	2	55	100
68		West	11,085	80	20	2	2	55	100

Appendix B-2
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 02 Existing+Project
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
69	(18) Grant Line Rd / Keifer Blvd	North	10,145	80	20	2	2	55	100
70		South	8,230	80	20	2	2	55	100
71		East	2,405	80	20	2	2	45	100
72		West	60	80	20	2	2	25	100
73	(19) Grant Line Rd / Douglas Rd	North	11,515	80	20	2	2	55	100
74		South	9,835	80	20	2	2	55	100
75		East							
76		West	4,050	80	20	2	2	45	100
77	(20) Grant Line Rd / Raymer Wy	North	14,700	80	20	2	2	55	100
78		South	12,365	80	20	2	2	55	100
79		East							
80		West	3,955	80	20	2	2	35	100
81	(21) Grant Line Rd / White Rock Rd	North	18,405	80	20	2	2	55	100
82		South	15,035	80	20	2	2	55	100
83		East							
84		West	6,530	80	20	2	2	45	100
85	(22) Prarie City / White Rock Rd	North	9,715	80	20	2	2	55	100
86		South							
87		East	11,835	80	20	2	2	45	100
88		West	18,150	80	20	2	2	45	100

Note: Blank cells represent roadways for which no traffic data was provided.

Appendix B-3
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 03 Cumulative
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Mather Field Rd / US 50 WB Ramp	North	35,050	80	20	2	2	45	100
2		South	47,050	80	20	2	2	45	100
3		East	26,250	80	20	2	2	65	100
4		West	6,350	80	20	2	2	65	100
5	(2) Mather Field Rd / US 50 EB Ramp	North	43,600	80	20	2	2	45	100
6		South	51,750	80	20	2	2	45	100
7		East	6,550	80	20	2	2	65	100
8		West	18,300	80	20	2	2	65	100
9	(3) Mather Field Rd / International Dr	North							
10		South	17,050	80	20	2	2	25	100
11		East	45,350	80	20	2	2	45	100
12		West	54,400	80	20	2	2	45	100
13	(4) Zinfandel Dr / US 50 WB Ramp	North	35,200	80	20	2	2	45	100
14		South	50,950	80	20	2	2	45	100
15		East	28,850	80	20	2	2	65	100
16		West	4,900	80	20	2	2	65	100
17	(5) Zinfandel Dr / US 50 EB Ramp	North	47,200	80	20	2	2	45	100
18		South	49,800	80	20	2	2	45	100
19		East	15,950	80	20	2	2	65	100
20		West	25,650	80	20	2	2	65	100
21	(6) Zinfandel Dr / White Rock Rd	North	53,750	80	20	2	2	45	100
22		South	33,550	80	20	2	2	45	100
23		East	18,500	80	20	2	2	45	100
24		West	14,900	80	20	2	2	45	100
25	(7) Zinfandel Dr / International Dr	North	37,600	80	20	2	2	45	100
26		South	47,950	80	20	2	2	45	100
27		East	36,750	80	20	2	2	45	100
28		West	46,600	80	20	2	2	45	100
29	(8) Sunrise Blvd / Zinfandel Dr	North	67,000	80	20	2	2	45	100
30		South	69,150	80	20	2	2	45	100
31		East	2,250	80	20	2	2	25	100
32		West	8,100	80	20	2	2	30	100
33	(9) Sunrise Blvd / US 50 WB Ramp	North	68,450	80	20	2	2	45	100
34		South	59,000	80	20	2	2	45	100

Appendix B-3
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 03 Cumulative
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
35		East	14,500	80	20	2	2	65	100
36		West	14,950	80	20	2	2	65	100
37	(10) Sunrise Blvd / US 50 EB Ramp	North	58,600	80	20	2	2	45	100
38		South	52,700	80	20	2	2	45	100
39		East	5,400	80	20	2	2	65	100
40		West	20,600	80	20	2	2	65	100
41	(11) Sunrise Blvd / Folsom Blvd	North	46,450	80	20	2	2	45	100
42		South	42,500	80	20	2	2	45	100
43		East	16,900	80	20	2	2	45	100
44		West	17,050	80	20	2	2	45	100
45	(12) Sunrise Blvd / White Rock Rd	North	35,150	80	20	2	2	45	100
46		South	34,550	80	20	2	2	45	100
47		East	28,500	80	20	2	2	45	100
48		West	26,000	80	20	2	2	45	100
49	(13) Zinfandel Dr / Douglas Rd	North	36,200	80	20	2	2	45	100
50		South	14,200	80	20	2	2	45	100
51		East	33,450	80	20	2	2	45	100
52		West	18,550	80	20	2	2	45	100
53	(14) Sunrise Blvd / Douglas Rd	North	47,200	80	20	2	2	45	100
54		South	46,650	80	20	2	2	50	100
55		East	26,600	80	20	2	2	45	100
56		West	32,750	80	20	2	2	45	100
57	(15) Americanos Blvd / Douglas Rd	North	9,600	80	20	2	2	35	100
58		South	7,050	80	20	2	2	35	100
59		East	12,900	80	20	2	2	45	100
60		West	15,050	80	20	2	2	45	100
61	(16) Sunrise Blvd / Jackson Rd/SR 16	North	39,600	80	20	2	2	55	100
62		South	31,000	80	20	2	2	55	100
63		East	19,600	80	20	2	2	55	100
64		West	19,500	80	20	2	2	55	100
65	(17) Grant Line Rd / Jackson Rd/SR 16	North	25,950	80	20	2	2	55	100
66		South	18,300	80	20	2	2	55	100
67		East	18,700	80	20	2	2	55	100
68		West	19,450	80	20	2	2	55	100

Appendix B-3
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 03 Cumulative
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
69	(18) Grant Line Rd / Keifer Blvd	North	25,100	80	20	2	2	55	100
70		South	23,250	80	20	2	2	55	100
71		East	3,200	80	20	2	2	45	100
72		West	7,150	80	20	2	2	25	100
73	(19) Grant Line Rd / Douglas Rd	North	31,250	80	20	2	2	55	100
74		South	28,850	80	20	2	2	55	100
75		East	5,900	80	20	2	2	35	100
76		West	13,400	80	20	2	2	45	100
77	(20) Grant Line Rd / Raymer Wy	North	40,650	80	20	2	2	55	100
78		South	34,350	80	20	2	2	55	100
79		East	7,750	80	20	2	2	35	100
80		West	8,450	80	20	2	2	35	100
81	(21) Grant Line Rd / White Rock Rd	North	53,500	80	20	2	2	55	100
82		South	41,050	80	20	2	2	55	100
83		East							
84		West	25,550	80	20	2	2	45	100
85	(22) Prarie City / White Rock Rd	North	22,900	80	20	2	2	55	100
86		South							
87		East	41,400	80	20	2	2	45	100
88		West	53,100	80	20	2	2	45	100

Note: Blank cells represent roadways for which no traffic data was provided.

ATTACHMENT 4

Appendix B-4
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 04 Cumulative+Project
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
1	(1) Mather Field Rd / US 50 WB Ramp	North	35,050	80	20	2	2	45	100
2		South	47,050	80	20	2	2	45	100
3		East	26,250	80	20	2	2	65	100
4		West	6,350	80	20	2	2	65	100
5	(2) Mather Field Rd / US 50 EB Ramp	North	43,600	80	20	2	2	45	100
6		South	51,750	80	20	2	2	45	100
7		East	6,550	80	20	2	2	65	100
8		West	18,300	80	20	2	2	65	100
9	(3) Mather Field Rd / International Dr	North							
10		South	17,050	80	20	2	2	25	100
11		East	45,350	80	20	2	2	45	100
12		West	54,400	80	20	2	2	45	100
13	(4) Zinfandel Dr / US 50 WB Ramp	North	35,240	80	20	2	2	45	100
14		South	51,145	80	20	2	2	45	100
15		East	29,005	80	20	2	2	65	100
16		West	4,900	80	20	2	2	65	100
17	(5) Zinfandel Dr / US 50 EB Ramp	North	47,395	80	20	2	2	45	100
18		South	50,130	80	20	2	2	45	100
19		East	15,950	80	20	2	2	65	100
20		West	25,785	80	20	2	2	65	100
21	(6) Zinfandel Dr / White Rock Rd	North	54,080	80	20	2	2	45	100
22		South	33,550	80	20	2	2	45	100
23		East	18,830	80	20	2	2	45	100
24		West	14,900	80	20	2	2	45	100
25	(7) Zinfandel Dr / International Dr	North	37,600	80	20	2	2	45	100
26		South	47,950	80	20	2	2	45	100
27		East	36,750	80	20	2	2	45	100
28		West	46,600	80	20	2	2	45	100
29	(8) Sunrise Blvd / Zinfandel Dr	North	67,140	80	20	2	2	45	100
30		South	69,290	80	20	2	2	45	100
31		East	2,250	80	20	2	2	25	100
32		West	8,100	80	20	2	2	30	100
33	(9) Sunrise Blvd / US 50 WB Ramp	North	68,590	80	20	2	2	45	100
34		South	57,640	80	20	2	2	45	100

Appendix B-4
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 04 Cumulative+Project
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
35		East	13,000	80	20	2	2	65	100
36		West	14,950	80	20	2	2	65	100
37	(10) Sunrise Blvd / US 50 EB Ramp	North	58,840	80	20	2	2	45	100
38		South	52,840	80	20	2	2	45	100
39		East	5,400	80	20	2	2	65	100
40		West	20,700	80	20	2	2	65	100
41	(11) Sunrise Blvd / Folsom Blvd	North	46,590	80	20	2	2	45	100
42		South	42,640	80	20	2	2	45	100
43		East	16,900	80	20	2	2	45	100
44		West	17,050	80	20	2	2	45	100
45	(12) Sunrise Blvd / White Rock Rd	North	35,290	80	20	2	2	45	100
46		South	34,550	80	20	2	2	45	100
47		East	29,005	80	20	2	2	45	100
48		West	26,365	80	20	2	2	45	100
49	(13) Zinfandel Dr / Douglas Rd	North	36,200	80	20	2	2	45	100
50		South	14,235	80	20	2	2	45	100
51		East	33,525	80	20	2	2	45	100
52		West	18,590	80	20	2	2	45	100
53	(14) Sunrise Blvd / Douglas Rd	North	47,200	80	20	2	2	45	100
54		South	46,650	80	20	2	2	50	100
55		East	26,745	80	20	2	2	45	100
56		West	32,895	80	20	2	2	45	100
57	(15) Americanos Blvd / Douglas Rd	North	10,220	80	20	2	2	35	100
58		South	7,050	80	20	2	2	35	100
59		East	12,900	80	20	2	2	45	100
60		West	15,670	80	20	2	2	45	100
61	(16) Sunrise Blvd / Jackson Rd/SR 16	North	39,600	80	20	2	2	55	100
62		South	31,075	80	20	2	2	55	100
63		East	19,745	80	20	2	2	55	100
64		West	19,570	80	20	2	2	55	100
65	(17) Grant Line Rd / Jackson Rd/SR 16	North	26,280	80	20	2	2	55	100
66		South	18,445	80	20	2	2	55	100
67		East	18,740	80	20	2	2	55	100
68		West	19,595	80	20	2	2	55	100

ATTACHMENT 4

Appendix B-4
FHWA Highway Traffic Noise Prediction Model Data Inputs
The Preserve Residential Development
File Name: 2019-085 04 Cumulative+Project
Model Run Date: 9/1/2020

Segment	Intersection	Direction	ADT	Day %	Night %	% Med. Trucks	% Hvy. Trucks	Speed	Distance
69	(18) Grant Line Rd / Keifer Blvd	North	25,505	80	20	2	2	55	100
70		South	23,580	80	20	2	2	55	100
71		East	3,200	80	20	2	2	45	100
72		West	7,225	80	20	2	2	25	100
73	(19) Grant Line Rd / Douglas Rd	North	32,195	80	20	2	2	55	100
74		South	29,395	80	20	2	2	55	100
75		East	6,300	80	20	2	2	35	100
76		West	13,400	80	20	2	2	45	100
77	(20) Grant Line Rd / Raymer Wy	North	42,730	80	20	2	2	55	100
78		South	35,295	80	20	2	2	55	100
79		East	7,750	80	20	2	2	35	100
80		West	11,475	80	20	2	2	35	100
81	(21) Grant Line Rd / White Rock Rd	North	54,340	80	20	2	2	55	100
82		South	43,130	80	20	2	2	55	100
83		East							
84		West	26,790	80	20	2	2	45	100
85	(22) Prarie City / White Rock Rd	North	23,225	80	20	2	2	55	100
86		South							
87		East	41,915	80	20	2	2	45	100
88		West	53,940	80	20	2	2	45	100

Note: Blank cells represent roadways for which no traffic data was provided.



Legend

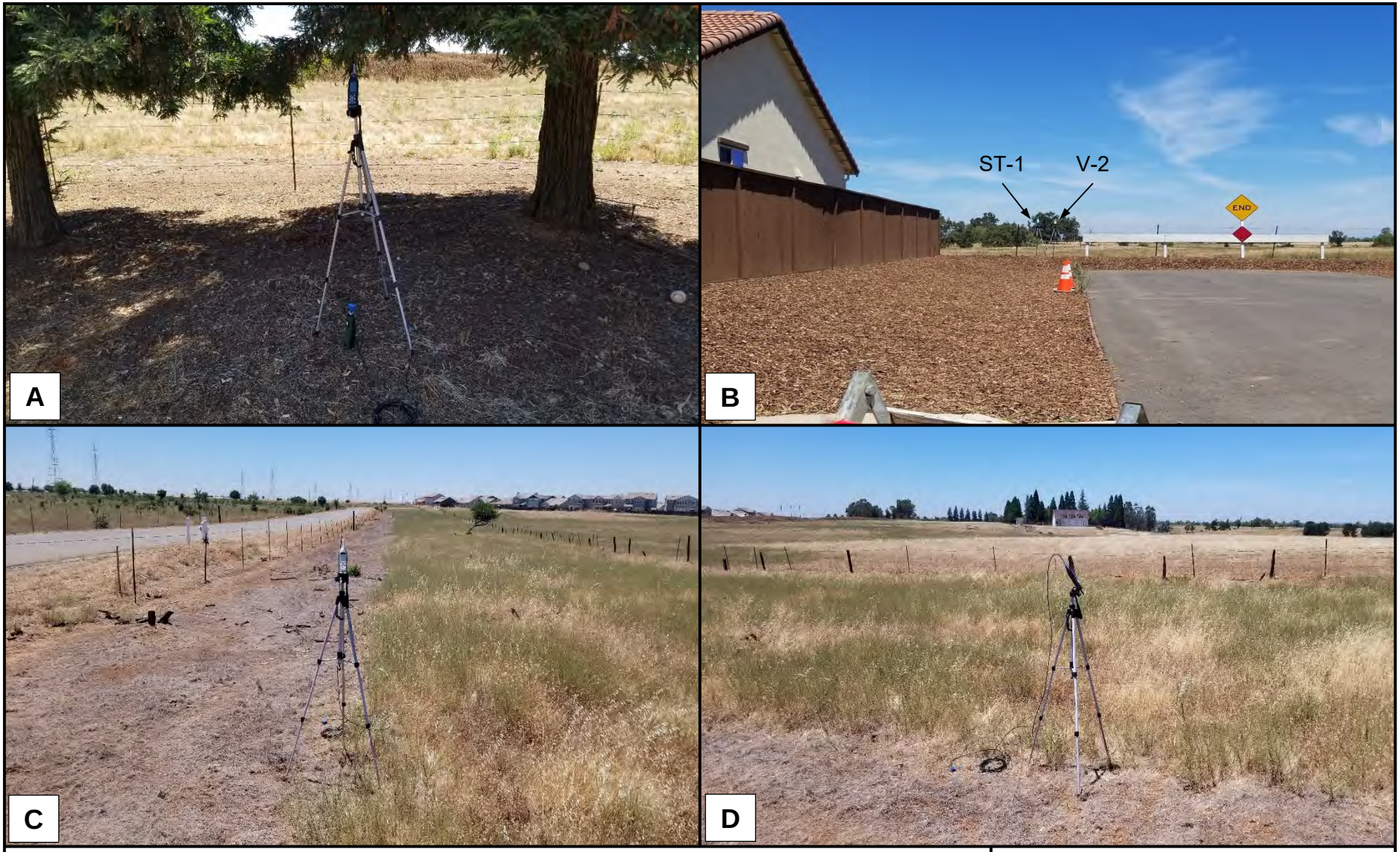
A: LT-1: Centrally located on project site, looking south towards existing residential development (38°34'25.26" N, 121°11'55.21" W)
B: LT-1: Centrally located on project site, looking north towards existing residence (38°34'25.26" N, 121°11'55.21" W)
C: LT-2: Eastern end of project area, looking east towards Raymer Way (38°34'27.30" N, 121°11'31.97" W)
D: LT-2: Eastern end of project area, looking south along Raymer Way (38°34'27.30" N, 121°11'31.97" W)

The Preserve Residential Development
Rancho Cordova, California

Photographs of Survey Locations

Appendix C-1

BOLLARD Acoustical Consultants



Legend

A: V-1: Looking east towards center of project area (38°34'26.00" N, 121°11'53.99" W)
B: ST-1 & V-2: Off Thornberg Way, looking north towards project site (38°34'18.77" N, 121°12'04.71" W)
C: V-3: Eastern end of project area, looking south along Raymer Way (38°34'28.08" N, 121°11'31.07" W)
D: V-3: Eastern end of project area, looking west towards center of project area (38°34'28.08" N, 121°11'31.07" W)

The Preserve Residential Development
Rancho Cordova, California

Photographs of Survey Locations

Appendix C-2

BOLLARD Acoustical Consultants

Appendix D-1
Ambient Noise Monitoring Results - Site LT-1
The Preserve Residential Development - Rancho Cordova, California
July 10-11, 2019

Hour	Leq	Lmax	L50	L90
12:00 PM	49	75	39	36
1:00 PM	41	56	38	35
2:00 PM	44	68	38	35
3:00 PM	50	74	38	34
4:00 PM	41	55	38	35
5:00 PM	42	55	41	35
6:00 PM	43	57	40	36
7:00 PM	47	61	45	41
8:00 PM	46	65	42	37
9:00 PM	38	56	37	35
10:00 PM	38	56	36	34
11:00 PM	37	58	36	34
12:00 AM	34	40	33	31
1:00 AM	33	42	32	31
2:00 AM	31	38	31	30
3:00 AM	35	50	34	32
4:00 AM	39	57	37	33
5:00 AM	43	56	42	38
6:00 AM	46	64	44	41
7:00 AM	43	59	42	40
8:00 AM	45	67	40	38
9:00 AM	48	70	40	37
10:00 AM	41	60	38	35
11:00 AM	41	57	37	34

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	50	38	45	46	31	40
Lmax (Maximum)	75	55	62	64	38	51
L50 (Median)	45	37	40	44	31	36
L90 (Background)	41	34	36	41	30	34

Computed DNL, dB	47
% Daytime Energy	85%
% Nighttime Energy	15%

GPS Coordinates	38°34'25.26"N
	121°11'55.21"W

Notes	Monitoring site centrally located, near terminus of Edington Drive.

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Appendix D-2
Ambient Noise Monitoring Results - Site LT-1
The Preserve Residential Development - Rancho Cordova, California
July 11-12, 2019

Hour	Leq	Lmax	L50	L90
12:00 PM	41	57	38	34
1:00 PM	41	59	37	34
2:00 PM	41	56	38	34
3:00 PM	42	55	38	34
4:00 PM	44	55	41	36
5:00 PM	44	59	42	35
6:00 PM	47	61	46	42
7:00 PM	47	60	45	42
8:00 PM	45	67	41	36
9:00 PM	39	54	38	36
10:00 PM	40	55	39	38
11:00 PM	37	57	36	34
12:00 AM	36	52	34	32
1:00 AM	34	50	33	31
2:00 AM	34	56	32	30
3:00 AM	35	46	34	32
4:00 AM	36	57	33	31
5:00 AM	43	52	41	36
6:00 AM	43	53	42	40
7:00 AM	43	58	43	41
8:00 AM	43	59	41	39
9:00 AM	52	81	38	36
10:00 AM	43	69	38	36
11:00 AM	41	57	37	34

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	52	39	45	43	34	39
Lmax (Maximum)	81	54	60	57	46	53
L50 (Median)	46	37	40	42	32	36
L90 (Background)	42	34	37	40	30	34

Computed DNL, dB	47
% Daytime Energy	86%
% Nighttime Energy	14%

GPS Coordinates	38°34'25.26"N
	121°11'55.21"W

Notes	Monitoring site centrally located, near terminus of Edington Drive.

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Appendix D-3
Ambient Noise Monitoring Results - Site LT-2
The Preserve Residential Development - Rancho Cordova, California
July 10-11, 2019

Hour	Leq	Lmax	L50	L90
1:00 PM	50	75	37	33
2:00 PM	49	75	38	34
3:00 PM	50	71	40	35
4:00 PM	49	69	40	36
5:00 PM	51	69	41	36
6:00 PM	50	71	39	33
7:00 PM	51	73	40	36
8:00 PM	50	68	41	36
9:00 PM	49	63	46	44
10:00 PM	50	69	46	44
11:00 PM	46	62	44	42
12:00 AM	44	60	43	41
1:00 AM	43	60	42	40
2:00 AM	43	63	40	39
3:00 AM	42	59	41	39
4:00 AM	47	63	44	40
5:00 AM	50	64	49	45
6:00 AM	55	80	52	48
7:00 AM	52	69	46	42
8:00 AM	50	68	43	39
9:00 AM	49	68	41	38
10:00 AM	47	65	39	36
11:00 AM	48	68	39	35
12:00 PM	49	70	39	34

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	52	47	50	55	42	49
Lmax (Maximum)	75	63	69	80	59	65
L50 (Median)	46	37	41	52	40	44
L90 (Background)	44	33	37	48	39	42

Computed DNL, dB	55
% Daytime Energy	68%
% Nighttime Energy	32%

GPS Coordinates	38°34'27.30"N
	121°11'31.97"W

Notes	Monitoring site located on the eastern end of the project area, approximately 90 feet from centerline of Raymer Way.

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Appendix D-4
Ambient Noise Monitoring Results - Site LT-2
The Preserve Residential Development - Rancho Cordova, California
July 11-12, 2019

Hour	Leq	Lmax	L50	L90
1:00 PM	50	77	39	34
2:00 PM	47	66	38	33
3:00 PM	48	74	39	35
4:00 PM	49	66	41	35
5:00 PM	49	66	40	34
6:00 PM	50	73	43	36
7:00 PM	52	74	47	39
8:00 PM	50	73	42	37
9:00 PM	50	67	46	44
10:00 PM	49	65	46	44
11:00 PM	48	64	46	45
12:00 AM	46	62	44	41
1:00 AM	51	80	43	41
2:00 AM	43	62	42	39
3:00 AM	43	53	42	40
4:00 AM	43	62	41	38
5:00 AM	48	64	45	42
6:00 AM	51	76	46	43
7:00 AM	53	73	43	42
8:00 AM	51	72	42	40
9:00 AM	57	83	41	38
10:00 AM	51	71	39	37
11:00 AM	50	73	38	35
12:00 PM	50	73	39	35

	Statistical Summary					
	Daytime (7 a.m. - 10 p.m.)			Nighttime (10 p.m. - 7 a.m.)		
	High	Low	Average	High	Low	Average
Leq (Average)	57	47	51	51	43	48
Lmax (Maximum)	83	66	72	80	53	65
L50 (Median)	47	38	41	46	41	44
L90 (Background)	44	33	37	45	38	42

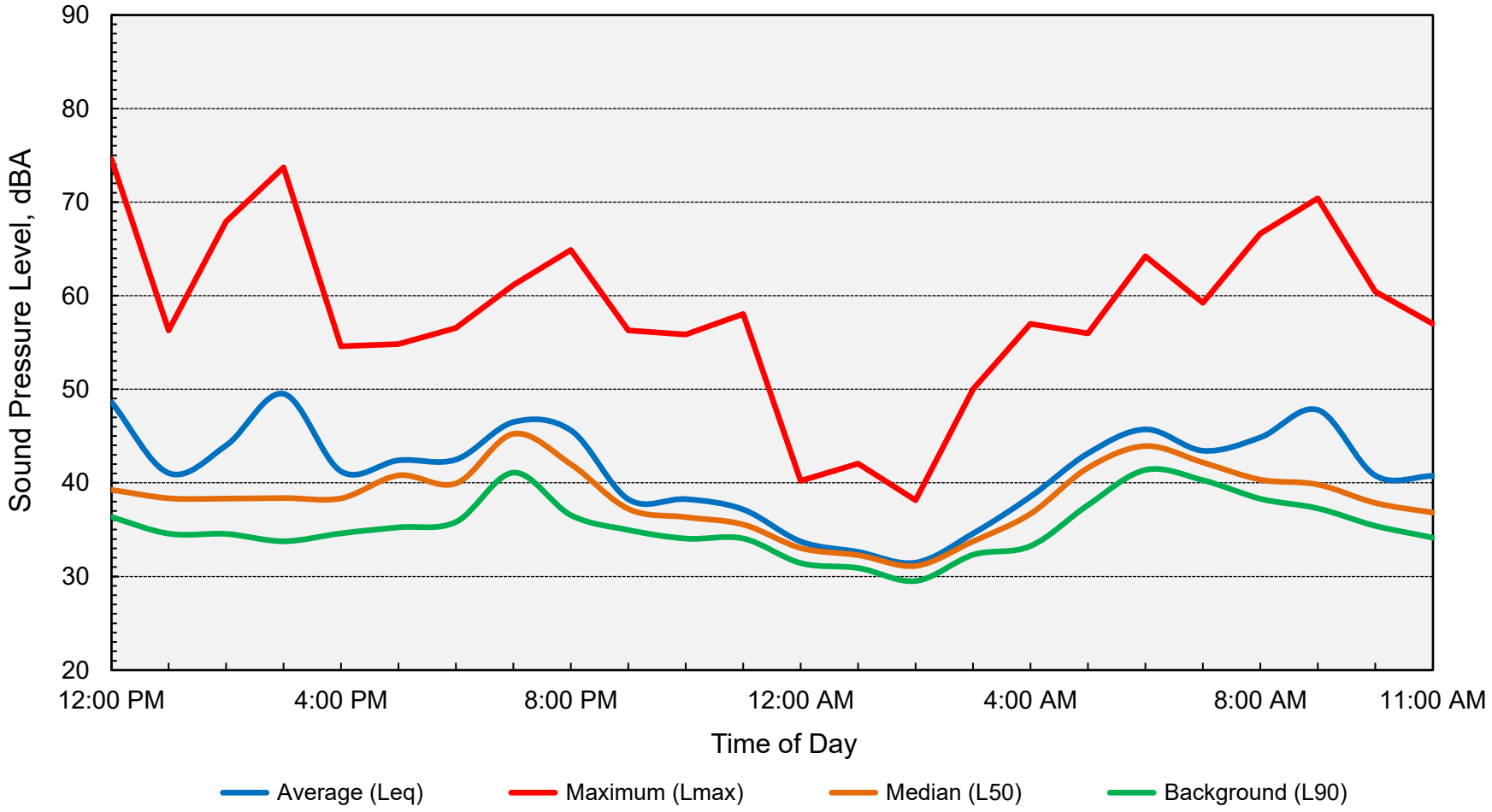
Computed DNL, dB	55
% Daytime Energy	78%
% Nighttime Energy	22%

GPS Coordinates	38°34'27.30"N
	121°11'31.97"W

Notes	Monitoring site located on the eastern end of the project area, approximately 90 feet from centerline of Raymer Way.

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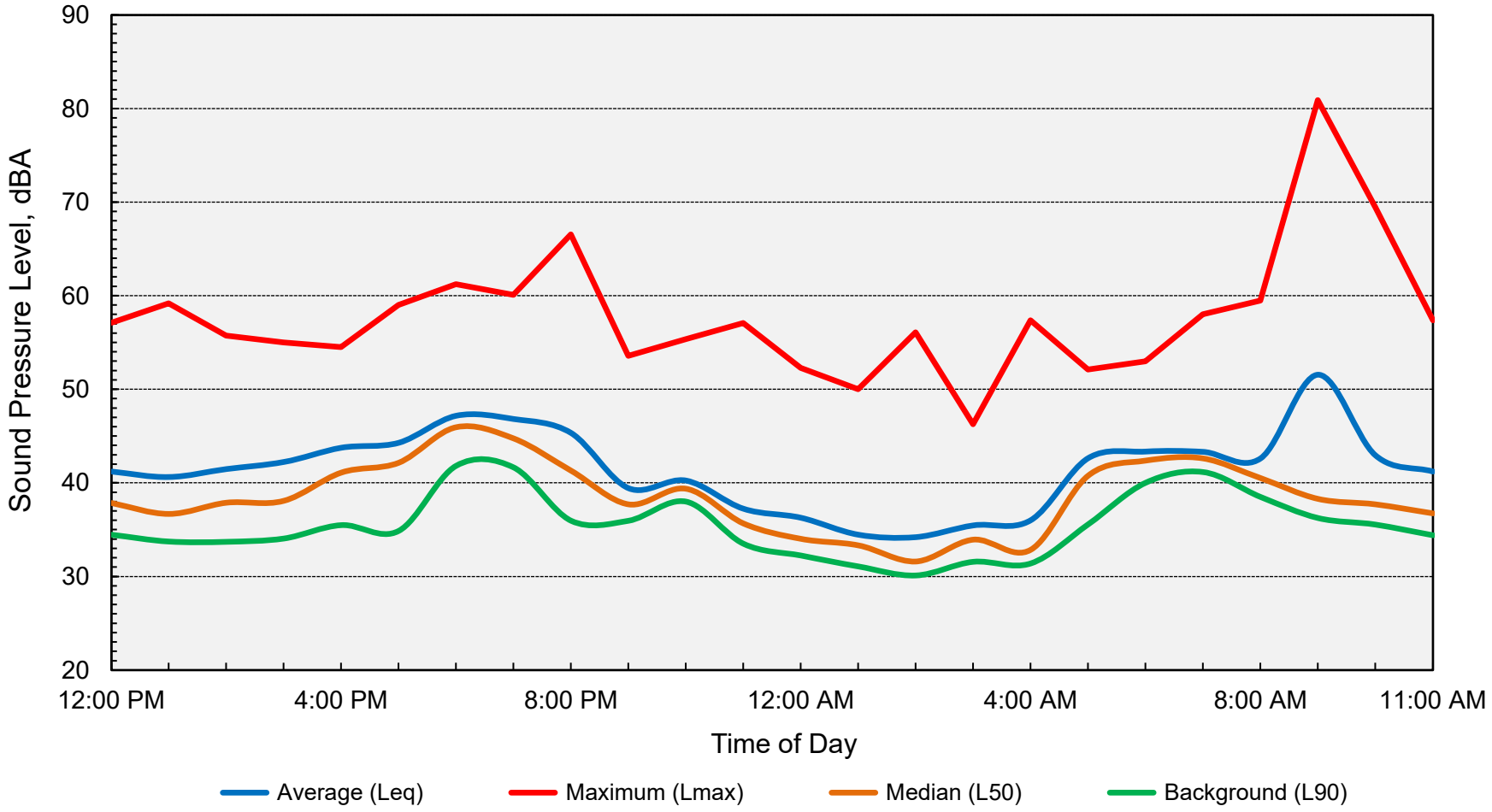
Appendix E-1
Ambient Noise Monitoring Results - Site LT-1
The Preserve Residential Development - Rancho Cordova, California
July 10-11, 2019



Computed DNL = 47 dB

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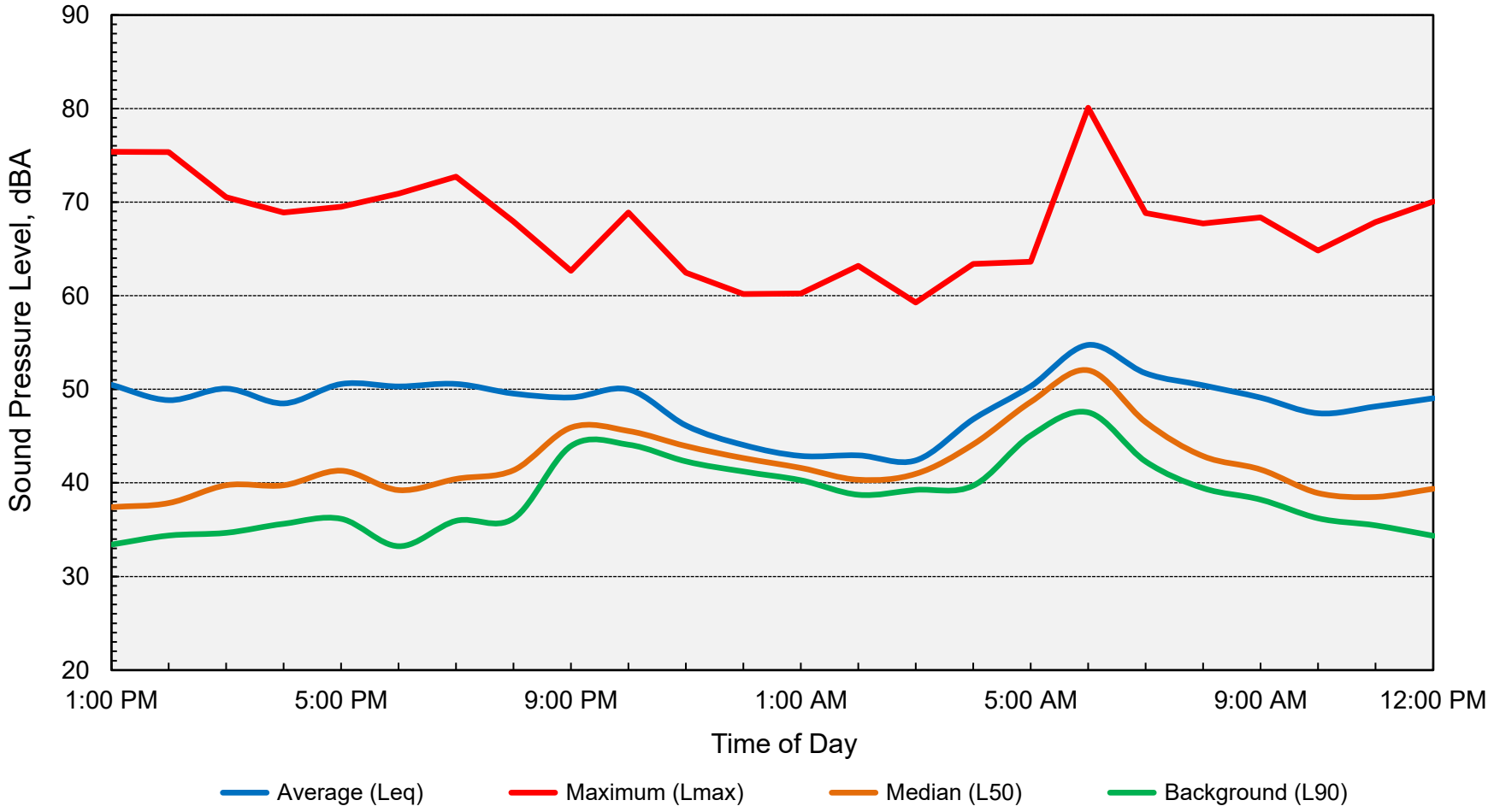
Appendix E-2
Ambient Noise Monitoring Results - Site LT-1
The Preserve Residential Development - Rancho Cordova, California
July 11-12, 2019



Computed DNL = 47 dB

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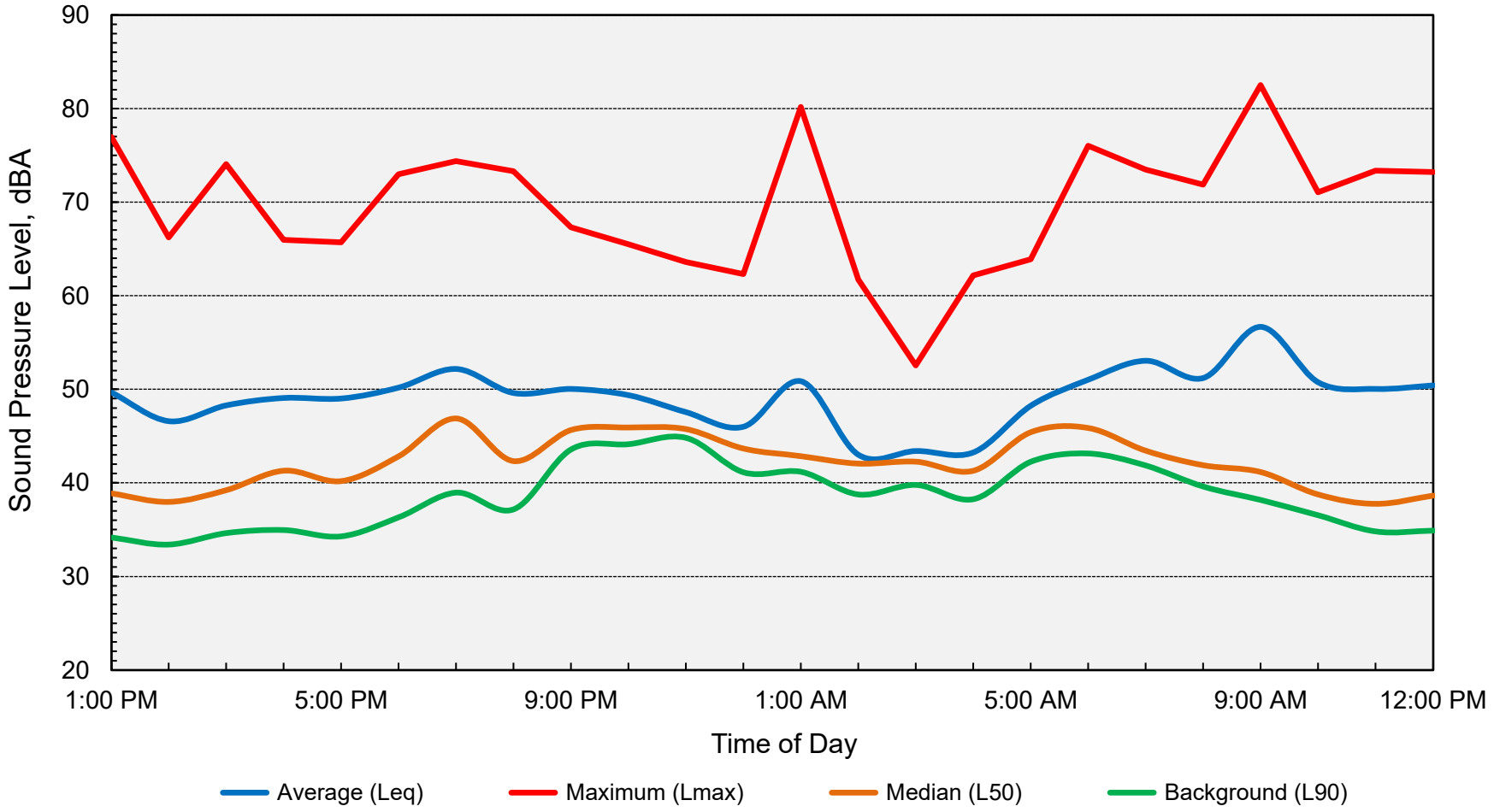
Appendix E-3
Ambient Noise Monitoring Results - Site LT-2
The Preserve Residential Development - Rancho Cordova, California
July 10-11, 2019



Computed DNL = 55 dB

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Appendix E-4
Ambient Noise Monitoring Results - Site LT-2
The Preserve Residential Development - Rancho Cordova, California
July 11-12, 2019



Computed DNL = 55 dB

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Appendix F
BAC File Data
Park Playing Fields

BOLLARD Acoustical Consultants

Test Date: 4/6/2016
Location: Rasmussen Community Park - Cameron Park, CA

			Measured Noise Levels, dB	
File #	Time	Duration	Leq	Lmax
1	5:40 PM	1 minute	45	55
2	5:41 PM	1 minute	48	53
3	5:42 PM	1 minute	47	58
4	5:43 PM	1 minute	54	66
5	5:44 PM	1 minute	50	59
6	5:45 PM	1 minute	52	57
7	5:46 PM	1 minute	53	70
8	5:47 PM	1 minute	50	58
9	5:48 PM	1 minute	47	54
10	5:49 PM	1 minute	49	59
11	5:50 PM	1 minute	53	62
12	5:51 PM	1 minute	46	52
13	5:52 PM	1 minute	50	61
14	5:53 PM	1 minute	51	63
15	5:54 PM	1 minute	51	64
16	5:55 PM	1 minute	51	63
17	5:56 PM	1 minute	52	67
18	5:57 PM	1 minute	53	66
19	5:58 PM	1 minute	50	59
20	5:59 PM	1 minute	49	59
21	6:00 PM	1 minute	51	59
22	6:01 PM	1 minute	52	62
23	6:02 PM	1 minute	52	59
24	6:03 PM	1 minute	51	58
25	6:04 PM	1 minute	50	58
26	6:05 PM	1 minute	50	60
27	6:06 PM	1 minute	52	65
28	6:07 PM	1 minute	45	51
29	6:08 PM	1 minute	53	61
30	6:09 PM	1 minute	52	61
31	6:10 PM	1 minute	50	58
32	6:11 PM	1 minute	53	64
33	6:12 PM	1 minute	49	54
34	6:13 PM	1 minute	53	69
35	6:14 PM	1 minute	52	66
36	6:15 PM	1 minute	47	58
37	6:16 PM	1 minute	47	53
38	6:17 PM	1 minute	52	64
39	6:18 PM	1 minute	51	59
40	6:19 PM	1 minute	52	58
41	6:20 PM	1 minute	53	62
			50	70
			Average	Max

Notes:
Measurements taken at a distance of 100 feet from a well attended little league baseball game

Appendix G-1
FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Prediction Worksheet

Project Information:

Job Number: 2019-085
Project Name: The Preserve Residential Development
Roadway Name: Grant Line Road

Traffic Data:

Year: Future
Average Daily Traffic Volume: 35,295
Percent Daytime Traffic: 73
Percent Nighttime Traffic: 27
Percent Medium Trucks (2 axle): 2
Percent Heavy Trucks (3+ axle): 2
Assumed Vehicle Speed (mph): 55
Intervening Ground Type (hard/soft): **Soft**

Traffic Noise Levels:

				DNL, dB			
Location	Description	Distance	Offset (dB)	Autos	Medium Trucks	Heavy Trucks	Total
Park	Nearest Park (Park 1)	1,080	0	56	46	50	57
Residential	Nearest Backyards	1,050	0	56	46	50	57
Residential	Nearest First-Floor Facades	1,060	0	56	46	50	57
Residential	Nearest Upper-Floor Facades	1,060	2	58	48	52	59

Traffic Noise Contours (No Calibration Offset):

DNL Contour, dB	Distance from Centerline, (ft)
75	67
70	145
65	313
60	675

Notes:
1. Future (Cumulative Plus Project conditions) average daily traffic volume for Grant Line Road was obtained using data provided in the traffic impact study conducted for the project by Kimley-Horn & Associates, Inc.
2. Offset of +2 dB offset was applied at upper-level building facades to account for reduced ground absorption of sound at elevated positions.

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Appendix G-2
FHWA Traffic Noise Prediction Model (FHWA-RD-77-108)
Noise Prediction Worksheet

Project Information:

Job Number: 2019-085
Project Name: The Preserve Residential Development
Roadway Name: Raymer Way

Traffic Data:

Year: Future
Average Daily Traffic Volume: 11,475
Percent Daytime Traffic: 73
Percent Nighttime Traffic: 27
Percent Medium Trucks (2 axle): 2
Percent Heavy Trucks (3+ axle): 2
Assumed Vehicle Speed (mph): 35
Intervening Ground Type (hard/soft): **Soft**

Traffic Noise Levels:

				DNL, dB			
Location	Description	Distance	Offset (dB)	Autos	Medium Trucks	Heavy Trucks	Total
Park	Nearest Park (Park 1)	450	0	51	44	49	53
Residential	Nearest Backyards	110	0	60	53	58	63
Residential	Nearest First-Floor Facades	120	0	59	52	57	62
Residential	Nearest Upper-Floor Facades	120	2	61	54	59	64

Traffic Noise Contours (No Calibration Offset):

DNL Contour, dB	Distance from Centerline, (ft)
75	16
70	35
65	76
60	163

Notes: 1. Future (Cumulative Plus Project conditions) average daily traffic volume for Raymer Way was obtained using data provided in the traffic impact study conducted for the project by Kimley-Horn & Associates, Inc.
2. Offset of +2 dB offset was applied at upper-level building facades to account for reduced ground absorption of sound at elevated positions.

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Acoustical Consultants

BOLLARD ACOUSTICAL CONSULTANTS, INC.
Acoustics ▶ Vibration ▶ Noise Control Engineering

January 5, 2021

Rod Stinson
Raney Planning & Management, Inc.
1501 Sports Drive Suite A
Sacramento, CA 95834

Transmitted via email: rods@raneymanagement.com

Subject: Changes in noise levels associated with the addition of six (6) units for the proposed Preserve Residential Development in Rancho Cordova, California.

Dear Rod,

Bollard Acoustical Consultants, Inc. (BAC) previously prepared a noise and vibration assessment for the Preserve Residential Development project in Rancho Cordova, California (dated September 3, 2020). On January 4, 2021, it was brought to the attention of BAC that the project had been revised to include six (6) additional units. According to the revised traffic impact analysis prepared by the project traffic consultant (Kimley-Horn & Associates, Inc.) dated November 4, 2020, the project proposes a total of approximately 434 single-family residential units. After a review of the revised traffic impact analysis, specifically the revised peak-hour turning movements contained in that report, it was determined that the changes in noise levels associated with the additional units would not be appreciable and would not change the conclusions presented in the noise and vibration assessment previously prepared by BAC. As a result, a revision to the noise and vibration study prepared by BAC dated September 3, 2020 would not be warranted.

Please contact me at (916) 663-0500 or dariog@bacnoise.com if you have any questions or require additional information.

Sincerely,



Dario Gotchet
Senior Consultant

Appendix J

WATER STUDY

FOR

THE PRESERVE

City of Rancho Cordova, California

September 2018

Prepared For:

Winn Properties

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

RECEIVED
DEC 13 2018
RANCHO CORDOVA
PLANNING

Technical Memorandum

To:	John Zellmer – Ruggeri-Jensen-Azar & Associates Rich Radoycis – Ruggeri-Jensen-Azar & Associates Steve Bowman – Ruggeri-Jensen-Azar & Associates
From:	Christian Kesler – Coleman Engineering Chad Coleman – Coleman Engineering
Date:	September 17, 2018
Project:	Winn Community Development
Subject:	Distribution Pipeline Sizing

PURPOSE

The purpose of this technical memorandum is to detail recommended pipe sizes and connection points for the proposed potable water distribution system for the Winn Communities development in Rancho Cordova, CA. Water modeling has demonstrated that the system is sized appropriately and that the resulting flows and pressures will be provided in accordance with Sacramento County Water Agency (SCWA/County) Operating Goals.

SITE

The Winn Communities Development is located on the east side of the City of Rancho Cordova and is planned to include 434 lots of single family residential housing. The development is located just north of Douglas Road and slightly west of Grant Line Road. Drinking water is to be supplied by Sacramento County Water Agency.

WATER SYSTEM DESIGN CRITERIA

Water system design criteria was determined using the criteria detailed in the *Zone 40 Water System Infrastructure Plan Update* (WSIP) dated February 2018. The criteria itemized in this section include:

- Water demands
- Peaking factors
- Water system materials and sizes
- Water system performance criteria

Water Demands

The system was designed using criteria detailed in the WSIP. Table 3-13 of the WSIP lists the Average Daily Demand per Single Family Residence as 490 gpd/connection. There are 434 lots on the developments which equates to an Average Daily Demand of 212,688 gpd or 148 gpm.

- 490 gpd/connection * 434 lots = 212,688 gpd
- 212,688 gpd /24 hours /60 min = 148 gpm

The demand was split up and applied throughout the nodes in the model as the Average Day Demand (ADD).

Table 6 of the WSIP lists the required fire flow for single family residences less than 3,600 square feet as 1,500 gpm. All residential homes in the proposed Winn development are assumed to be less than 3,600 square feet.

Peaking Factors
Table 5-15 of the WSIP lists the peaking factors that are shown in Table 1 below:

Table 1 – Water System Peaking Factors

Demand	Peaking Factor
Maximum Day Demand (MDD)	2.0 ADD
Peak Hour Demand (PHD)	2.0 MDD

Water System Materials and Sizes
According to the *Sacramento County Water Agency's 2018 Improvement Standards*, the specified pipe material for distribution pipes is cement-lined pipe, polyvinyl chloride pipe, or ductile iron pipe and a Hazen-Williams "C" value of 125 should be used for all three pipe types.

Table 5-14 of the WSIP indicates that the minimum size for all distribution pipes is 8-inches in diameter.

Water System Performance Criteria
The County dictates required performance for water distribution system pipes. Table 2 below lists the applicable operating goals for SCWA water systems, as dictated by Table 5-14 of the WSIP.

Table 2 – Water System Performance Criteria

Operating Goal	Requirement
PHD Minimum Pressure	35 psi
PHD Maximum Pressure	65 psi
ADD Maximum Velocity	5 fps
PHD Maximum Velocity	7 fps
PHD Maximum Unit Headloss	3 ft/1,000 ft
MDD+FF Minimum Pressure	20 psi

Operating Goal	Requirement
MDD+FF Maximum Velocity	10 fps

MODEL

After laying out the water distribution pipe network, Coleman Engineering modeled the system using Bentley WaterCAD v8i to verify conformance with County design and operating criteria. The planned street layout and elevations were detailed by Ruggeri-Jensen-Azar (RJA). Pipe materials, pipe diameters, water demands, etc. were selected by Coleman Engineering. Model elevations were taken from the *Preliminary Grading Plan* prepared by RJA and were verified on Google Earth.

The locations and alignments of existing public water transmission and distribution system pipes were provided by the County. See Figure 2 attached to this memo. Existing County pipes that were modeled to be connected to the new system include:

- 12-inch distribution main in Edington Way
- 8-inch distribution main in Thornberg Way
- 12-inch to 10-inch distribution main in Raymer Way.

According to Table 5-14 of the WSIP, the minimum allowable pressure in a Zone 40 transmission main at peak hour flow conditions is 40 psi. The supply water pressure in the model assumes 40 psi in the 24-inch transmission main in Edington Way. That transmission main supplies all other pipes in the modeled system.

Water system pressures in the development were modeled at ground level. Building heights were not considered in the model since Building MEP's and Fire Sprinkler designers will calculate losses interior to the buildings.

To verify water system performance versus County criteria, the following modeling runs were calculated:

- ADD
- MDD
- PHD
- MDD + Fire Flow
- Redundancy Check #1 - MDD + Fire Flow with the connection at Edington Way out of service
- Redundancy Check #2 - MDD + Fire Flow with the connection at Thornberg Way out of service
- Redundancy Check #3 – MDD + Fire Flow with the connection at Raymer Way out of service

RESULTS

Model result tables are attached as Figure 3. Table 3 below shows the summary of results from the model runs compared to the applicable County operating goals.

Table 3 – Modeling Results vs. Water System Performance Criteria

Operating Goal	Operating Goal	Modeled Minimum	Modeled Maximum	Meets Goal?
PHD Minimum Pressure (psi)	35	36	-	Yes
PHD Maximum Pressure (psi)	65	-	43	Yes
ADD Maximum Velocity (fps)	5	-	0.3	Yes
PHD Maximum Velocity (fps)	7	-	1.2	Yes
PHD Maximum Unit Headloss (ft/1,000 ft)	3	-	0.9	Yes
MDD+FF Minimum Pressure (psi)	20	25	-	Yes
MDD+FF Maximum Velocity (fps)	10	-	9.7	Yes
MDD+FF Minimum Pressure – Redundancy Check #1 Edington Way Out of Service (psi)	20	21	-	Yes
MDD+FF Maximum Velocity – Redundancy Check #1 Edington Way Out of Service (psi)	10	-	9.7	Yes
MDD+FF Minimum Pressure – Redundancy Check #2 Thornberg Way Out of Service (psi)	20	24	-	Yes
MDD+FF Maximum Velocity – Redundancy Check #2 Thornberg Way Out of Service (psi)	10	-	9.7	Yes
MDD+FF Minimum Pressure – Redundancy Check #3 Raymer Way Out of Service (psi)	20	25	-	Yes
MDD+FF Maximum Velocity – Redundancy Check #3 Raymer Way Out of Service (psi)	10	-	9.7	Yes

All of the County operating goals stated in the WSIP were met as shown in Table 3 above. 8-inch diameter pipe throughout the system is calculated to be able to deliver water under all of the conditions that were tested in the model.

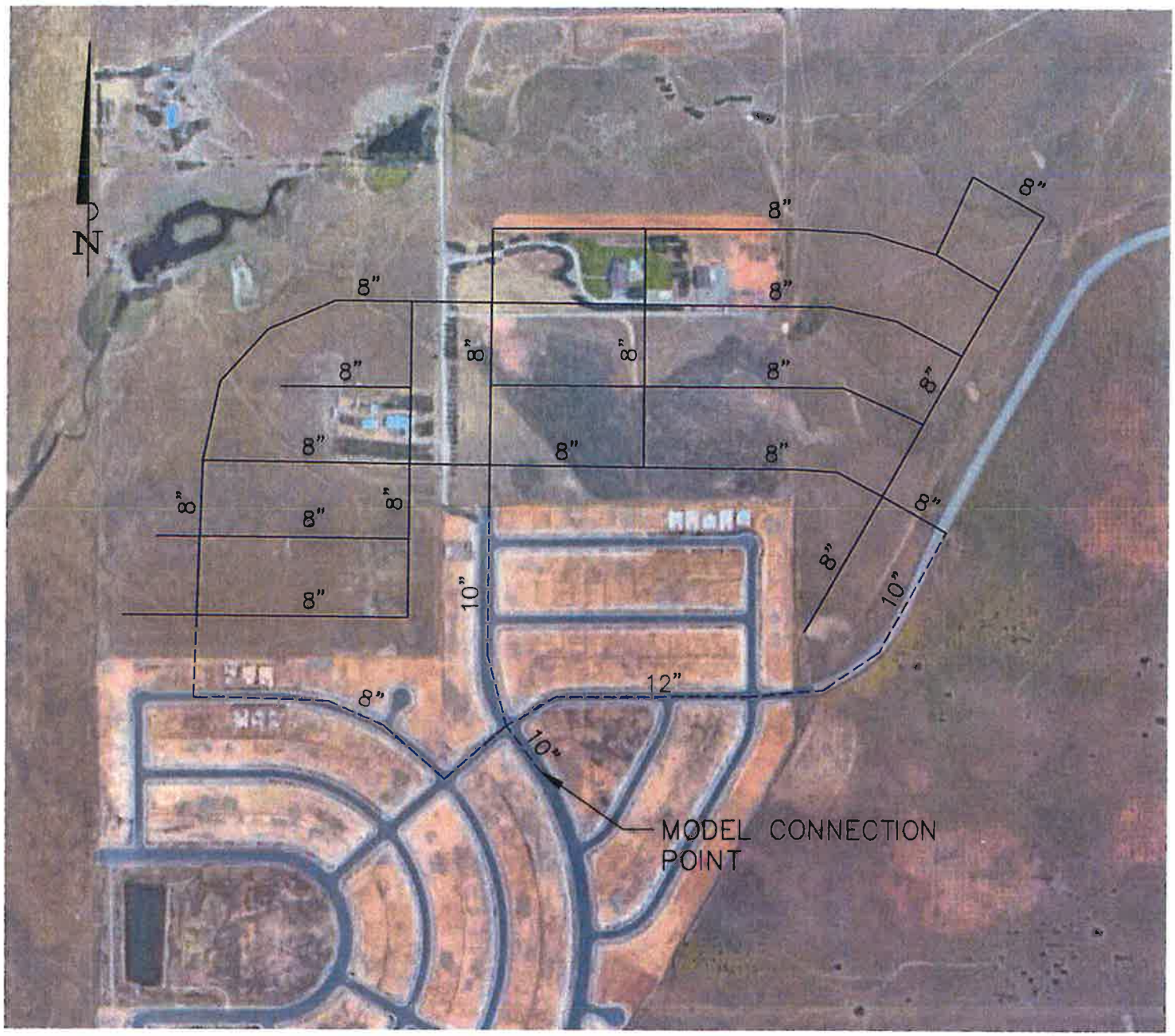
During fire flow conditions, the lowest pressures and highest velocities occurred at dead ends, but the criteria were still met at these locations. The modeling results attached as Figure 3 summarize results of the water modeling runs.

The modeling results show that the water distribution pipe networks shown in the attached Figure 1 is calculated to be able to deliver sufficient water to the development. To summarize, the new water system is modeled to include the following features:

- Connections to the 12-inch main in Edington Drive, the 8-inch main in Thornberg Way, and the 10-inch main in Raymer Way
- 8-inch pipes for all distribution mains in the Winn Development

ATTACHMENTS

- Figure 1 – Water System Layout
- Figure 2 – County Water Map
- Figure 3 – Water Modeling Results



LEGEND

PROPOSED PIPE ——————

EXISTING PIPE - - - - - -

500 0 500 1000

SCALE OF FEET

COLEMAN ENGINEERING

FIGURE 1

WINN DEVELOPMENT WATER SYSTEM LAYOUT

CITY OF RANCHO CORDOVA

COLEMAN ENGINEERING

1358 Blue Oaks Boulevard, Suite 200, Roseville California (916) 791-1188

DATE: 9-17-18

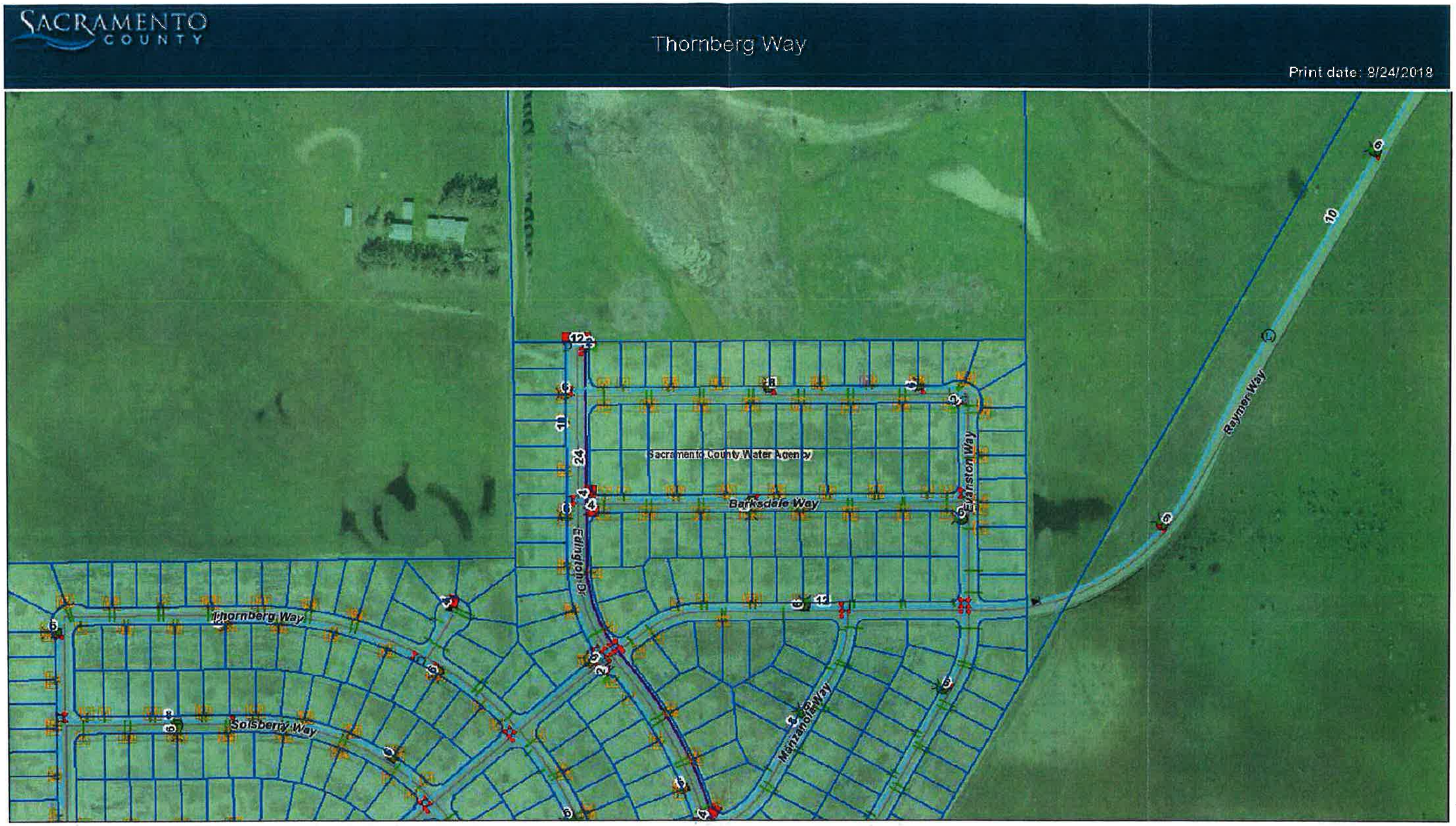
DRN: CPK

CKD: CRC

SCALE: 1"=500'

JN: RJAA18-003

Figure 2



1" = 200'

N

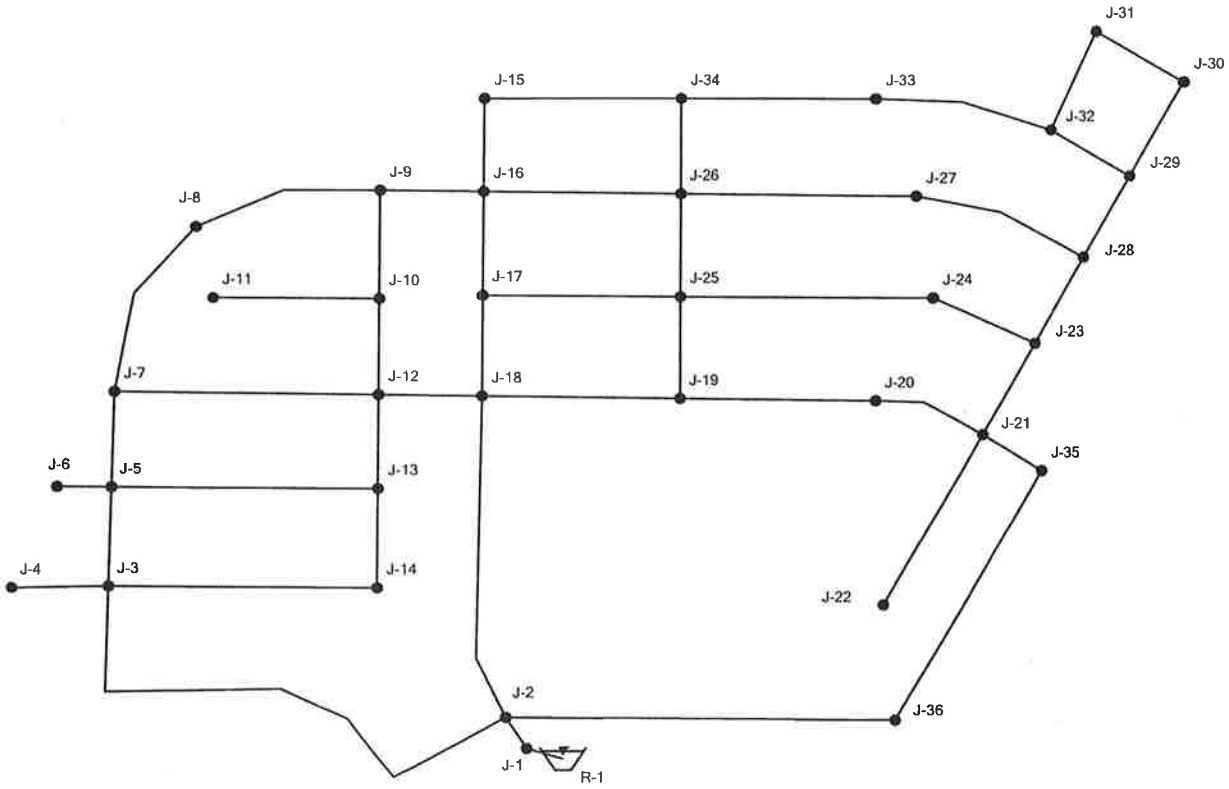
Independent verification of all data contained on this map product should be obtained by any user thereof. The County of Sacramento does not warrant the accuracy or completeness of this map product and therefore disclaims all liability for its fitness of use.

Figure 3

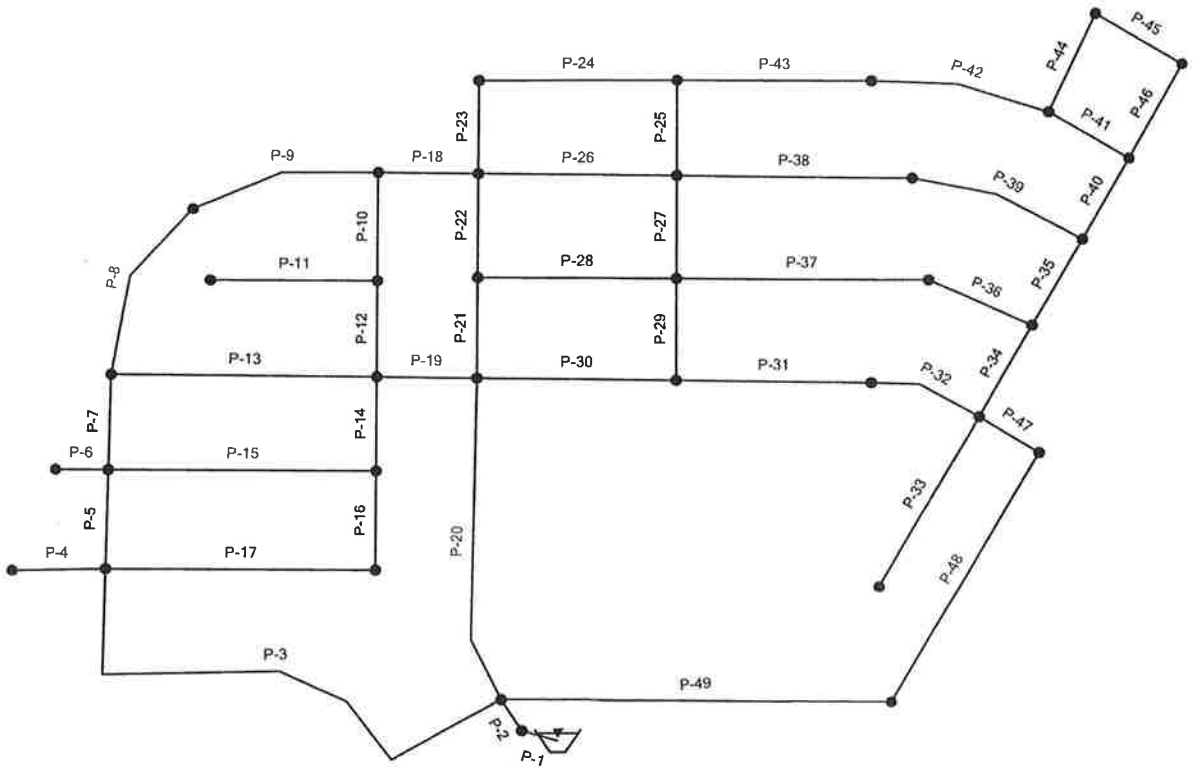
(pages 1-15)

Model: Winn Development

Node Labels



Model: Winn Development
Pipe Labels



Model: Winn Development
Active Scenario: ADD
Node Results

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)
J-1	236.20	0	40
J-2	236.20	0	40
J-3	233.50	4	41
J-4	229.60	3	43
J-5	232.90	4	41
J-6	232.50	2	42
J-7	232.00	7	42
J-8	231.00	2	42
J-9	233.70	5	41
J-10	233.60	3	41
J-11	231.90	5	42
J-12	233.70	6	41
J-13	237.60	7	39
J-14	236.10	7	40
J-15	236.10	2	40
J-16	235.00	5	40
J-17	234.60	5	41
J-18	236.30	5	40
J-19	236.80	7	40
J-20	238.80	4	39
J-21	240.60	5	38
J-22	242.40	4	37
J-23	240.90	4	38
J-24	238.90	5	39
J-25	236.60	5	40
J-26	237.50	6	39
J-27	239.70	7	38
J-28	241.80	4	38
J-29	242.70	3	37
J-30	243.60	7	37
J-31	244.00	3	37
J-32	242.90	5	37
J-33	238.90	4	39
J-34	237.40	2	39
J-35	241.50	0	38
J-36	237.00	0	40

Model: Winn Development
Active Scenario: ADD
Pipe Results

Label	Diameter (in)	Hazen-Williams C	Length (ft)	Flow (Absolute) (gpm)	Velocity (ft/s)
P-1	99.0	125.0	95	148	0.01
P-2	99.0	125.0	96	148	0.01
P-3	8.0	125.0	1,433	31	0.20
P-4	8.0	125.0	247	3	0.02
P-5	8.0	125.0	258	15	0.09
P-6	8.0	125.0	138	2	0.02
P-7	8.0	125.0	248	7	0.05
P-8	8.0	125.0	496	5	0.03
P-9	8.0	125.0	499	3	0.02
P-10	8.0	125.0	282	3	0.02
P-11	8.0	125.0	433	5	0.03
P-12	8.0	125.0	250	11	0.07
P-13	8.0	125.0	685	5	0.03
P-14	8.0	125.0	245	4	0.03
P-15	8.0	125.0	690	1	0.00
P-16	8.0	125.0	258	2	0.01
P-17	8.0	125.0	696	9	0.05
P-18	8.0	125.0	262	1	0.00
P-19	8.0	125.0	261	27	0.17
P-20	10.0	125.0	853	69	0.28
P-21	8.0	125.0	262	25	0.16
P-22	8.0	125.0	271	15	0.10
P-23	8.0	125.0	243	7	0.04
P-24	8.0	125.0	504	4	0.03
P-25	8.0	125.0	249	7	0.04
P-26	8.0	125.0	505	4	0.02
P-27	8.0	125.0	268	15	0.09
P-28	8.0	125.0	506	4	0.03
P-29	8.0	125.0	265	16	0.10
P-30	8.0	125.0	507	13	0.08
P-31	8.0	125.0	506	10	0.06
P-32	8.0	125.0	297	13	0.08
P-33	8.0	125.0	511	4	0.02
P-34	8.0	125.0	275	26	0.16
P-35	8.0	125.0	259	18	0.11
P-36	8.0	125.0	290	4	0.02
P-37	8.0	125.0	651	1	0.01
P-38	8.0	125.0	608	5	0.03
P-39	8.0	125.0	469	1	0.01
P-40	8.0	125.0	244	13	0.08
P-41	8.0	125.0	242	4	0.03
P-42	8.0	125.0	463	4	0.03
P-43	8.0	125.0	504	9	0.06
P-44	8.0	125.0	284	4	0.02
P-45	8.0	125.0	264	1	0.01
P-46	8.0	125.0	283	6	0.04

Model: Winn Development
Active Scenario: ADD
Pipe Results

Label	Diameter (in)	Hazen-Williams C	Length (ft)	Flow (Absolute) (gpm)	Velocity (ft/s)
P-47	8.0	125.0	181	47	0.30
P-48	10.0	125.0	751	47	0.19
P-49	12.0	125.0	1,003	47	0.13

Model: Winn Development
Active Scenario: MDD
Node Results

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)
J-1	236.20	0	40
J-2	236.20	0	40
J-3	233.50	9	41
J-4	229.60	6	43
J-5	232.90	9	41
J-6	232.50	5	42
J-7	232.00	5	42
J-8	231.00	14	42
J-9	233.70	5	41
J-10	233.60	11	41
J-11	231.90	5	42
J-12	233.70	10	41
J-13	237.60	12	39
J-14	236.10	14	40
J-15	236.10	13	40
J-16	235.00	5	40
J-17	234.60	10	41
J-18	236.30	10	40
J-19	236.80	10	40
J-20	238.80	10	39
J-21	240.60	13	38
J-22	242.40	12	37
J-23	240.90	7	38
J-24	238.90	10	39
J-25	236.60	13	40
J-26	237.50	7	39
J-27	239.70	8	38
J-28	241.80	7	37
J-29	242.70	13	37
J-30	243.60	9	37
J-31	244.00	10	37
J-32	242.90	5	37
J-33	238.90	7	39
J-34	237.40	10	39
J-35	241.50	0	38
J-36	237.00	0	40

Model: Winn Development
Active Scenario: MDD
Pipe Results

Label	Diameter (in)	Hazen-Williams C	Length (ft)	Flow (Absolute) (gpm)	Velocity (ft/s)
P-1	99.0	125.0	95	295	0.01
P-2	99.0	125.0	96	295	0.01
P-3	8.0	125.0	1,433	61	0.39
P-4	8.0	125.0	247	6	0.04
P-5	8.0	125.0	258	29	0.18
P-6	8.0	125.0	138	5	0.03
P-7	8.0	125.0	248	13	0.08
P-8	8.0	125.0	496	16	0.10
P-9	8.0	125.0	499	2	0.01
P-10	8.0	125.0	282	9	0.06
P-11	8.0	125.0	433	5	0.03
P-12	8.0	125.0	250	25	0.16
P-13	8.0	125.0	685	8	0.05
P-14	8.0	125.0	245	7	0.04
P-15	8.0	125.0	690	3	0.02
P-16	8.0	125.0	258	3	0.02
P-17	8.0	125.0	696	17	0.11
P-18	8.0	125.0	262	6	0.04
P-19	8.0	125.0	261	50	0.32
P-20	10.0	125.0	853	138	0.56
P-21	8.0	125.0	262	50	0.32
P-22	8.0	125.0	271	28	0.18
P-23	8.0	125.0	243	20	0.13
P-24	8.0	125.0	504	7	0.05
P-25	8.0	125.0	249	18	0.12
P-26	8.0	125.0	505	9	0.06
P-27	8.0	125.0	268	27	0.17
P-28	8.0	125.0	506	11	0.07
P-29	8.0	125.0	265	32	0.21
P-30	8.0	125.0	507	28	0.18
P-31	8.0	125.0	506	15	0.09
P-32	8.0	125.0	297	24	0.15
P-33	8.0	125.0	511	12	0.08
P-34	8.0	125.0	275	47	0.30
P-35	8.0	125.0	259	33	0.21
P-36	8.0	125.0	290	7	0.04
P-37	8.0	125.0	651	4	0.02
P-38	8.0	125.0	608	10	0.06
P-39	8.0	125.0	469	2	0.01
P-40	8.0	125.0	244	28	0.18
P-41	8.0	125.0	242	5	0.03
P-42	8.0	125.0	463	9	0.06
P-43	8.0	125.0	504	16	0.10
P-44	8.0	125.0	284	8	0.05
P-45	8.0	125.0	264	1	0.01
P-46	8.0	125.0	283	10	0.06

Model: Winn Development
Active Scenario: MDD
Pipe Results

Label	Diameter (in)	Hazen-Williams C	Length (ft)	Flow (Absolute) (gpm)	Velocity (ft/s)
P-47	8.0	125.0	181	96	0.61
P-48	10.0	125.0	751	96	0.39
P-49	12.0	125.0	1,003	96	0.27

Model: Winn Development
Active Scenario: PHD
Node Results

Label	Elevation (ft)	Demand (gpm)	Pressure (psi)
J-1	236.20	0	40
J-2	236.20	0	40
J-3	233.50	18	41
J-4	229.60	12	43
J-5	232.90	18	41
J-6	232.50	10	41
J-7	232.00	29	42
J-8	231.00	10	42
J-9	233.70	22	41
J-10	233.60	11	41
J-11	231.90	20	42
J-12	233.70	25	41
J-13	237.60	29	39
J-14	236.10	26	40
J-15	236.10	10	40
J-16	235.00	20	40
J-17	234.60	20	40
J-18	236.30	20	40
J-19	236.80	26	39
J-20	238.80	15	39
J-21	240.60	19	38
J-22	242.40	15	37
J-23	240.90	16	38
J-24	238.90	20	39
J-25	236.60	19	40
J-26	237.50	25	39
J-27	239.70	26	38
J-28	241.80	15	37
J-29	242.70	14	37
J-30	243.60	26	36
J-31	244.00	11	36
J-32	242.90	19	37
J-33	238.90	18	39
J-34	237.40	10	39
J-35	241.50	0	38
J-36	237.00	0	40

Model: Winn Development
Active Scenario: PHD
Pipe Results

Label	Diameter (in)	Hazen-Williams C	Length (ft)	Flow (Absolute) (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-1	99.0	125.0	95	591	0.02	0.00
P-2	99.0	125.0	96	591	0.02	0.00
P-3	8.0	125.0	1,433	123	0.79	0.41
P-4	8.0	125.0	247	12	0.08	0.01
P-5	8.0	125.0	258	59	0.38	0.10
P-6	8.0	125.0	138	10	0.06	0.00
P-7	8.0	125.0	248	29	0.18	0.03
P-8	8.0	125.0	496	20	0.13	0.01
P-9	8.0	125.0	499	10	0.06	0.00
P-10	8.0	125.0	282	14	0.09	0.01
P-11	8.0	125.0	433	20	0.13	0.01
P-12	8.0	125.0	250	45	0.29	0.06
P-13	8.0	125.0	685	19	0.12	0.01
P-14	8.0	125.0	245	17	0.11	0.01
P-15	8.0	125.0	690	3	0.02	0.00
P-16	8.0	125.0	258	8	0.05	0.00
P-17	8.0	125.0	696	34	0.22	0.04
P-18	8.0	125.0	262	2	0.01	0.00
P-19	8.0	125.0	261	106	0.68	0.31
P-20	10.0	125.0	853	278	1.13	0.62
P-21	8.0	125.0	262	98	0.63	0.27
P-22	8.0	125.0	271	60	0.38	0.11
P-23	8.0	125.0	243	26	0.17	0.02
P-24	8.0	125.0	504	17	0.11	0.01
P-25	8.0	125.0	249	28	0.18	0.03
P-26	8.0	125.0	505	15	0.10	0.01
P-27	8.0	125.0	268	58	0.37	0.10
P-28	8.0	125.0	506	18	0.11	0.01
P-29	8.0	125.0	265	65	0.41	0.12
P-30	8.0	125.0	507	53	0.34	0.08
P-31	8.0	125.0	506	38	0.24	0.05
P-32	8.0	125.0	297	53	0.34	0.09
P-33	8.0	125.0	511	15	0.10	0.01
P-34	8.0	125.0	275	103	0.66	0.29
P-35	8.0	125.0	259	71	0.46	0.15
P-36	8.0	125.0	290	15	0.10	0.01
P-37	8.0	125.0	651	5	0.03	0.00
P-38	8.0	125.0	608	21	0.14	0.02
P-39	8.0	125.0	469	4	0.03	0.00
P-40	8.0	125.0	244	52	0.33	0.08
P-41	8.0	125.0	242	16	0.10	0.01
P-42	8.0	125.0	463	18	0.11	0.01
P-43	8.0	125.0	504	35	0.22	0.04
P-44	8.0	125.0	284	15	0.09	0.01
P-45	8.0	125.0	264	4	0.02	0.00

Model: Winn Development
Active Scenario: PHD
Pipe Results

Label	Diameter (in)	Hazen-Williams C	Length (ft)	Flow (Absolute) (gpm)	Velocity (ft/s)	Headloss Gradient (ft/1000ft)
P-46	8.0	125.0	283	22	0.14	0.02
P-47	8.0	125.0	181	190	1.21	0.91
P-48	10.0	125.0	751	190	0.78	0.31
P-49	12.0	125.0	1,003	190	0.54	0.13

Model: Winn Development
Active Scenario: MDD + Fire Flow
Fire Flow Analysis

Label	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Velocity of Maximum Pipe (ft/s)
J-1	True	1,500	40	0.61
J-2	True	1,500	40	0.61
J-3	True	1,509	37	3.94
J-4	True	1,506	34	9.62
J-5	True	1,509	37	4.09
J-6	True	1,505	35	9.61
J-7	True	1,505	38	4.09
J-8	True	1,514	37	5.00
J-9	True	1,505	37	4.57
J-10	True	1,511	37	5.21
J-11	True	1,505	30	9.62
J-12	True	1,510	38	4.63
J-13	True	1,512	35	5.06
J-14	True	1,514	34	5.86
J-15	True	1,513	35	6.02
J-16	True	1,505	37	3.71
J-17	True	1,510	38	4.24
J-18	True	1,510	38	3.74
J-19	True	1,510	37	3.96
J-20	True	1,509	35	5.49
J-21	True	1,513	35	4.82
J-22	True	1,512	25	9.66
J-23	True	1,507	34	4.61
J-24	True	1,510	34	5.53
J-25	True	1,513	37	3.93
J-26	True	1,507	36	3.88
J-27	True	1,508	33	4.87
J-28	True	1,507	33	5.01
J-29	True	1,513	31	6.36
J-30	True	1,509	29	6.24
J-31	True	1,509	29	6.16
J-32	True	1,505	31	5.95
J-33	True	1,507	32	5.40
J-34	True	1,509	35	4.78
J-35	True	1,500	35	3.85
J-36	True	1,500	38	3.28

Model: Winn Development

Active Scenario: MDD + Fire Flow - Redundancy Check #1 Edington Way Out of Service

Fire Flow Analysis

Label	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Velocity of Maximum Pipe (ft/s)
J-1	True	1,500	40	1.15
J-2	True	1,500	40	1.15
J-3	True	1,509	33	6.37
J-4	True	1,506	30	9.62
J-5	True	1,509	33	6.57
J-6	True	1,505	31	9.61
J-7	True	1,505	33	6.69
J-8	True	1,514	32	6.77
J-9	True	1,505	32	6.87
J-10	True	1,511	32	6.82
J-11	True	1,505	25	9.62
J-12	True	1,510	33	6.78
J-13	True	1,512	31	6.64
J-14	True	1,514	30	6.56
J-15	True	1,513	30	7.01
J-16	True	1,505	32	6.97
J-17	True	1,510	32	6.98
J-18	True	1,510	32	6.94
J-19	True	1,510	32	7.09
J-20	True	1,509	30	7.33
J-21	True	1,513	32	7.44
J-22	True	1,512	21	9.66
J-23	True	1,507	30	7.23
J-24	True	1,510	29	7.16
J-25	True	1,513	32	7.05
J-26	True	1,507	31	7.05
J-27	True	1,508	28	7.10
J-28	True	1,507	29	7.13
J-29	True	1,513	27	7.11
J-30	True	1,509	24	7.11
J-31	True	1,509	24	7.11
J-32	True	1,505	26	7.11
J-33	True	1,507	27	7.08
J-34	True	1,509	30	7.05
J-35	True	1,500	33	5.10
J-36	True	1,500	37	4.05

Model: Winn Development

Active Scenario: MDD + Fire Flow - Redundancy Check #2 Thornberg Way Out of Service

Fire Flow Analysis

Label	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Velocity of Maximum Pipe (ft/s)
J-1	True	1,500	40	0.76
J-2	True	1,500	40	0.76
J-3	True	1,509	32	6.23
J-4	True	1,506	29	9.62
J-5	True	1,509	34	5.90
J-6	True	1,505	32	9.61
J-7	True	1,505	35	5.78
J-8	True	1,514	35	5.55
J-9	True	1,505	36	5.34
J-10	True	1,511	35	5.59
J-11	True	1,505	28	9.62
J-12	True	1,510	36	6.16
J-13	True	1,512	32	6.22
J-14	True	1,514	31	6.44
J-15	True	1,513	34	5.98
J-16	True	1,505	36	4.52
J-17	True	1,510	37	4.49
J-18	True	1,510	37	4.61
J-19	True	1,510	36	4.68
J-20	True	1,509	34	5.59
J-21	True	1,513	35	5.37
J-22	True	1,512	24	9.66
J-23	True	1,507	34	4.93
J-24	True	1,510	33	5.57
J-25	True	1,513	36	4.65
J-26	True	1,507	35	4.63
J-27	True	1,508	32	4.91
J-28	True	1,507	32	5.12
J-29	True	1,513	30	6.39
J-30	True	1,509	28	6.28
J-31	True	1,509	28	6.20
J-32	True	1,505	30	5.99
J-33	True	1,507	31	5.37
J-34	True	1,509	34	4.81
J-35	True	1,500	35	3.95
J-36	True	1,500	38	3.43

Model: Winn Development

Active Scenario: MDD + Fire Flow - Redundancy Check #3 Raymer Way Out of Service

Fire Flow Analysis

Label	Satisfies Fire Flow Constraints?	Flow (Total Needed) (gpm)	Pressure (Calculated Residual @ Total Flow Needed) (psi)	Velocity of Maximum Pipe (ft/s)
J-1	True	1,500	40	0.61
J-2	True	1,500	40	0.61
J-3	True	1,509	37	3.94
J-4	True	1,506	34	9.62
J-5	True	1,509	37	4.09
J-6	True	1,505	35	9.61
J-7	True	1,505	38	4.09
J-8	True	1,514	37	5.00
J-9	True	1,505	37	4.57
J-10	True	1,511	37	5.21
J-11	True	1,505	30	9.62
J-12	True	1,510	38	4.63
J-13	True	1,512	35	5.06
J-14	True	1,514	34	5.86
J-15	True	1,513	35	6.02
J-16	True	1,505	37	3.71
J-17	True	1,510	38	4.24
J-18	True	1,510	38	3.74
J-19	True	1,510	37	3.96
J-20	True	1,509	35	5.49
J-21	True	1,513	35	4.82
J-22	True	1,512	25	9.66
J-23	True	1,507	34	4.61
J-24	True	1,510	34	5.53
J-25	True	1,513	37	3.93
J-26	True	1,507	36	3.88
J-27	True	1,508	33	4.87
J-28	True	1,507	33	5.01
J-29	True	1,513	31	6.36
J-30	True	1,509	29	6.24
J-31	True	1,509	29	6.16
J-32	True	1,505	31	5.95
J-33	True	1,507	32	5.40
J-34	True	1,509	35	4.78
J-35	True	1,500	35	3.85
J-36	True	1,500	38	3.28

SEWER STUDY

FOR

THE PRESERVE

City of Rancho Cordova, California

June 2020

Prepared For:

Winn Properties

Prepared By:

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Exhibits

Exhibit A: Project Location Map

Exhibit B: Sewer Study (11x17 & Insert)

Exhibit C: Sewer Flow Calculations

Exhibit D: Land Use Plan

Exhibit E: Grading Plan

Attachments

Attachment A: Proposed Sewer Shed Shift Report

Executive Summary

This report has been prepared to present onsite and offsite sewer conveyance facilities to gravity serve the study area as well as identifying off-site contributing areas and downstream impacted areas. It addresses the viability of sewering the project, as well as consistency with the existing interceptor and trunk sewer master plans.

The Preserve is a proposed single family development (**See Exhibit D**). The Preserve is in the eastern part of Sacramento County, approximately 4,500 feet north of the intersection of Douglas Road and Americanos Boulevard. (**See Exhibit A**).

The Preserve encompasses a total of 279± acres, of which 184 acres are designated to be open space. Based on land use, with a minimum of 6 equivalent single-family dwelling (ESD's) per acre (RD-6), the remaining 95 acres will be 440 single family homes and approximately 20± acres of public park and open space. The project proposes two points of connection to the existing system and the 440.0 ESD's have Peak Wet Weather Flows (PWWF) of 0.210 MGD and 0.155 MGD. The flows leave the site at Node WP/MH-1 and Node WP-6/MH-26A.

There are no upstream areas that will contribute flow to the project sewer shed.

The Preserve is part of the BR East Rancho Area 1 Trunk Shed area per the SFEMP and would receive ultimate service from the Aerojet Interceptor Section 2S.

There are no required pump stations or force mains. This project proposes a permanent shed shift of 75± acres of The Preserve to the BR East Rancho Area 2. The designated open space north of Morrison Creek (184 Ac) is not part of the proposed shift (See Attachment A). The offsite facilities that are required to develop The Preserve have been constructed with the North Douglas development.

Section 1: Introduction

This study has been prepared at a Subdivision Plan level. At this level, it serves as a design guide for the creation of the subsequent improvement plans.

The Preserve covers 279± acres. The ground ranges in elevation from 205 feet on the west side to 245 feet above sea level on the east side. The 184 acres north of Morrison Creek are currently in the South Sacramento Habitat Conservation Plan (SSHCP) as a preserve. This property is currently in negotiation to be sold to the SSHCP. As open space, the area is not included in the flow calculations. The proposed open space areas will not be developed and will be set aside for conservation purposes only.

There are no offsite upstream areas that will contribute to the flows produced by The Preserve. The flow created from the project will utilize the existing North Douglas subdivision sewer system.

The Preserve will ultimately be serviced by the Aerojet Interceptor.

Section 2: Design

This study has been prepared in accordance with the current master plans.

Assumptions

Future upstream areas will not be served through The Preserve. It is anticipated that undeveloped areas within the (BR East Rancho Area 1) will be served according to the SFEMP, and will not be served to the south, through The Preserve and North Douglas developments.

Per the approved North Douglas Sewer Study, there are 1390 acres and 8522 ESD's at Node DR-4 in Douglas Road, producing 5.442 MGD. This study proposes to increase Node DR-4 to 1462.5 acres and 8969.6 ESD's producing 5.927 MGD. From Node DR-4, flows travel west in a 24" sewer pipe at a slope of 0.0021. A 24" sewer pipe at s= 0.0021 has a capacity of 6.697 MGD.

High ground water tables typically don't exist in this area of Sacramento County.

Approach: Mater Plan Design Procedures

The following general procedures are used in the development of this Sewer Master Plan:

- Major sewer sheds defined.
- A detailed collection system established.
- Major sheds divided into sub-sheds in order to define the areas, which contribute flows to certain points (nodes) on the collection system.
- Equivalent Single-Family Dwellings (ESDs) should be determined by lot count or by using 6 Equivalent Single-Family Dwellings (ESDs/acre), whichever is greater

The methodology for estimating sewage flows in collectors and trunk lines in the Plan area sewer system is defined in the Sacramento Area Sewer District Standards and Specifications dated March 2019. The primary design criteria used in our analysis are listed in Table 1 below.

Table 1

Category	Conditions	Modifiers
Development Density	Planned Development Density	Minimum Plan Density shall be RD-5
Flow Generation	310 gpd/ESD	I/I-new 1400 gpd/ac < 5 Years 1600 gpd/ac > 5 Years
Peaking Factor	$PF=3.5 - 1.8Q_a^{0.05}$ (local sewers) Where: Q_a = ADWF	
Velocity Criteria	Min. 2 fps at Peak Wet Weather Flow	
Hydraulic Grade Line	Maximum HGL at crown of pipe Peak Wet Weather Flow	
Friction Factor	N=0.013	
Minimum Depth	6.3' at periphery of plan. 6.3' min depth @ last line manhole	8" sewer from periphery to collection point
Minimum Slope	Slope = 0.007 Minimum	Main to last line manhole

Peak Dry Weather Flows are computed based on 310 gallons per day (gpd) per Equivalent Single Family Dwelling Unit (ESD) entering each trunk pipe system. ESD values used in Sewer Master Plans assumed a minimum plan density of 6 ESD's per acre.

Regional San and SASD

Sanitary sewer service in the project area is provided by the Sacramento Regional County Sanitation District (Regional San) and the Sacramento Area Sewer District (SASD).

Regional San is responsible for the interceptor collection (sanitary sewers which are designed to carry flows in excess of 10 million gallons per day) and treatment of wastewater.

SASD is responsible for the local collection facilities (up to 1 MGD) and trunk sewers with capacity of 1 million to 10 million gallons per day.

Regional San and SASD own, operate and are responsible for the public collection, trunk and interceptor sewer systems throughout Sacramento County as well as the Regional Wastewater Treatment Plant located south of Freeport.

Section 3: Sewer Flow Information

Currently there are no existing sewer facilities within The Preserve. When the 75 acres develops, it will produce 440.0 ESD's and have a combined Peak Wet Weather Flow (PWWF) of 0.365 mgd. These flows leave the site at nodes MH-1 and MH-26A, and enter the North Douglas development. We are reducing the Peak Wet Weather Flow (PWWF) at node 2623-EN01 and increasing the Peak Wet Weather Flow (PWWF) at node 2875-EN01. See the approved Sewer Master Study for North Douglas 1, dated March 2004, and prepared by Wood Rodgers, Inc. for reference.

Section 4: Sewer Alignments and Facilities

The most feasible way to serve this project is by gravity through the North Douglas development down to Douglas Road. This is a permanent shed shift. At this time, there are no other alternatives to sewer The Preserve.

Section 5: Conclusion

This study was prepared with the intent of providing support documentation for use in the development of The Preserve improvement plans. As configured, all of the project flows will sewer south through the North Douglas project, and eventually into the Aerojet Interceptor. No offsite upstream sewer flows through The Preserve, thus this study has only accounted for flows originated onsite. This project's 75 developable acres account for approximately 440.0 ESD's and produces a combined Peak Wet Weather Flow of 0.365 MGD's. The Preserve does not adversely affect the downstream system.

Exhibits

Exhibit A: Project Location Map

Exhibit B: Sewer Study (11x17 & Insert)

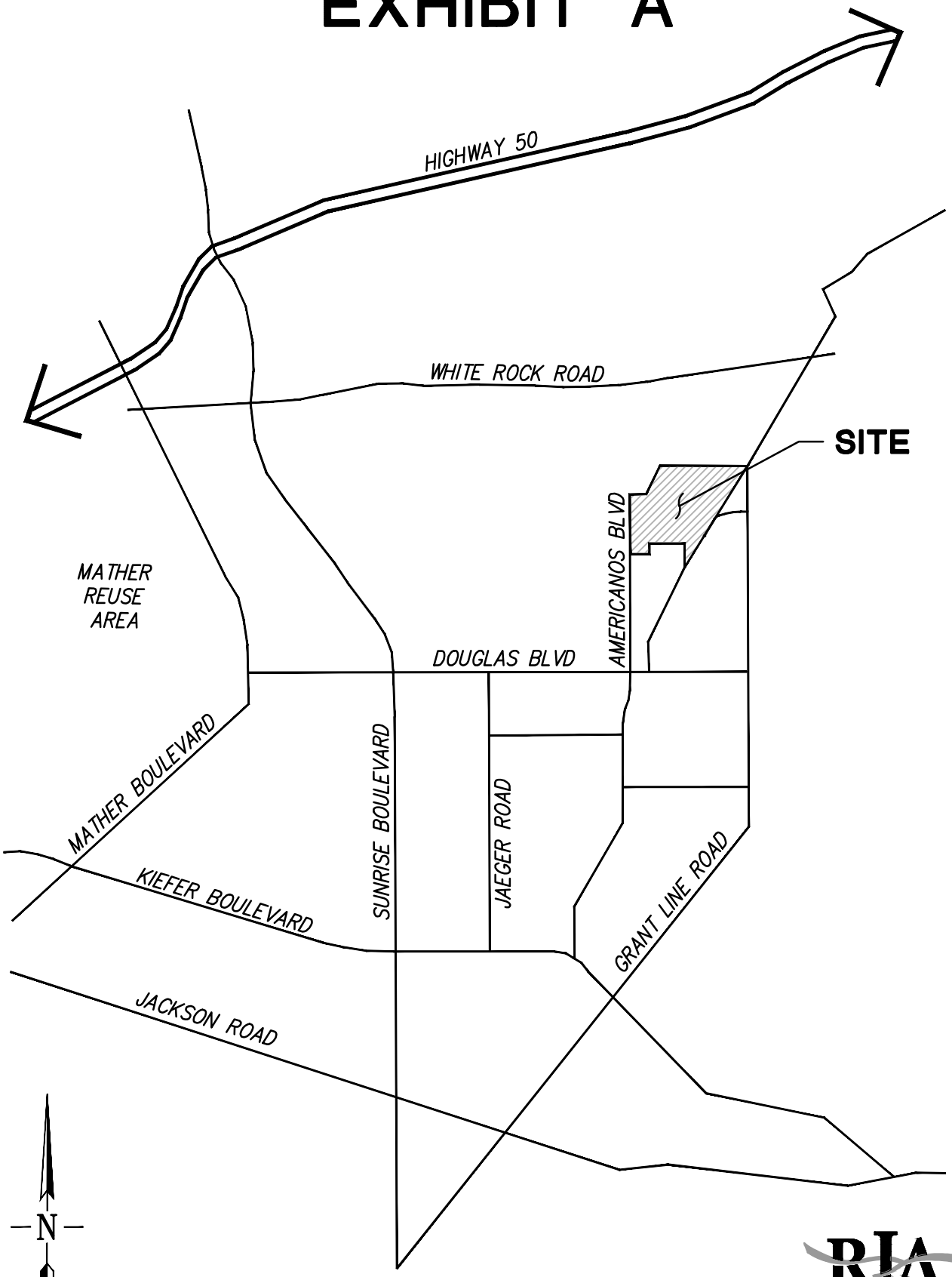
Exhibit C: Sewer Flow Calculations

Exhibit D: Land Use Plan

Exhibit E: Grading Plan

PROJECT LOCATION

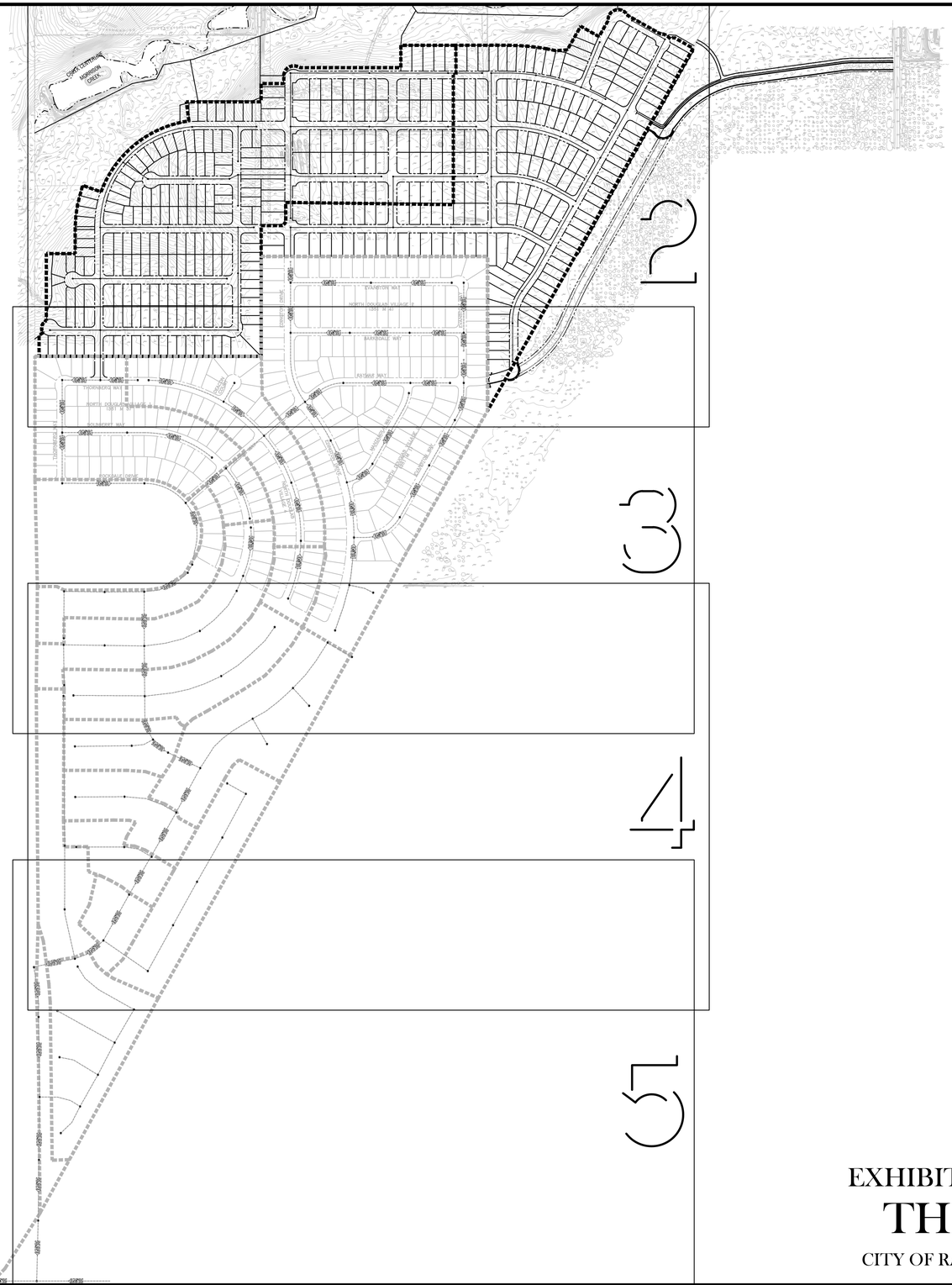
EXHIBIT A

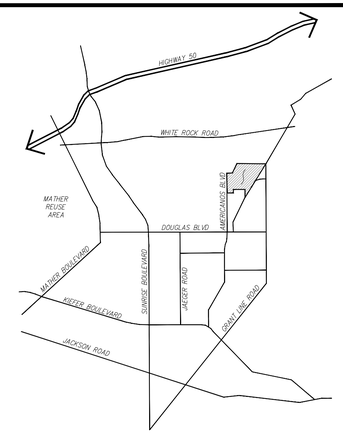


NOT TO SCALE

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

DATE: 6-23-2020 JOB NO. 165018





VICINITY MAP
NTS

0 300 600 900

1 inch = 300 ft.

LEGEND

D.C.	DROP CONNECTION
P.S.	PARALLEL SERVICE
200'	PIPE LENGTH
XX"SS	PROPOSED SEWER PIPE (INCHES)
S=0.0018	PIPE SLOPE
INV=150.00	PIPE INVERT (FEET)
RIM=50.0	MANHOLE RIM ELEVATION (FEET)
D=10.0	DEPTH (FEET)
200' EXX"SS S=0.0018	PIPE INFORMATION PER APPROVED NORTH DOUGLAS 1 & 2 SEWER STUDY BY WOOD RODGERS, INC. DATED MARCH 2004.
INV=150.00 RIM=50.0 D=10.0	MANHOLE INFORMATION PER APPROVED NORTH DOUGLAS 1 & 2 SEWER STUDY BY WOOD RODGERS, INC. DATED MARCH 2004.
	PROPOSED SEWER MANHOLE
	SEWER MANHOLE PER NORTH DOUGLAS
	MAJOR SHED BOUNDARY
	INDIVIDUAL SHED BOUNDARY
	PROJECT BOUNDARY
	NODE NUMBER POINT ACREAGE CUMULATIVE ACREAGE POINT ESD CUMULATIVE ESD PEAK WET WEATHER FLOW (MGD)
1 A= 00.0 ac. ΣA= 10.0 ac. ESD= 0.0 ΣESD= 10.0 Q_{PWWF}=0.10 mgd	NODE INFORMATION PER APPROVED NORTH DOUGLAS 1 & 2 SEWER STUDY BY WOOD RODGERS, INC. DATED MARCH 2004.

EXHIBIT B SEWER STUDY FOR
THE PRESERVE
CITY OF RANCHO CORDOVA, CALIFORNIA

REVISIONS NO.	DESCRIPTION	DATE	BY

SCALE
HORIZ. ____
VERT. ____

CITY OF RANCHO CORDOVA

DRAWN BY: A. ZAMORANO
DATE 2/2020

DESIGNED BY: S. BOWMAN
R.C.E. 71924 DATE 2/2020

CHECKED BY: S. BOWMAN
R.C.E. 71924 DATE 2/2020

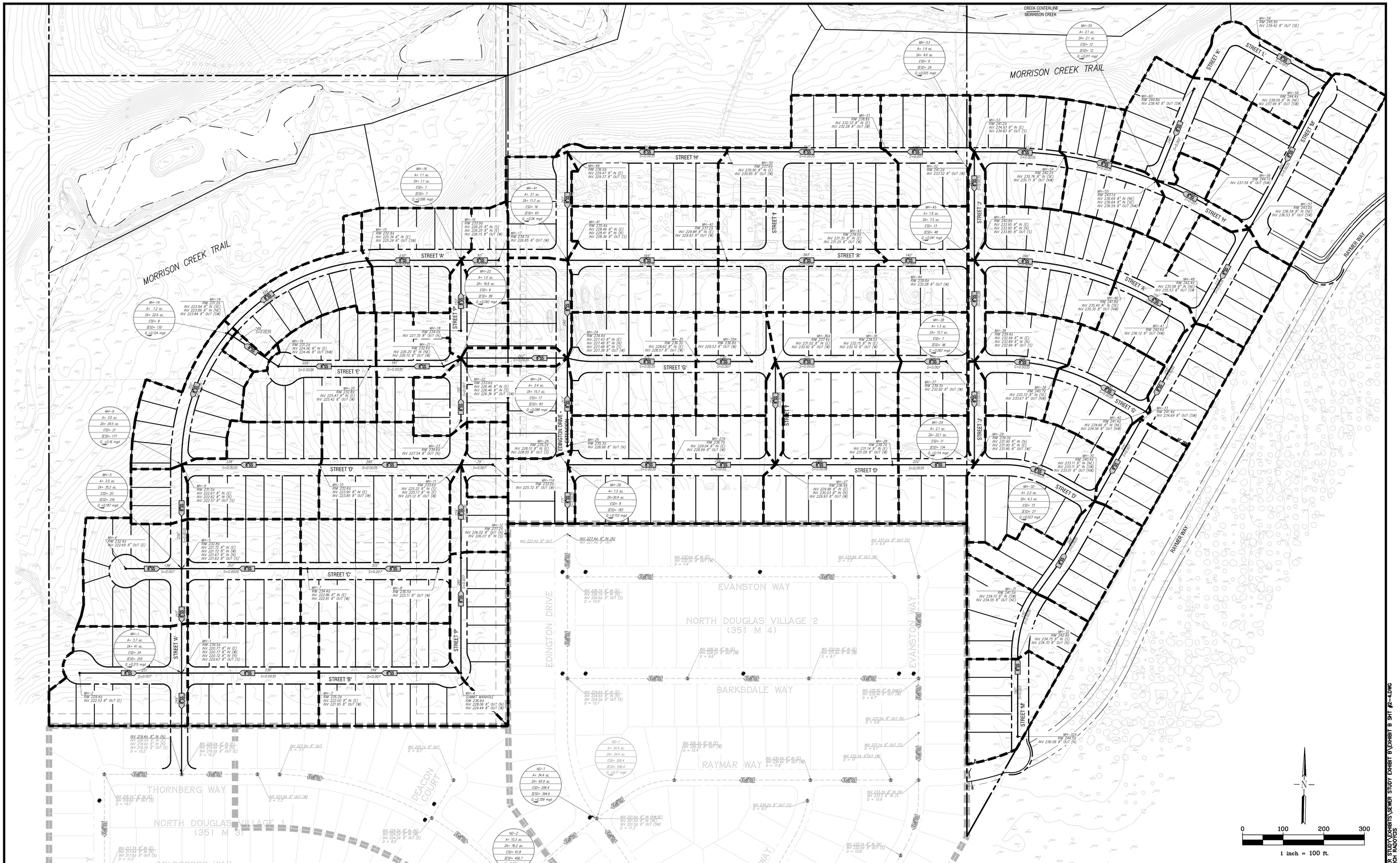
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PHONE: (916) 630-8900 FAX: (916) 630-8909

SEWER STUDY FOR
THE PRESERVE

PROJECT NO.

DWG. NO.
SHEET
— OF —
5

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REVISIONS NO.	DESCRIPTION	DATE	BY

SCALE
HORIZ. ____
VERT. ____

CITY OF RANCHO CORDOVA

DRAWN BY: A. ZAMORANO
DATE 2/2020

DESIGNED BY: S. BOWMAN
R.C.E. 71924 DATE 2/2020

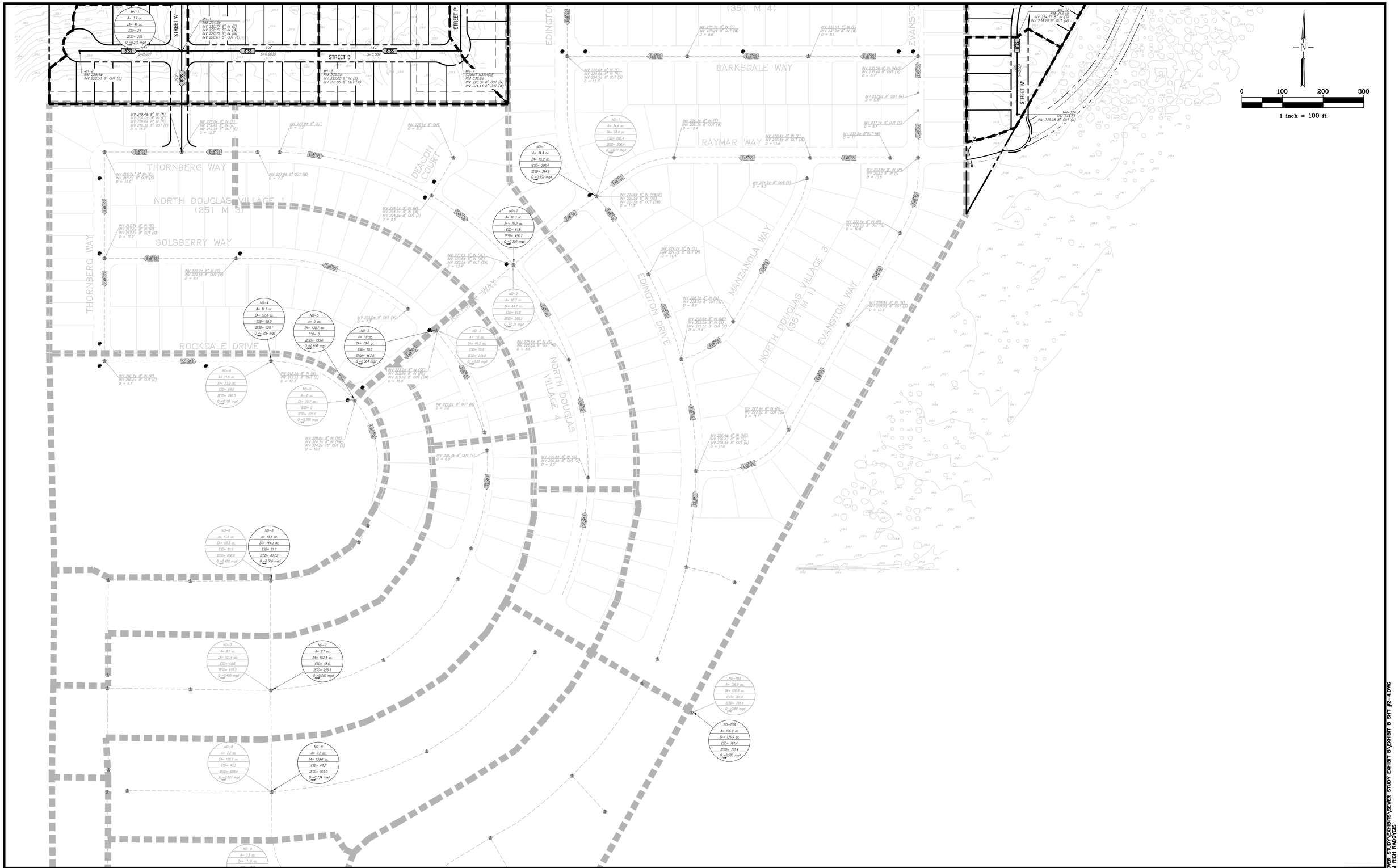
CHECKED BY: S. BOWMAN
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SEWER STUDY FOR
THE PRESERVE

PROJECT NO. 165018
EXHIBIT B
DWG. NO.
SHEET 2 OF 5

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REVISIONS NO.	DESCRIPTION	DATE	BY

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HORIZ. ____
VERT. ____

CITY OF RANCHO CORDOVA

DRAWN BY: A. ZAMORANO
DATE 2/2020

DESIGNED BY: S. BOWMAN
R.C.E. 71924 DATE 2/2020

CHECKED BY: S. BOWMAN
R.C.E. 71924 DATE 2/2020

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SEWER STUDY FOR
THE PRESERVE

PROJECT NO. 165018

EXHIBIT B

DWG. NO.
SHEET 3 — OF — 5

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CITY OF RANCHO CORDOVA

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R.C.E. 71924 DATE 2/2020

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R.C.E. 71924 DATE 2/2020

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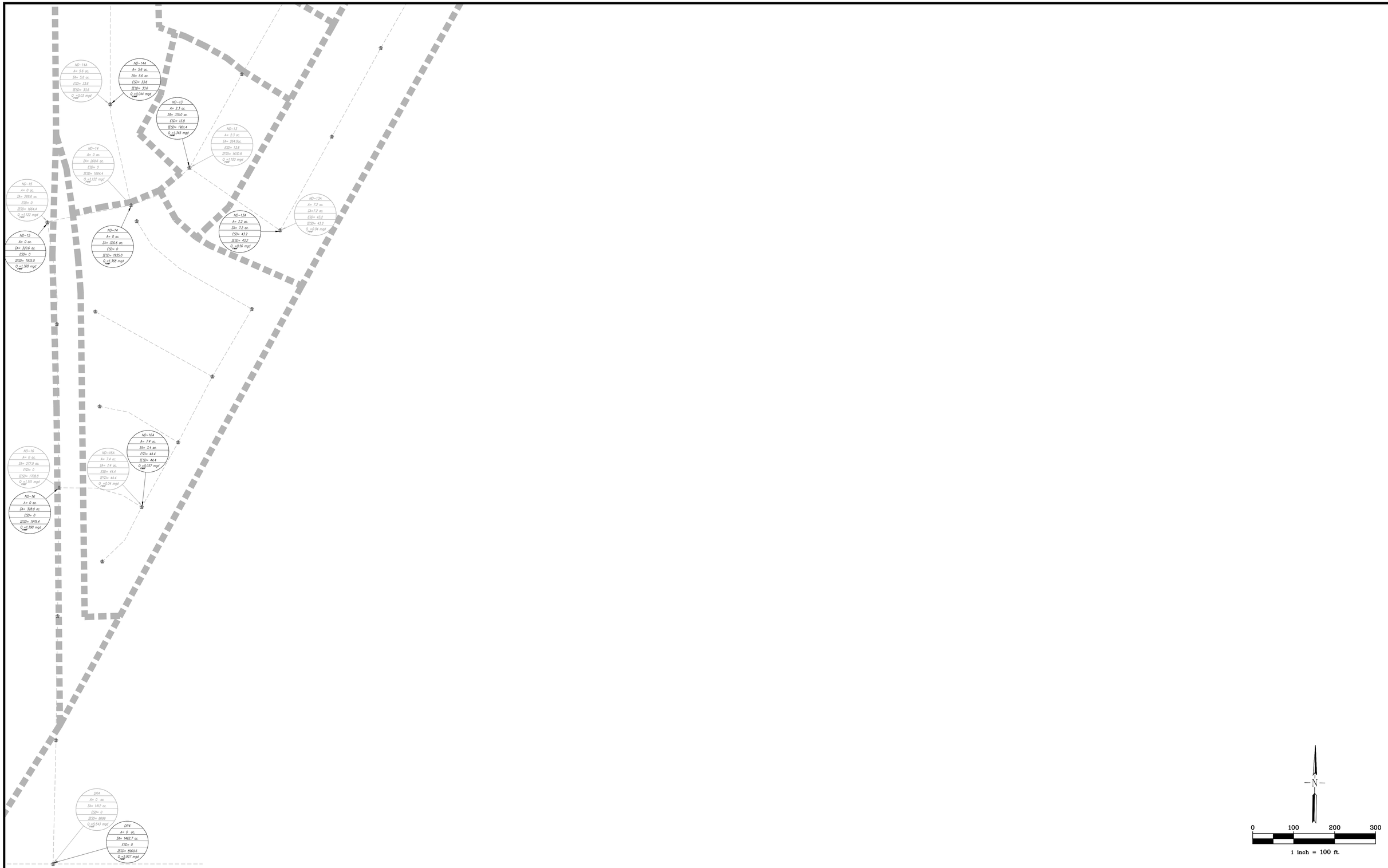
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THE PRESERVE

PROJECT NO. 165018

EXHIBIT B

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SHEET 4 — OF — 5

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VERT. ____

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DATE 2/2020

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R.C.E. 71924 DATE 2/2020

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R.C.E. 71924 DATE 2/2020

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THE PRESERVE

PROJECT NO. 165018

EXHIBIT B

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EXHIBIT C
THE PRESERVE

(Note: Node (MH) Data Applies to Pipes Downstream of Subject Node)

Up Stream Node#	Down Stream Node#	**LDR (ac)**	ESD's (By Area)	ESD's (By Lot)	**Park (ac)**	ESD's	Total Area (ac)	Total ESD's	Cumulative Area (ac)	Cumulative ESD's	Qavg (MGD)	Q I/I (MGD)	Peaking Factor	Q Peak DWF (MGD)	Q Peak PWWF (MGD)	Q Peak (cfs)	Dia (in)	Slope (ft/ft)	C=COLL. T=TRUNK	Capacity @ $S_{.7}$ (cfs)	Capacity @ $S_{.8}$ (cfs)	Capacity @ $S_{.9}$ (cfs)	Capacity @ S_{Full} (cfs)	@ $S_{.7}$ (MGD)	Velocity @ Qpeak & S (fps)	Upsteam MH Rim	Upstream MH INV	Upstream MH Depth
MH-60	MH-55	1.5	8.8	9.0		0.0	1.5	8.8	1.5	9.0	0.003	0.002	2.159	0.006	0.008	0.012	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.14	244.8	238.40	6.4
MH-56	MH-55	0.6	3.6	3.0		0.0	0.6	3.6	0.6	3.6	0.001	0.001	2.219	0.002	0.003	0.005	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.06	244.1	237.59	6.5
MH-55	MH-54	1.2	7.2	8.0		0.0	1.2	7.2	3.3	20.0	0.006	0.005	2.104	0.013	0.018	0.027	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.31	243.1	236.69	6.4
MH-54	MH-53	1.4	8.1	9.0		0.0	1.4	8.1	4.6	29.0	0.009	0.006	2.078	0.019	0.025	0.039	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.45	242.2	235.76	6.4
MH-52	MH-51	1.3	7.5	7.0		0.0	1.3	7.5	1.3	7.5	0.002	0.002	2.175	0.005	0.006	0.010	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.11	241.2	233.51	7.7
MH-53	MH-45	0.2	1.2	0.0		0.0	0.2	1.2	4.8	29.0	0.009	0.007	2.078	0.019	0.025	0.039	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.45	241.2	234.93	6.3
MH-47	MH-46	1.0	6.0	6.0		0.0	1.0	6.0	1.0	6.0	0.002	0.001	2.186	0.004	0.005	0.008	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.10	242.6	236.12	6.5
MH-46	MH-45	1.7	10.0	13.0		0.0	1.7	10.0	2.7	19.0	0.006	0.004	2.108	0.012	0.016	0.025	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.29	241.8	235.40	6.4
MH-44	MH-43	1.4	8.1	8.0		0.0	1.4	8.1	1.4	8.1	0.003	0.002	2.166	0.005	0.007	0.011	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.13	239.8	232.28	7.5
MH-45	MH-38	0.2	1.2	0.0		0.0	0.2	1.2	7.7	48.0	0.015	0.011	2.042	0.030	0.041	0.064	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.73	240.8	233.95	6.9
MH-59	MH-58	1.0	6.0	4.0		0.0	1.0	6.0	1.0	6.0	0.002	0.001	2.186	0.004	0.005	0.008	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.10	245.9	239.42	6.5
MH-58	MH-57	2.3	14.0	14.0		0.0	2.3	14.0	3.3	20.0	0.006	0.005	2.104	0.013	0.018	0.027	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.31	244.4	238.09	6.3
MH-57	MH-48	1.3	8.0	9.0		0.0	1.3	8.0	4.7	28.1	0.009	0.007	2.080	0.018	0.025	0.038	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.44	243.0	236.58	6.4
MH-48	MH-40	0.9	5.5	6.0		0.0	0.9	5.5	5.6	33.6	0.010	0.008	2.067	0.022	0.029	0.045	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.52	242.4	235.58	6.8
MH-40	MH-39	1.3	7.6	8.0		0.0	1.3	7.6	6.9	41.2	0.013	0.010	2.053	0.026	0.036	0.055	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.64	241.4	234.66	6.7
MH-39	MH-38	1.1	6.8	7.0		0.0	1.1	6.8	8.0	48.0	0.015	0.011	2.042	0.030	0.042	0.064	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.74	240.7	233.72	7.0
MH-37	MH-36	1.0	6.0	6.0		0.0	1.0	6.0	1.0	6.0	0.002	0.001	2.186	0.004	0.005	0.008	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.10	239.3	232.92	6.4
MH-38	MH-29	0.2	1.2	0.0		0.0	0.2	1.2	15.9	96.0	0.030	0.022	1.990	0.059	0.081	0.126	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.46	239.4	232.94	6.5
MH-33	MH-30	0.8	4.5	5.0		0.0	0.8	4.5	0.8	5.0	0.002	0.001	2.197	0.003	0.004	0.007	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.08	241.4	234.69	6.7
MH-32A	MH-32	1.0	6.0	6.0		0.0	1.0	6.0	1.0	6.0	0.002	0.001	2.186	0.004	0.005	0.008	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.00	244.5	236.08	8.4
MH-32	MH-31	1.2	6.9	7.0		0.0	1.2	6.9	2.2	13.0	0.004	0.003	2.134	0.009	0.012	0.018	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.21	242.9	234.75	8.2
MH-31	MH-30	1.4	8.1	9.0		0.0	1.4	8.1	3.5	22.0	0.007	0.005	2.097	0.014	0.019	0.030	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.34	241.5	234.10	7.4
MH-30	MH-29	1.9	11.5	11.0		0.0	1.9	11.5	6.2	38.0	0.012	0.009	2.058	0.024	0.033	0.051	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.58	240.6	233.11	7.5
MH-29	MH-28	1.1	6.3	6.0		0.0	1.1	6.3	23.1	140.0	0.043	0.032	1.961	0.085	0.117	0.182	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.11	239.3	231.95	7.4
MH-51	MH-50	2.1	12.5	11.0		0.0	2.1	12.5	3.3	20.0	0.006	0.005	2.104	0.013	0.018	0.027	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.31	238.8	232.33	6.5
MH-50	MH-49	1.2	7.3	6.0		0.0	1.2	7.3	4.6	27.4	0.008	0.006	2.082	0.018	0.024	0.037	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.43	237.6	230.90	6.7
MH-49	MH-41	0.9	5.6	4.0		0.0	0.9	5.6	5.5	32.9	0.010	0.008	2.069	0.021	0.029	0.045	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.51	236.0	229.47	6.5
MH-43	MH-42	2.3	14.0	12.0		0.0	2.3	14.0	3.7	22.1	0.007	0.005	2.097	0.014	0.020	0.030	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.35	239.0	231.30	7.7
MH-42	MH-41	2.2	13.0	12.0		0.0	2.2	13.0	5.9	35.1	0.011	0.008	2.064	0.022	0.031	0.047	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.54	237.2	229.88	7.3
MH-41	MH-24	0.8	4.8	3.0		0.0	0.8	4.8	12.1	72.8	0.023	0.017	2.011	0.045	0.062	0.097	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.11	235.4	228.46	6.9
MH-36	MH-36A	1.8	10.5	10.0		0.0	1.8	10.5	2.8	16.5	0.005	0.004	2.117	0.011	0.015	0.023	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.26	238.5	232.15	6.3
MH-36A	MH-27	0.2	1.2	0.0		0.0	0.2	1.2	3.0	17.7	0.005	0.004	2.112	0.012	0.016	0.024	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.28	237.4	231.02	6.4
MH-35	MH-24	1.8	10.7	10.0		0.0	1.8	10.7	2.8	28.4	0.009	0.004	2.079	0.018	0.022	0.035	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.40	236.3	228.67	7.6
MH-35A	MH-35	1.1	6.3	6.0		0.0	1.1	6.3	1.1	6.3	0.002	0.001	2.182	0.004	0.006	0.009	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.10	236.8	229.58	7.2
MH-25	MH-24	0.8	4.9	4.0		0.0	0.8	4.9	0.8	4.9	0.002	0.001	2.199	0.003	0.004	0.007	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.08	235.3	228.99	6.3
MH-24	MH-22	0.0	0.0	0.0		0.0	0.0	0.0	15.8	106.1	0.033	0.022	1.982	0.065	0.087	0.135	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.56	234.4	227.48	6.9
MH-23	MH-22	0.8	4.7	6.0		0.0	0.8	4.7	0.8	6.0	0.002	0.001	2.186	0.004	0.005	0.008	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.09	234.6	227.54	7.1
MH-22	MH-21	0.0	0.0	0.0		0.0	0.0	0.0	16.6	110.8	0.034	0.023	1.979	0.068	0.091	0.141	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.63	233.6	226.46	7.1
MH-18	MH-16	0.6	3.5	3.0		0.0	0.6	3.5	0.6	3.5	0.001	0.001	2.220	0.002	0.003	0.005	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.06	234.0	227.35	6.7
MH-17	MH-16	0.5	3.2	4.0		0.0	0.5	3.2	0.5	4.0	0.001	0.001	2.212	0.003	0.003	0.005	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.06	234.7	226.85	7.8
MH-16	MH-15	1.4	8.1	10.0		0.0	1.4	8.1	2.4	17.0	0.005	0.003	2.115	0.011	0.015	0.022	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.26	233.9	226.25	7.7

EXHIBIT C
THE PRESERVE

(Note: Node (MH) Data Applies to Pipes Downstream of Subject Node)

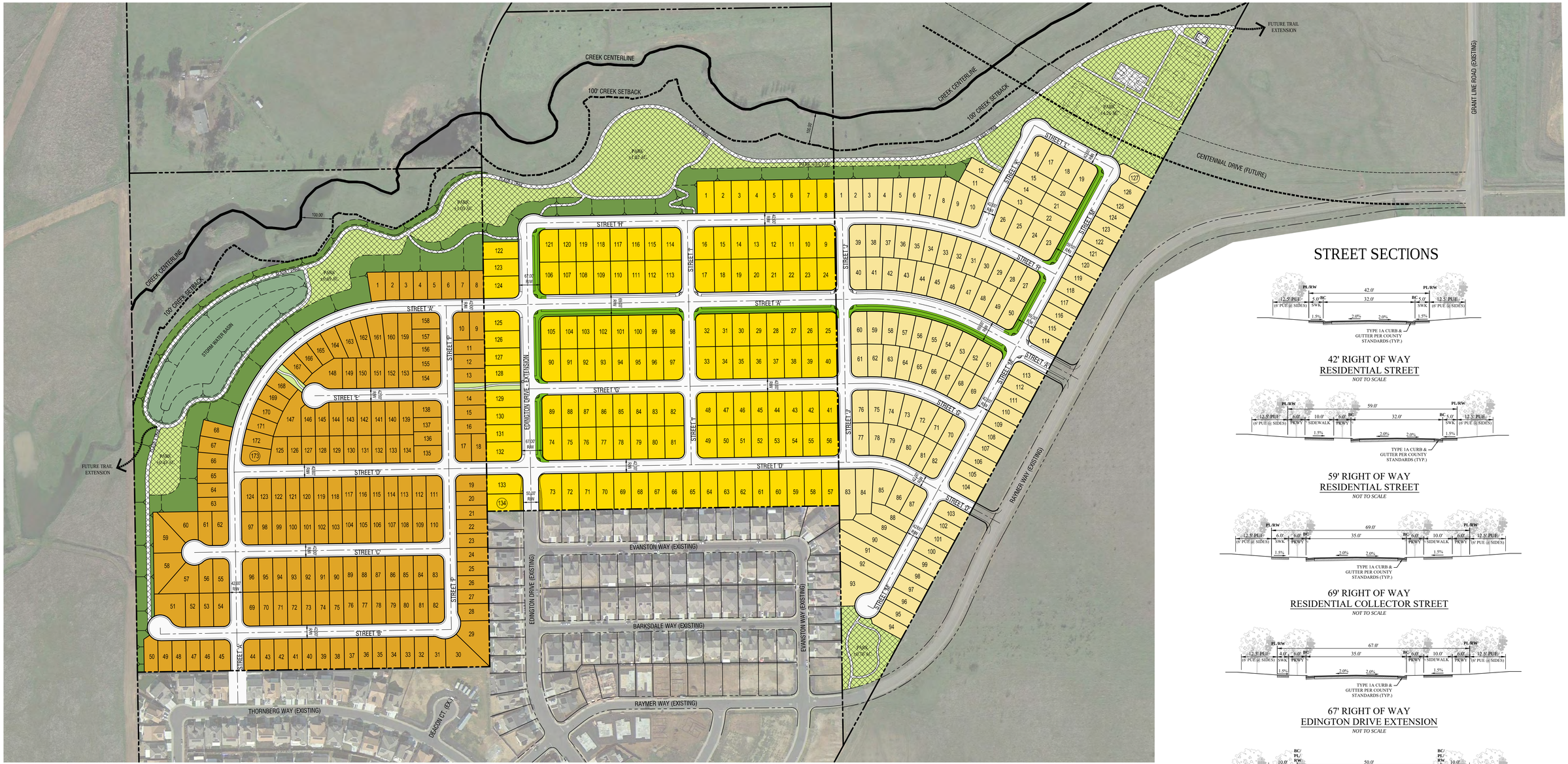
Up Stream Node#	Down Stream Node#	**LDR (ac)**	ESD's (By Area)	ESD's (By Lot)	**Park (ac)**	ESD's	Total Area (ac)	Total ESD's	Cumulative Area (ac)	Cumulative ESD's	Qavg (MGD)	Q I/I (MGD)	Peaking Factor	Q Peak DWF (MGD)	Q Peak PWWF (MGD)	Q Peak (cfs)	Dia (in)	Slope (ft/ft)	C=COLL. T=TRUNK	Capacity @ $S_{.7}$ (cfs)	Capacity @ $S_{.8}$ (cfs)	Capacity @ $S_{.9}$ (cfs)	Capacity @ S_{Full} (cfs)	@ $S_{.7}$ (MGD)	Velocity @ Qpeak & S (fps)	Upsteam MH Rim	Upstream MH INV	Upstream MH Depth
MH-21	MH-20	0.8	4.6	5.0		0.0	0.8	4.6	17.3	115.4	0.036	0.024	1.976	0.071	0.095	0.147	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.70	232.6	226.20	6.4
MH-20	MH-19	1.7	10.0	11.0		0.0	1.7	10.0	19.0	125.5	0.039	0.027	1.970	0.077	0.103	0.160	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.85	232.8	225.47	7.3
MH-19	MH-14	1.4	8.4	0.0		0.0	1.4	8.4	19.0	125.5	0.039	0.027	1.970	0.077	0.103	0.160	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.85	231.2	224.56	6.6
MH-15	MH-14	1.2	6.9	8.0		0.0	1.2	6.9	3.6	25.0	0.008	0.005	2.088	0.016	0.021	0.033	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.38	232.9	225.34	7.6
MH-14	MH-9	1.4	8.4	9.0		0.0	1.4	8.4	24.0	155.6	0.048	0.034	1.953	0.094	0.128	0.198	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.30	231.2	223.94	7.3
MH-4	MH-12	1.2	6.9	7.0		0.0	1.2	6.9	1.2	7.0	0.002	0.002	2.175	0.005	0.006	0.010	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.11	236.6	228.06	8.5
MH-12	MH-11	0.5	3.0	3.0		0.0	0.5	3.0	1.7	10.0	0.003	0.002	2.152	0.007	0.009	0.014	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.16	237.2	226.02	11.2
MH-11	MH-10	1.8	10.6	13.0		0.0	1.8	10.6	3.9	26.0	0.008	0.005	2.086	0.017	0.022	0.034	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.40	233.6	225.22	8.4
MH-10	MH-9	1.6	9.5	12.0		0.0	1.6	9.5	5.5	38.0	0.012	0.008	2.058	0.024	0.032	0.049	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.57	232.6	223.90	8.7
MH-9	MH-5	0.4	2.6	3.0		0.0	0.4	2.6	29.9	190.9	0.059	0.042	1.937	0.115	0.156	0.242	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.84	231.0	222.67	8.3
MH-8	MH-7	2.2	13.0	16.0		0.0	2.2	13.0	2.2	16.0	0.005	0.003	2.119	0.011	0.014	0.021	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.24	236.5	225.11	11.4
MH-7	MH-5	1.6	9.8	12.0		0.0	1.6	9.8	3.8	28.0	0.009	0.005	2.080	0.018	0.023	0.036	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.41	234.4	222.86	11.5
MH-6	MH-5	1.5	9.2	8.0		0.0	1.5	9.2	1.5	9.2	0.003	0.002	2.157	0.006	0.008	0.013	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.15	232.4	222.69	9.7
MH-5	MH-1	0.0	0.0	0.0		0.0	0.0	0.0	35.2	222.8	0.069	0.049	1.925	0.133	0.182	0.282	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	3.33	232.8	221.72	11.1
MH-4	MH-3	2.1	12.7	15.0		0.0	2.1	12.7	2.1	15.0	0.005	0.003	2.124	0.010	0.013	0.020	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.23	236.6	228.06	8.5
MH-3	MH-1	1.9	11.2	14.0		0.0	1.9	11.2	4.0	29.0	0.009	0.006	2.078	0.019	0.024	0.038	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.43	235.3	222.00	13.3
MH-2	MH-1	1.8	10.6	10.0		0.0	1.8	10.6	1.8	10.6	0.003	0.002	2.148	0.007	0.009	0.015	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	0.17	229.4	222.53	6.9
MH-1	MH-1A	0.0	0.0	0.0		0.0	0.0	0.0	41.0	257.3	0.080	0.057	1.914	0.153	0.210	0.325	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	3.88	234.5	220.77	13.7
MH-1A	ND-4	11.0	66.0	62.0		0.0	11.0	66.0	52.0	323.3	0.100	0.073	1.896	0.190	0.263	0.406	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	4.96	234.5	219.40	15.1
MH-28	MH-27	1.9	11.3	11.0		0.0	1.9	11.3	25.0	151.0	0.047	0.035	1.955	0.092	0.127	0.196	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.28	238.7	231.14	7.6
MH-27	MH-27A	1.4	8.3	8.0		0.0	1.4	8.3	29.3	175.0	0.054	0.041	1.944	0.105	0.147	0.227	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.65	236.9	230.03	6.9
MH-27A	MH-26	1.5	9.1	8.0		0.0	1.5	9.1	30.9	183.0	0.057	0.043	1.941	0.110	0.153	0.237	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.78	236.7	229.04	7.7
MH-11A	MH-11	0.4	2.6	3.0		0.0	0.4	2.6	0.4	3.0	0.001	0.001	2.230	0.002	0.003	0.004	8	0.0070	C	0.85	0.99	1.08	1.01	0.55	0.05	233.0	225.72	7.3
MH-26	MH-26A	0.6	3.6	2.0		0.0	0.6	3.6	31.5	185.0	0.057	0.044	1.940	0.111	0.155	0.240	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.82	235.2	228.10	7.1
MH-26A	ND-1	15.0	90.0	82.0		0.0	15.0	90.0	45.9	274.9	0.085	0.064	1.909	0.163	0.227	0.351	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	4.21	234.6	227.40	7.2
ND-1	ND-2	20.0	120.0			0.0	20.0	120.0	65.9	394.9	0.122	0.079	1.879	0.230	0.309	0.478	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.20			
ND-2	ND-3	10.3	61.8			0.0	10.3	61.8	76.2	456.7	0.142	0.091	1.868	0.264	0.356	0.551	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.26			
ND-3	ND-5	1.8	10.8			0.0	1.8	10.8	78.0	467.5	0.145	0.094	1.866	0.270	0.364	0.563	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.28			
ND-4	ND-5	0.8	4.8	4.0		0.0	0.8	4.8	52.8	328.1	0.102	0.063	1.894	0.193	0.256	0.396	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	2.12			
ND-5	ND-6	0.0	0.0			0.0	0.0	0.0	130.7	795.6	0.247	0.157	1.822	0.449	0.606	0.938	10	0.0034	C	1.07	1.24	1.35	1.26	0.69	2.56			
ND-6	ND-7	4.6	27.6		9.0	54.0	13.6	81.6	144.3	877.2	0.272	0.173	1.813	0.493	0.666	1.031	10	0.0036	C	1.10	1.27	1.39	1.30	0.71	2.68			
ND-7	ND-8	8.1	48.6			0.0	8.1	48.6	152.4	925.8	0.287	0.183	1.809	0.519	0.702	1.086	10	0.0036	C	1.10	1.27	1.39	1.30	0.71	2.71			
ND-8	ND-9	7.2	43.2			0.0	7.2	43.2	159.6	969.0	0.300	0.192	1.805	0.542	0.734	1.135	10	0.0025	C	0.92	1.06	1.16	1.08	0.59	2.30			
ND-9	ND-10	3.3	19.8			0.0	3.3	19.8	162.9	988.8	0.307	0.195	1.803	0.553	0.748	1.158	10	0.0031	C	1.02	1.18	1.29	1.21	0.66	2.56			
ND-10A	ND-10	126.9	761.4			0.0	126.9	761.4	126.9	761.4	0.236	0.152	1.825	0.431	0.583	0.902	12	0.0097	C	2.94	3.43	3.74	3.51	1.90	3.81			
ND-10	ND-11	8.9	53.4			0.0	8.9	53.4	298.7	1803.6	0.559	0.299	1.752	0.979	1.278	1.977	15	0.0015	T	2.10	2.45	2.67	2.50	1.36	2.23			
ND-11	ND-12	4.0	24.0			0.0	4.0	24.0	302.7	1827.6	0.567	0.303	1.750	0.992	1.294	2.003	15	0.0015	T	2.10	2.45	2.67	2.50	1.36	2.23			
ND-12	ND-13	2.8	16.8			0.0	2.8	16.8	305.5	1844.4	0.572	0.306	1.750	1.000	1.306	2.020	15	0.0036	T	3.25	3.79	4.13	3.88	2.10	3.14			
ND-13A	ND-13	7.2	43.2			0.0	7.2	43.2	7.2	43.2	0.013	0.009	2.049	0.027	0.036	0.056	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.23			
ND-13	ND-14	2.3	13.8			0.0	2.3	13.8	315.0	1901.4	0.589	0.315	1.747	1.030	1.345	2.081	15	0.0015	T	2.10	2.45	2.67	2.50	1.36	2.25			
ND-14A	ND-14	5.6	33.6			0.0	5.6	33.6	5.6	33.6	0.010	0.007	2.067	0.022	0.028	0.044	8	0.0096	C	0.99	1.17	1.28	1.20	0.64	1.67			

EXHIBIT C
THE PRESERVE

(Note: Node (MH) Data Applies to Pipes Downstream of Subject Node)

Up Stream Node#	Down Stream Node#	**LDR (ac)**	ESD's (By Area)	ESD's (By Lot)	**Park (ac)**	ESD's	Total Area (ac)	Total ESD's	Cumulative Area (ac)	Cumulative ESD's	Qavg (MGD)	Q I/I (MGD)	Peaking Factor	Q Peak DWF (MGD)	Q Peak PWWF (MGD)	Q Peak (cfs)	Dia (in)	Slope (ft/ft)	C=COLL. T=TRUNK	Capacity @ $S_{.7}$ (cfs)	Capacity @ $S_{.8}$ (cfs)	Capacity @ $S_{.9}$ (cfs)	Capacity @ S_{Full} (cfs)	@ $S_{.7}$ (MGD)	Velocity @ Qpeak & S (fps)	Upsteam MH Rim	Upstream MH INV	Upstream MH Depth
ND-14	ND-15	0.0	0.0			0.0	0.0	0.0	320.6	1935.0	0.600	0.321	1.745	1.047	1.368	2.116	15	0.0015	T	2.10	2.45	2.67	2.50	1.36	2.25			
ND-15	ND-16	0.0	0.0			0.0	0.0	0.0	320.6	1935.0	0.600	0.321	1.745	1.047	1.368	2.116	15	0.0137	T	6.33	7.39	8.06	7.56	4.09	5.19			
ND-16A	ND-16	7.4	44.4			0.0	7.4	44.4	7.4	44.4	0.014	0.009	2.047	0.028	0.037	0.057	8	0.0035	C	0.60	0.71	0.77	0.72	0.39	1.23			
ND-16	DR4	0.0	0.0			0.0	0.0	0.0	328.0	1979.4	0.614	0.328	1.743	1.070	1.398	2.163	15	0.0144	T	6.49	7.58	8.26	7.75	4.19	5.32			
DR4	OUT	1134.7	6990.2			0.0	1134.7	6990.2	1462.7	8969.6	2.781	1.463	1.606	4.464	5.927	9.171	24	0.0021	T	8.68	10.13	11.05	10.37	5.61	3.71			

		321.0			9.0		330.0	
ΣESD			1926.0			54.0		1980.0



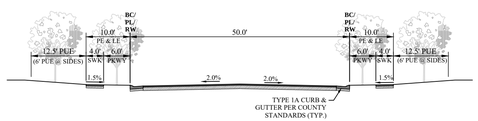
STREET SECTIONS

42' RIGHT OF WAY
RESIDENTIAL STREET
NOT TO SCALE

59' RIGHT OF WAY
RESIDENTIAL STREET
NOT TO SCALE

69' RIGHT OF WAY
RESIDENTIAL COLLECTOR STREET
NOT TO SCALE

67' RIGHT OF WAY
EDINGTON DRIVE EXTENSION
NOT TO SCALE



50' RIGHT OF WAY
EDINGTON DRIVE EXTENSION
NOT TO SCALE

NOTES

1. The shown yield may vary once grading and utility concepts are prepared.
2. The shown trail and park configuration is conceptual in nature. Final design will vary based on grading, utilities, client consultation and City consultation.
3. The shown yield and layout may vary if other constraints are identified not known at the time of conceptual site plan preparation.
4. The conceptual site plan is subject to change based on City consultation.
5. Shown residential blocks do not exceed the maximum 800' block length, but the block bounded by Streets A, B, C, D & F (Lots 69 - 134 of the 45'x90' lot type) exceeds the recommended 600' block length.

REQUIRED PARK LAND

ZONING CODE CHAPTER 22.40

Formula: (# of dwelling units) x (Factor for SFD) = Amount of land in acres

Calculation: 434 x 0.01475 = 6.40 Acres

Park Area Shown: Ñ11.42 Acres (Includes trails, walkways, flat usable recreation areas & recreation area within future Centennial Drive Right-of-Way.)

YIELD & LOT MIX

LOT TYPE: 45'x90' (minimum)
Yield: 173 Units

LOT TYPE: 55'x105' (minimum)
Yield: 134 Units

LOT TYPE: 45'x105' (minimum)
Yield: 127 Units

Total Yield: 434 Units

LEGEND

22 Lot Number
Parcel Boundary
Lot Line
Right of Way
Street Center Line
Creek Setback
Creek Centerline
10' Sidewalk w/ 6' parkways on either side

N

0 150 300 450

SCALE IN FEET: 1"= 150'

WINN NORTH DOUGLAS

CONCEPTUAL SITE PLAN

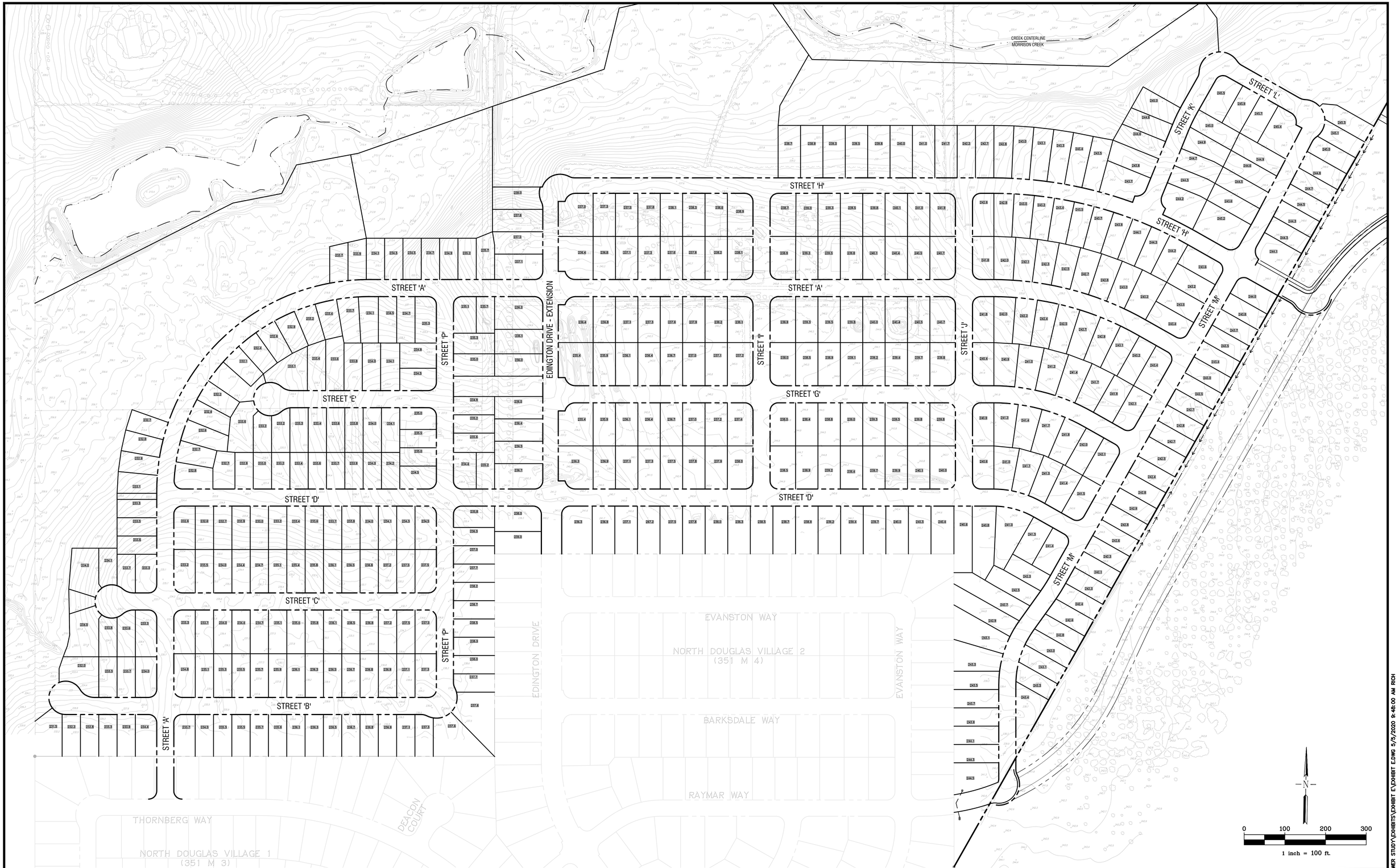
RANCHO CORDOVA, CA

RUGGERI-JENSEN-AZAR
ENGINEERS + PLANNERS + SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

AUGUST 2018

165018

EXHIBIT D



REVISIONS

NO.	DESCRIPTION	DATE	BY

SCALE
HORIZ. ____
VERT. ____

CITY OF RANCHO CORDOVA

DRAWN BY: A. ZAMORANO
DATE 10/2019

DESIGNED BY: S. BOWMAN
R.C.E. 71924 DATE 10/2019

CHECKED BY: S. BOWMAN
R.C.E. 71924 DATE 10/2019

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

GRADING PLAN FOR
THE PRESERVE

PROJECT NO. 165018

EXHIBIT E

DWG. NO.
SHEET 1 OF 1

G:\2016\165018\SEWER STUDY\EXHIBITS\EXHIBIT E\EXHIBIT E.DWG 5/5/2020 9:48:00 AM RICH RADOYOS

RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS

January 7, 2021 JN: 165018

Mr. Bob Shattuck
Shattuck Community Planning
6589 Laurel Crest Circle
Roseville, CA 95678

RE: The Preserve – Unit Count Increase on Sewer and Water Studies

Mr. Shattuck:

As you are aware, the original Tentative Map for The Preserve had a unit count of 434 lots, as the project evolved, the unit count increased to 440 lots.

The Sewer Study reviewed and approved by the Sacramento Area Sewer District (SASD) was based on the current unit count of 440. During our last submittal to the District, we notified them of the increase and updated the sewer shed calculations.

The Water Study for the project was completed in September of 2018 and used the original unit count of 434. The additional 6 lots result in a 1.4% increase in unit count and will have a negligible impact on the water model. The existing water system has sufficient supply to support the development.

If you have any questions, please feel free to call me at (916) 630-8900.

Sincerely,

RUGGERI-JENSEN-AZAR



Rich Radoycis, P.E., LEED AP
Project Manager

Appendix K

Traffic Impact Analysis

The Preserve
City of Rancho Cordova, California

DRAFT
November 4, 2020

Prepared for:

Winn Communities

Prepared by:

Kimley»Horn

555 Capitol Mall, Suite 300
Sacramento, California 95814

Phone: (916) 858-5800



EXECUTIVE SUMMARY

This report documents the results of a traffic impact analysis completed for The Preserve project (the "proposed project" or "project"). The vacant project site is located west of the Raymer Way intersection with Grant Line Road in Rancho Cordova, California. The proposed project will consist of approximately 434 single-family detached housing units. Access to the project site will be provided by Raymer Way from the east and Americanos Way from the south. This study was performed in accordance with the County of Sacramento's traffic study guidelines and standards established by the Circulation Element of the City of Rancho Cordova's General Plan.

This analysis includes evaluation of the following transportation facilities:

- 22 Intersections
  - 19 within Rancho Cordova
  - 3 within Sacramento County's jurisdiction
- 17 Roadway Segments
  - 15 within Rancho Cordova
  - 2 within Sacramento County's jurisdiction

Based on the County's requirements, this traffic impact analysis was conducted for the study facilities for the following scenarios:

A. Existing (2019) Conditions
B. Existing (2019) plus Proposed Project Conditions
C. Cumulative (2035) Conditions
D. Cumulative (2035) plus Proposed Project Conditions

Significant findings of this study include:

- The proposed project is estimated to generate 4,014 new daily trips, with 313 new trips occurring during the AM peak-hour, and 416 new trips occurring during the PM peak-hour.
- The addition of the proposed project to the Existing (2019) Conditions results in a significant impact at two (2) study intersections, Intersection #17 (Jackson Road/SR-16 at Grant Line Road) and Intersection #20 (Grant Line Road at Raymer Way). With the application of mitigation measures recommended herein, the impacts to Intersection #17 can be mitigated. However, because the City of Rancho Cordova cannot guarantee that mitigation measure M1 can be implemented, the impact would remain ***significant and unavoidable***. With the implementation of mitigation measure M2, the impact to Intersection #20 is ***less than significant with mitigation***.
- The addition of the proposed project to Cumulative (2035) Conditions results in a significant impact at three (3) intersections. With the application of mitigation measures recommended herein, the impacts to intersections can be mitigated. However, because the City of Rancho Cordova cannot guarantee that these mitigation measures (M3, M4, and M5) can be implemented, the impact would remain ***significant and unavoidable***.

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INTRODUCTION

This report documents the results of a traffic impact analysis completed for The Preserve residential project (the "proposed project" or "project"). The vacant project site is located west of the Raymer Way intersection with Grant Line Road in Rancho Cordova, California. The purpose of this impact analysis is to identify potential environmental impacts to transportation facilities as required by the California Environmental Quality Act (CEQA). This study was performed in accordance with the County of Sacramento's traffic study guidelines[1] and standards established by the Circulation Element of the City of Rancho Cordova's General Plan [2].

PROJECT DESCRIPTION

The proposed project will consist of approximately 434 single-family detached housing units. Access to the project site will be provided by Raymer Way from the east and Americanos Way from the south. The project location, study intersections and study segments are depicted in **Figure 1.** The proposed project site plan is shown in **Figure 2**. **Figure 3** illustrates the existing study intersections facilities, traffic control, and lane configurations.

Based on the County's requirements, this traffic impact analysis was conducted for the study facilities for the following scenarios:

A. Existing (2019) Conditions
B. Existing (2019) plus Proposed Project Conditions
C. Cumulative (2035) Conditions
D. Cumulative (2035) plus Proposed Project Conditions

The following transportation facilities are included in this evaluation:

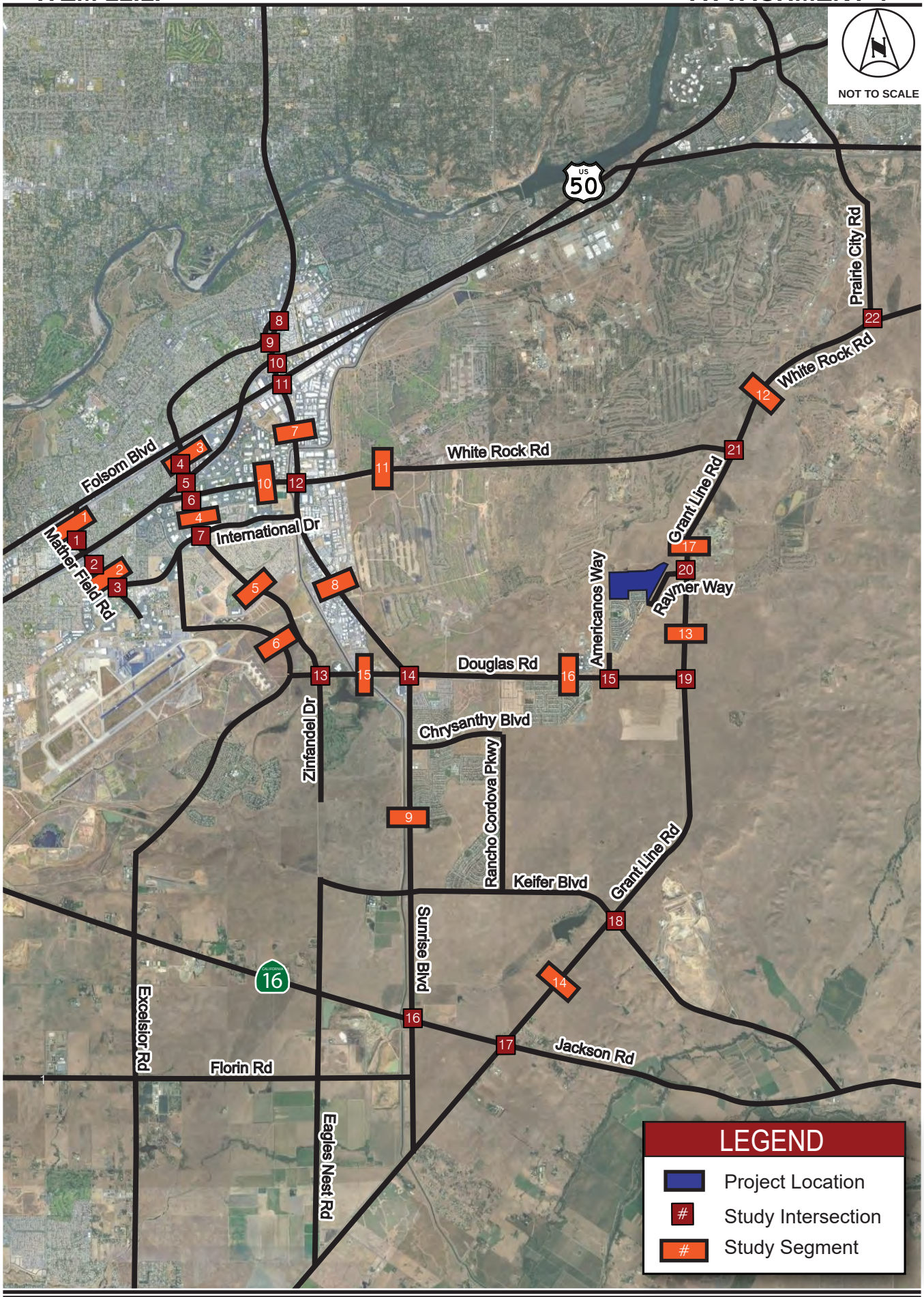
Intersections:

1. Mather Field Rd @ US-50 Westbound Ramps
2. Mather Field Rd @ US-50 Eastbound Ramps
3. Mather Field Rd @ International Dr
4. Zinfandel Dr @ US-50 Westbound Ramps
5. Zinfandel Dr @ US-50 Eastbound Ramps
6. Zinfandel Dr @ White Rock Rd
7. Zinfandel Dr @ International Dr
8. Sunrise Blvd @ Zinfandel Dr
9. Sunrise Blvd @ US-50 Westbound Ramps
10. Sunrise Blvd @ US-50 Eastbound Ramps
11. Sunrise Blvd @ Folsom Blvd
12. Sunrise Blvd @ White Rock Rd
13. Douglas Rd @ Zinfandel Dr
14. Douglas Rd @ Sunrise Blvd
15. Douglas Rd @ Americanos Blvd
16. Jackson Rd/SR-16 @ Sunrise Blvd
17. Jackson Rd/SR-16 @ Grant Line Rd
18. Grant Line Rd @ Kiefer Blvd
19. Grant Line Rd @ Douglas Rd
20. Grant Line Rd @ Raymer Way
21. Grant Line Rd @ White Rock Rd
22. White Rock Rd @ Prairie City Rd

[1] *Traffic Impact Analysis Guidelines, July 2004*, County of Sacramento.
[2] *City of Rancho Cordova General Plan: Circulation Element, May 2015,* City of Rancho Cordova

Roadway Segments

1. Mather Field Rd between Folsom Blvd and US-50 Westbound Ramps
2. Mather Field Rd between US-50 Eastbound Ramps and International Dr
3. Zinfandel Dr between Folsom Blvd and US-50 Westbound Ramps
4. Zinfandel Dr between White Rock Rd and International Dr
5. Zinfandel Dr between International Dr and Douglas Rd
6. Mather Blvd between Femoyer St and Douglas Rd
7. Sunrise Blvd between Folsom Blvd and White Rock Rd
8. Sunrise Blvd between White Rock Rd and Douglas Rd
9. Sunrise Blvd between Douglas Rd and Jackson Rd/SR-16
10. White Rock Rd between Zinfandel Dr and Sunrise Blvd
11. White Rock Rd between Sunrise Blvd and Grant Line Rd
12. White Rock Rd between Grant Line Rd and Prairie City Rd
13. Grant Line Rd between Raymer Wy and Douglas Rd
14. Grant Line Rd between Douglas Rd and Jackson Rd/SR-16
15. Douglas Rd between Mather Blvd and Sunrise Blvd
16. Douglas Rd between Sunrise Blvd and Grant Line Rd
17. Grant Line Rd between White Rock Rd and Raymer Wy



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Figure 1
Project Vicinity Map



Figure 2
Proposed Project Site Plan

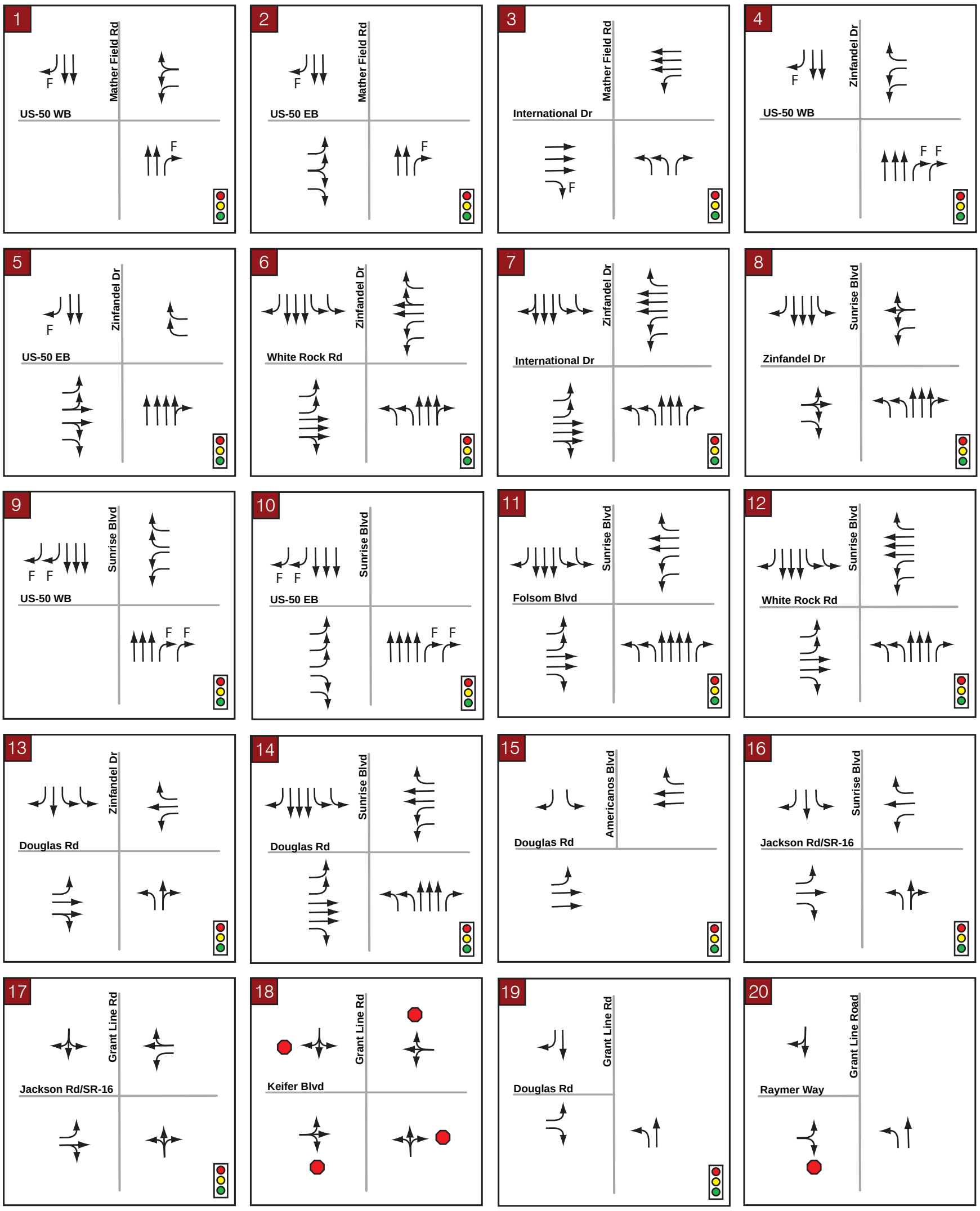


Figure 3
Existing (2019) Study Intersections, Traffic Control, and Lane Geometries

PROJECT AREA ROADWAYS

The following are descriptions of the primary roadways in the vicinity of the project.

United States Route 50 (US-50) is an east-west interstate facility located approximately 5-miles from the proposed project. US-50 connects Rancho Cordova to Sacramento to the west and El Dorado County to the east. Primary access to the project site from US-50 is provided at the Sunrise Boulevard, Zinfandel Drive and Mather Field Road interchanges. Near Zinfandel Drive, US-50 carries approximately 180,000 vehicles per day[3] with five lanes in each direction.

Jackson Road (SR 16) is an expressway connecting Amador County and Sacramento County, along the southern edge of Rancho Cordova's city limits. Jackson Road connects with US-50 west of the project site. South of the project site, between Sunrise Boulevard and Grant Line Road, Jackson Road carries approximately 13,000 vehicles per day[3] with one lane in each direction.

Sunrise Boulevard is a north-south arterial, connecting the project site to north Rancho Cordova and Placer County.

Zinfandel Drive is a north-south arterial, connecting the project site to US-50, as well as the commercial, industrial and residential areas northwest of the project site.

Raymer Way is a local roadway adjacent to the project site and provides access to Grant Line Road to the east.

Americanos Way is a local roadway that will provide access to the project site from the south. This roadway will serve as a connection between the project site and Douglas Road.

TRANSPORTATION IMPACT STUDY METHODOLOGY

This study was performed in accordance with the County of Sacramento's traffic study guidelines[4] and standards established by the Circulation Element of the City of Rancho Cordova's General Plan[5].

Level of Service Definitions

Analysis of transportation facility significant environmental impacts is based on the concept of Level of Service (LOS). The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity.

Intersection Analysis

Levels of Service for this study were determined using methods defined in the *Highway Capacity Manual (HCM) 6th Edition* and appropriate traffic analysis software. The HCM includes procedures for analyzing side-street stop controlled (SSSC), all-way stop controlled (AWSC), and signalized intersections. The SSSC procedure defines LOS as a function of average control delay for each minor street approach movement. The AWSC and signalized intersection procedure defines LOS as a function of average control delay for the intersection as a whole. Table 1 presents intersection LOS definitions as defined in the HCM.

[3] Caltrans Traffic Counts, 2017. http://www.dot.ca.gov/trafficops/census/
[4] *Traffic Impact Analysis Guidelines, July 2004*, County of Sacramento.
[5] *City of Rancho Cordova General Plan: Circulation Element, May 2015,* City of Rancho Cordova

Table 1 – Intersection Level of Service Criteria

Level of Service (LOS)	Unsignalized	Signalized
	Average Control Delay* (sec/veh)	Average Control Delay (sec/veh)
A	≤ 10	≤ 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F	> 50	> 80

Source: Highway Capacity Manual, 2010
* Applied to the worst lane/lane group(s) for SSSC

Roadway Segment Analysis

The analysis of roadway segments involves the comparison of daily segment volumes to the LOS criteria provided in the County's traffic impact analysis guidelines[1]. The criteria provide maximum volumes for given service levels for various facility types. Table 2 replicates the County's roadway segment LOS criteria.

Table 2 – Roadway Segment Level of Service Criteria

Facility Type	# Lanes	Maximum Volume for Given Service Level				
		A	B	C	D	E
Residential	2	600	1,200	2,000	3,000	4,500
Residential Collector w/ Frontage	2	1,600	3,200	4,800	6,400	8,000
Residential Collector w/o Frontage	2	6,000	7,000	8,000	9,000	10,000
Arterial, Low Access Control	2	9,000	10,500	12,000	13,500	15,000
	4	18,000	21,000	24,000	27,000	30,000
	6	27,000	31,500	36,000	40,500	45,000
Arterial, Moderate Access Control	2	10,800	12,600	14,400	16,200	18,000
	4	21,600	25,200	28,800	32,400	36,000
	6	32,400	37,800	43,200	48,600	54,000
Arterial, High Access Control	2	12,000	14,000	16,000	18,000	20,000
	4	24,000	28,000	32,000	36,000	40,000
	6	36,000	42,000	48,000	54,000	60,000
Rural, 2-lane highway	2	2,400	4,800	7,900	13,500	22,900
Rural, 2-lane road, 24'-36' of pavement, paved shoulders	2	2,200	4,300	7,100	12,200	20,000
Rural, 2-lane road, 24'-36' of pavement, no shoulders	2	1,800	3,600	5,900	10,100	17,000

Source: Traffic Impact Analysis Guidelines, Table 2, County of Sacramento Department of Transportation, July 2004.

Based on the County's requirements[4], this LOS analysis was conducted for the study facilities for the following scenarios:

A. Existing (2019) Conditions
B. Existing (2019) plus Proposed Project Conditions
C. Cumulative (2035) Conditions
D. Cumulative (2035) plus Proposed Project Conditions

The following sections present the technical analysis results for the four primary scenarios.

EXISTING (2019) CONDTIONS

To establish existing conditions, new traffic counts were collected for the study intersections and roadway segments. Twenty (20) new weekday AM and PM peak-period intersection turning movement traffic counts were collected on May 22, 2019. These counts were conducted between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m. Sixteen (16) new roadway segment counts were conducted on May 21, 2019. Weekday AM and PM peak-period turning movement traffic counts were also collected on November 8, 2017, at the Douglas Road intersection with Americanos Way (Intersection #15) and at the Grant Line Road intersection with Raymer Way (Intersection #20). These counts were conducted between 7:00 a.m. and 9:00 a.m. and between 4:00 p.m. and 6:00 p.m.

Existing (2019) peak-hour turn movement volumes are presented in Figure 4, and the traffic count data sheets are provided in Appendix A. Analysis worksheets for this scenario are provided in Appendix B.

Intersections

Table 3 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in Table 3, the study intersections operate from LOS A to LOS F during the AM and PM peak-hours. It should be noted that U-turn movement volumes were added to the corresponding left-turn movement volumes due to *HCM 6th Edition* analysis methodology limitations.

Table 3 – Existing (2019) Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Existing (2019)	
				Delay (sec)	LOS
1	Mather Field Road @ US-50 Westbound Ramps	Signal	AM	**117.2**	**F**
			PM	26.4	C
2	Mather Field Road @ US-50 Eastbound Ramps	Signal	AM	**74.7**	**E**
			PM	24.3	C
3	Mather Field Road @ International Drive	Signal	AM	9.7	A
			PM	14.8	B
4	Zinfandel Drive @ US-50 Westbound Ramps	Signal	AM	32.7	C
			PM	20.2	C
5	Zinfandel Drive @ US-50 Eastbound Ramps	Signal	AM	**86.3**	**F**
			PM	36.7	D
6	Zinfandel Drive @ White Rock Road	Signal	AM	31.9	C
			PM	43.3	D
7	Zinfandel Drive @ International Drive	Signal	AM	22.0	C
			PM	30.2	C
8	Sunrise Boulevard @ Zinfandel Drive	Signal	AM	**110.8**	**F**
			PM	**56.6**	**E**
9	Sunrise Boulevard @ US-50 Westbound Ramps	Signal	AM	17.4	B
			PM	12.9	B
10	Sunrise Boulevard @ US-50 Eastbound Ramps	Signal	AM	23.4	C
			PM	22.0	C
11	Sunrise Boulevard @ Folsom Boulevard	Signal	AM	32.8	C
			PM	35.8	D
12	Sunrise Boulevard @ White Rock Road	Signal	AM	30.8	C
			PM	**58.0**	**E**
13	Douglas Road @ Zinfandel Drive	Signal	AM	41.7	D
			PM	19.6	B
14	Douglas Road @ Sunrise Boulevard	Signal	AM	29.1	C
			PM	42.7	D
15	Douglas Road @ Americanos Boulevard	Signal	AM	8.6	A
			PM	8.3	A
16	Jackson Road/SR-16 @ Sunrise Boulevard	Signal	AM	**70.7**	**E**
			PM	**59.6**	**E**
17	Jackson Road/SR-16 @ Grant Line Road	Signal	AM	**90.9**	**F**
			PM	**108.5**	**F**
18	Grant Line Road @ Kiefer Boulevard	AWSC	AM	16.3	C
			PM	17.1	C
19	Grant Line Road @ Douglas Road	Signal	AM	10.7	B
			PM	9.2	A
20	Grant Line Road @ Raymer Way	SSSC	AM	**2.2 (37 EB)**	**E**
			PM	0.7 (28.1 EB)	D
21	Grant Line Road @ White Rock Road	Signal	AM	6.9	A
			PM	11.9	B
22	White Rock Road @ Prairie City Road	Signal	AM	19.0	B
			PM	18.1	B

Notes: **Bold** represents unacceptable operations.

Roadway Segments

Table 4 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in Table 4, the study roadway segments operate from LOS A to LOS F.

Table 4 – Existing (2019) Roadway Segment Level of Service

ID	Roadway	Segment		Existing				
		From	To	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service
1	Mather Field Rd	Folsom Blvd	US-50 WB Ramps	4	Arterial Moderate	23,486	0.65	B
2	Mather Field Rd	US-50 EB Ramps	International Dr	6	Arterial Moderate	19,544	0.36	A
3	Zinfandel Dr	Folsom Blvd	US-50 WB Ramps	4	Arterial Moderate	21,533	0.60	A
4	Zinfandel Dr	White Rock Rd	International Dr	6	Arterial Moderate	29,740	0.55	A
5	Zinfandel Dr	International Dr	Douglas Rd	4	Arterial Moderate	15,603	0.43	A
6	Mather Field Rd	Femoyer St	Douglas Rd	2	Arterial Moderate	5,711	0.32	A
7	Sunrise Blvd	Folsom Blvd	White Rock Rd	6	Arterial Moderate	37,902	0.70	C
8	Sunrise Blvd	White Rock Rd	Douglas Road	6	Arterial Moderate	27,763	0.51	A
9	Sunrise Blvd	Douglas Rd	Jackson Rd/SR 16	2	Arterial Moderate	20,467	**1.14**	**F**
10	White Rock Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial Moderate	14,871	0.28	A
11	White Rock Rd	Sunrise Blvd	Grant Line Road	2	Arterial Moderate	3,375	0.19	A
12	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Arterial Moderate	14,582	0.41	A
13	Grant Line Road	Raymer Wy	Douglas Road	2	Rural (No Shoulder)	10,151	**0.60**	**E**
14	Grant Line Road	Douglas Rd	Jackson Rd/SR 16	2	Rural (Shoulder)	7,501	0.38	D
15	Douglas Rd	Mather Field Rd	Sunrise Blvd	2	Arterial Moderate	14,030	0.78	C
16	Douglas Rd	Sunrise Blvd	Grant Line Road	4	Arterial Moderate	10,853	0.30	A
17	Grant Line Road	White Rock Rd	Raymer Wy	2	Rural (No Shoulder)	10,384	0.61	E

Note: **Bold** represents unacceptable operations. Shaded indicates significant impact.

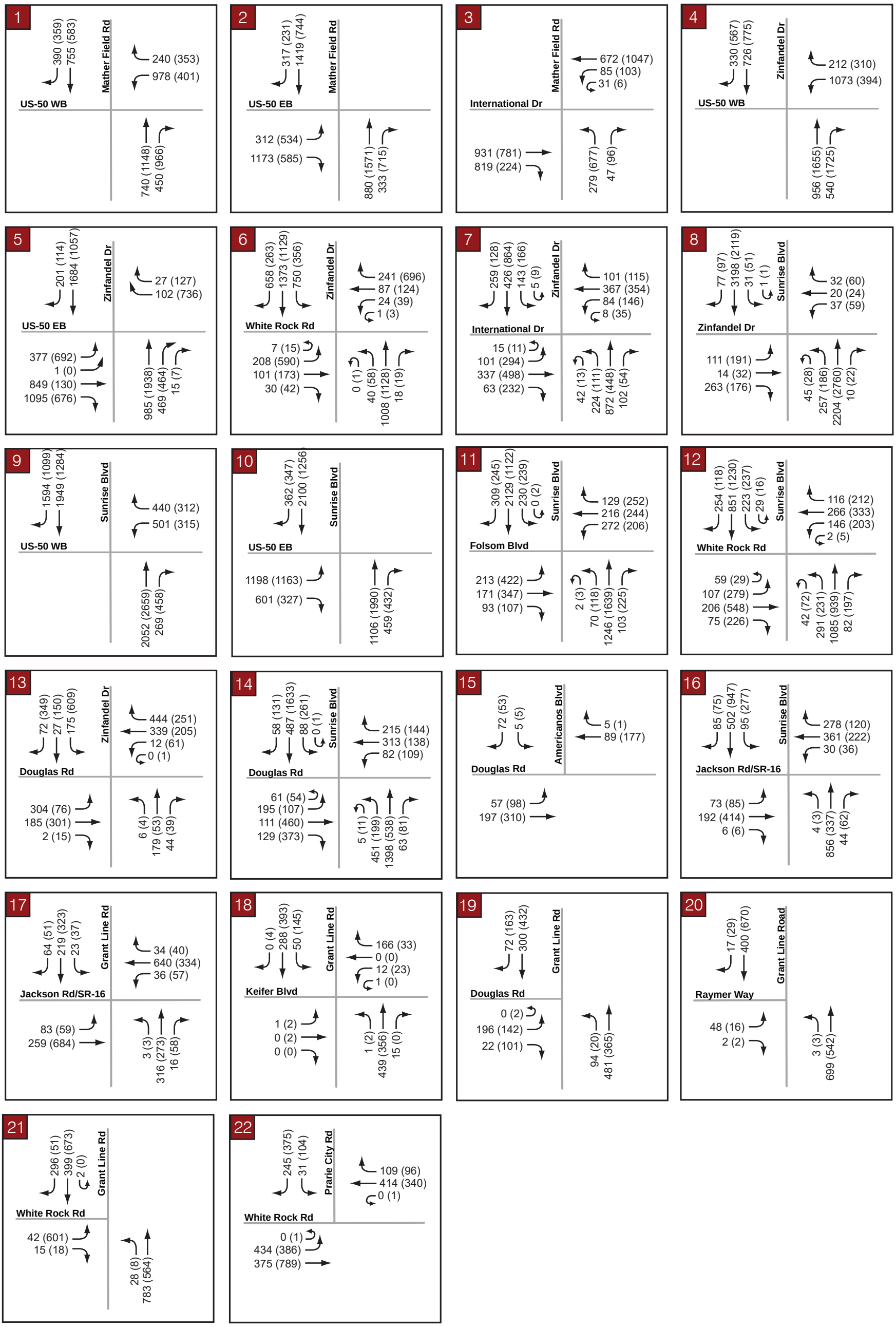


Figure 4
Existing (2019) Peak-Hour Traffic Volumes

ASSESSMENT OF PROPOSED PROJECT

Proposed Project Trip Generation and Assignment

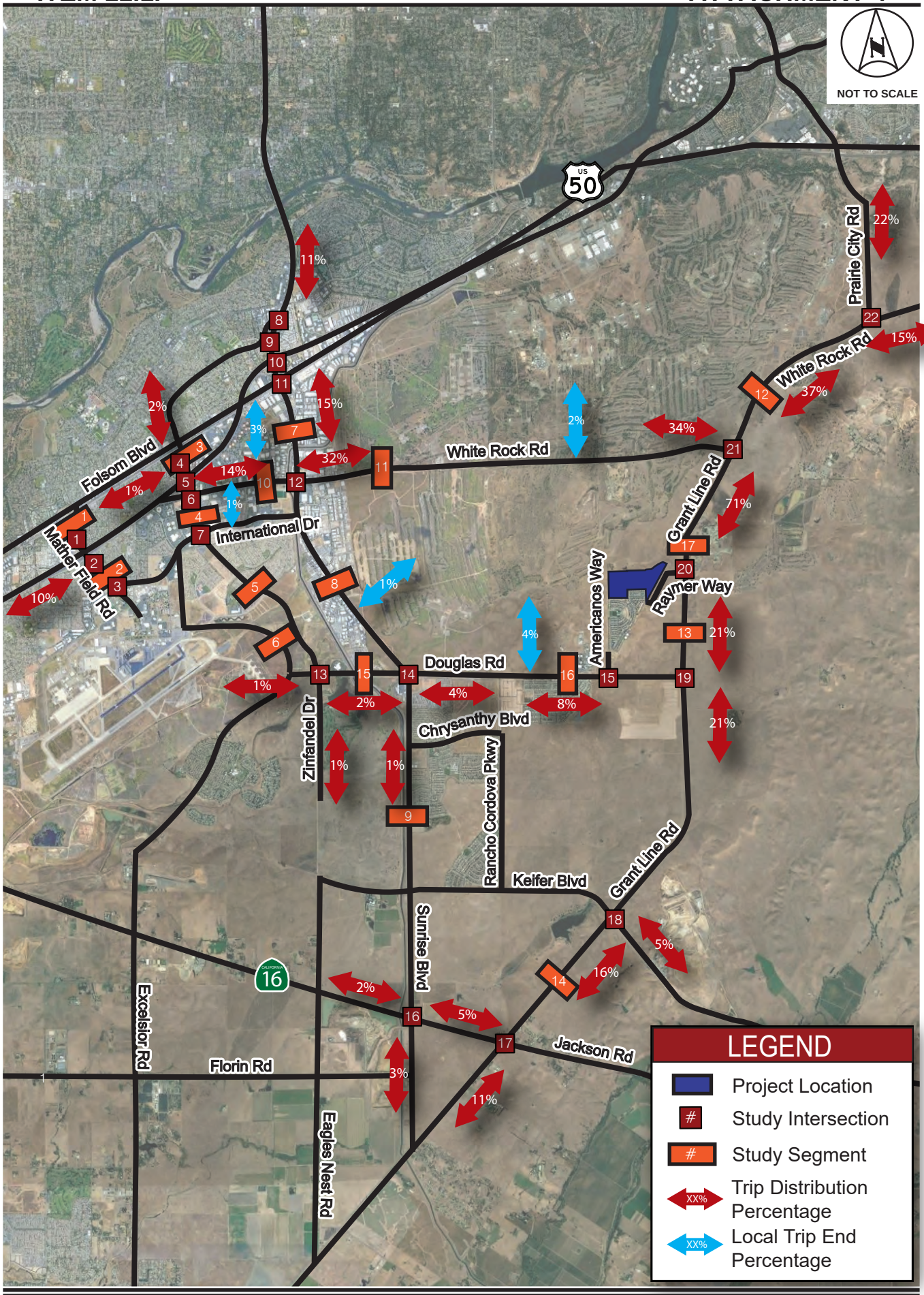
The number of trips anticipated to be generated by the proposed project are approximated using data included in *Trip Generation, 10th Edition,* published by the Institute of Transportation Engineers (ITE). ITE Land Use Code 210 (Single-Family Detached Housing) was used to represent the proposed units and the equation was used to calculate the generated trips. As shown in Table 5, the proposed project is estimated to generate 4,014 new daily trips, with 313 new trips occurring during the AM peak-hour, and 416 new trips occurring during the PM peak-hour.

Table 5 – Proposed Project Trip Generation

Land Use (ITE Code)	Size (Dwelling Units)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	In		Out		Total Trips	In		Out	
				%	Trips	%	Trips		%	Trips	%	Trips
Single-Family Detached Housing (210)[1]	434	4,014	313	25%	78	75%	235	416	63%	262	37%	154
New Project Trips		**4,014**	**313**		**78**		**235**	**416**		**262**		**154**

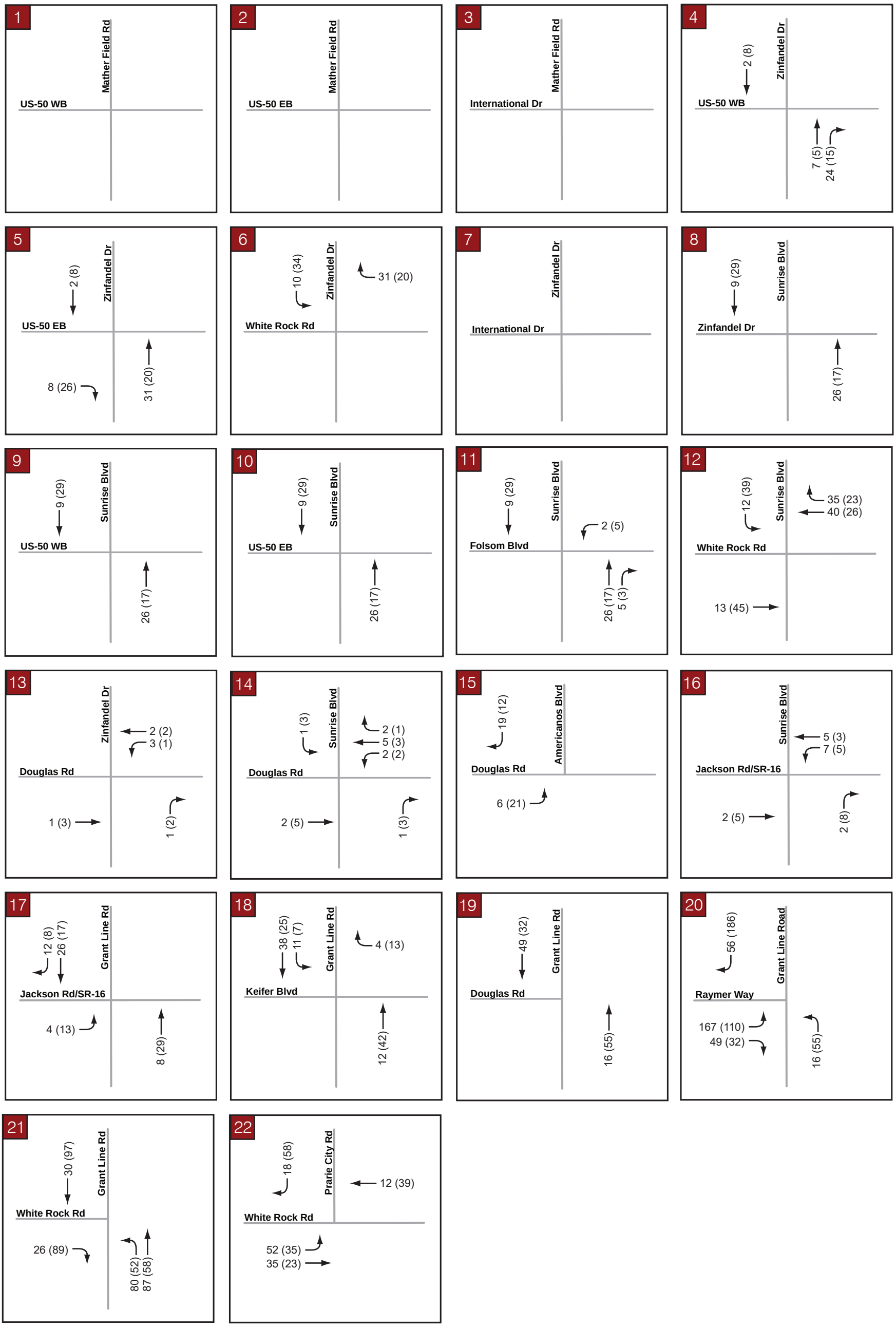
[1] *Trip generation based on Institute of Transporation Engineers (ITE), Trip Generation Manual, (10th Edition) equations for Single-Family Detached Housing (Land Use Code 210)*
Daily: Ln(T) = 0.92Ln(X) + 2.71
AM Peak Hour: T = 0.71(X) + 4.80
PM Peak Hour: Ln(T) = 0.96Ln(X) + 0.2
Where: T = trips generated, X = dwelling units

The project trip distribution percentages are provided in Figure 5. The assignments of project trips are depicted in Figure 6.



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Figure 5
Existing (2019) Project Trip Distribution


1
Mather Field Rd
US-50 WB
2
Mather Field Rd
US-50 EB
3
Mather Field Rd
International Dr
4
Zinfandel Dr
2 (8)
US-50 WB
7 (5)
24 (15)
5
Zinfandel Dr
2 (8)
US-50 EB
8 (26)
31 (20)
6
Zinfandel Dr
10 (34)
31 (20)
White Rock Rd
7
Zinfandel Dr
International Dr
8
Sunrise Blvd
9 (29)
Zinfandel Dr
26 (17)
9
Sunrise Blvd
9 (29)
US-50 WB
26 (17)
10
Sunrise Blvd
9 (29)
US-50 EB
26 (17)
11
Sunrise Blvd
9 (29)
Folsom Blvd
2 (5)
26 (17)
5 (3)
12
Sunrise Blvd
12 (39)
35 (23)
40 (26)
White Rock Rd
13 (45)
13
Zinfandel Dr
2 (2)
3 (1)
Douglas Rd
1 (3)
1 (2)
14
Sunrise Blvd
1 (3)
2 (1)
5 (3)
2 (2)
Douglas Rd
2 (5)
1 (3)
15
19 (12)
Americanos Blvd
Douglas Rd
6 (21)
16
Sunrise Blvd
5 (3)
7 (5)
Jackson Rd/SR-16
2 (5)
2 (8)
17
Grant Line Rd
12 (8)
26 (17)
Jackson Rd/SR-16
4 (13)
8 (29)
18
Grant Line Rd
38 (25)
11 (7)
4 (13)
Keifer Blvd
12 (42)
19
Grant Line Rd
49 (32)
Douglas Rd
16 (55)
20
56 (186)
Grant Line Road
Raymer Way
167 (110)
49 (32)
16 (55)
21
Grant Line Rd
30 (97)
White Rock Rd
26 (89)
80 (52)
87 (58)
22
18 (58)
Prarie City Rd
12 (39)
White Rock Rd
52 (35)
35 (23)
LEGEND
Study Intersection
xx(xx) AM(PM) Peak-Hour Volumes

EXISTING (2019) PLUS PROPOSED PROJECT CONDTIONS

As previously discussed, the number of trips anticipated to be generated by the proposed project was derived using the *Trip Generation Manual, 10th Edition,* published by the Institute for Traffic Engineering (ITE). These trips were assigned to the roadway network based on existing traffic volumes, the City's Travel Demand Model (TDM), and professional judgment. Using these volumes, levels of service were determined at the study facilities. Existing (2019) plus Proposed Project peak-hour turn movement volumes are presented in Figure 7. Levels of service were then determined at the study facilities. Analysis worksheets for this scenario are provided in Appendix C.

Table 6 presents the intersection operating conditions for this analysis scenario. As indicated in Table 6, the study intersections operate from LOS A to LOS F during the AM and PM peak-hours. As noted previously, U-turn movement volumes were added to the corresponding left-turn movement volumes due to *HCM 6th Edition* analysis methodology limitations.

Table 7 presents the roadway segment operating conditions for this analysis scenario. As indicated in Table 7, the study roadway segments operate from LOS A to LOS F.

Table 6 - Existing (2019) plus Proposed Project Intersection Levels of Service

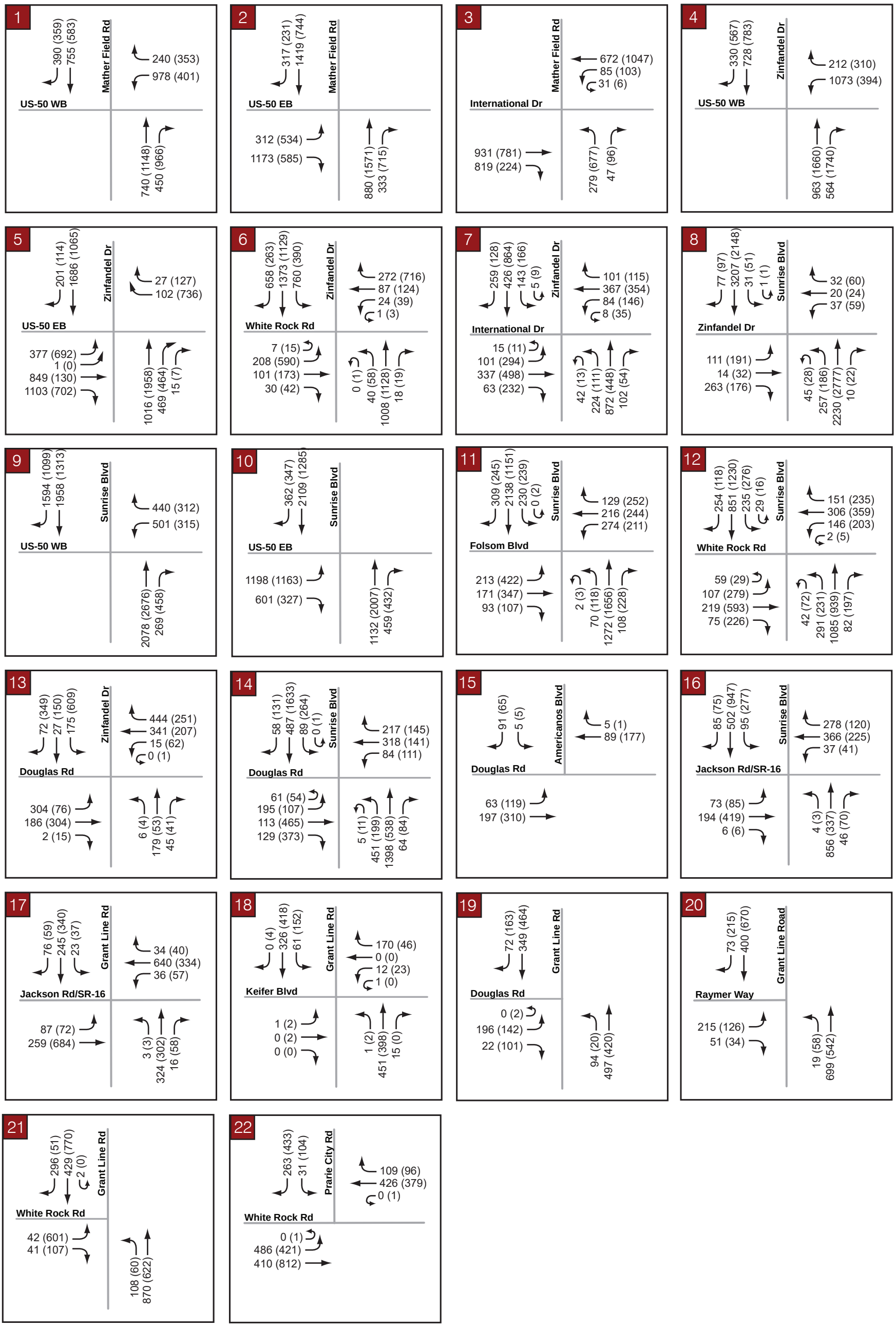
ID	Intersection	Control	Peak Hour	Existing (2019)		Existing (2019) plus Proposed Project	
				Delay (sec)	LOS	Delay (sec)	LOS
1	Mather Field Road @ US-50 Westbound Ramps	Signal	AM	**117.2**	**F**	**117.2**	**F**
			PM	26.4	C	26.4	C
2	Mather Field Road @ US-50 Eastbound Ramps	Signal	AM	**74.7**	**E**	**74.7**	**E**
			PM	24.3	C	24.3	C
3	Mather Field Road @ International Drive	Signal	AM	9.7	A	9.7	A
			PM	14.8	B	14.8	B
4	Zinfandel Drive @ US-50 Westbound Ramps	Signal	AM	32.7	C	32.7	C
			PM	20.2	C	20.1	C
5	Zinfandel Drive @ US-50 Eastbound Ramps	Signal	AM	**86.3**	**F**	**87.0**	**F**
			PM	36.7	D	37.7	D
6	Zinfandel Drive @ White Rock Road	Signal	AM	31.9	C	32.1	C
			PM	43.3	D	45.2	D
7	Zinfandel Drive @ International Drive	Signal	AM	22.0	C	22.0	C
			PM	30.2	C	30.2	C
8	Sunrise Boulevard @ Zinfandel Drive	Signal	**AM**	**110.8**	**F**	**111.6**	**F**
			PM	**56.6**	**E**	**58.1**	**E**
9	Sunrise Boulevard @ US-50 Westbound Ramps	Signal	AM	17.4	B	17.4	B
			PM	12.9	B	12.9	B
10	Sunrise Boulevard @ US-50 Eastbound Ramps	Signal	AM	23.4	C	23.4	C
			PM	22.0	C	22.0	C
11	Sunrise Boulevard @ Folsom Boulevard	Signal	AM	32.8	C	32.9	C
			PM	35.8	D	36.0	D
12	Sunrise Boulevard @ White Rock Road	Signal	AM	30.8	C	33.4	C
			PM	**58.0**	**E**	**62.0**	**E**
13	Douglas Road @ Zinfandel Drive	Signal	AM	41.7	D	41.9	D
			PM	19.6	B	19.6	B
14	Douglas Road @ Sunrise Boulevard	Signal	AM	29.1	C	29.3	C
			PM	42.7	D	42.8	D
15	Douglas Road @ Americanos Boulevard	Signal	AM	8.6	A	9.0	A
			PM	8.3	A	8.6	A
16	Jackson Road/SR-16 @ Sunrise Boulevard	Signal	AM	**70.7**	**E**	**72.2**	**E**
			PM	**59.6**	**E**	**61.3**	**E**
17	Jackson Road/SR-16 @ Grant Line Road	Signal	AM	**90.9**	**F**	**103.7**	**F**
			PM	**108.5**	**F**	**120.4**	**F**
18	Grant Line Road @ Kiefer Boulevard	AWSC	AM	16.3	C	19.1	C
			PM	17.1	C	20.6	C
19	Grant Line Road @ Douglas Road	Signal	AM	10.7	B	11.0	B
			PM	9.2	A	9.3	A
20	Grant Line Road @ Raymer Way	SSSC	AM	**2.2 (37 EB)**	**E**	**146.3 (606 EB)**	**F**
			PM	0.7 (28.1 EB)	D	**84.1 (545 EB)**	**F**
21	Grant Line Road @ White Rock Road	Signal	AM	6.9	A	7.7	A
			PM	11.9	B	13.3	B
22	White Rock Road @ Prairie City Road	Signal	AM	19.0	B	23.2	C
			PM	18.1	B	25.8	C

Notes: **Bold** represents unacceptable operations. Shaded represents a significant impact.

Table 7- Existing (2019) Plus Project Roadway Segment Levels of Service

ID	Roadway	Segment		Existing					Existing plus Project					LOS Threshold
		From	To	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service	
1	Mather Field Rd	Folsom Blvd	US-50 WB Ramps	4	Arterial Moderate	23,486	0.65	B	4	Arterial Moderate	23,486	0.65	B	D
2	Mather Field Rd	US-50 EB Ramps	International Dr	6	Arterial Moderate	19,544	0.36	A	6	Arterial Moderate	19,544	0.36	A	D
3	Zinfandel Dr	Folsom Blvd	US-50 WB Ramps	4	Arterial Moderate	21,533	0.60	A	4	Arterial Moderate	21,653	0.60	B	D
4	Zinfandel Dr	White Rock Rd	International Dr	6	Arterial Moderate	29,740	0.55	A	6	Arterial Moderate	29,740	0.55	A	D
5	Zinfandel Dr	International Dr	Douglas Rd	4	Arterial Moderate	15,603	0.43	A	4	Arterial Moderate	15,603	0.43	A	D
6	Mather Field Rd	Femoyer St	Douglas Rd	2	Arterial Moderate	5,711	0.32	A	2	Arterial Moderate	5,711	0.32	A	D
7	Sunrise Blvd	Folsom Blvd	White Rock Rd	6	Arterial Moderate	37,902	0.70	C	6	Arterial Moderate	38,504	0.71	C	D
8	Sunrise Blvd	White Rock Rd	Douglas Road	6	Arterial Moderate	27,763	0.51	A	6	Arterial Moderate	27,803	0.51	A	D
9	Sunrise Blvd	Douglas Rd	Jackson Rd/SR 16	2	Arterial Moderate	20,467	**1.14**	**F**	2	Arterial Moderate	20,507	**1.14**	**F**	D
10	White Rock Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial Moderate	14,871	0.28	A	6	Arterial Moderate	15,553	0.29	A	D
11	White Rock Rd	Sunrise Blvd	Grant Line Road	2	Arterial Moderate	3,375	0.19	A	2	Arterial Moderate	4,740	0.26	A	D
12	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Arterial Moderate	14,582	0.41	A	4	Arterial Moderate	16,067	0.45	A	E
13	Grant Line Road	Raymer Wy	Douglas Road	2	Rural (No Shoulder)	10,151	**0.60**	**E**	2	Rural (No Shoulder)	10,994	**0.65**	**E**	D
14	Grant Line Road	Douglas Rd	Jackson Rd/SR 16	2	Rural (Shoulder)	7,501	0.38	D	2	Rural (Shoulder)	8,143	0.41	D	D
15	Douglas Rd	Mather Field Rd	Sunrise Blvd	2	Arterial Moderate	14,030	0.78	C	2	Arterial Moderate	14,110	0.78	C	D
16	Douglas Rd	Sunrise Blvd	Grant Line Road	4	Arterial Moderate	10,853	0.30	A	4	Arterial Moderate	11,174	0.31	A	D
17	Grant Line Road	White Rock Rd	Raymer Wy	2	Rural (No Shoulder)	10,384	0.61	E	2	Rural (No Shoulder)	13,234	0.78	E	E

Note: **Bold** represents unacceptable operations. Shaded indicates significant impact.



LEGEND

#	Study Intersection
xx(xx)	AM(PM) Peak-Hour Volumes

CUMULATIVE CONDITIONS

Future traffic estimates were prepared using the modified SACMET travel demand model developed by the City of Rancho Cordova for the 2035 General Plan. The interpolated difference between the resulting traffic estimate and the 2008 baseline model results (the growth) was then added to Existing (2019) traffic volumes to establish Cumulative (2035) traffic estimates for this study. Using these volumes, levels of service were determined at the study facilities. Analysis worksheets for this scenario are provided in Appendix D. Figure 8 depicts the assumed lane geometries for the Cumulative (2035) scenario. Cumulative peak-hour turning movement volumes are presented in Figure 9.

Table 8 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in Table 8, the study intersections operate from LOS A to LOS F during the AM and PM peak-hours.

Table 9 presents the roadway segment operating conditions for this analysis scenario. As indicated in Table 9, the study roadway segments operate from LOS A to LOS F.

Table 8 – Cumulative (2035) Intersection Levels of Service

ID	Intersection	Control	Peak Hour	Cumulative (2035)	
				Delay (sec)	LOS
1	Mather Field Road @ US-50 Westbound Ramps	Signal	AM	37.7	D
			PM	16.3	B
2	Mather Field Road @ US-50 Eastbound Ramps	Signal	AM	34.5	C
			PM	27.8	C
3	Mather Field Road @ International Drive	Signal	AM	39.0	D
			PM	23.3	C
4	Zinfandel Drive @ US-50 Westbound Ramps	Signal	AM	22.1	C
			PM	15.0	B
5	Zinfandel Drive @ US-50 Eastbound Ramps	Signal	AM	73.6	E
			PM	**174.1**	**F**
6	Zinfandel Drive @ White Rock Road	Signal	AM	60.0	E
			PM	70.4	E
7	Zinfandel Drive @ International Drive	Signal	AM	**223.4**	**F**
			PM	**332.9**	**F**
8	Sunrise Boulevard @ Zinfandel Drive	Signal	AM	**217.8**	**F**
			PM	**166.9**	**F**
9	Sunrise Boulevard @ US-50 Westbound Ramps	Signal	AM	12.3	B
			PM	13.8	B
10	Sunrise Boulevard @ US-50 Eastbound Ramps	Signal	AM	13.5	B
			PM	13.2	B
11	Sunrise Boulevard @ Folsom Boulevard	Signal	AM	46.2	D
			PM	62.0	E
12	Sunrise Boulevard @ White Rock Road	Signal	AM	66.2	E
			PM	**140.3**	**F**
13	Douglas Road @ Zinfandel Drive	Signal	AM	**436.4**	**F**
			PM	**165.7**	**F**
14	Douglas Road @ Sunrise Boulevard	Signal	AM	**114.9**	**F**
			PM	**175.3**	**F**
15	Douglas Road @ Americanos Boulevard	Signal	AM	21.5	C
			PM	24.0	C
16	Jackson Road/SR-16 @ Sunrise Boulevard	Signal	AM	**142.7**	**F**
			PM	**172.3**	**F**
17	Jackson Road/SR-16 @ Grant Line Road	Signal	AM	**210.3**	**F**
			PM	**141.8**	**F**
18	Grant Line Road @ Kiefer Boulevard	Signal	AM	21.4	C
			PM	23.1	C
19	Grant Line Road @ Douglas Road	Signal	AM	41.6	D
			PM	47.4	D
20	Grant Line Road @ Raymer Way	Signal	AM	**170.3**	**F**
			PM	**100.8**	**F**
21	Grant Line Road @ White Rock Road	Signal	AM	**81.3**	**F**
			PM	**153.7**	**F**
22	White Rock Road @ Prairie City Road	Signal	AM	**178.6**	**F**
			PM	**249.4**	**F**

Notes: **Bold** represents unacceptable operations.

Table 9 – Cumulative (2035) Roadway Segment Level of Service

ID	Roadway	Segment		Cumulative				
		From	To	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service
1	Mather Field Rd	Folsom Blvd	US-50 WB Ramps	6	Arterial Moderate	34,520	0.64	B
2	Mather Field Rd	US-50 EB Ramps	International Dr	6	Arterial Moderate	29,010	0.54	A
3	Zinfandel Dr	Folsom Blvd	US-50 WB Ramps	6	Arterial Moderate	21,900	0.41	A
4	Zinfandel Dr	White Rock Rd	International Dr	6	Arterial Moderate	88,350	**1.64**	**F**
5	Zinfandel Dr	International Dr	Douglas Rd	4	Arterial Moderate	46,350	**1.29**	**F**
6	Mather Field Rd	Femoyer St	Douglas Rd	4	Arterial Moderate	15,630	0.43	A
7	Sunrise Blvd	Folsom Blvd	White Rock Rd	6	Arterial Moderate	39,830	0.74	C
8	Sunrise Blvd	White Rock Rd	Douglas Road	6	Arterial Moderate	38,650	0.72	C
9	Sunrise Blvd	Douglas Rd	Jackson Rd/SR 16	4	Arterial Moderate	43,460	**1.21**	**F**
10	White Rock Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial Moderate	15,080	0.28	A
11	White Rock Rd	Sunrise Blvd	Grant Line Road	6	Arterial Moderate	13,380	0.25	A
12	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Arterial Moderate	69,700	**1.94**	**F**
13	Grant Line Road	Raymer Wy	Douglas Road	4	Expressway	38,620	0.54	A
14	Grant Line Road	Douglas Rd	Jackson Rd/SR 16	4	Arterial High	23,280	0.58	A
15	Douglas Rd	Mather Field Rd	Sunrise Blvd	4	Arterial Moderate	60,580	**1.68**	**F**
16	Douglas Rd	Sunrise Blvd	Grant Line Road	6	Arterial Moderate	24,730	0.46	A
17	Grant Line Road	White Rock Rd	Raymer Wy	4	Expressway	51,290	0.71	C

Note: **Bold** represents unacceptable operations. Shaded indicates significant impact

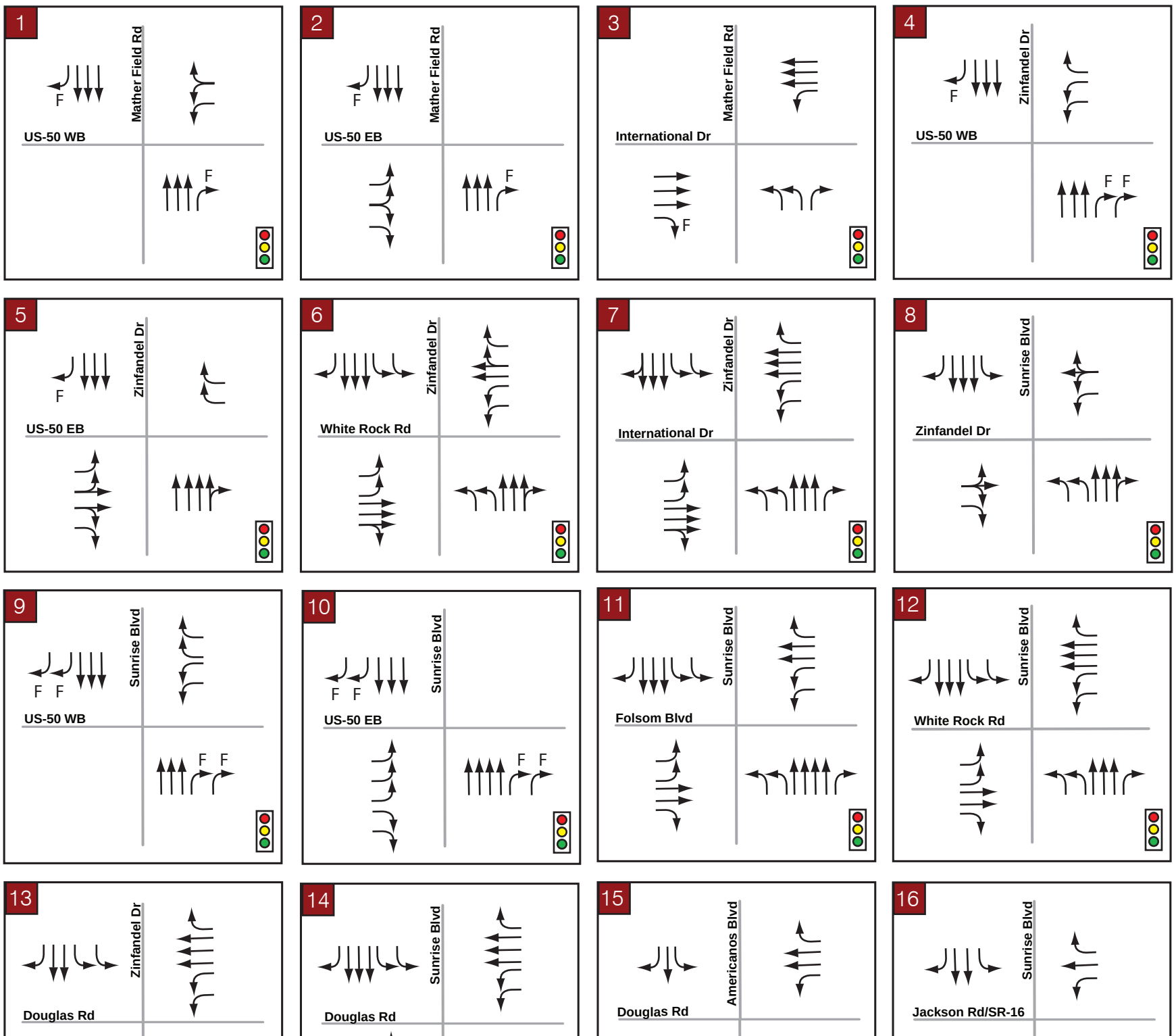
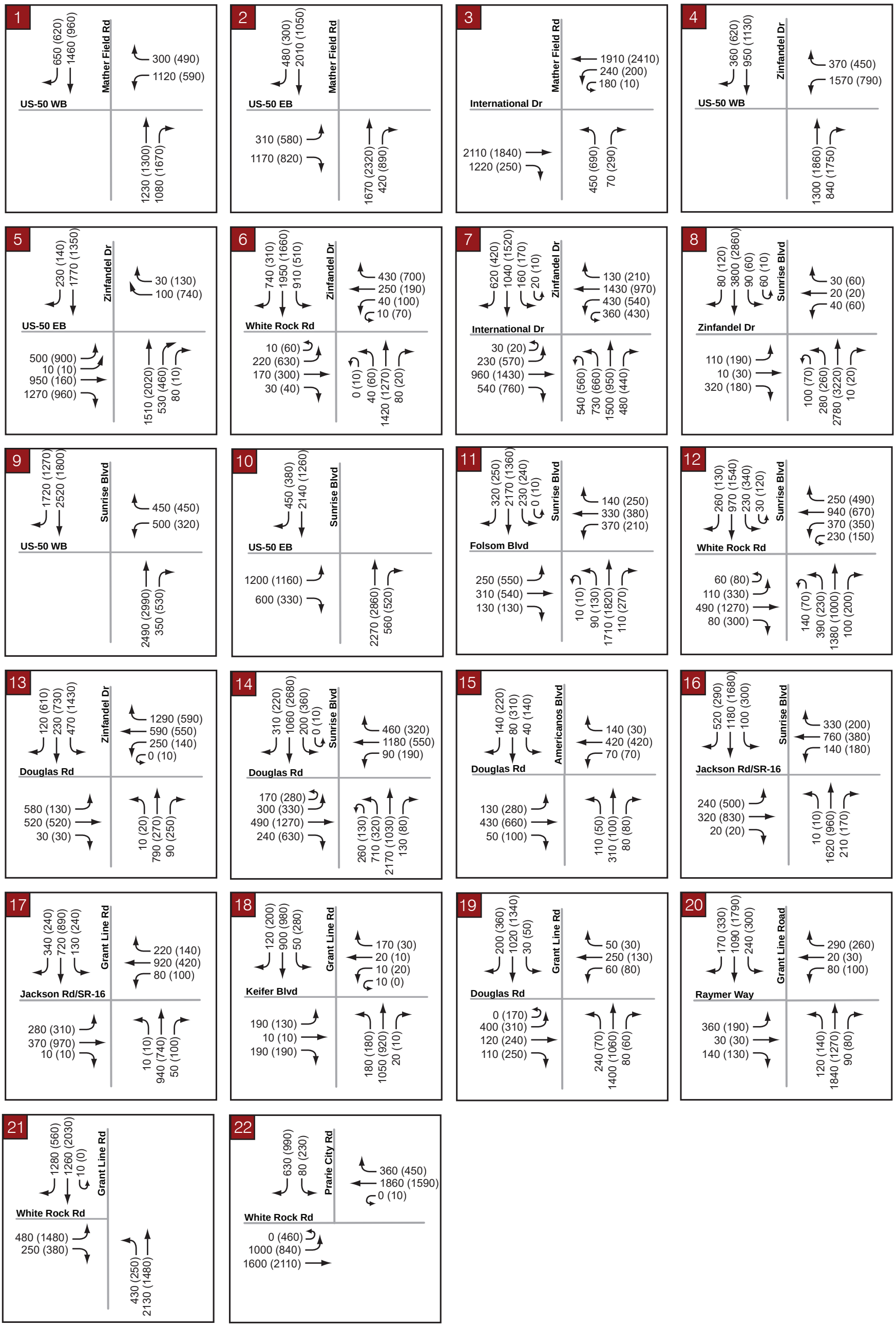


Figure 8
Cumulative (2035) Study Intersections, Traffic Control, and Lane Geometries


1
Mather Field Rd
US-50 WB
650 (620)
1460 (960)
300 (490)
1120 (590)
1230 (1300)
1080 (1670)
2
Mather Field Rd
US-50 EB
480 (300)
2010 (1050)
310 (580)
1170 (820)
1670 (2320)
420 (890)
3
Mather Field Rd
International Dr
1910 (2410)
240 (200)
180 (10)
2110 (1840)
1220 (250)
450 (690)
70 (290)
4
Zinfandel Dr
US-50 WB
360 (620)
950 (1130)
370 (450)
1570 (790)
1300 (1860)
840 (1750)
5
Zinfandel Dr
US-50 EB
230 (140)
1770 (1350)
30 (130)
100 (740)
500 (900)
10 (10)
950 (160)
1270 (960)
1510 (2020)
530 (460)
80 (10)
6
Zinfandel Dr
White Rock Rd
740 (310)
1950 (1660)
910 (510)
430 (700)
250 (190)
40 (100)
10 (70)
10 (60)
220 (630)
170 (300)
30 (40)
0 (10)
40 (60)
1420 (1270)
80 (20)
7
Zinfandel Dr
International Dr
620 (420)
1040 (1520)
160 (170)
20 (10)
130 (210)
1430 (970)
430 (540)
360 (430)
30 (20)
230 (570)
960 (1430)
540 (760)
540 (560)
730 (660)
1500 (950)
480 (440)
8
Sunrise Blvd
Zinfandel Dr
80 (120)
3800 (2860)
90 (60)
60 (10)
30 (60)
20 (20)
40 (60)
110 (190)
10 (30)
320 (180)
100 (70)
280 (260)
2780 (3220)
10 (20)
9
Sunrise Blvd
US-50 WB
1720 (1270)
2520 (1800)
450 (450)
500 (320)
2490 (2990)
350 (530)
10
Sunrise Blvd
US-50 EB
450 (380)
2140 (1260)
1200 (1160)
600 (330)
2270 (2860)
560 (520)
11
Sunrise Blvd
Folsom Blvd
320 (250)
2170 (1360)
230 (240)
0 (10)
140 (250)
330 (380)
370 (210)
250 (550)
310 (540)
130 (130)
10 (10)
90 (130)
1710 (1820)
110 (270)
12
Sunrise Blvd
White Rock Rd
260 (130)
970 (1540)
230 (340)
30 (120)
250 (490)
940 (670)
370 (350)
230 (150)
60 (80)
110 (330)
490 (1270)
80 (300)
140 (70)
390 (230)
1380 (1000)
100 (200)
13
Zinfandel Dr
Douglas Rd
120 (610)
230 (730)
470 (1430)
1290 (590)
590 (550)
250 (140)
0 (10)
580 (130)
520 (520)
30 (30)
10 (20)
790 (270)
90 (250)
14
Sunrise Blvd
Douglas Rd
310 (220)
1060 (2680)
200 (360)
0 (10)
460 (320)
1180 (550)
90 (190)
170 (280)
300 (330)
490 (1270)
240 (630)
260 (130)
710 (320)
2170 (1030)
130 (80)
15
Americanos Blvd
Douglas Rd
140 (220)
80 (310)
40 (140)
140 (30)
420 (420)
70 (70)
130 (280)
430 (660)
50 (100)
110 (50)
310 (100)
80 (80)
16
Sunrise Blvd
Jackson Rd/SR-16
520 (290)
1180 (1680)
100 (300)
330 (200)
760 (380)
140 (180)
240 (500)
320 (830)
20 (20)
10 (10)
1620 (960)
210 (170)
17
Grant Line Rd
Jackson Rd/SR-16
340 (240)
720 (890)
130 (240)
220 (140)
920 (420)
80 (100)
280 (310)
370 (970)
10 (10)
10 (10)
940 (740)
50 (100)
18
Grant Line Rd
Keifer Blvd
120 (200)
900 (980)
50 (280)
170 (30)
20 (10)
10 (20)
10 (0)
190 (130)
10 (10)
190 (190)
180 (180)
1050 (920)
20 (10)
19
Grant Line Rd
Douglas Rd
200 (360)
1020 (1340)
30 (50)
50 (30)
250 (130)
60 (80)
0 (170)
400 (310)
120 (240)
110 (250)
240 (70)
1400 (1060)
80 (60)
20
Grant Line Road
Raymer Way
170 (330)
1090 (1790)
240 (300)
290 (260)
20 (30)
80 (100)
360 (190)
30 (30)
140 (130)
120 (140)
1840 (1270)
90 (80)
21
Grant Line Rd
White Rock Rd
1280 (560)
1260 (2030)
10 (0)
480 (1480)
250 (380)
430 (250)
2130 (1480)
22
Prarie City Rd
White Rock Rd
630 (990)
80 (230)
360 (450)
1860 (1590)
0 (10)
0 (460)
1000 (840)
1600 (2110)
LEGEND
Study Intersection
xx(xx) AM(PM) Peak-Hour Volumes

CUMULATIVE PLUS PROPOSED PROJECT CONDITIONS

As previously discussed, the number of trips anticipated to be generated by the proposed project was derived using the *Trip Generation Manual, 10th Edition,* published by the Institute for Traffic Engineering (ITE). The project trips were assigned to the future roadway network based on modified SACMET travel demand model, as provided by the City of Rancho Cordova. Using these volumes, levels of service were determined at the study facilities.

The Cumulative Scenario Project Trip distribution and trip assignment are shown in Figure 10 and Figure 11, respectively. Cumulative plus Proposed Project peak-hour turning movement volumes are presented in Figure 12. Analysis worksheets for this scenario are provided in Appendix E.

Table 10 presents the peak-hour intersection operating conditions for this analysis scenario. As indicated in Table 10, the study intersections operate from LOS A to LOS F during the AM and PM peak-hours.

Table 11 presents the roadway segment operating conditions for this analysis scenario. As indicated in Table 11, the study roadway segments operate from LOS A to LOS F.

Table 10 - Cumulative (2035) plus Proposed Project Intersection Levels of Service

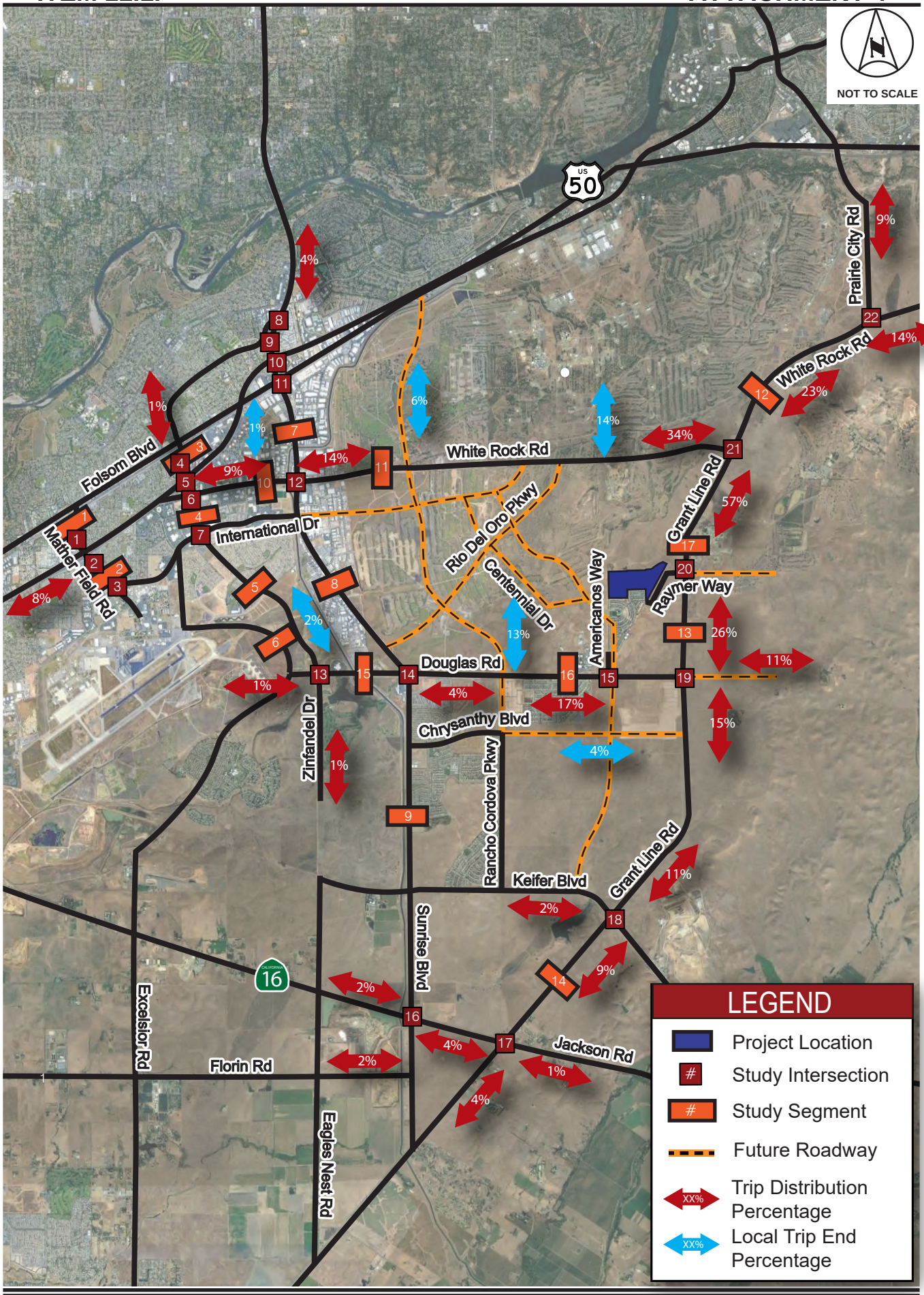
ID	Intersection	Control	Peak Hour	Cumulative (2035)		Cumulative (2035) plus Proposed Project	
				Delay (sec)	LOS	Delay (sec)	LOS
1	Mather Field Road @ US-50 Westbound Ramps	Signal	AM	37.7	D	37.7	D
			PM	16.3	B	16.3	B
2	Mather Field Road @ US-50 Eastbound Ramps	Signal	AM	34.5	C	34.5	C
			PM	27.8	C	27.8	C
3	Mather Field Road @ International Drive	Signal	AM	39.0	D	39.0	D
			PM	23.3	C	23.3	C
4	Zinfandel Drive @ US-50 Westbound Ramps	Signal	AM	22.1	C	22.1	C
			PM	15.0	B	15.0	B
5	Zinfandel Drive @ US-50 Eastbound Ramps	Signal	AM	**73.6**	**E**	**75.6**	**E**
			PM	**174.1**	**F**	**175.5**	**F**
6	Zinfandel Drive @ White Rock Road	Signal	AM	**60.0**	**E**	**60.5**	**E**
			PM	**70.4**	**E**	**71.8**	**E**
7	Zinfandel Drive @ International Drive	Signal	AM	**223.4**	**F**	**223.4**	**F**
			PM	**332.9**	**F**	**332.9**	**F**
8	Sunrise Boulevard @ Zinfandel Drive	Signal	AM	**217.8**	**F**	**218.6**	**F**
			PM	**166.9**	**F**	**168.2**	**F**
9	Sunrise Boulevard @ US-50 Westbound Ramps	Signal	AM	12.3	B	12.4	B
			PM	13.8	B	13.9	B
10	Sunrise Boulevard @ US-50 Eastbound Ramps	Signal	AM	13.5	B	13.5	B
			PM	13.2	B	13.3	B
11	Sunrise Boulevard @ Folsom Boulevard	Signal	AM	46.2	D	46.2	D
			PM	**62.0**	**E**	**62.2**	**E**
12	Sunrise Boulevard @ White Rock Road	Signal	AM	**66.2**	**E**	**66.6**	**E**
			PM	**140.3**	**F**	**143.7**	**F**
13	Douglas Road @ Zinfandel Drive	Signal	AM	**436.4**	**F**	**436.2**	**F**
			PM	**165.7**	**F**	**166.0**	**F**
14	Douglas Road @ Sunrise Boulevard	Signal	AM	**114.9**	**F**	**115.3**	**F**
			PM	**175.3**	**F**	**175.2**	**F**
15	Douglas Road @ Americanos Boulevard	Signal	AM	21.5	C	23.2	C
			PM	24.0	C	26.2	C
16	Jackson Road/SR-16 @ Sunrise Boulevard	Signal	AM	**142.7**	**F**	**143.4**	**F**
			PM	**172.3**	**F**	**173.4**	**F**
17	Jackson Road/SR-16 @ Grant Line Road	Signal	AM	**210.3**	**F**	**214.0**	**F**
			PM	**141.8**	**F**	**145.5**	**F**
18	Grant Line Road @ Kiefer Boulevard	Signal	AM	21.4	C	21.5	C
			PM	23.1	C	23.5	C
19	Grant Line Road @ Douglas Road	Signal	AM	41.6	D	45.0	D
			PM	47.4	D	49.0	D
20	Grant Line Road @ Raymer Way	Signal	AM	**170.3**	**F**	**206.3**	**F**
			PM	**100.8**	**F**	**129.1**	**F**
21	Grant Line Road @ White Rock Road	Signal	AM	**81.3**	**F**	**88.6**	**F**
			PM	**153.7**	**F**	**166.7**	**F**
22	White Rock Road @ Prairie City Road	Signal	AM	**178.6**	**F**	**182.6**	**F**
			PM	**249.4**	**F**	**260.5**	**F**

Notes: **Bold** represents unacceptable operations. Shaded represents a significant impact.

Table 11 – Cumulative (2035) plus Proposed Project Roadway Segment Levels of Service

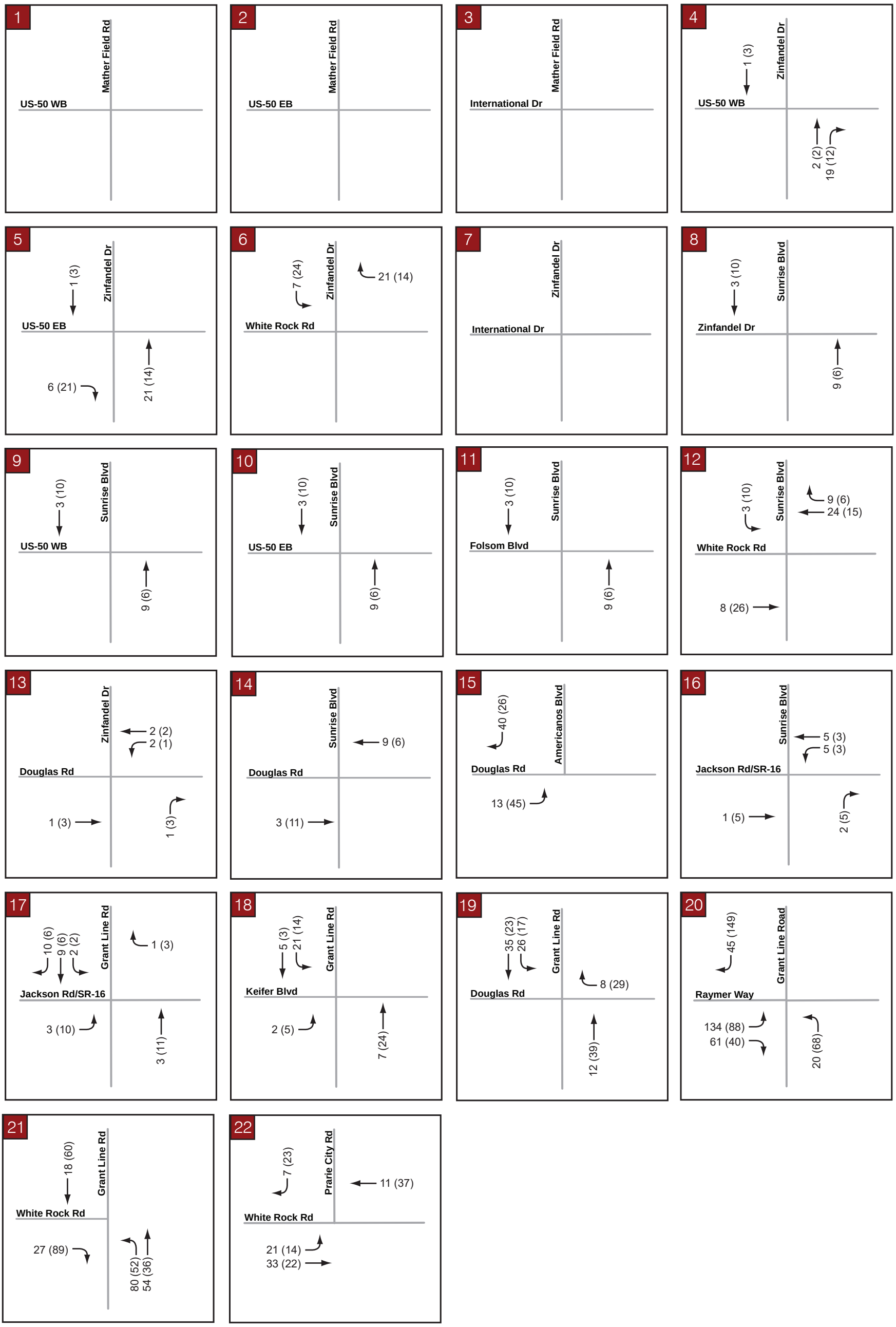
ID	Roadway	Segment		Cumulative					Cumulative plus Project					LOS Threshold
		From	To	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service	
1	Mather Field Rd	Folsom Blvd	US-50 WB Ramps	6	Arterial Moderate	34,520	0.64	B	6	Arterial Moderate	34,520	0.64	B	D
2	Mather Field Rd	US-50 EB Ramps	International Dr	6	Arterial Moderate	29,010	0.54	A	6	Arterial Moderate	29,010	0.54	A	D
3	Zinfandel Dr	Folsom Blvd	US-50 WB Ramps	6	Arterial Moderate	21,900	0.41	A	6	Arterial Moderate	21,940	0.41	A	D
4	Zinfandel Dr	White Rock Rd	International Dr	6	Arterial Moderate	88,350	**1.64**	**F**	6	Arterial Moderate	88,350	**1.64**	**F**	D
5	Zinfandel Dr	International Dr	Douglas Rd	4	Arterial Moderate	46,350	**1.29**	**F**	4	Arterial Moderate	46,350	**1.29**	**F**	D
6	Mather Field Rd	Femoyer St	Douglas Rd	4	Arterial Moderate	15,630	0.43	A	4	Arterial Moderate	15,630	0.43	A	D
7	Sunrise Blvd	Folsom Blvd	White Rock Rd	6	Arterial Moderate	39,830	0.74	C	6	Arterial Moderate	39,991	0.74	C	D
8	Sunrise Blvd	White Rock Rd	Douglas Road	6	Arterial Moderate	38,650	0.72	C	6	Arterial Moderate	38,650	0.72	C	D
9	Sunrise Blvd	Douglas Rd	Jackson Rd/SR 16	4	Arterial Moderate	43,460	**1.21**	**F**	4	Arterial Moderate	43,460	**1.21**	**F**	D
10	White Rock Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial Moderate	15,080	0.28	A	6	Arterial Moderate	15,481	0.29	A	D
11	White Rock Rd	Sunrise Blvd	Grant Line Road	6	Arterial Moderate	13,380	0.25	A	6	Arterial Moderate	14,745	0.27	A	D
12	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Arterial Moderate	69,700	**1.94**	**F**	4	Arterial Moderate	70,623	**1.96**	**F**	E
13	Grant Line Road	Raymer Wy	Douglas Road	4	Expressway	38,620	0.54	A	4	Expressway	39,664	0.55	A	D
14	Grant Line Road	Douglas Rd	Jackson Rd/SR 16	4	Arterial High	23,280	0.58	A	4	Arterial High	23,641	0.59	A	D
15	Douglas Rd	Mather Field Rd	Sunrise Blvd	4	Arterial Moderate	60,580	**1.68**	**F**	4	Arterial Moderate	60,741	**1.69**	**F**	D
16	Douglas Rd	Sunrise Blvd	Grant Line Road	6	Arterial Moderate	24,730	0.46	A	6	Arterial Moderate	25,412	0.47	A	D
17	Grant Line Road	White Rock Rd	Raymer Wy	4	Expressway	51,290	0.71	C	4	Expressway	53,578	0.74	C	E

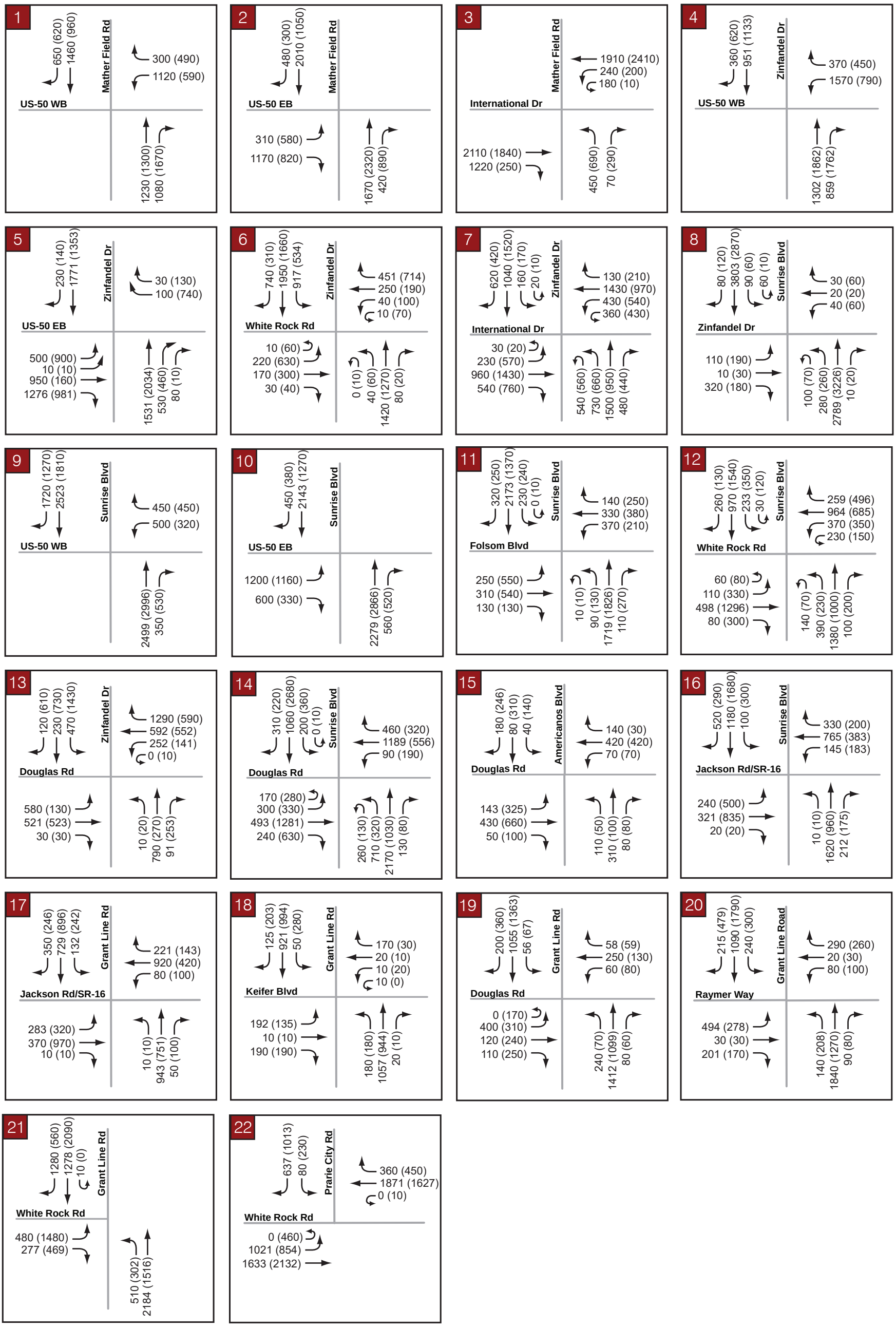
Note: **Bold** represents unacceptable operations. Shaded indicates significant impact



Kimley»Horn

Figure 10
Cumulative (2035) Project Trip Distribution


1
Mather Field Rd
US-50 WB
2
Mather Field Rd
US-50 EB
3
Mather Field Rd
International Dr
4
Zinfandel Dr
1 (3)
US-50 WB
2 (2)
19 (12)
5
Zinfandel Dr
1 (3)
US-50 EB
6 (21)
21 (14)
6
Zinfandel Dr
7 (24)
21 (14)
White Rock Rd
7
Zinfandel Dr
International Dr
8
Sunrise Blvd
3 (10)
Zinfandel Dr
9 (6)
9
Sunrise Blvd
3 (10)
US-50 WB
9 (6)
10
Sunrise Blvd
3 (10)
US-50 EB
9 (6)
11
Sunrise Blvd
3 (10)
Folsom Blvd
9 (6)
12
Sunrise Blvd
3 (10)
9 (6)
24 (15)
White Rock Rd
8 (26)
13
Zinfandel Dr
2 (2)
2 (1)
Douglas Rd
1 (3)
1 (3)
14
Sunrise Blvd
9 (6)
Douglas Rd
3 (11)
15
Americanos Blvd
40 (26)
Douglas Rd
13 (45)
16
Sunrise Blvd
5 (3)
5 (3)
Jackson Rd/SR-16
1 (5)
2 (5)
17
Grant Line Rd
10 (6)
9 (6)
2 (2)
1 (3)
Jackson Rd/SR-16
3 (10)
3 (11)
18
Grant Line Rd
5 (3)
21 (14)
Keifer Blvd
2 (5)
7 (24)
19
Grant Line Rd
35 (23)
26 (17)
8 (29)
Douglas Rd
12 (39)
20
Grant Line Road
45 (149)
Raymer Way
134 (88)
61 (40)
20 (68)
21
Grant Line Rd
18 (60)
White Rock Rd
27 (89)
80 (52)
54 (36)
22
Prarie City Rd
7 (23)
11 (37)
White Rock Rd
21 (14)
33 (22)
LEGEND
Study Intersection
xx(xx) AM(PM) Peak-Hour Volumes



LEGEND

#	Study Intersection
xx(xx)	AM(PM) Peak-Hour Volumes

IMPACTS AND MITIGATION

Regulatory Setting and Thresholds of Significance

Sacramento County

The Circulation Element of the latest County of Sacramento General Plan[6] includes the following relevant provisions:

> *CI-9. Plan and design the roadway system in a manner that meets Level of Service (LOS) D on rural roadways and LOS E on urban roadways, unless it is infeasible to implement project alternatives or mitigation measures that would achieve LOS D on rural roadways or LOS E on urban roadways. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural.*
>
> *CI-35. The applicant/developer of land development projects shall be responsible to install bicycle and pedestrian facilities in accordance with Sacramento County Improvement Standards and may be responsible to participate in the fair share funding of regional multi-use trails identified in the Sacramento County Bicycle Master Plan.*

Sacramento County's traffic study guidelines[1] provide guidelines for the implementation of the General Plan provisions: "The County defines the minimum acceptable operation level for its roadways and intersections to be LOS D for rural areas and LOS E for urban areas. The urban areas are those areas within the Urban Service Boundary as shown in the Land Use Element of the Sacramento County General Plan. The areas outside the Urban Service Boundary are considered rural."

All of the Sacramento County study facilities are within the Urban Services Boundary. Therefore, LOS E is the minimum acceptable LOS for all County facilities.

Thresholds of Significance

Roadways/Signalized Intersections: A project is considered to have a significant effect if it would:

- result in a roadway or a signalized intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS; or
- increase the V/C ratio by more than 0.05 at a roadway or at a signalized intersection that is operating at an unacceptable LOS without the project.

Unsignalized Intersections: A project is considered to have a significant effect if it would:

- result in an unsignalized intersection movement/approach operating at an acceptable LOS to deteriorate to an unacceptable LOS, and also cause the intersection to meet a traffic signal warrant; or
- for an unsignalized intersection that meets a signal warrant, increase the delay by more than 5 seconds at a movement/approach that is operating at an unacceptable LOS without the project.

[6] *Sacramento County General Plan of 2005-2030,* Sacramento County Community Planning & Development Department, November 9, 2011.

City of Rancho Cordova

The Circulation Element of the City of Rancho Cordova's General Plan 2035 includes the following relevant provisions:

> *Policy C.1.2 - Seek to maintain operations on all roadways and intersections at Level of Service D or better at all times, including peak travel times, unless maintaining this Level of Service would, in the City's judgment, be infeasible and/or conflict with the achievement of other goals. Congestion in excess of Level of Service D may be accepted in these cases, provided that provisions are made to improve traffic flow and/or promote non-vehicular transportation as part of a development project or a City-initiated project. Please see Policy C.1.3 for additional policy guidance related to this issue.*
>
> *Examples of system improvements which may be accepted when Level of Service D cannot be maintained include the following, where the improvement or funding is in excess of standard City requirements:*
>
> *• Development of on- or off-street bicycle or pedestrian circulation (not including sidewalks that are constructed as part of roadway improvements);*
> *• Providing or funding public transportation facilities or services;*
> *• Other features as determined appropriate by the City.*
>
> *Policy C.1.3 - Recognize that regional traffic beyond the City's control, as well as circulation system decisions made prior to incorporation or by other agencies, will make it infeasible to achieve the City's desired Level of Service on all roadways. Subject development projects which affect these roadways to the provisions of Policy C.1.2 to provide offsetting improvements to the vehicular and/or non-vehicular transportation system.*

Impacts and Mitigation

Existing (2019) plus Proposed Project Conditions

As reflected in Table 6 and Table 7, the addition of the proposed project results in two (2) significant impacts. Analysis worksheets for the mitigations for this scenario are provided in Appendix F. The following is a discussion of each impact and its associated mitigation.

Intersection Impacts:

I1. Intersection #17, Jackson Road/SR-16 @ Grant Line Road
As shown in Table 6, this intersection operates at unacceptable LOS F during the AM and PM peak-hours without the project, and the project adds more than 5 seconds of delay to the intersection during the AM and PM peak-hours. ***This is a significant impact***.

I2. Intersection #20, Grant Line Road @ Raymer Way
As shown in Table 6, this intersection operates at LOS E and D during the AM and PM peak-hours without the project, and the project results in the intersection operating at LOS F. ***This is a significant impact***.

Mitigations:

M1. Intersection #17, Jackson Road/SR-16 @ Grant Line Road
The significant impact at this intersection during the AM and PM peak-hours can be mitigated by constructing a northbound and southbound left-turn pocket. As shown in Table 12, with the addition of this improvement, the intersection operates at LOS D during the AM and PM peak-

hours. However, a portion of the identified improvement lies outside of the City Limits and beyond the control of the City of Rancho Cordova. Because the City of Rancho Cordova cannot guarantee this measure can be implemented, the impact would remain ***significant and unavoidable***.

M2. Intersection #20, Grant Line Road @ Raymer

The significant impact at this intersection can be mitigated by converting the intersection from side street stop controlled to signalized along the existing Grant Line Road alignment. As shown in Table 12, with this mitigation, the intersection operates at LOS B and LOS C during the AM and PM peak-hours, respectively. Therefore, the impact is ***less than significant with mitigation***.

Table 12 – Intersection Levels of Service – Existing (2019) plus Proposed Project Mitigated Conditions

ID	Intersection	Control	Peak Hour	Existing (2019) plus Proposed Project		Control	Existing (2019) plus Proposed Project (Mitigated)	
				Delay (sec)	LOS		Delay (sec)	LOS
17	Jackson Road/SR-16 @ Grant Line Road	Signal	AM	**103.7**	**F**	Signal	46.3	D
			PM	**120.4**	**F**		40.1	D
20	Grant Line Road @ Raymer Way	SSSC	AM	**146.3 (606 EB)**	**F**	Signal	15.4	B
			PM	**84.1 (545 EB)**	**F**		22.2	C

Bold represents unacceptable operations. Shaded represents significant impact.

Cumulative plus Proposed Project Conditions

As reflected in Table 10 and Table 11, the addition of the proposed project results in three (3) significant impacts. Analysis worksheets for the mitigations for this scenario are provided in Appendix F. The following is a discussion of each impact and its associated mitigation.

Intersection Impacts:

I3. Intersection #20, Grant Line @ Raymer Way

As shown in Table 10, this intersection operates at unacceptable LOS F during the AM peak-hour without the project, and the project adds more than 5 seconds of delay to the intersection during the AM and PM peak-hours. ***This is a significant impact***.

I4. Intersection #21, Grant Line @ White Rock Road

As shown in Table 10, this intersection operates at unacceptable LOS F during the AM peak-hour without the project, and the project adds more than 5 seconds of delay to the intersection during the AM and PM peak-hours. ***This is a significant impact***.

I5. Intersection #22, White Rock Road @Prairie City Road

As shown in Table 10, this intersection operates at unacceptable LOS F during the AM and PM peak-hour without the project, and the project adds more than 5 seconds of delay to the intersection during the PM peak-hour. ***This is a significant impact***.

Mitigations:

M3. Intersection #20, Grant Line @ Raymer Way

The significant impact at this intersection can be mitigated by the addition of two eastbound left-turn lanes, a southbound left turn lane, a westbound left turn lane and restriping the thru-left land to a thru-right lane. It is expected that this these improvements will be implemented with the construction of the Capital South East Connector and related relocation of Grant Line Road. As shown in Table 13, this mitigation measure results in the intersection operating at LOS D during the AM and PM peak-hours. However, since the City of Rancho Cordova cannot guarantee the timing or implementation of Capital South East Connector, the impact would remain ***significant and unavoidable***.

M4. Intersection #21, Grant Line @ White Rock Road

The significant impact at this intersection during the AM and PM peak-hours can be mitigated by the addition of a northbound left-turn lane, a southbound through lane, and an eastbound left-turn lane. As shown in Table 13, this mitigation measure results in the intersection operating at LOS E and LOS D during the AM and PM peak-hours, respectively. However, the identified improvement lies outside of the City Limits and beyond the control of the City of Rancho Cordova. Because the City of Rancho Cordova cannot guarantee this measure can be implemented, the impact would remain ***significant and unavoidable***.

M5. Intersection #22, White Rock Road @ Prairie City Road

The significant impact at this intersection during the PM peak-hour can be mitigated with the addition of a second southbound right-turn lane and the addition of a right-turn overlap signal phase for the southbound right-turn. As shown in Table 13, this mitigation measure results in the intersection operating at LOS E during the AM and PM peak-hours. However, the identified improvement lies outside of the City Limits and beyond the control of the City of Rancho Cordova. Because the City of Rancho Cordova cannot guarantee this measure can be implemented, the impact would remain ***significant and unavoidable***.

Table 13 – Intersection Levels of Service – Cumulative (2035) plus Proposed Project Mitigated Conditions

ID	Intersection	Control	Peak Hour	Cumulative (2035) plus Proposed Project		Control	Cumulative (2035) plus Proposed Project (Mitigated)	
				Delay (sec)	LOS		Delay (sec)	LOS
20	Grant Line Road @ Raymer Way	Signal	AM	**206.3**	**F**	Signal	39.1	D
			PM	**129.1**	**F**		54.3	D
21	Grant Line Road @ White Rock Road	Signal	AM	**88.6**	**F**	Signal	59.2	E
			PM	**166.7**	**F**		46.7	D
22	White Rock Road @ Prairie City Road	Signal	AM	**182.6**	**F**	Signal	72.7	E
			PM	**260.5**	**F**		77.9	E

Bold represents unacceptable operations. Shaded represents significant impact.

CONCLUSIONS

Significant findings of this study include:

- The proposed project is estimated to generate 4,014 new daily trips, with 313 new trips occurring during the AM peak-hour, and 416 new trips occurring during the PM peak-hour.
- The addition of the proposed project to the Existing (2019) Conditions results in a significant impact at two (2) study intersections, Intersection #17 (Jackson Road/SR-16 at Grant Line Road) and Intersection #20 (Grant Line Road at Raymer Way). With the application of mitigation measures recommended herein, the impacts to Intersection #17 can be mitigated. However, because the City of Rancho Cordova cannot guarantee that mitigation measure M1 can be implemented, the impact would remain ***significant and unavoidable***. With the implementation of mitigation measure M2, the impact to Intersection #20 is ***less than significant with mitigation***.
- The addition of the proposed project to Cumulative (2035) Conditions results in a significant impact at three (3) intersections. With the application of mitigation measures recommended herein, the impacts to intersections can be mitigated. However, because the City of Rancho Cordova cannot guarantee that these mitigation measures (M3, M4, and M5) can be implemented, the impact would remain ***significant and unavoidable***.

Appendix A

Traffic Count Data Sheets

National Data & Surveying Services

Intersection Turning Movement Count

Location: Grant Line Rd & Kiefer Blvd
City: Rancho Cordova
Control: 3-Way Stop(NB/SB/WB)

Project ID: 19-07202-001
Date: 5/21/2019

Total

NS/EW Streets:	Grant Line Rd				Grant Line Rd				Kiefer Blvd				Kiefer Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	78	5	0	11	63	0	0	0	0	0	0	9	0	22	0	188
7:15 AM	0	110	1	0	15	61	0	0	0	0	0	0	1	0	49	1	238
7:30 AM	0	111	7	0	15	92	0	0	0	0	0	0	4	0	49	0	278
7:45 AM	0	112	5	0	11	75	0	0	0	0	0	0	3	0	48	0	254
8:00 AM	1	106	2	0	9	60	0	0	1	0	0	0	4	0	20	0	203
8:15 AM	0	111	7	0	7	57	0	0	0	0	0	0	5	0	23	0	210
8:30 AM	0	114	14	0	9	45	0	0	0	0	0	0	6	0	12	0	200
8:45 AM	0	101	18	0	8	46	1	0	0	0	0	0	3	0	16	0	193
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1	843	59	0	85	499	1	0	1	0	0	0	35	0	239	1	1764
APPROACH %'s :	0.11%	93.36%	6.53%	0.00%	14.53%	85.30%	0.17%	0.00%	100.00%	0.00%	0.00%	0.00%	12.73%	0.00%	86.91%	0.36%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	1	439	15	0	50	288	0	0	1	0	0	0	12	0	166	1	973
PEAK HR FACTOR :	0.250	0.980	0.536	0.000	0.833	0.783	0.000	0.000	0.250	0.000	0.000	0.000	0.750	0.000	0.847	0.250	0.875
		0.964				0.790				0.250				0.844			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	87	2	0	23	79	2	0	0	0	2	0	4	0	8	0	207
4:15 PM	1	98	5	0	26	99	0	0	2	0	0	0	5	1	10	0	247
4:30 PM	0	83	0	0	34	102	0	0	1	0	0	0	4	0	7	0	231
4:45 PM	0	80	0	0	42	87	2	0	0	2	0	0	8	0	6	0	227
5:00 PM	1	97	0	0	37	91	1	0	1	0	0	0	10	0	10	0	248
5:15 PM	1	96	0	0	32	113	1	0	0	0	0	0	1	0	10	0	254
5:30 PM	1	71	1	0	22	92	0	0	1	1	0	0	2	0	4	0	195
5:45 PM	0	75	0	0	21	68	1	0	0	0	1	0	0	0	5	0	171
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	4	687	8	0	237	731	7	0	5	3	3	0	34	1	60	0	1780
APPROACH %'s :	0.57%	98.28%	1.14%	0.00%	24.31%	74.97%	0.72%	0.00%	45.45%	27.27%	27.27%	0.00%	35.79%	1.05%	63.16%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	2	356	0	0	145	393	4	0	2	2	0	0	23	0	33	0	960
PEAK HR FACTOR :	0.500	0.918	0.000	0.000	0.863	0.869	0.500	0.000	0.500	0.250	0.000	0.000	0.575	0.000	0.825	0.000	0.945
		0.913				0.928				0.500				0.700			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Grant Line Rd & Jackson Rd/SR-16
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-002
Date: 5/21/2019

Total

NS/EW Streets:	Grant Line Rd				Grant Line Rd				Jackson Rd/SR-16				Jackson Rd/SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	63	4	0	5	51	13	0	16	67	0	0	9	177	6	0	411
7:15 AM	1	85	4	0	7	50	10	0	18	72	0	0	14	164	4	0	429
7:30 AM	1	90	2	0	9	56	19	0	23	54	0	0	9	153	12	0	428
7:45 AM	1	78	6	0	2	62	22	0	26	66	0	0	4	146	12	0	425
8:00 AM	2	75	11	0	5	42	25	0	21	50	1	0	5	127	19	0	383
8:15 AM	2	86	5	0	2	45	10	0	15	78	0	0	7	139	15	0	404
8:30 AM	1	94	7	0	3	45	12	0	21	56	3	0	12	133	16	0	403
8:45 AM	1	90	4	0	6	32	13	0	22	70	1	0	9	119	5	0	372
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	661	43	0	39	383	124	0	162	513	5	0	69	1158	89	0	3255
APPROACH %'s :	1.26%	92.71%	6.03%	0.00%	7.14%	70.15%	22.71%	0.00%	23.82%	75.44%	0.74%	0.00%	5.24%	87.99%	6.76%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	3	316	16	0	23	219	64	0	83	259	0	0	36	640	34	0	1693
PEAK HR FACTOR :	0.750	0.878	0.667	0.000	0.639	0.883	0.727	0.000	0.798	0.899	0.000	0.000	0.643	0.904	0.708	0.000	0.987
		0.901				0.890				0.929				0.924			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	1	1	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	71	13	0	11	66	11	0	5	144	1	0	7	72	0	0	402
4:15 PM	0	84	16	0	13	74	10	0	11	162	0	0	14	78	10	0	472
4:30 PM	1	56	10	0	6	93	9	0	15	186	0	0	18	98	11	0	503
4:45 PM	1	61	17	0	9	69	13	0	17	180	0	0	14	79	13	0	473
5:00 PM	1	72	15	0	9	87	19	0	16	156	0	0	11	79	6	0	471
5:15 PM	1	73	14	0	9	85	16	0	16	175	0	0	2	67	13	0	471
5:30 PM	0	56	13	0	9	81	8	0	14	174	0	0	11	75	14	0	455
5:45 PM	0	60	6	0	11	53	9	0	7	170	1	0	10	69	6	0	402
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	5	533	104	0	77	608	95	0	101	1347	2	0	87	617	73	0	3649
APPROACH %'s :	0.78%	83.02%	16.20%	0.00%	9.87%	77.95%	12.18%	0.00%	6.97%	92.90%	0.14%	0.00%	11.20%	79.41%	9.40%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	3	273	58	0	37	323	51	0	59	684	0	0	57	334	40	0	1919
PEAK HR FACTOR :	0.750	0.813	0.853	0.000	0.712	0.868	0.671	0.000	0.868	0.919	0.000	0.000	0.792	0.852	0.769	0.000	0.954
		0.835				0.893				0.924				0.848			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Zinfandel Dr & Douglas Rd
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-003
Date: 5/21/2019

Total

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				Douglas Rd				Douglas Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	2	1	1	0	1	2	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	3	23	9	0	22	2	9	0	54	27	0	0	3	72	137	0	361
7:15 AM	3	29	11	0	42	5	9	0	63	28	0	0	9	92	133	0	424
7:30 AM	3	56	11	0	43	2	11	0	81	38	1	0	2	73	106	0	427
7:45 AM	1	46	15	0	45	13	18	0	81	49	1	0	1	101	135	0	506
8:00 AM	0	47	9	0	44	5	17	0	69	42	0	0	4	78	109	0	424
8:15 AM	2	30	9	0	43	7	26	0	73	56	0	0	5	87	94	0	432
8:30 AM	2	37	16	0	42	7	19	0	47	40	1	0	5	42	110	1	369
8:45 AM	2	19	6	0	35	7	10	0	38	20	1	0	9	46	94	0	287
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	287	86	0	316	48	119	0	506	300	4	0	38	591	918	1	3230
APPROACH %'s :	4.11%	73.78%	22.11%	0.00%	65.42%	9.94%	24.64%	0.00%	62.47%	37.04%	0.49%	0.00%	2.45%	38.18%	59.30%	0.06%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	6	179	44	0	175	27	72	0	304	185	2	0	12	339	444	0	1789
PEAK HR FACTOR :	0.500	0.799	0.733	0.000	0.972	0.519	0.692	0.000	0.938	0.826	0.500	0.000	0.600	0.839	0.822	0.000	0.884
	0.818				0.901				0.937				0.839				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	2	1	1	0	1	2	0	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	14	10	0	132	35	59	0	17	64	3	0	13	51	47	0	445
4:15 PM	0	8	9	0	149	32	79	0	13	66	3	0	13	39	52	0	463
4:30 PM	1	19	11	0	144	39	85	0	21	75	3	0	19	56	61	0	534
4:45 PM	0	6	8	0	135	36	88	0	19	86	2	0	17	44	60	0	501
5:00 PM	2	14	10	0	152	39	95	0	23	67	5	0	12	53	65	0	537
5:15 PM	1	14	10	0	178	36	81	0	13	73	5	0	13	52	65	1	542
5:30 PM	4	17	7	0	157	42	66	0	19	70	3	0	21	40	56	0	502
5:45 PM	2	8	6	0	145	28	64	0	15	44	1	0	7	47	42	0	409
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	100	71	0	1192	287	617	0	140	545	25	0	115	382	448	1	3933
APPROACH %'s :	5.52%	55.25%	39.23%	0.00%	56.87%	13.69%	29.44%	0.00%	19.72%	76.76%	3.52%	0.00%	12.16%	40.38%	47.36%	0.11%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	4	53	39	0	609	150	349	0	76	301	15	0	61	205	251	1	2114
PEAK HR FACTOR :	0.500	0.697	0.886	0.000	0.855	0.962	0.918	0.000	0.826	0.875	0.750	0.000	0.803	0.915	0.965	0.250	0.975
	0.774				0.939				0.916				0.952				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Grant Line Rd & Douglas Rd
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-005
Date: 5/21/2019

Total

NS/EW Streets:	Grant Line Rd				Grant Line Rd				Douglas Rd				Douglas Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	1	0	1	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	13	87	0	0	0	69	12	0	27	0	11	0	0	0	0	0	219
7:15 AM	27	117	0	0	0	71	14	0	34	0	5	0	0	0	0	0	268
7:30 AM	24	119	0	0	0	88	18	0	74	0	6	0	0	0	0	0	329
7:45 AM	33	133	0	0	0	76	23	0	36	0	7	0	0	0	0	0	308
8:00 AM	10	112	0	0	0	65	17	0	52	0	4	0	0	0	0	0	260
8:15 AM	13	111	0	0	0	55	12	0	62	0	3	0	0	0	0	0	256
8:30 AM	11	124	0	0	0	52	15	0	43	0	6	0	0	0	0	0	251
8:45 AM	8	112	0	0	0	42	11	0	33	0	4	0	0	0	0	0	210
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	139	915	0	0	0	518	122	0	361	0	46	0	0	0	0	0	2101
APPROACH %'s :	13.19%	86.81%	0.00%	0.00%	0.00%	80.94%	19.06%	0.00%	88.70%	0.00%	11.30%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	94	481	0	0	0	300	72	0	196	0	22	0	0	0	0	0	1165
PEAK HR FACTOR :	0.712	0.904	0.000	0.000	0.000	0.852	0.783	0.000	0.662	0.000	0.786	0.000	0.000	0.000	0.000	0.000	0.885
		0.866				0.877				0.681							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	1	0	1	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	2	86	0	0	0	85	35	0	37	0	10	0	0	0	0	0	255
4:15 PM	6	109	0	0	0	125	41	0	35	0	18	1	0	0	0	0	335
4:30 PM	5	80	0	0	0	86	38	0	42	0	33	0	0	0	0	0	284
4:45 PM	2	75	0	0	0	114	45	0	26	0	26	1	0	0	0	0	289
5:00 PM	7	101	0	0	0	107	39	0	39	0	24	0	0	0	0	0	317
5:15 PM	8	96	0	0	0	119	44	0	35	0	22	0	0	0	0	0	324
5:30 PM	2	77	0	0	0	96	52	0	48	0	11	0	0	0	0	0	286
5:45 PM	3	87	0	0	0	68	36	0	29	0	12	0	0	0	0	0	235
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	35	711	0	0	0	800	330	0	291	0	156	2	0	0	0	0	2325
APPROACH %'s :	4.69%	95.31%	0.00%	0.00%	0.00%	70.80%	29.20%	0.00%	64.81%	0.00%	34.74%	0.45%					
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	20	365	0	0	0	432	163	0	142	0	101	2	0	0	0	0	1225
PEAK HR FACTOR :	0.714	0.837	0.000	0.000	0.000	0.864	0.906	0.000	0.845	0.000	0.765	0.500	0.000	0.000	0.000	0.000	0.914
		0.837				0.896				0.817							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mather Field Rd & US-50 WB Ramps
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-006
Date: 5/22/2019

Total

NS/EW Streets:	Mather Field Rd				Mather Field Rd				US-50 WB Ramps				US-50 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	1	0	0	0	0	0	1.5	0	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	146	166	0	0	112	123	0	0	0	0	0	212	0	40	0	799
7:15 AM	0	169	140	0	0	175	82	0	0	0	0	0	227	0	60	0	853
7:30 AM	0	205	104	0	0	179	88	0	0	0	0	0	247	0	56	0	879
7:45 AM	0	188	96	0	0	205	76	0	0	0	0	0	284	0	67	0	916
8:00 AM	0	189	121	0	0	178	115	0	0	0	0	0	213	0	67	0	883
8:15 AM	0	158	129	0	0	193	111	0	0	0	0	0	234	0	50	0	875
8:30 AM	0	148	138	0	0	168	104	0	0	0	0	0	189	0	52	0	799
8:45 AM	0	135	122	0	0	115	98	0	0	0	0	0	151	0	61	0	682
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1338	1016	0	0	1325	797	0	0	0	0	0	1757	0	453	0	6686
APPROACH %'s :	0.00%	56.84%	43.16%	0.00%	0.00%	62.44%	37.56%	0.00%					79.50%	0.00%	20.50%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	740	450	0	0	755	390	0	0	0	0	0	978	0	240	0	3553
PEAK HR FACTOR :	0.000	0.902	0.872	0.000	0.000	0.921	0.848	0.000	0.000	0.000	0.000	0.000	0.861	0.000	0.896	0.000	0.970
		0.960				0.942								0.868			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	2	1	0	0	2	1	0	0	0	0	0	1.5	0	0.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	227	263	0	0	143	109	0	0	0	0	0	70	0	72	0	884
4:15 PM	0	241	205	0	0	136	68	0	0	0	0	0	65	0	75	0	790
4:30 PM	0	279	246	0	0	136	95	0	0	0	0	0	83	0	81	0	920
4:45 PM	0	290	240	0	0	146	84	0	0	0	0	0	98	0	94	0	952
5:00 PM	0	293	245	0	0	176	97	0	0	0	0	0	97	0	77	0	985
5:15 PM	0	286	235	0	0	125	83	0	0	0	0	0	123	0	101	0	953
5:30 PM	0	240	176	0	0	136	90	0	0	0	0	0	91	0	84	0	817
5:45 PM	0	234	149	0	0	129	86	0	0	0	0	0	100	0	87	0	785
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2090	1759	0	0	1127	712	0	0	0	0	0	727	0	671	0	7086
APPROACH %'s :	0.00%	54.30%	45.70%	0.00%	0.00%	61.28%	38.72%	0.00%					52.00%	0.00%	48.00%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1148	966	0	0	583	359	0	0	0	0	0	401	0	353	0	3810
PEAK HR FACTOR :	0.000	0.980	0.982	0.000	0.000	0.828	0.925	0.000	0.000	0.000	0.000	0.000	0.815	0.000	0.874	0.000	0.967
		0.982				0.863								0.842			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mather Field Rd & US-50 EB Ramps
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-007
Date: 5/22/2019

Total

NS/EW Streets:	Mather Field Rd				Mather Field Rd				US-50 EB Ramps				US-50 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	2	0	0	2	1	0	1.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	237	66	0	0	284	46	0	76	0	222	0	0	0	0	0	931
7:15 AM	0	238	84	0	0	309	80	0	67	0	265	0	0	0	0	0	1043
7:30 AM	0	230	88	0	0	348	96	0	83	0	305	0	0	0	0	0	1150
7:45 AM	0	225	86	0	0	387	79	0	61	0	329	0	0	0	0	0	1167
8:00 AM	0	219	77	0	0	346	63	0	84	0	261	0	0	0	0	0	1050
8:15 AM	0	206	82	0	0	338	79	0	84	0	278	0	0	0	0	0	1067
8:30 AM	0	205	82	0	0	278	77	0	76	0	242	0	0	0	0	0	960
8:45 AM	0	178	69	0	0	225	52	0	76	0	200	0	0	0	0	0	800
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1738	634	0	0	2515	572	0	607	0	2102	0	0	0	0	0	8168
APPROACH %'s :	0.00%	73.27%	26.73%	0.00%	0.00%	81.47%	18.53%	0.00%	22.41%	0.00%	77.59%	0.00%					
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	880	333	0	0	1419	317	0	312	0	1173	0	0	0	0	0	4434
PEAK HR FACTOR :	0.000	0.957	0.946	0.000	0.000	0.917	0.826	0.000	0.929	0.000	0.891	0.000	0.000	0.000	0.000	0.000	0.950
		0.954				0.931				0.952							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	2	0	0	2	1	0	1.5	0	1.5	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	381	239	0	0	137	70	0	113	0	157	0	0	0	0	0	1097
4:15 PM	0	285	179	0	0	162	48	0	150	0	146	0	0	0	0	0	970
4:30 PM	0	402	211	0	0	151	52	0	131	0	144	0	0	0	0	0	1091
4:45 PM	0	388	182	0	0	202	48	0	120	0	158	0	0	0	0	0	1098
5:00 PM	0	432	182	0	0	188	71	0	124	0	119	0	0	0	0	0	1116
5:15 PM	0	349	140	0	0	203	60	0	159	0	164	0	0	0	0	0	1075
5:30 PM	0	291	99	0	0	186	57	0	128	0	153	0	0	0	0	0	914
5:45 PM	0	244	83	0	0	183	42	0	145	0	148	0	0	0	0	0	845
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2772	1315	0	0	1412	448	0	1070	0	1189	0	0	0	0	0	8206
APPROACH %'s :	0.00%	67.82%	32.18%	0.00%	0.00%	75.91%	24.09%	0.00%	47.37%	0.00%	52.63%	0.00%					
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1571	715	0	0	744	231	0	534	0	585	0	0	0	0	0	4380
PEAK HR FACTOR :	0.000	0.909	0.847	0.000	0.000	0.916	0.813	0.000	0.840	0.000	0.892	0.000	0.000	0.000	0.000	0.000	0.981
		0.931				0.927				0.866							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Mather Field Rd & International Dr
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-008
Date: 5/22/2019

Total

NS/EW Streets:	Mather Field Rd				Mather Field Rd				International Dr				International Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	0	1	0	0	0	0	0	0	3	1	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	61	0	12	0	0	0	0	0	0	144	204	0	10	166	0	1	598
7:15 AM	65	0	9	0	0	0	0	0	0	203	174	0	20	183	0	3	657
7:30 AM	69	0	11	0	0	0	0	0	0	193	184	0	23	214	0	3	697
7:45 AM	62	0	11	0	0	0	0	0	0	284	234	0	22	168	0	4	785
8:00 AM	67	0	13	0	0	0	0	0	0	231	208	0	19	139	0	8	685
8:15 AM	81	0	12	0	0	0	0	0	0	223	193	0	21	151	0	16	697
8:30 AM	66	0	17	0	0	0	0	0	0	198	163	0	4	142	0	2	592
8:45 AM	82	0	6	0	0	0	0	0	0	173	162	0	18	126	0	5	572
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	553	0	91	0	0	0	0	0	0	1649	1522	0	137	1289	0	42	5283
APPROACH %'s :	85.87%	0.00%	14.13%	0.00%					0.00%	52.00%	48.00%	0.00%	9.33%	87.81%	0.00%	2.86%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	279	0	47	0	0	0	0	0	0	931	819	0	85	672	0	31	2864
PEAK HR FACTOR :	0.861	0.000	0.904	0.000	0.000	0.000	0.000	0.000	0.000	0.820	0.875	0.000	0.924	0.785	0.000	0.484	0.912
	0.876									0.845				0.821			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	0	1	0	0	0	0	0	0	3	1	0	1	3	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	263	0	33	0	0	0	0	0	0	145	41	0	25	264	0	2	773
4:15 PM	153	0	26	0	0	0	0	0	0	179	59	0	18	234	0	4	673
4:30 PM	251	0	26	0	0	0	0	0	0	165	55	0	18	254	0	1	770
4:45 PM	145	0	21	0	0	0	0	0	0	186	57	0	23	247	0	0	679
5:00 PM	174	0	30	0	0	0	0	0	0	219	55	0	32	291	0	4	805
5:15 PM	107	0	19	0	0	0	0	0	0	211	57	0	30	255	0	1	680
5:30 PM	108	0	9	0	0	0	0	0	0	185	53	0	17	220	0	2	594
5:45 PM	73	0	7	0	0	0	0	0	0	188	60	0	8	179	0	6	521
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	1274	0	171	0	0	0	0	0	0	1478	437	0	171	1944	0	20	5495
APPROACH %'s :	88.17%	0.00%	11.83%	0.00%					0.00%	77.18%	22.82%	0.00%	8.01%	91.05%	0.00%	0.94%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	677	0	96	0	0	0	0	0	0	781	224	0	103	1047	0	6	2934
PEAK HR FACTOR :	0.674	0.000	0.800	0.000	0.000	0.000	0.000	0.000	0.000	0.892	0.982	0.000	0.805	0.899	0.000	0.375	0.911
	0.698									0.917				0.884			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Zinfandel Dr & International Dr
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-009
Date: 5/22/2019

Total

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				International Dr				International Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	1	0	2	3	0	0	2	3	0	0	2	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	65	195	14	2	18	59	42	1	15	59	14	1	10	76	25	4	600
7:15 AM	71	234	16	8	24	62	47	0	19	62	14	1	14	93	24	5	694
7:30 AM	47	221	21	7	40	71	61	1	21	81	16	3	13	86	30	0	719
7:45 AM	71	208	30	9	29	138	75	2	28	95	21	3	29	113	19	4	874
8:00 AM	56	219	26	19	39	98	58	1	25	83	13	3	25	86	26	0	777
8:15 AM	50	224	25	7	35	119	65	1	27	78	13	6	17	82	26	4	779
8:30 AM	58	148	6	5	27	74	40	1	36	83	22	0	14	63	30	4	611
8:45 AM	52	160	18	7	28	91	57	1	34	68	13	2	16	54	28	2	631
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	470	1609	156	64	240	712	445	8	205	609	126	19	138	653	208	23	5685
APPROACH %'s :	20.44%	69.99%	6.79%	2.78%	17.08%	50.68%	31.67%	0.57%	21.38%	63.50%	13.14%	1.98%	13.50%	63.89%	20.35%	2.25%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	224	872	102	42	143	426	259	5	101	337	63	15	84	367	101	8	3149
PEAK HR FACTOR :	0.789	0.973	0.850	0.553	0.894	0.772	0.863	0.625	0.902	0.887	0.750	0.625	0.724	0.812	0.842	0.500	0.901
	0.969				0.853				0.878				0.848				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	1	0	2	3	0	0	2	3	0	0	2	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	20	91	12	4	46	182	48	1	80	104	56	2	32	106	41	7	832
4:15 PM	26	125	11	5	43	214	34	2	63	124	51	2	31	73	20	4	828
4:30 PM	30	106	16	1	36	204	30	4	89	134	54	4	36	76	31	7	858
4:45 PM	27	99	11	1	31	204	33	1	65	107	61	2	35	97	34	11	819
5:00 PM	28	118	16	6	56	242	31	2	77	133	66	3	44	108	30	13	973
5:15 PM	30	88	16	11	42	213	31	1	56	98	57	2	27	79	34	8	793
5:30 PM	28	113	13	6	48	219	19	1	45	78	63	1	35	94	24	6	793
5:45 PM	23	108	17	7	27	191	22	7	30	64	56	2	30	79	23	6	692
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	212	848	112	41	329	1669	248	19	505	842	464	18	270	712	237	62	6588
APPROACH %'s :	17.48%	69.91%	9.23%	3.38%	14.53%	73.69%	10.95%	0.84%	27.61%	46.04%	25.37%	0.98%	21.08%	55.58%	18.50%	4.84%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	111	448	54	13	166	864	128	9	294	498	232	11	146	354	115	35	3478
PEAK HR FACTOR :	0.925	0.896	0.844	0.542	0.741	0.893	0.941	0.563	0.826	0.929	0.879	0.688	0.830	0.819	0.846	0.673	0.894
	0.932				0.881				0.921				0.833				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Zinfandel Dr & White Rock Rd
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-010
Date: 5/22/2019

Total

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				White Rock Rd				White Rock Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	3	0	0	2	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	8	214	3	0	125	171	122	0	35	17	3	4	7	19	72	1	801
7:15 AM	8	272	6	0	151	313	155	0	45	19	6	4	6	24	54	0	1063
7:30 AM	7	250	5	0	154	287	147	0	62	26	6	1	4	18	81	0	1048
7:45 AM	8	238	5	0	199	373	170	0	46	28	5	1	6	29	48	0	1156
8:00 AM	14	243	2	0	202	329	169	0	61	27	10	2	9	21	44	0	1133
8:15 AM	11	277	6	0	195	384	172	0	39	20	9	3	5	19	68	1	1209
8:30 AM	9	241	8	0	138	244	139	0	77	16	8	2	7	20	49	1	959
8:45 AM	11	209	6	0	129	282	112	0	49	21	5	4	9	18	56	1	912
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	76	1944	41	0	1293	2383	1186	0	414	174	52	21	53	168	472	4	8281
APPROACH %'s :	3.69%	94.32%	1.99%	0.00%	26.59%	49.01%	24.39%	0.00%	62.63%	26.32%	7.87%	3.18%	7.60%	24.10%	67.72%	0.57%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	40	1008	18	0	750	1373	658	0	208	101	30	7	24	87	241	1	4546
PEAK HR FACTOR :	0.714	0.910	0.750	0.000	0.928	0.894	0.956	0.000	0.839	0.902	0.750	0.583	0.667	0.750	0.744	0.250	0.940
		0.906				0.926				0.865				0.857			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	2	3	1	0	2	3	0	0	2	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	14	262	5	0	76	215	57	0	132	27	4	1	12	27	146	2	980
4:15 PM	10	321	5	0	62	228	52	0	140	31	10	4	11	28	147	3	1052
4:30 PM	13	294	3	0	101	291	51	0	148	44	12	4	11	27	157	1	1157
4:45 PM	11	282	3	1	85	241	69	0	157	38	13	3	8	30	176	1	1118
5:00 PM	21	266	6	0	90	295	68	0	136	46	9	2	8	42	180	1	1170
5:15 PM	13	286	7	0	80	302	75	0	149	45	8	6	12	25	183	0	1191
5:30 PM	8	259	8	0	82	311	60	0	108	20	12	1	9	32	130	1	1041
5:45 PM	4	272	5	0	63	260	76	0	91	30	11	2	5	29	123	2	973
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	94	2242	42	1	639	2143	508	0	1061	281	79	23	76	240	1242	11	8682
APPROACH %'s :	3.95%	94.24%	1.77%	0.04%	19.42%	65.14%	15.44%	0.00%	73.48%	19.46%	5.47%	1.59%	4.84%	15.30%	79.16%	0.70%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	58	1128	19	1	356	1129	263	0	590	173	42	15	39	124	696	3	4636
PEAK HR FACTOR :	0.690	0.959	0.679	0.250	0.881	0.935	0.877	0.000	0.939	0.940	0.808	0.625	0.813	0.738	0.951	0.750	0.973
		0.973				0.956				0.972				0.933			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Zinfandel Dr & US-50 EB Ramps
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-011
Date: 5/22/2019

Total

NS/EW Streets:	Zinfandel Dr					Zinfandel Dr				US-50 EB Ramps					US-50 EB Ramps					
AM	NORTHBOUND					SOUTHBOUND				EASTBOUND					WESTBOUND					
	0	4	0	0	0	0	2	1	0	1.5	1.5	1.5	0	0	0	0	2	0	0	
	NL	NT	NR	NU	NT2	SL	ST	SR	SU	EL	ET	ER	EU	EL2	WL	WT	WR	WU	WR2	TOTAL
7:00 AM	0	263	0	0	97	0	221	33	0	63	152	225	0	0	0	0	27	0	5	1086
7:15 AM	0	240	0	0	92	0	320	44	0	80	204	275	0	0	0	0	33	0	11	1299
7:30 AM	0	264	7	0	143	0	370	58	0	75	197	251	0	1	0	0	29	0	5	1400
7:45 AM	0	200	6	0	102	0	431	45	0	110	253	301	0	0	0	0	25	0	11	1484
8:00 AM	0	271	2	0	112	0	472	45	0	93	209	254	0	0	0	0	23	0	6	1487
8:15 AM	0	250	0	0	112	0	411	53	0	99	190	289	0	0	0	0	25	0	5	1434
8:30 AM	0	235	2	0	115	0	300	40	0	88	173	208	0	0	0	0	36	0	8	1205
8:45 AM	0	242	1	0	93	0	324	28	0	93	148	196	0	0	0	0	25	0	6	1156
	NL	NT	NR	NU	NT2	SL	ST	SR	SU	EL	ET	ER	EU	EL2	WL	WT	WR	WU	WR2	TOTAL
TOTAL VOLUMES :	0	1965	18	0	866	0	2849	346	0	701	1526	1999	0	1	0	0	223	0	57	10551
APPROACH %'s :	0.00%	68.97%	0.63%	0.00%	30.40%	0.00%	89.17%	10.83%	0.00%	16.58%	36.10%	47.29%	0.00%	0.02%	0.00%	0.00%	79.64%	0.00%	20.36%	
PEAK HR :	07:30 AM - 08:30 AM																			TOTAL
PEAK HR VOL :	0	985	15	0	469	0	1684	201	0	377	849	1095	0	1	0	0	102	0	27	5805
PEAK HR FACTOR :	0.000	0.909	0.536	0.000	0.820	0.000	0.892	0.866	0.000	0.857	0.839	0.909	0.000	0.250	0.000	0.000	0.879	0.000	0.614	0.976
			0.887				0.912					0.874					0.896			

NS/EW Streets:	Zinfandel Dr					Zinfandel Dr				US-50 EB Ramps					US-50 EB Ramps					
PM	NORTHBOUND					SOUTHBOUND				EASTBOUND					WESTBOUND					
	0	4	0	0	0	0	2	1	0	1.5	1.5	1.5	0	0	0	0	2	0	0	
	NL	NT	NR	NU	NT2	SL	ST	SR	SU	EL	ET	ER	EU	EL2	WL	WT	WR	WU	WR2	TOTAL
4:00 PM	0	428	0	0	123	0	212	29	0	191	35	151	0	0	0	0	206	0	33	1408
4:15 PM	0	464	0	0	143	0	230	22	0	141	24	153	0	1	0	0	169	0	33	1380
4:30 PM	0	471	3	0	139	0	229	29	0	169	34	173	0	0	0	0	203	0	35	1485
4:45 PM	0	477	1	0	109	0	273	33	0	170	26	162	0	0	0	0	171	0	29	1451
5:00 PM	0	492	0	0	106	0	249	23	0	187	35	166	0	0	0	0	208	0	35	1501
5:15 PM	0	498	3	0	110	0	306	29	0	166	35	175	0	0	0	0	154	0	28	1504
5:30 PM	0	375	1	0	104	0	251	26	0	197	31	167	0	0	0	0	159	0	19	1330
5:45 PM	0	382	1	0	102	0	263	27	0	168	30	150	0	1	0	0	122	0	30	1276
	NL	NT	NR	NU	NT2	SL	ST	SR	SU	EL	ET	ER	EU	EL2	WL	WT	WR	WU	WR2	TOTAL
TOTAL VOLUMES :	0	3587	9	0	936	0	2013	218	0	1389	250	1297	0	2	0	0	1392	0	242	11335
APPROACH %'s :	0.00%	79.15%	0.20%	0.00%	20.65%	0.00%	90.23%	9.77%	0.00%	47.28%	8.51%	44.15%	0.00%	0.07%	0.00%	0.00%	85.19%	0.00%	14.81%	
PEAK HR :	04:30 PM - 05:30 PM																			TOTAL
PEAK HR VOL :	0	1938	7	0	464	0	1057	114	0	692	130	676	0	0	0	0	736	0	127	5941
PEAK HR FACTOR :	0.000	0.973	0.583	0.000	0.835	0.000	0.864	0.864	0.000	0.925	0.929	0.966	0.000	0.000	0.000	0.000	0.885	0.000	0.907	0.988
			0.982				0.874					0.965					0.888			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Zinfandel Dr & US-50 WB Ramps
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-012
Date: 5/22/2019

Total

NS/EW Streets:	Zinfandel Dr				Zinfandel Dr				US-50 WB Ramps				US-50 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	2	0	0	2	1	0	0	0	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	122	227	0	0	93	97	0	0	0	0	0	155	0	19	0	713
7:15 AM	0	162	193	0	0	140	82	0	0	0	0	0	246	0	43	0	866
7:30 AM	0	211	121	0	0	200	74	0	0	0	0	0	203	0	62	0	871
7:45 AM	0	234	139	0	0	199	73	0	0	0	0	0	300	0	75	0	1020
8:00 AM	0	270	126	0	0	188	79	0	0	0	0	0	302	0	42	0	1007
8:15 AM	0	199	136	0	0	173	85	0	0	0	0	0	277	0	54	0	924
8:30 AM	0	253	139	0	0	166	93	0	0	0	0	0	194	0	41	0	886
8:45 AM	0	220	130	0	0	147	71	0	0	0	0	0	231	0	53	0	852
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1671	1211	0	0	1306	654	0	0	0	0	0	1908	0	389	0	7139
APPROACH %'s :	0.00%	57.98%	42.02%	0.00%	0.00%	66.63%	33.37%	0.00%					83.06%	0.00%	16.94%	0.00%	
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	956	540	0	0	726	330	0	0	0	0	0	1073	0	212	0	3837
PEAK HR FACTOR :	0.000	0.885	0.971	0.000	0.000	0.912	0.887	0.000	0.000	0.000	0.000	0.000	0.888	0.000	0.707	0.000	0.940
		0.944				0.971								0.857			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	2	0	0	2	1	0	0	0	0	0	2	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	396	457	0	0	186	122	0	0	0	0	0	82	0	67	0	1310
4:15 PM	0	389	368	0	0	161	137	0	0	0	0	0	78	0	79	0	1212
4:30 PM	0	402	454	0	0	185	136	0	0	0	0	0	93	0	82	0	1352
4:45 PM	0	427	402	0	0	200	133	0	0	0	0	0	97	0	73	0	1332
5:00 PM	0	428	434	0	0	205	144	0	0	0	0	0	87	0	66	0	1364
5:15 PM	0	398	435	0	0	185	154	0	0	0	0	0	117	0	89	0	1378
5:30 PM	0	429	318	0	0	197	119	0	0	0	0	0	105	0	60	0	1228
5:45 PM	0	364	287	0	0	189	115	0	0	0	0	0	82	0	67	0	1104
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3233	3155	0	0	1508	1060	0	0	0	0	0	741	0	583	0	10280
APPROACH %'s :	0.00%	50.61%	49.39%	0.00%	0.00%	58.72%	41.28%	0.00%					55.97%	0.00%	44.03%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	1655	1725	0	0	775	567	0	0	0	0	0	394	0	310	0	5426
PEAK HR FACTOR :	0.000	0.967	0.950	0.000	0.000	0.945	0.920	0.000	0.000	0.000	0.000	0.000	0.842	0.000	0.871	0.000	0.984
		0.980				0.961								0.854			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & White Rock Rd
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-013
Date: 5/22/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				White Rock Rd				White Rock Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	1	0	2	3	1	0	2	2	1	0	2	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	63	238	23	10	57	201	62	4	27	47	9	14	21	54	23	0	853
7:15 AM	57	247	19	9	54	198	66	4	20	38	15	15	41	52	46	0	881
7:30 AM	84	292	24	8	46	205	62	5	31	52	18	15	39	83	24	0	988
7:45 AM	72	275	18	12	52	234	65	4	25	57	21	11	43	62	36	1	988
8:00 AM	66	256	21	9	50	213	69	11	29	43	22	20	30	64	27	1	931
8:15 AM	69	262	19	13	75	199	58	9	22	54	14	13	34	57	29	0	927
8:30 AM	55	243	30	4	52	222	51	6	25	30	15	13	31	49	29	0	855
8:45 AM	47	253	16	11	40	220	39	10	24	41	22	9	35	39	33	1	840
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	513	2066	170	76	426	1692	472	53	203	362	136	110	274	460	247	3	7263
APPROACH %'s :	18.16%	73.13%	6.02%	2.69%	16.12%	64.02%	17.86%	2.01%	25.03%	44.64%	16.77%	13.56%	27.85%	46.75%	25.10%	0.30%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	291	1085	82	42	223	851	254	29	107	206	75	59	146	266	116	2	3834
PEAK HR FACTOR :	0.866	0.929	0.854	0.808	0.743	0.909	0.920	0.659	0.863	0.904	0.852	0.738	0.849	0.801	0.806	0.500	0.970
		0.919				0.956				0.963				0.908			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	1	0	2	3	1	0	2	2	1	0	2	3	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	38	228	42	15	61	340	24	6	46	99	54	3	55	67	57	2	1137
4:15 PM	50	201	44	14	51	299	21	10	40	119	43	2	49	62	52	0	1057
4:30 PM	59	237	60	16	60	321	19	2	61	118	80	6	36	82	46	1	1204
4:45 PM	52	220	38	18	62	292	31	8	64	145	41	5	60	67	52	2	1157
5:00 PM	71	258	57	19	59	288	40	5	84	177	63	9	51	126	62	1	1370
5:15 PM	49	224	42	19	56	329	28	1	70	108	42	9	56	58	52	1	1144
5:30 PM	51	188	28	20	54	275	31	9	48	97	43	7	53	56	42	1	1003
5:45 PM	22	183	21	8	49	241	34	6	43	73	26	9	47	40	47	1	850
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	392	1739	332	129	452	2385	228	47	456	936	392	50	407	558	410	9	8922
APPROACH %'s :	15.12%	67.09%	12.81%	4.98%	14.52%	76.64%	7.33%	1.51%	24.86%	51.04%	21.37%	2.73%	29.41%	40.32%	29.62%	0.65%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	231	939	197	72	237	1230	118	16	279	548	226	29	203	333	212	5	4875
PEAK HR FACTOR :	0.813	0.910	0.821	0.947	0.956	0.935	0.738	0.500	0.830	0.774	0.706	0.806	0.846	0.661	0.855	0.625	0.890
		0.888				0.967				0.812				0.784			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & Folsom Blvd
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-014
Date: 5/22/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				Folsom Blvd				Folsom Blvd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	4	1	0	2	3	1	0	2	2	1	0	2	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	10	250	20	1	69	545	62	2	34	34	8	0	60	36	31	0	1162
7:15 AM	8	277	20	0	70	475	79	1	41	32	26	0	62	55	42	0	1188
7:30 AM	15	329	27	1	55	487	66	0	54	36	12	0	70	55	34	0	1241
7:45 AM	15	300	30	1	68	533	87	0	51	49	34	0	73	69	32	0	1342
8:00 AM	28	309	26	0	54	562	79	0	49	45	28	0	59	51	37	0	1327
8:15 AM	12	308	20	0	53	547	77	0	59	41	19	0	70	41	26	0	1273
8:30 AM	16	303	20	1	72	484	77	0	53	36	23	0	63	40	39	0	1227
8:45 AM	19	330	32	0	51	469	75	0	42	27	17	0	47	38	44	0	1191
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	123	2406	195	4	492	4102	602	3	383	300	167	0	504	385	285	0	9951
APPROACH %'s :	4.51%	88.20%	7.15%	0.15%	9.46%	78.90%	11.58%	0.06%	45.06%	35.29%	19.65%	0.00%	42.93%	32.79%	24.28%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	70	1246	103	2	230	2129	309	0	213	171	93	0	272	216	129	0	5183
PEAK HR FACTOR :	0.625	0.947	0.858	0.500	0.846	0.947	0.888	0.000	0.903	0.872	0.684	0.000	0.932	0.783	0.872	0.000	0.966
	0.955				0.960				0.890				0.886				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	4	1	0	2	3	1	0	2	2	1	0	2	1.5	1.5	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	16	464	50	1	51	280	60	2	100	67	26	0	49	54	61	0	1281
4:15 PM	27	451	59	1	63	274	59	0	111	83	28	0	42	60	60	0	1318
4:30 PM	29	355	56	1	43	270	66	2	115	84	25	0	55	74	69	0	1244
4:45 PM	32	420	54	1	65	258	67	0	104	82	29	0	48	56	64	0	1280
5:00 PM	30	413	56	0	68	320	53	0	92	98	25	0	61	54	59	0	1329
5:15 PM	33	378	76	0	60	255	70	1	101	110	27	0	67	77	53	0	1308
5:30 PM	27	383	59	0	58	274	61	0	66	87	21	0	54	61	50	0	1201
5:45 PM	14	291	68	0	52	253	59	0	82	61	28	0	39	42	45	0	1034
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	208	3155	478	4	460	2184	495	5	771	672	209	0	415	478	461	0	9995
APPROACH %'s :	5.41%	82.05%	12.43%	0.10%	14.63%	69.47%	15.74%	0.16%	46.67%	40.68%	12.65%	0.00%	30.65%	35.30%	34.05%	0.00%	
PEAK HR :	04:15 PM - 05:15 PM																TOTAL
PEAK HR VOL :	118	1639	225	3	239	1122	245	2	422	347	107	0	206	244	252	0	5171
PEAK HR FACTOR :	0.922	0.909	0.953	0.750	0.879	0.877	0.914	0.250	0.917	0.885	0.922	0.000	0.844	0.824	0.913	0.000	0.973
	0.922				0.912				0.978				0.886				

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & US-50 EB Ramps
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-015
Date: 5/22/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				US-50 EB Ramps				US-50 EB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	4	2	0	0	3	2	0	3	0	2	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	241	87	0	0	548	80	0	179	0	142	0	0	0	0	0	1277
7:15 AM	0	256	96	0	0	444	102	0	278	0	160	0	0	0	0	0	1336
7:30 AM	0	301	129	0	0	475	112	0	289	0	145	0	0	0	0	0	1451
7:45 AM	0	264	113	0	0	545	84	0	298	0	164	0	0	0	0	0	1468
8:00 AM	0	290	115	0	0	545	81	0	289	0	132	0	0	0	0	0	1452
8:15 AM	0	259	119	0	0	518	83	0	321	0	144	0	0	0	0	0	1444
8:30 AM	0	293	112	0	0	492	114	0	290	0	161	0	0	0	0	0	1462
8:45 AM	0	303	121	0	0	491	98	0	276	0	120	0	0	0	0	0	1409
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2207	892	0	0	4058	754	0	2220	0	1168	0	0	0	0	0	11299
APPROACH %'s :	0.00%	71.22%	28.78%	0.00%	0.00%	84.33%	15.67%	0.00%	65.53%	0.00%	34.47%	0.00%					
PEAK HR :	07:45 AM - 08:45 AM																TOTAL
PEAK HR VOL :	0	1106	459	0	0	2100	362	0	1198	0	601	0	0	0	0	0	5826
PEAK HR FACTOR :	0.000	0.944	0.964	0.000	0.000	0.963	0.794	0.000	0.933	0.000	0.916	0.000	0.000	0.000	0.000	0.000	0.992
		0.966				0.979				0.967							

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	4	2	0	0	3	2	0	3	0	2	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	551	113	0	0	299	99	0	317	0	99	0	0	0	0	0	1478
4:15 PM	0	477	116	0	0	320	70	0	287	0	75	0	0	0	0	0	1345
4:30 PM	0	451	102	0	0	301	99	0	279	0	78	0	0	0	0	0	1310
4:45 PM	0	511	101	0	0	336	79	0	280	0	75	0	0	0	0	0	1382
5:00 PM	0	429	103	0	0	346	87	0	259	0	73	0	0	0	0	0	1297
5:15 PM	0	403	103	0	0	321	94	0	250	0	86	0	0	0	0	0	1257
5:30 PM	0	448	79	0	0	303	34	0	260	0	75	0	0	0	0	0	1199
5:45 PM	0	367	68	0	0	297	30	0	253	0	72	0	0	0	0	0	1087
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3637	785	0	0	2523	592	0	2185	0	633	0	0	0	0	0	10355
APPROACH %'s :	0.00%	82.25%	17.75%	0.00%	0.00%	81.00%	19.00%	0.00%	77.54%	0.00%	22.46%	0.00%					
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	1990	432	0	0	1256	347	0	1163	0	327	0	0	0	0	0	5515
PEAK HR FACTOR :	0.000	0.903	0.931	0.000	0.000	0.935	0.876	0.000	0.917	0.000	0.826	0.000	0.000	0.000	0.000	0.000	0.933
		0.912				0.966				0.895							

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & US-50 WB Ramps
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-016
Date: 5/22/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				US-50 WB Ramps				US-50 WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	2	0	0	3	2	0	0	0	0	0	2	0	2	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	373	65	0	0	540	461	0	0	0	0	0	77	0	84	0	1600
7:15 AM	0	445	79	0	0	478	402	0	0	0	0	0	79	0	94	0	1577
7:30 AM	0	532	73	0	0	484	422	0	0	0	0	0	90	0	111	0	1712
7:45 AM	0	480	64	0	0	494	374	0	0	0	0	0	155	0	123	0	1690
8:00 AM	0	507	59	0	0	488	406	0	0	0	0	0	130	0	108	0	1698
8:15 AM	0	533	73	0	0	483	392	0	0	0	0	0	126	0	98	0	1705
8:30 AM	0	498	69	0	0	494	410	0	0	0	0	0	102	0	86	0	1659
8:45 AM	0	499	83	0	0	452	308	0	0	0	0	0	119	0	99	0	1560
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	3867	565	0	0	3913	3175	0	0	0	0	0	878	0	803	0	13201
APPROACH %'s :	0.00%	87.25%	12.75%	0.00%	0.00%	55.21%	44.79%	0.00%					52.23%	0.00%	47.77%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	2052	269	0	0	1949	1594	0	0	0	0	0	501	0	440	0	6805
PEAK HR FACTOR :	0.000	0.962	0.921	0.000	0.000	0.986	0.944	0.000	0.000	0.000	0.000	0.000	0.808	0.000	0.894	0.000	0.994
		0.958				0.978								0.846			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	3	2	0	0	3	2	0	0	0	0	0	2	0	2	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	718	131	0	0	326	268	0	0	0	0	0	80	0	84	0	1607
4:15 PM	0	651	124	0	0	292	289	0	0	0	0	0	74	0	73	0	1503
4:30 PM	0	591	99	0	0	323	303	0	0	0	0	0	86	0	91	0	1493
4:45 PM	0	699	104	0	0	343	239	0	0	0	0	0	75	0	64	0	1524
5:00 PM	0	594	120	0	0	325	275	0	0	0	0	0	91	0	71	0	1476
5:15 PM	0	517	97	0	0	316	311	0	0	0	0	0	92	0	66	0	1399
5:30 PM	0	632	87	0	0	278	296	0	0	0	0	0	85	0	74	0	1452
5:45 PM	0	537	97	0	0	256	310	0	0	0	0	0	95	0	99	0	1394
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	4939	859	0	0	2459	2291	0	0	0	0	0	678	0	622	0	11848
APPROACH %'s :	0.00%	85.18%	14.82%	0.00%	0.00%	51.77%	48.23%	0.00%					52.15%	0.00%	47.85%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	0	2659	458	0	0	1284	1099	0	0	0	0	0	315	0	312	0	6127
PEAK HR FACTOR :	0.000	0.926	0.874	0.000	0.000	0.936	0.907	0.000	0.000	0.000	0.000	0.000	0.916	0.000	0.857	0.000	0.953
		0.918				0.952								0.886			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & Zinfandel Dr
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-017
Date: 5/22/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				Zinfandel Dr				Zinfandel Dr				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	1	3	1	0	0.3	0.3	1.3	0	1.3	0.3	0.3	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	36	382	0	10	3	848	11	0	21	4	59	0	9	3	3	0	1389
7:15 AM	32	532	1	11	1	844	8	1	26	3	56	0	15	6	10	0	1546
7:30 AM	54	558	2	14	3	766	19	0	33	2	77	0	13	3	11	0	1555
7:45 AM	59	561	2	9	11	866	18	0	18	3	51	0	8	8	6	0	1620
8:00 AM	81	520	3	6	8	761	19	0	25	6	66	0	9	6	8	0	1518
8:15 AM	63	565	3	16	9	805	21	1	35	3	69	0	7	3	7	0	1607
8:30 AM	57	511	2	10	5	786	23	0	39	4	59	0	7	3	8	0	1514
8:45 AM	69	551	3	8	6	718	20	1	22	2	52	0	7	7	10	0	1476
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	451	4180	16	84	46	6394	139	3	219	27	489	0	75	39	63	0	12225
APPROACH %'s :	9.53%	88.35%	0.34%	1.78%	0.70%	97.14%	2.11%	0.05%	29.80%	3.67%	66.53%	0.00%	42.37%	22.03%	35.59%	0.00%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	257	2204	10	45	31	3198	77	1	111	14	263	0	37	20	32	0	6300
PEAK HR FACTOR :	0.793	0.975	0.833	0.703	0.705	0.923	0.917	0.250	0.793	0.583	0.854	0.000	0.712	0.625	0.727	0.000	0.972
		0.972				0.924				0.866				0.824			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	3	0	0	1	3	1	0	0.3	0.3	1.3	0	1.3	0.3	0.3	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	34	743	5	5	7	475	22	1	54	9	48	0	18	3	11	0	1435
4:15 PM	62	640	4	15	25	527	20	0	43	8	41	0	15	8	20	0	1428
4:30 PM	52	630	8	4	11	610	32	0	43	6	42	0	14	7	16	0	1475
4:45 PM	38	747	5	4	8	507	23	0	51	9	45	0	12	6	13	0	1468
5:00 PM	35	591	8	3	9	499	26	0	38	2	44	0	23	7	29	0	1314
5:15 PM	54	534	4	11	21	631	35	4	57	7	42	0	17	14	14	0	1445
5:30 PM	61	693	9	11	14	542	33	0	41	9	41	0	18	5	19	0	1496
5:45 PM	46	595	5	10	13	458	29	0	46	7	50	0	15	6	11	0	1291
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	382	5173	48	63	108	4249	220	5	373	57	353	0	132	56	133	0	11352
APPROACH %'s :	6.74%	91.30%	0.85%	1.11%	2.36%	92.73%	4.80%	0.11%	47.64%	7.28%	45.08%	0.00%	41.12%	17.45%	41.43%	0.00%	
PEAK HR :	04:00 PM - 05:00 PM																TOTAL
PEAK HR VOL :	186	2760	22	28	51	2119	97	1	191	32	176	0	59	24	60	0	5806
PEAK HR FACTOR :	0.750	0.924	0.688	0.467	0.510	0.868	0.758	0.250	0.884	0.889	0.917	0.000	0.819	0.750	0.750	0.000	0.984
		0.943				0.868				0.899				0.831			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Sunrise Blvd & Jackson Rd/SR-16
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-018
Date: 5/21/2019

Total

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				Jackson Rd/SR-16				Jackson Rd/SR-16				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	196	8	0	23	82	23	0	8	45	1	0	5	109	65	0	566
7:15 AM	0	190	9	0	25	141	26	0	16	49	1	0	8	100	66	0	631
7:30 AM	2	210	15	0	22	163	22	0	14	50	0	0	3	94	72	0	667
7:45 AM	0	225	6	0	21	110	22	0	21	57	2	0	6	94	86	0	650
8:00 AM	2	231	14	0	27	88	15	0	22	36	3	0	13	73	54	0	578
8:15 AM	2	190	4	0	23	78	26	0	22	62	4	0	10	97	50	0	568
8:30 AM	0	153	7	0	28	76	19	0	30	46	1	0	6	68	54	0	488
8:45 AM	2	116	7	0	25	75	20	0	18	53	1	0	4	92	54	0	467
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	9	1511	70	0	194	813	173	0	151	398	13	0	55	727	501	0	4615
APPROACH %'s :	0.57%	95.03%	4.40%	0.00%	16.44%	68.90%	14.66%	0.00%	26.87%	70.82%	2.31%	0.00%	4.29%	56.66%	39.05%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	4	856	44	0	95	502	85	0	73	192	6	0	30	361	278	0	2526
PEAK HR FACTOR :	0.500	0.926	0.733	0.000	0.880	0.770	0.817	0.000	0.830	0.842	0.500	0.000	0.577	0.903	0.808	0.000	0.947
		0.915				0.824				0.847				0.899			

NS/EW Streets:	Sunrise Blvd				Sunrise Blvd				Jackson Rd/SR-16				Jackson Rd/SR-16				
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	1	1	1	0	1	1	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	1	90	4	0	55	204	15	0	23	82	2	0	13	39	25	0	553
4:15 PM	0	97	15	0	55	220	15	0	11	111	3	0	15	58	19	0	619
4:30 PM	1	96	14	0	82	220	12	0	24	102	1	0	9	69	40	0	670
4:45 PM	0	73	12	0	68	226	22	0	22	108	3	0	12	49	16	0	611
5:00 PM	2	84	22	0	67	252	28	0	16	96	0	0	8	50	32	0	657
5:15 PM	0	84	14	0	60	249	13	0	23	108	2	0	7	54	32	0	646
5:30 PM	2	60	11	0	75	205	24	0	24	109	2	0	10	56	24	0	602
5:45 PM	0	60	8	0	76	167	19	0	29	88	2	0	8	49	28	0	534
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	6	644	100	0	538	1743	148	0	172	804	15	0	82	424	216	0	4892
APPROACH %'s :	0.80%	85.87%	13.33%	0.00%	22.15%	71.76%	6.09%	0.00%	17.36%	81.13%	1.51%	0.00%	11.36%	58.73%	29.92%	0.00%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	3	337	62	0	277	947	75	0	85	414	6	0	36	222	120	0	2584
PEAK HR FACTOR :	0.375	0.878	0.705	0.000	0.845	0.939	0.670	0.000	0.885	0.958	0.500	0.000	0.750	0.804	0.750	0.000	0.964
		0.905				0.936				0.949				0.801			

National Data & Surveying Services

Intersection Turning Movement Count

Location: Grant Line Rd & White Rock Rd
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-019
Date: 5/21/2019

Total

NS/EW Streets:	Grant Line Rd				Grant Line Rd				White Rock Rd				White Rock Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	1	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	7	137	0	0	0	102	72	0	7	0	7	0	0	0	0	0	332
7:15 AM	8	156	0	0	0	101	69	1	10	0	8	0	0	0	0	0	353
7:30 AM	6	225	0	0	0	102	72	0	13	0	2	0	0	0	0	0	420
7:45 AM	10	216	0	0	0	101	82	0	11	0	2	0	0	0	0	0	422
8:00 AM	4	186	0	0	0	95	73	1	8	0	3	0	0	0	0	0	370
8:15 AM	4	170	0	0	0	101	46	1	7	0	3	0	0	0	0	0	332
8:30 AM	9	174	0	0	0	89	46	0	12	0	5	0	0	0	0	0	335
8:45 AM	6	126	0	0	0	58	27	0	5	0	1	0	0	0	0	0	223
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	54	1390	0	0	0	749	487	3	73	0	31	0	0	0	0	0	2787
APPROACH %'s :	3.74%	96.26%	0.00%	0.00%	0.00%	60.45%	39.31%	0.24%	70.19%	0.00%	29.81%	0.00%					
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	28	783	0	0	0	399	296	2	42	0	15	0	0	0	0	0	1565
PEAK HR FACTOR :	0.700	0.870	0.000	0.000	0.000	0.978	0.902	0.500	0.808	0.000	0.469	0.000	0.000	0.000	0.000	0.000	0.927
	0.878				0.952				0.792								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	2	0	0	1	2	1	0	2	0	1	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	3	114	0	0	0	129	23	0	121	0	2	0	0	0	0	0	392
4:15 PM	2	137	0	0	0	146	18	0	129	0	5	0	0	0	0	0	437
4:30 PM	2	125	0	0	0	137	14	0	148	0	6	0	0	0	0	0	432
4:45 PM	2	138	0	0	0	175	16	0	141	0	2	0	0	0	0	0	474
5:00 PM	0	130	0	0	0	158	15	0	164	0	1	0	0	0	0	0	468
5:15 PM	2	147	0	0	0	183	9	0	176	0	10	0	0	0	0	0	527
5:30 PM	4	149	0	0	0	157	11	0	120	0	5	0	0	0	0	0	446
5:45 PM	1	113	0	0	0	122	8	1	83	0	5	0	0	0	0	0	333
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	16	1053	0	0	0	1207	114	1	1082	0	36	0	0	0	0	0	3509
APPROACH %'s :	1.50%	98.50%	0.00%	0.00%	0.00%	91.30%	8.62%	0.08%	96.78%	0.00%	3.22%	0.00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	8	564	0	0	0	673	51	0	601	0	18	0	0	0	0	0	1915
PEAK HR FACTOR :	0.500	0.946	0.000	0.000	0.000	0.919	0.797	0.000	0.854	0.000	0.450	0.000	0.000	0.000	0.000	0.000	0.908
	0.935				0.943				0.832								

National Data & Surveying Services

Intersection Turning Movement Count

Location: Prairie City Rd & White Rock Rd
City: Rancho Cordova
Control: Signalized

Project ID: 19-07202-020
Date: 5/21/2019

Total

NS/EW Streets:	Prairie City Rd				Prairie City Rd				White Rock Rd				White Rock Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	0	0	0	6	0	63	0	58	56	0	0	0	93	18	0	294
7:15 AM	0	0	0	0	6	0	64	0	76	71	0	0	0	126	15	0	358
7:30 AM	0	0	0	0	10	0	65	0	116	85	0	0	0	126	34	0	436
7:45 AM	0	0	0	0	10	0	72	0	126	96	0	0	0	89	27	0	420
8:00 AM	0	0	0	0	5	0	54	0	88	99	0	0	0	117	24	0	387
8:15 AM	0	0	0	0	6	0	54	0	104	95	0	0	0	82	24	0	365
8:30 AM	0	0	0	0	8	0	40	0	102	100	0	0	0	79	27	1	357
8:45 AM	0	0	0	0	7	0	51	0	99	79	0	1	0	40	25	0	302
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	58	0	463	0	769	681	0	1	0	752	194	1	2919
APPROACH %'s :					11.13%	0.00%	88.87%	0.00%	53.00%	46.93%	0.00%	0.07%	0.00%	79.41%	20.49%	0.11%	
PEAK HR :	07:30 AM - 08:30 AM																TOTAL
PEAK HR VOL :	0	0	0	0	31	0	245	0	434	375	0	0	0	414	109	0	1608
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	0.775	0.000	0.851	0.000	0.861	0.947	0.000	0.000	0.000	0.821	0.801	0.000	0.922
							0.841				0.911				0.817		

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	0	0	0	1	0	1	0	1	2	0	0	1	2	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
4:00 PM	0	0	0	0	34	0	87	0	73	140	0	0	0	65	16	0	415
4:15 PM	0	0	0	0	26	0	94	0	102	193	0	0	0	85	23	0	523
4:30 PM	0	0	0	0	26	0	78	0	82	185	0	0	0	78	22	0	471
4:45 PM	0	0	0	0	26	0	87	0	88	182	0	0	0	87	29	0	499
5:00 PM	0	0	0	0	26	0	104	0	100	195	0	1	0	82	22	1	531
5:15 PM	0	0	0	0	26	0	106	0	116	227	0	0	0	93	23	0	591
5:30 PM	0	0	0	0	21	0	67	0	84	179	0	0	0	65	16	1	433
5:45 PM	0	0	0	0	19	0	68	0	82	135	0	0	0	49	10	0	363
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	0	0	0	204	0	691	0	727	1436	0	1	0	604	161	2	3826
APPROACH %'s :					22.79%	0.00%	77.21%	0.00%	33.60%	66.36%	0.00%	0.05%	0.00%	78.75%	20.99%	0.26%	
PEAK HR :	04:30 PM - 05:30 PM																TOTAL
PEAK HR VOL :	0	0	0	0	104	0	375	0	386	789	0	1	0	340	96	1	2092
PEAK HR FACTOR :	0.000	0.000	0.000	0.000	1.000	0.000	0.884	0.000	0.832	0.869	0.000	0.250	0.000	0.914	0.828	0.250	0.885
							0.907				0.857				0.942		

Prepared by NDS/ATD

VOLUME

Mather Blvd Bet. Femoyer St & Douglas Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_001

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,724	2,987	5,711

AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	1	1		12:00			34	20	54	
00:15			3	0	3		12:15			29	23	52	
00:30			2	0	2		12:30			23	34	57	
00:45			3	2	5		12:45			23	41	64	
			8	3	11					109	118		227
01:00			3	0	3		13:00			31	28	59	
01:15			2	0	2		13:15			32	29	61	
01:30			1	1	2		13:30			32	30	62	
01:45			3	1	4		13:45			38	35	73	
			9	2	11					133	122		255
02:00			1	0	1		14:00			37	29	66	
02:15			2	0	2		14:15			34	30	64	
02:30			1	2	3		14:30			50	32	82	
02:45			1	0	1		14:45			33	30	63	
			5	2	7					154	121		275
03:00			1	0	1		15:00			60	37	97	
03:15			0	5	5		15:15			82	34	116	
03:30			1	2	3		15:30			91	31	122	
03:45			2	0	2		15:45			90	29	119	
			4	7	11					323	131		454
04:00			1	3	4		16:00			134	29	163	
04:15			0	4	4		16:15			120	28	148	
04:30			1	7	8		16:30			179	32	211	
04:45			1	5	6		16:45			130	27	157	
			3	19	22					563	116		679
05:00			3	11	14		17:00			171	34	205	
05:15			4	13	17		17:15			125	41	166	
05:30			3	36	39		17:30			102	34	136	
05:45			10	36	46		17:45			53	25	78	
			20	96	116					451	134		585
06:00			4	44	48		18:00			62	24	86	
06:15			10	61	71		18:15			36	19	55	
06:30			12	97	109		18:30			39	22	61	
06:45			13	146	159		18:45			32	17	49	
			39	348	387					169	82		251
07:00			14	149	163		19:00			39	15	54	
07:15			14	198	212		19:15			25	14	39	
07:30			14	181	195		19:30			27	8	35	
07:45			27	195	222		19:45			19	13	32	
			69	723	792					110	50		160
08:00			37	148	185		20:00			20	6	26	
08:15			32	139	171		20:15			17	11	28	
08:30			21	94	115		20:30			14	13	27	
08:45			20	74	94		20:45			23	11	34	
			110	455	565					74	41		115
09:00			18	56	74		21:00			17	5	22	
09:15			18	44	62		21:15			14	9	23	
09:30			17	25	42		21:30			12	8	20	
09:45			18	25	43		21:45			11	11	22	
			71	150	221					54	33		87
10:00			21	29	50		22:00			8	2	10	
10:15			20	29	49		22:15			6	6	12	
10:30			16	25	41		22:30			4	4	8	
10:45			19	21	40		22:45			7	5	12	
			76	104	180					25	17		42
11:00			31	20	51		23:00			5	3	8	
11:15			22	18	40		23:15			9	1	10	
11:30			34	32	66		23:30			5	4	9	
11:45			35	33	68		23:45			4	2	6	
			122	103	225					23	10		33
TOTALS			536	2012	**2548**		**TOTALS**			2188	975		**3163**
SPLIT %			21.0%	79.0%	**44.6%**		**SPLIT %**			69.2%	30.8%		**55.4%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,724	2,987	5,711

AM Peak Hour			11:30	07:00	**07:15**		**PM Peak Hour**			16:30	16:45	**16:30**	
AM Pk Volume			132	723	**814**		**PM Pk Volume**			605	136	**739**	
Pk Hr Factor			0.943	0.913	**0.917**		**Pk Hr Factor**			0.845	0.829	**0.876**	
7 - 9 Volume	0	0	179	1178	**1357**		**4 - 6 Volume**	0	0	1014	250	**1264**	
7 - 9 Peak Hour			07:45	07:00	**07:15**		**4 - 6 Peak Hour**			16:30	16:45	**16:30**	
7 - 9 Pk Volume	0	0	117	723	**814**		**4 - 6 Pk Volume**	0	0	605	136	**739**	
Pk Hr Factor	0.000	0.000	0.791	0.913	**0.917**		**Pk Hr Factor**	0.000	0.000	0.845	0.829	**0.876**	

Prepared by NDS/ATD

VOLUME

Douglas Rd Bet. Mather Blvd & Sunrise Blvd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_002

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,263	6,767	14,030

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			12		5		17		12:00			90		76		166	
00:15			12		4		16		12:15			102		74		176	
00:30			9		1		10		12:30			91		89		180	
00:45			6	39	3	13	9	52	12:45			65	348	99	338	164	686
01:00			7		4		11		13:00			85		79		164	
01:15			7		4		11		13:15			81		83		164	
01:30			2		1		3		13:30			77		72		149	
01:45			3	19	2	11	5	30	13:45			99	342	82	316	181	658
02:00			3		3		6		14:00			105		96		201	
02:15			6		2		8		14:15			110		79		189	
02:30			5		5		10		14:30			107		95		202	
02:45			3	17	1	11	4	28	14:45			130	452	86	356	216	808
03:00			2		7		9		15:00			141		73		214	
03:15			1		7		8		15:15			137		90		227	
03:30			4		7		11		15:30			147		106		253	
03:45			8	15	12	33	20	48	15:45			160	585	96	365	256	950
04:00			3		7		10		16:00			220		104		324	
04:15			4		9		13		16:15			219		112		331	
04:30			11		13		24		16:30			233		141		374	
04:45			15	33	20	49	35	82	16:45			234	906	125	482	359	1388
05:00			11		24		35		17:00			247		137		384	
05:15			11		41		52		17:15			253		135		388	
05:30			28		75		103		17:30			231		113		344	
05:45			33	83	77	217	110	300	17:45			208	939	92	477	300	1416
06:00			49		92		141		18:00			164		98		262	
06:15			46		118		164		18:15			129		91		220	
06:30			62		188		250		18:30			152		72		224	
06:45			86	243	196	594	282	837	18:45			105	550	59	320	164	870
07:00			62		212		274		19:00			119		64		183	
07:15			87		224		311		19:15			98		66		164	
07:30			101		228		329		19:30			110		51		161	
07:45			108	358	235	899	343	1257	19:45			73	400	52	233	125	633
08:00			99		202		301		20:00			90		37		127	
08:15			118		188		306		20:15			70		44		114	
08:30			100		176		276		20:30			60		35		95	
08:45			68	385	155	721	223	1106	20:45			73	293	39	155	112	448
09:00			65		94		159		21:00			50		36		86	
09:15			60		88		148		21:15			53		29		82	
09:30			60		90		150		21:30			59		31		90	
09:45			68	253	71	343	139	596	21:45			41	203	35	131	76	334
10:00			68		71		139		22:00			48		23		71	
10:15			65		66		131		22:15			35		16		51	
10:30			65		75		140		22:30			24		10		34	
10:45			71	269	59	271	130	540	22:45			33	140	16	65	49	205
11:00			62		77		139		23:00			28		8		36	
11:15			73		64		137		23:15			21		8		29	
11:30			85		103		188		23:30			16		12		28	
11:45			86	306	84	328	170	634	23:45			20	85	11	39	31	124
TOTALS				2020		3490		**5510**	**TOTALS**				5243		3277		**8520**
SPLIT %				36.7%		63.3%		**39.3%**	**SPLIT %**				61.5%		38.5%		**60.7%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,263	6,767	14,030

AM Peak Hour			07:30	07:00	**07:15**	**PM Peak Hour**			16:30	16:30	**16:30**
AM Pk Volume			426	899	**1284**	**PM Pk Volume**			967	538	**1505**
Pk Hr Factor			0.903	0.956	**0.936**	**Pk Hr Factor**			0.956	0.954	**0.970**
7 - 9 Volume	0	0	743	1620	**2363**	**4 - 6 Volume**	0	0	1845	959	**2804**
7 - 9 Peak Hour			07:30	07:00	**07:15**	**4 - 6 Peak Hour**			16:30	16:30	**16:30**
7 - 9 Pk Volume	0	0	426	899	**1284**	**4 - 6 Pk Volume**	0	0	967	538	**1505**
Pk Hr Factor	0.000	0.000	0.903	0.956	**0.936**	**Pk Hr Factor**	0.000	0.000	0.956	0.954	**0.970**

Prepared by NDS/ATD

VOLUME

Douglas Rd Bet. Sunrise Blvd & Grant Line Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_003

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,457	5,396	10,853

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			5		4		9		12:00			78		73		151	
00:15			3		2		5		12:15			74		63		137	
00:30			7		3		10		12:30			82		85		167	
00:45			2	17	2	11	4	28	12:45			53	287	74	295	127	582
01:00			3		5		8		13:00			59		55		114	
01:15			4		2		6		13:15			64		66		130	
01:30			6		1		7		13:30			90		74		164	
01:45			1	14	1	9	2	23	13:45			73	286	86	281	159	567
02:00			4		1		5		14:00			81		70		151	
02:15			2		1		3		14:15			69		81		150	
02:30			4		3		7		14:30			77		118		195	
02:45			2	12	5	10	7	22	14:45			147	374	100	369	247	743
03:00			2		3		5		15:00			104		80		184	
03:15			1		2		3		15:15			102		85		187	
03:30			3		7		10		15:30			131		94		225	
03:45			1	7	6	18	7	25	15:45			128	465	90	349	218	814
04:00			0		5		5		16:00			144		97		241	
04:15			5		4		9		16:15			136		76		212	
04:30			6		13		19		16:30			144		99		243	
04:45			14	25	15	37	29	62	16:45			156	580	86	358	242	938
05:00			6		28		34		17:00			167		86		253	
05:15			7		30		37		17:15			192		90		282	
05:30			18		55		73		17:30			181		91		272	
05:45			29	60	54	167	83	227	17:45			133	673	99	366	232	1039
06:00			25		56		81		18:00			111		79		190	
06:15			46		83		129		18:15			109		71		180	
06:30			66		117		183		18:30			77		59		136	
06:45			59	196	133	389	192	585	18:45			82	379	60	269	142	648
07:00			51		161		212		19:00			84		60		144	
07:15			57		145		202		19:15			74		47		121	
07:30			59		144		203		19:30			78		40		118	
07:45			64	231	177	627	241	858	19:45			72	308	44	191	116	499
08:00			56		158		214		20:00			63		43		106	
08:15			63		113		176		20:15			74		31		105	
08:30			48		118		166		20:30			53		24		77	
08:45			46	213	87	476	133	689	20:45			50	240	26	124	76	364
09:00			74		84		158		21:00			41		27		68	
09:15			62		66		128		21:15			38		21		59	
09:30			63		67		130		21:30			42		24		66	
09:45			49	248	69	286	118	534	21:45			27	148	21	93	48	241
10:00			49		85		134		22:00			26		11		37	
10:15			71		70		141		22:15			26		12		38	
10:30			61		61		122		22:30			16		9		25	
10:45			58	239	71	287	129	526	22:45			21	89	6	38	27	127
11:00			74		85		159		23:00			12		6		18	
11:15			77		70		147		23:15			16		5		21	
11:30			81		92		173		23:30			12		7		19	
11:45			79	311	72	319	151	630	23:45			15	55	9	27	24	82
TOTALS				1573		2636		4209	TOTALS				3884		2760		6644
SPLIT %				37.4%		62.6%		38.8%	SPLIT %				58.5%		41.5%		61.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	5,457	5,396	10,853

AM Peak Hour			11:15	07:00	07:15	PM Peak Hour			16:45	14:30	16:45
AM Pk Volume			315	627	860	PM Pk Volume			696	383	1049
Pk Hr Factor			0.972	0.886	0.892	Pk Hr Factor			0.906	0.811	0.930
7 - 9 Volume	0	0	444	1103	1547	4 - 6 Volume	0	0	1253	724	1977
7 - 9 Peak Hour			07:30	07:00	07:15	4 - 6 Peak Hour			16:45	17:00	16:45
7 - 9 Pk Volume	0	0	242	627	860	4 - 6 Pk Volume	0	0	696	366	1049
Pk Hr Factor	0.000	0.000	0.945	0.886	0.892	Pk Hr Factor	0.000	0.000	0.906	0.924	0.930

Prepared by NDS/ATD

VOLUME

White Rock Rd Bet. Zinfandel Dr & Sunrise Blvd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,334	7,537	14,871

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			4		11		15		12:00			149		134		283	
00:15			3		3		6		12:15			155		156		311	
00:30			1		5		6		12:30			141		141		282	
00:45			5	13	2	21	7	34	12:45			148	593	104	535	252	1128
01:00			6		10		16		13:00			143		129		272	
01:15			3		2		5		13:15			153		138		291	
01:30			0		5		5		13:30			118		125		243	
01:45			1	10	5	22	6	32	13:45			120	534	127	519	247	1053
02:00			0		2		2		14:00			117		123		240	
02:15			3		6		9		14:15			103		126		229	
02:30			6		2		8		14:30			126		223		349	
02:45			8	17	2	12	10	29	14:45			98	444	156	628	254	1072
03:00			7		2		9		15:00			99		189		288	
03:15			2		27		29		15:15			96		121		217	
03:30			9		16		25		15:30			131		178		309	
03:45			16	34	6	51	22	85	15:45			104	430	157	645	261	1075
04:00			7		9		16		16:00			157		183		340	
04:15			18		8		26		16:15			151		128		279	
04:30			38		15		53		16:30			175		217		392	
04:45			47	110	11	43	58	153	16:45			185	668	169	697	354	1365
05:00			42		13		55		17:00			184		259		443	
05:15			57		30		87		17:15			183		153		336	
05:30			114		39		153		17:30			126		159		285	
05:45			204	417	42	124	246	541	17:45			96	589	127	698	223	1287
06:00			102		57		159		18:00			86		121		207	
06:15			91		81		172		18:15			93		101		194	
06:30			104		70		174		18:30			53		88		141	
06:45			148	445	98	306	246	751	18:45			62	294	84	394	146	688
07:00			114		102		216		19:00			81		105		186	
07:15			117		111		228		19:15			57		72		129	
07:30			167		117		284		19:30			44		70		114	
07:45			179	577	102	432	281	1009	19:45			47	229	58	305	105	534
08:00			137		124		261		20:00			42		52		94	
08:15			131		101		232		20:15			26		44		70	
08:30			103		93		196		20:30			24		42		66	
08:45			120	491	114	432	234	923	20:45			21	113	44	182	65	295
09:00			97		108		205		21:00			13		57		70	
09:15			89		88		177		21:15			20		28		48	
09:30			79		87		166		21:30			13		17		30	
09:45			102	367	93	376	195	743	21:45			14	60	23	125	37	185
10:00			94		77		171		22:00			11		16		27	
10:15			73		84		157		22:15			10		11		21	
10:30			99		119		218		22:30			14		18		32	
10:45			86	352	100	380	186	732	22:45			4	39	16	61	20	100
11:00			114		124		238		23:00			2		23		25	
11:15			116		116		232		23:15			4		8		12	
11:30			106		133		239		23:30			8		10		18	
11:45			154	490	129	502	283	992	23:45			4	18	6	47	10	65
TOTALS				3323		2701		**6024**	**TOTALS**				4011		4836		**8847**
SPLIT %				55.2%		44.8%		**40.5%**	**SPLIT %**				45.3%		54.7%		**59.5%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,334	7,537	14,871

AM Peak Hour			07:30	11:45	**11:45**	**PM Peak Hour**			16:30	16:30	**16:30**
AM Pk Volume			614	560	**1159**	**PM Pk Volume**			727	798	**1525**
Pk Hr Factor			0.858	0.897	**0.932**	**Pk Hr Factor**			0.982	0.770	**0.861**
7 - 9 Volume	0	0	1068	864	**1932**	**4 - 6 Volume**	0	0	1257	1395	**2652**
7 - 9 Peak Hour			07:30	07:15	**07:30**	**4 - 6 Peak Hour**			16:30	16:30	**16:30**
7 - 9 Pk Volume	0	0	614	454	**1058**	**4 - 6 Pk Volume**	0	0	727	798	**1525**
Pk Hr Factor	0.000	0.000	0.858	0.915	**0.931**	**Pk Hr Factor**	0.000	0.000	0.982	0.770	**0.861**

Prepared by NDS/ATD

VOLUME

White Rock Rd Bet. Sunrise Blvd & Grant Line Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,012	1,363	3,375

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00			0	0	0	12:00			19	11	30
00:15			0	0	0	12:15			19	9	28
00:30			0	0	0	12:30			19	14	33
00:45			0	0	0	12:45			20	10	30
01:00			0	1	1	13:00			15	12	27
01:15			0	0	0	13:15			19	15	34
01:30			0	0	0	13:30			24	18	42
01:45			0	0	0	13:45			31	12	43
02:00			0	0	0	14:00			21	18	39
02:15			0	0	0	14:15			17	11	28
02:30			1	0	1	14:30			31	11	42
02:45			0	2	2	14:45			36	21	57
03:00			0	0	0	15:00			34	11	45
03:15			0	0	0	15:15			44	8	52
03:30			0	0	0	15:30			53	15	68
03:45			0	1	1	15:45			67	24	91
04:00			0	1	1	16:00			85	10	95
04:15			0	1	1	16:15			142	20	162
04:30			0	2	2	16:30			145	16	161
04:45			3	3	6	16:45			152	17	169
05:00			2	1	3	17:00			161	20	181
05:15			2	5	7	17:15			187	15	202
05:30			6	5	11	17:30			122	16	138
05:45			5	18	23	17:45			75	5	80
06:00			6	23	29	18:00			61	12	73
06:15			7	18	25	18:15			34	8	42
06:30			10	34	44	18:30			17	10	27
06:45			9	64	73	18:45			14	3	17
07:00			8	56	64	19:00			8	4	12
07:15			7	79	86	19:15			6	4	10
07:30			12	81	93	19:30			4	5	9
07:45			9	90	99	19:45			3	3	6
08:00			9	79	88	20:00			5	4	9
08:15			15	74	89	20:15			6	5	11
08:30			9	51	60	20:30			3	1	4
08:45			14	48	62	20:45			0	3	3
09:00			8	31	39	21:00			5	4	9
09:15			18	22	40	21:15			3	3	6
09:30			8	15	23	21:30			1	1	2
09:45			16	9	25	21:45			0	0	0
10:00			10	18	28	22:00			3	0	3
10:15			15	17	32	22:15			3	1	4
10:30			15	11	26	22:30			0	2	2
10:45			17	22	39	22:45			0	1	1
11:00			10	16	26	23:00			0	2	2
11:15			14	13	27	23:15			0	1	1
11:30			14	15	29	23:30			0	2	2
11:45			19	19	38	23:45			0	0	0
TOTALS			298	945	1243	TOTALS			1714	418	2132
SPLIT %			24.0%	76.0%	36.8%	SPLIT %			80.4%	19.6%	63.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	2,012	1,363	3,375

AM Peak Hour			11:45	07:15	07:30	PM Peak Hour			16:30	16:15	16:30
AM Pk Volume			76	329	369	PM Pk Volume			645	73	713
Pk Hr Factor			1.000	0.914	0.932	Pk Hr Factor			0.862	0.913	0.882
7 - 9 Volume	0	0	83	558	641	4 - 6 Volume	0	0	1069	119	1188
7 - 9 Peak Hour			08:00	07:15	07:30	4 - 6 Peak Hour			16:30	16:15	16:30
7 - 9 Pk Volume	0	0	47	329	369	4 - 6 Pk Volume	0	0	645	73	713
Pk Hr Factor	0.000	0.000	0.783	0.914	0.932	Pk Hr Factor	0.000	0.000	0.862	0.913	0.882

Prepared by NDS/ATD

VOLUME

White Rock Rd Bet. Grant Line Rd & Prairie City Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_006

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,600	6,982	14,582

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			5		2		7		12:00			89		63		152	
00:15			5		4		9		12:15			84		71		155	
00:30			3		3		6		12:30			64		95		159	
00:45			3	16	4	13	7	29	12:45			87	324	80	309	167	633
01:00			3		6		9		13:00			82		67		149	
01:15			1		4		5		13:15			72		88		160	
01:30			2		1		3		13:30			94		97		191	
01:45			2	8	1	12	3	20	13:45			76	324	87	339	163	663
02:00			1		0		1		14:00			69		100		169	
02:15			0		2		2		14:15			102		107		209	
02:30			3		5		8		14:30			98		122		220	
02:45			3	7	4	11	7	18	14:45			108	377	139	468	247	845
03:00			4		2		6		15:00			105		134		239	
03:15			2		0		2		15:15			118		170		288	
03:30			6		1		7		15:30			150		174		324	
03:45			5	17	4	7	9	24	15:45			189	562	208	686	397	1248
04:00			4		7		11		16:00			188		154		342	
04:15			6		8		14		16:15			284		182		466	
04:30			12		5		17		16:30			281		165		446	
04:45			13	35	19	39	32	74	16:45			258	1011	174	675	432	1686
05:00			18		22		40		17:00			266		198		464	
05:15			28		22		50		17:15			330		209		539	
05:30			46		31		77		17:30			269		139		408	
05:45			54	146	50	125	104	271	17:45			216	1081	123	669	339	1750
06:00			49		62		111		18:00			147		142		289	
06:15			68		85		153		18:15			129		111		240	
06:30			108		97		205		18:30			102		87		189	
06:45			132	357	146	390	278	747	18:45			70	448	69	409	139	857
07:00			98		158		256		19:00			58		45		103	
07:15			139		156		295		19:15			36		62		98	
07:30			186		203		389		19:30			32		36		68	
07:45			228	651	188	705	416	1356	19:45			27	153	61	204	88	357
08:00			185		174		359		20:00			35		44		79	
08:15			187		143		330		20:15			45		33		78	
08:30			196		121		317		20:30			21		27		48	
08:45			191	759	130	568	321	1327	20:45			21	122	34	138	55	260
09:00			121		93		214		21:00			18		36		54	
09:15			130		95		225		21:15			25		24		49	
09:30			99		79		178		21:30			30		31		61	
09:45			89	439	78	345	167	784	21:45			14	87	22	113	36	200
10:00			77		82		159		22:00			11		14		25	
10:15			70		73		143		22:15			10		24		34	
10:30			80		51		131		22:30			12		11		23	
10:45			93	320	69	275	162	595	22:45			2	35	21	70	23	105
11:00			78		88		166		23:00			9		8		17	
11:15			78		86		164		23:15			8		14		22	
11:30			75		106		181		23:30			4		12		16	
11:45			66	297	85	365	151	662	23:45			3	24	13	47	16	71
TOTALS				3052		2855		5907	TOTALS				4548		4127		8675
SPLIT %				51.7%		48.3%		40.5%	SPLIT %				52.4%		47.6%		59.5%

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	7,600	6,982	14,582

AM Peak Hour			07:45	07:15	07:30	PM Peak Hour			16:30	16:30	16:30
AM Pk Volume			796	721	1494	PM Pk Volume			1135	746	1881
Pk Hr Factor			0.873	0.888	0.898	Pk Hr Factor			0.860	0.892	0.872
7 - 9 Volume	0	0	1410	1273	2683	4 - 6 Volume	0	0	2092	1344	3436
7 - 9 Peak Hour			07:45	07:15	07:30	4 - 6 Peak Hour			16:30	16:30	16:30
7 - 9 Pk Volume	0	0	796	721	1494	4 - 6 Pk Volume	0	0	1135	746	1881
Pk Hr Factor	0.000	0.000	0.873	0.888	0.898	Pk Hr Factor	0.000	0.000	0.860	0.892	0.872

Prepared by NDS/ATD

VOLUME

Mather Field Rd Bet. Folsom Blvd & US-50 WB Ramps

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_007

DAILY TOTALS	NB	SB	EB	WB	Total
	11,787	11,699	0	0	23,486

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	38		28				66		12:00	202		157				359	
00:15	34		23				57		12:15	148		156				304	
00:30	25		19				44		12:30	186		160				346	
00:45	22	119	19	89			41	208	12:45	155	691	199	672			354	1363
01:00	13		18				31		13:00	160		193				353	
01:15	24		9				33		13:15	154		163				317	
01:30	22		9				31		13:30	200		176				376	
01:45	18	77	12	48			30	125	13:45	168	682	160	692			328	1374
02:00	15		12				27		14:00	179		194				373	
02:15	12		6				18		14:15	201		177				378	
02:30	9		15				24		14:30	220		182				402	
02:45	16	52	17	50			33	102	14:45	235	835	227	780			462	1615
03:00	8		11				19		15:00	228		200				428	
03:15	12		11				23		15:15	242		225				467	
03:30	9		21				30		15:30	267		196				463	
03:45	5	34	8	51			13	85	15:45	286	1023	171	792			457	1815
04:00	12		13				25		16:00	281		176				457	
04:15	15		30				45		16:15	254		160				414	
04:30	10		54				64		16:30	251		176				427	
04:45	17	54	59	156			76	210	16:45	277	1063	182	694			459	1757
05:00	17		51				68		17:00	298		189				487	
05:15	34		84				118		17:15	283		166				449	
05:30	36		129				165		17:30	270		175				445	
05:45	47	134	121	385			168	519	17:45	231	1082	185	715			416	1797
06:00	41		136				177		18:00	192		171				363	
06:15	58		162				220		18:15	209		174				383	
06:30	70		184				254		18:30	181		167				348	
06:45	77	246	194	676			271	922	18:45	165	747	154	666			319	1413
07:00	113		174				287		19:00	145		150				295	
07:15	169		210				379		19:15	157		133				290	
07:30	191		198				389		19:30	145		124				269	
07:45	189	662	227	809			416	1471	19:45	149	596	112	519			261	1115
08:00	185		223				408		20:00	132		119				251	
08:15	175		224				399		20:15	125		113				238	
08:30	173		224				397		20:30	136		109				245	
08:45	157	690	169	840			326	1530	20:45	124	517	102	443			226	960
09:00	114		172				286		21:00	97		69				166	
09:15	105		151				256		21:15	118		94				212	
09:30	108		168				276		21:30	98		89				187	
09:45	124	451	164	655			288	1106	21:45	93	406	60	312			153	718
10:00	118		164				282		22:00	81		62				143	
10:15	138		153				291		22:15	69		71				140	
10:30	116		163				279		22:30	64		43				107	
10:45	133	505	133	613			266	1118	22:45	55	269	55	231			110	500
11:00	147		166				313		23:00	59		38				97	
11:15	145		134				279		23:15	60		42				102	
11:30	150		158				308		23:30	65		41				106	
11:45	172	614	188	646			360	1260	23:45	54	238	44	165			98	403
TOTALS		3638		5018				8656	TOTALS		8149		6681				14830
SPLIT %		42.0%		58.0%				36.9%	SPLIT %		54.9%		45.1%				63.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	11,787	11,699	0	0	23,486

AM Peak Hour	07:30	07:45			07:45	PM Peak Hour	16:45	14:45			15:15
AM Pk Volume	740	898			1620	PM Pk Volume	1128	848			1844
Pk Hr Factor	0.969	0.989			0.974	Pk Hr Factor	0.946	0.934			0.987
7 - 9 Volume	1352	1649	0	0	3001	4 - 6 Volume	2145	1409	0	0	3554
7 - 9 Peak Hour	07:30	07:45			07:45	4 - 6 Peak Hour	16:45	17:00			16:45
7 - 9 Pk Volume	740	898	0	0	1620	4 - 6 Pk Volume	1128	715	0	0	1840
Pk Hr Factor	0.969	0.989	0.000	0.000	0.974	Pk Hr Factor	0.946	0.946	0.000	0.000	0.945

Prepared by NDS/ATD

VOLUME

Mather Field Rd Bet. US-50 EB Ramps & International Dr

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_008

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,824	9,720	19,544

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
00:00			17		16		33		12:00			151		148		299	
00:15			21		10		31		12:15			143		174		317	
00:30			13		9		22		12:30			160		173		333	
00:45			13	64	3	38	16	102	12:45			141	595	166	661	307	1256
01:00			11		10		21		13:00			152		148		300	
01:15			10		7		17		13:15			134		133		267	
01:30			6		8		14		13:30			140		157		297	
01:45			7	34	6	31	13	65	13:45			120	546	141	579	261	1125
02:00			5		4		9		14:00			123		139		262	
02:15			4		7		11		14:15			148		142		290	
02:30			4		3		7		14:30			124		204		328	
02:45			4	17	9	23	13	40	14:45			167	562	186	671	353	1233
03:00			5		3		8		15:00			160		189		349	
03:15			7		7		14		15:15			178		148		326	
03:30			6		11		17		15:30			183		216		399	
03:45			10	28	9	30	19	58	15:45			175	696	212	765	387	1461
04:00			9		11		20		16:00			181		260		441	
04:15			8		8		16		16:15			182		213		395	
04:30			22		24		46		16:30			189		288		477	
04:45			38	77	17	60	55	137	16:45			198	750	244	1005	442	1755
05:00			31		25		56		17:00			207		322		529	
05:15			27		32		59		17:15			228		269		497	
05:30			63		52		115		17:30			176		194		370	
05:45			100	221	52	161	152	382	17:45			161	772	182	967	343	1739
06:00			82		72		154		18:00			109		188		297	
06:15			106		100		206		18:15			144		146		290	
06:30			111		148		259		18:30			127		113		240	
06:45			189	488	150	470	339	958	18:45			107	487	110	557	217	1044
07:00			149		178		327		19:00			92		104		196	
07:15			210		214		424		19:15			92		85		177	
07:30			242		208		450		19:30			76		90		166	
07:45			293	894	181	781	474	1675	19:45			88	348	69	348	157	696
08:00			246		175		421		20:00			95		71		166	
08:15			241		177		418		20:15			93		58		151	
08:30			182		144		326		20:30			61		70		131	
08:45			146	815	141	637	287	1452	20:45			87	336	42	241	129	577
09:00			149		110		259		21:00			62		45		107	
09:15			146		94		240		21:15			59		58		117	
09:30			113		94		207		21:30			56		32		88	
09:45			116	524	126	424	242	948	21:45			52	229	37	172	89	401
10:00			120		79		199		22:00			45		31		76	
10:15			113		100		213		22:15			42		31		73	
10:30			112		106		218		22:30			37		27		64	
10:45			122	467	109	394	231	861	22:45			45	169	25	114	70	283
11:00			131		120		251		23:00			41		17		58	
11:15			132		120		252		23:15			42		13		55	
11:30			146		139		285		23:30			38		12		50	
11:45			146	555	162	541	308	1096	23:45			29	150	8	50	37	200
TOTALS				4184		3590		**7774**	**TOTALS**				5640		6130		**11770**
SPLIT %				53.8%		46.2%		**39.8%**	**SPLIT %**				47.9%		52.1%		**60.2%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	9,824	9,720	19,544

AM Peak Hour			07:30	07:00	**07:15**	**PM Peak Hour**			16:30	16:30	**16:30**
AM Pk Volume			1022	781	**1769**	**PM Pk Volume**			822	1123	**1945**
Pk Hr Factor			0.872	0.912	**0.933**	**Pk Hr Factor**			0.901	0.872	**0.919**
7 - 9 Volume	0	0	1709	1418	**3127**	**4 - 6 Volume**	0	0	1522	1972	**3494**
7 - 9 Peak Hour			07:30	07:00	**07:15**	**4 - 6 Peak Hour**			16:30	16:30	**16:30**
7 - 9 Pk Volume	0	0	1022	781	**1769**	**4 - 6 Pk Volume**	0	0	822	1123	**1945**
Pk Hr Factor	0.000	0.000	0.872	0.912	**0.933**	**Pk Hr Factor**	0.000	0.000	0.901	0.872	**0.919**

Prepared by NDS/ATD

VOLUME

Zinfandel Dr Bet. Folsom Blvd & US-50 WB Ramps

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_009

DAILY TOTALS	NB	SB	EB	WB	Total
	11,913	9,620	0	0	21,533

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	13		21				34		12:00	271		181				452	
00:15	24		9				33		12:15	200		184				384	
00:30	23		15				38		12:30	249		221				470	
00:45	13	73	12	57			25	130	12:45	202	922	169	755			371	1677
01:00	18		12				30		13:00	204		203				407	
01:15	9		9				18		13:15	189		152				341	
01:30	11		6				17		13:30	217		171				388	
01:45	11	49	2	29			13	78	13:45	197	807	140	666			337	1473
02:00	6		19				25		14:00	221		152				373	
02:15	6		7				13		14:15	192		145				337	
02:30	14		8				22		14:30	243		157				400	
02:45	8	34	6	40			14	74	14:45	240	896	162	616			402	1512
03:00	8		4				12		15:00	208		168				376	
03:15	8		5				13		15:15	249		176				425	
03:30	6		9				15		15:30	280		170				450	
03:45	15	37	9	27			24	64	15:45	241	978	146	660			387	1638
04:00	12		8				20		16:00	301		180				481	
04:15	3		11				14		16:15	271		129				400	
04:30	19		18				37		16:30	338		147				485	
04:45	19	53	26	63			45	116	16:45	294	1204	159	615			453	1819
05:00	20		25				45		17:00	281		158				439	
05:15	11		38				49		17:15	323		155				478	
05:30	29		47				76		17:30	299		174				473	
05:45	41	101	68	178			109	279	17:45	252	1155	180	667			432	1822
06:00	31		48				79		18:00	207		160				367	
06:15	55		78				133		18:15	183		164				347	
06:30	59		135				194		18:30	244		147				391	
06:45	70	215	106	367			176	582	18:45	194	828	143	614			337	1442
07:00	73		149				222		19:00	166		152				318	
07:15	120		130				250		19:15	137		151				288	
07:30	174		168				342		19:30	145		127				272	
07:45	154	521	166	613			320	1134	19:45	143	591	121	551			264	1142
08:00	135		195				330		20:00	125		129				254	
08:15	114		162				276		20:15	116		127				243	
08:30	126		125				251		20:30	98		105				203	
08:45	119	494	118	600			237	1094	20:45	116	455	84	445			200	900
09:00	111		104				215		21:00	99		72				171	
09:15	109		110				219		21:15	97		71				168	
09:30	96		109				205		21:30	98		71				169	
09:45	121	437	109	432			230	869	21:45	103	397	51	265			154	662
10:00	133		114				247		22:00	56		63				119	
10:15	126		108				234		22:15	55		48				103	
10:30	147		113				260		22:30	47		51				98	
10:45	133	539	138	473			271	1012	22:45	58	216	44	206			102	422
11:00	166		101				267		23:00	47		26				73	
11:15	193		147				340		23:15	33		41				74	
11:30	219		171				390		23:30	34		22				56	
11:45	189	767	143	562			332	1329	23:45	30	144	30	119			60	263
TOTALS		3320		3441				6761	TOTALS		8593		6179				14772
SPLIT %		49.1%		50.9%				31.4%	SPLIT %		58.2%		41.8%				68.6%

DAILY TOTALS	NB	SB	EB	WB	Total
	11,913	9,620	0	0	21,533

AM Peak Hour	11:45	11:45				11:45	PM Peak Hour	16:30	12:15				16:30
AM Pk Volume	909	729				1638	PM Pk Volume	1236	777				1855
Pk Hr Factor	0.839	0.825				0.871	Pk Hr Factor	0.914	0.879				0.956
7 - 9 Volume	1015	1213	0	0		2228	4 - 6 Volume	2359	1282	0	0		3641
7 - 9 Peak Hour	07:15	07:30				07:30	4 - 6 Peak Hour	16:30	17:00				16:30
7 - 9 Pk Volume	583	691	0	0		1268	4 - 6 Pk Volume	1236	667	0	0		1855
Pk Hr Factor	0.838	0.886	0.000	0.000		0.927	Pk Hr Factor	0.914	0.926	0.000	0.000		0.956

Prepared by NDS/ATD

VOLUME

Zinfandel Dr Bet. White Rock Rd & International Dr

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_010

DAILY TOTALS	NB	SB	EB	WB	Total
	14,945	14,795	0	0	29,740

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	18		30				48		12:00	287		205				492	
00:15	11		18				29		12:15	234		277				511	
00:30	14		18				32		12:30	271		218				489	
00:45	9	52	18	84			27	136	12:45	232	1024	255	955			487	1979
01:00	18		17				35		13:00	255		211				466	
01:15	13		17				30		13:15	207		223				430	
01:30	7		8				15		13:30	226		221				447	
01:45	2	40	5	47			7	87	13:45	211	899	218	873			429	1772
02:00	9		8				17		14:00	269		216				485	
02:15	5		11				16		14:15	260		196				456	
02:30	11		13				24		14:30	288		185				473	
02:45	9	34	5	37			14	71	14:45	278	1095	242	839			520	1934
03:00	11		5				16		15:00	305		251				556	
03:15	8		11				19		15:15	255		265				520	
03:30	14		7				21		15:30	302		263				565	
03:45	21	54	18	41			39	95	15:45	236	1098	258	1037			494	2135
04:00	28		5				33		16:00	322		264				586	
04:15	26		12				38		16:15	298		281				579	
04:30	32		28				60		16:30	334		267				601	
04:45	42	128	30	75			72	203	16:45	325	1279	307	1119			632	2398
05:00	42		30				72		17:00	338		274				612	
05:15	65		39				104		17:15	286		302				588	
05:30	98		56				154		17:30	251		311				562	
05:45	106	311	82	207			188	518	17:45	228	1103	323	1210			551	2313
06:00	102		112				214		18:00	263		212				475	
06:15	142		150				292		18:15	209		245				454	
06:30	212		191				403		18:30	229		212				441	
06:45	239	695	221	674			460	1369	18:45	184	885	193	862			377	1747
07:00	253		223				476		19:00	161		217				378	
07:15	269		272				541		19:15	157		196				353	
07:30	327		283				610		19:30	123		166				289	
07:45	264	1113	338	1116			602	2229	19:45	115	556	157	736			272	1292
08:00	299		356				655		20:00	141		160				301	
08:15	220		299				519		20:15	113		161				274	
08:30	279		284				563		20:30	117		143				260	
08:45	178	976	272	1211			450	2187	20:45	91	462	142	606			233	1068
09:00	220		179				399		21:00	75		97				172	
09:15	188		171				359		21:15	68		131				199	
09:30	191		178				369		21:30	77		123				200	
09:45	182	781	188	716			370	1497	21:45	66	286	91	442			157	728
10:00	197		163				360		22:00	63		99				162	
10:15	192		158				350		22:15	66		72				138	
10:30	222		156				378		22:30	35		59				94	
10:45	207	818	181	658			388	1476	22:45	38	202	79	309			117	511
11:00	203		176				379		23:00	40		48				88	
11:15	203		200				403		23:15	37		41				78	
11:30	272		179				451		23:30	28		41				69	
11:45	250	928	222	777			472	1705	23:45	21	126	34	164			55	290
TOTALS		5930		5643				11573	TOTALS		9015		9152				18167
SPLIT %		51.2%		48.8%				38.9%	SPLIT %		49.6%		50.4%				61.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	14,945	14,795	0	0	29,740

AM Peak Hour	07:15	07:45				07:15	PM Peak Hour	16:15	17:00				16:30
AM Pk Volume	1159	1277				2408	PM Pk Volume	1295	1210				2433
Pk Hr Factor	0.886	0.897				0.919	Pk Hr Factor	0.958	0.937				0.962
7 - 9 Volume	2089	2327	0	0		4416	4 - 6 Volume	2382	2329	0	0		4711
7 - 9 Peak Hour	07:15	07:45				07:15	4 - 6 Peak Hour	16:15	17:00				16:30
7 - 9 Pk Volume	1159	1277	0	0		2408	4 - 6 Pk Volume	1295	1210	0	0		2433
Pk Hr Factor	0.886	0.897	0.000	0.000		0.919	Pk Hr Factor	0.958	0.937	0.000	0.000		0.962

Prepared by NDS/ATD

VOLUME

Zinfandel Dr Bet. International Dr & Douglas Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_011

DAILY TOTALS	NB	SB	EB	WB	Total
	7,287	8,316	0	0	15,603

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	4		17				21		12:00	94		100				194	
00:15	6		14				20		12:15	83		147				230	
00:30	4		12				16		12:30	94		120				214	
00:45	5	19	9	52			14	71	12:45	98	369	93	460			191	829
01:00	7		12				19		13:00	113		124				237	
01:15	6		10				16		13:15	90		93				183	
01:30	1		2				3		13:30	96		101				197	
01:45	4	18	5	29			9	47	13:45	93	392	126	444			219	836
02:00	2		2				4		14:00	114		110				224	
02:15	0		5				5		14:15	99		119				218	
02:30	3		3				6		14:30	114		101				215	
02:45	2	7	2	12			4	19	14:45	110	437	142	472			252	909
03:00	6		1				7		15:00	88		177				265	
03:15	3		2				5		15:15	78		182				260	
03:30	9		6				15		15:30	88		184				272	
03:45	14	32	9	18			23	50	15:45	85	339	183	726			268	1065
04:00	13		2				15		16:00	107		265				372	
04:15	18		6				24		16:15	91		249				340	
04:30	22		12				34		16:30	115		251				366	
04:45	23	76	11	31			34	107	16:45	92	405	286	1051			378	1456
05:00	22		12				34		17:00	113		321				434	
05:15	42		18				60		17:15	110		262				372	
05:30	72		23				95		17:30	102		238				340	
05:45	84	220	19	72			103	292	17:45	85	410	238	1059			323	1469
06:00	88		40				128		18:00	104		186				290	
06:15	121		57				178		18:15	85		176				261	
06:30	162		53				215		18:30	95		170				265	
06:45	195	566	73	223			268	789	18:45	67	351	140	672			207	1023
07:00	223		51				274		19:00	61		133				194	
07:15	242		68				310		19:15	62		137				199	
07:30	268		75				343		19:30	52		130				182	
07:45	272	1005	92	286			364	1291	19:45	56	231	110	510			166	741
08:00	228		109				337		20:00	44		103				147	
08:15	196		80				276		20:15	47		86				133	
08:30	217		78				295		20:30	41		95				136	
08:45	148	789	71	338			219	1127	20:45	40	172	91	375			131	547
09:00	122		52				174		21:00	33		69				102	
09:15	121		61				182		21:15	26		85				111	
09:30	98		70				168		21:30	28		77				105	
09:45	108	449	65	248			173	697	21:45	32	119	60	291			92	410
10:00	87		65				152		22:00	24		66				90	
10:15	94		65				159		22:15	31		44				75	
10:30	91		82				173		22:30	17		39				56	
10:45	87	359	82	294			169	653	22:45	18	90	52	201			70	291
11:00	93		75				168		23:00	9		33				42	
11:15	65		87				152		23:15	5		34				39	
11:30	123		79				202		23:30	10		28				38	
11:45	118	399	99	340			217	739	23:45	9	33	17	112			26	145
TOTALS		3939		1943				5882	TOTALS		3348		6373				9721
SPLIT %		67.0%		33.0%				37.7%	SPLIT %		34.4%		65.6%				62.3%

DAILY TOTALS	NB	SB	EB	WB	Total
	7,287	8,316	0	0	15,603

AM Peak Hour	07:15	11:45			07:15	PM Peak Hour	14:00	16:30			16:30
AM Pk Volume	1010	466			1354	PM Pk Volume	437	1120			1550
Pk Hr Factor	0.928	0.793			0.930	Pk Hr Factor	0.958	0.872			0.893
7 - 9 Volume	1794	624	0	0	2418	4 - 6 Volume	815	2110	0	0	2925
7 - 9 Peak Hour	07:15	07:45			07:15	4 - 6 Peak Hour	16:30	16:30			16:30
7 - 9 Pk Volume	1010	359	0	0	1354	4 - 6 Pk Volume	430	1120	0	0	1550
Pk Hr Factor	0.928	0.823	0.000	0.000	0.930	Pk Hr Factor	0.935	0.872	0.000	0.000	0.893

Prepared by NDS/ATD

VOLUME

Sunrise Blvd Bet. Folsom Blvd & White Rock Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_012

DAILY TOTALS	NB	SB	EB	WB	Total
	18,167	19,735	0	0	37,902

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	23		26				49		12:00	367		318				685	
00:15	15		14				29		12:15	298		312				610	
00:30	10		17				27		12:30	296		342				638	
00:45	14	62	12	69			26	131	12:45	313	1274	327	1299			640	2573
01:00	15		20				35		13:00	297		324				621	
01:15	6		11				17		13:15	311		364				675	
01:30	21		14				35		13:30	333		287				620	
01:45	9	51	17	62			26	113	13:45	313	1254	364	1339			677	2593
02:00	7		10				17		14:00	311		334				645	
02:15	5		4				9		14:15	328		306				634	
02:30	11		13				24		14:30	429		313				742	
02:45	7	30	15	42			22	72	14:45	354	1422	298	1251			652	2673
03:00	5		5				10		15:00	362		330				692	
03:15	13		17				30		15:15	332		304				636	
03:30	23		12				35		15:30	435		358				793	
03:45	25	66	14	48			39	114	15:45	323	1452	340	1332			663	2784
04:00	14		10				24		16:00	351		376				727	
04:15	18		27				45		16:15	375		362				737	
04:30	38		37				75		16:30	395		331				726	
04:45	35	105	111	185			146	290	16:45	354	1475	370	1439			724	2914
05:00	58		78				136		17:00	382		395				777	
05:15	59		106				165		17:15	366		345				711	
05:30	83		183				266		17:30	305		372				677	
05:45	114	314	258	625			372	939	17:45	284	1337	292	1404			576	2741
06:00	144		201				345		18:00	243		287				530	
06:15	194		270				464		18:15	247		248				495	
06:30	218		310				528		18:30	191		269				460	
06:45	260	816	398	1179			658	1995	18:45	200	881	232	1036			432	1917
07:00	286		353				639		19:00	175		209				384	
07:15	326		362				688		19:15	207		216				423	
07:30	348		376				724		19:30	174		162				336	
07:45	354	1314	371	1462			725	2776	19:45	156	712	165	752			321	1464
08:00	339		387				726		20:00	119		131				250	
08:15	325		364				689		20:15	102		138				240	
08:30	298		343				641		20:30	80		109				189	
08:45	291	1253	360	1454			651	2707	20:45	92	393	121	499			213	892
09:00	230		274				504		21:00	129		132				261	
09:15	254		268				522		21:15	84		119				203	
09:30	237		278				515		21:30	71		82				153	
09:45	267	988	249	1069			516	2057	21:45	98	382	83	416			181	798
10:00	239		247				486		22:00	78		65				143	
10:15	249		257				506		22:15	49		63				112	
10:30	276		253				529		22:30	47		53				100	
10:45	277	1041	270	1027			547	2068	22:45	18	192	76	257			94	449
11:00	296		312				608		23:00	40		39				79	
11:15	302		319				621		23:15	25		39				64	
11:30	325		356				681		23:30	23		52				75	
11:45	319	1242	339	1326			658	2568	23:45	23	111	33	163			56	274
TOTALS		7282		8548				15830	TOTALS		10885		11187				22072
SPLIT %		46.0%		54.0%				41.8%	SPLIT %		49.3%		50.7%				58.2%

DAILY TOTALS	NB	SB	EB	WB	Total
	18,167	19,735	0	0	37,902

AM Peak Hour	07:15	07:30					07:30		PM Peak Hour	16:15	16:45					16:15		
AM Pk Volume	1367	1498					2864		PM Pk Volume	1506	1482					2964		
Pk Hr Factor	0.965	0.968					0.986		Pk Hr Factor	0.953	0.938					0.954		
7 - 9 Volume	2567	2916	0	0			5483		4 - 6 Volume	2812	2843	0	0			5655		
7 - 9 Peak Hour	07:15	07:30					07:30		4 - 6 Peak Hour	16:15	16:45					16:15		
7 - 9 Pk Volume	1367	1498	0	0			2864		4 - 6 Pk Volume	1506	1482	0	0			2964		
Pk Hr Factor	0.965	0.968	0.000	0.000			0.986		Pk Hr Factor	0.953	0.938	0.000	0.000			0.954		

Prepared by NDS/ATD

VOLUME

Sunrise Blvd Bet. White Rock Rd & Douglas Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_013

DAILY TOTALS	NB	SB	EB	WB	Total
	13,581	14,182	0	0	27,763

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	11		21				32		12:00	189		182				371	
00:15	10		11				21		12:15	178		190				368	
00:30	11		12				23		12:30	203		174				377	
00:45	7	39	7	51			14	90	12:45	187	757	184	730			371	1487
01:00	8		14				22		13:00	184		105				289	
01:15	4		7				11		13:15	216		198				414	
01:30	7		10				17		13:30	186		185				371	
01:45	4	23	7	38			11	61	13:45	180	766	201	689			381	1455
02:00	2		6				8		14:00	193		228				421	
02:15	6		2				8		14:15	179		229				408	
02:30	11		5				16		14:30	196		240				436	
02:45	10	29	6	19			16	48	14:45	197	765	249	946			446	1711
03:00	5		3				8		15:00	217		317				534	
03:15	10		16				26		15:15	169		300				469	
03:30	17		10				27		15:30	211		384				595	
03:45	24	56	5	34			29	90	15:45	178	775	371	1372			549	2147
04:00	15		2				17		16:00	224		448				672	
04:15	12		8				20		16:15	205		414				619	
04:30	37		16				53		16:30	229		462				691	
04:45	64	128	30	56			94	184	16:45	189	847	417	1741			606	2588
05:00	58		24				82		17:00	236		508				744	
05:15	82		31				113		17:15	204		444				648	
05:30	117		56				173		17:30	173		419				592	
05:45	157	414	84	195			241	609	17:45	176	789	350	1721			526	2510
06:00	155		81				236		18:00	171		332				503	
06:15	208		107				315		18:15	157		296				453	
06:30	261		104				365		18:30	124		227				351	
06:45	337	961	127	419			464	1380	18:45	121	573	199	1054			320	1627
07:00	359		160				519		19:00	124		163				287	
07:15	383		168				551		19:15	95		204				299	
07:30	431		161				592		19:30	111		161				272	
07:45	476	1649	168	657			644	2306	19:45	85	415	121	649			206	1064
08:00	403		164				567		20:00	73		149				222	
08:15	383		155				538		20:15	61		117				178	
08:30	343		216				559		20:30	66		105				171	
08:45	324	1453	191	726			515	2179	20:45	52	252	114	485			166	737
09:00	224		167				391		21:00	52		121				173	
09:15	223		161				384		21:15	55		90				145	
09:30	213		144				357		21:30	46		75				121	
09:45	226	886	142	614			368	1500	21:45	67	220	62	348			129	568
10:00	192		121				313		22:00	52		51				103	
10:15	194		137				331		22:15	39		56				95	
10:30	225		170				395		22:30	26		36				62	
10:45	190	801	142	570			332	1371	22:45	13	130	52	195			65	325
11:00	196		176				372		23:00	35		35				70	
11:15	195		180				375		23:15	12		30				42	
11:30	187		201				388		23:30	17		27				44	
11:45	200	778	190	747			390	1525	23:45	11	75	34	126			45	201
TOTALS		7217		4126				11343	TOTALS		6364		10056				16420
SPLIT %		63.6%		36.4%				40.9%	SPLIT %		38.8%		61.2%				59.1%

DAILY TOTALS	NB	SB	EB	WB	Total
	13,581	14,182	0	0	27,763

AM Peak Hour	07:15	11:30				07:15	PM Peak Hour	16:15	16:30				16:30
AM Pk Volume	1693	763				2354	PM Pk Volume	859	1831				2689
Pk Hr Factor	0.889	0.949				0.914	Pk Hr Factor	0.910	0.901				0.904
7 - 9 Volume	3102	1383	0	0		4485	4 - 6 Volume	1636	3462	0	0		5098
7 - 9 Peak Hour	07:15	08:00				07:15	4 - 6 Peak Hour	16:15	16:30				16:30
7 - 9 Pk Volume	1693	726	0	0		2354	4 - 6 Pk Volume	859	1831	0	0		2689
Pk Hr Factor	0.889	0.840	0.000	0.000		0.914	Pk Hr Factor	0.910	0.901	0.000	0.000		0.904

Prepared by NDS/ATD

VOLUME

Sunrise Blvd Bet. Douglas Rd & Jackson Rd/SR-16

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_014

DAILY TOTALS	NB	SB	EB	WB	Total
	9,528	10,939	0	0	20,467

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	4		24				28		12:00	108		135				243	
00:15	4		7				11		12:15	119		120				239	
00:30	10		11				21		12:30	105		120				225	
00:45	7	25	5	47			12	72	12:45	123	455	117	492			240	947
01:00	5		9				14		13:00	129		127				256	
01:15	2		5				7		13:15	126		154				280	
01:30	4		10				14		13:30	125		156				281	
01:45	3	14	4	28			7	42	13:45	116	496	176	613			292	1109
02:00	3		4				7		14:00	114		156				270	
02:15	2		1				3		14:15	109		168				277	
02:30	12		1				13		14:30	102		217				319	
02:45	7	24	5	11			12	35	14:45	115	440	214	755			329	1195
03:00	5		2				7		15:00	121		247				368	
03:15	6		9				15		15:15	124		244				368	
03:30	15		7				22		15:30	141		272				413	
03:45	25	51	7	25			32	76	15:45	150	536	314	1077			464	1613
04:00	10		4				14		16:00	140		357				497	
04:15	15		6				21		16:15	135		376				511	
04:30	30		12				42		16:30	160		353				513	
04:45	41	96	24	46			65	142	16:45	112	547	397	1483			509	2030
05:00	49		19				68		17:00	132		367				499	
05:15	74		24				98		17:15	140		424				564	
05:30	87		35				122		17:30	105		344				449	
05:45	148	358	37	115			185	473	17:45	104	481	306	1441			410	1922
06:00	142		47				189		18:00	95		241				336	
06:15	198		85				283		18:15	96		247				343	
06:30	236		81				317		18:30	80		159				239	
06:45	279	855	100	313			379	1168	18:45	75	346	168	815			243	1161
07:00	291		114				405		19:00	72		126				198	
07:15	320		179				499		19:15	65		126				191	
07:30	342		116				458		19:30	68		123				191	
07:45	373	1326	128	537			501	1863	19:45	60	265	102	477			162	742
08:00	337		125				462		20:00	56		97				153	
08:15	275		138				413		20:15	59		102				161	
08:30	255		110				365		20:30	48		67				115	
08:45	225	1092	122	495			347	1587	20:45	34	197	85	351			119	548
09:00	174		98				272		21:00	37		82				119	
09:15	173		121				294		21:15	30		82				112	
09:30	138		90				228		21:30	24		46				70	
09:45	150	635	101	410			251	1045	21:45	53	144	51	261			104	405
10:00	122		101				223		22:00	31		46				77	
10:15	118		96				214		22:15	30		42				72	
10:30	143		97				240		22:30	17		32				49	
10:45	128	511	121	415			249	926	22:45	16	94	30	150			46	244
11:00	120		114				234		23:00	13		23				36	
11:15	123		104				227		23:15	13		27				40	
11:30	137		136				273		23:30	6		24				30	
11:45	117	497	134	488			251	985	23:45	11	43	20	94			31	137
TOTALS		5484		2930				8414	TOTALS		4044		8009				12053
SPLIT %		65.2%		34.8%				41.1%	SPLIT %		33.6%		66.4%				58.9%

DAILY TOTALS	NB	SB	EB	WB	Total
	9,528	10,939	0	0	20,467

AM Peak Hour	07:15	07:15			07:15	PM Peak Hour	15:45	16:30			16:30
AM Pk Volume	1372	548			1920	PM Pk Volume	585	1541			2085
Pk Hr Factor	0.920	0.765			0.958	Pk Hr Factor	0.914	0.909			0.924
7 - 9 Volume	2418	1032	0	0	3450	4 - 6 Volume	1028	2924	0	0	3952
7 - 9 Peak Hour	07:15	07:15			07:15	4 - 6 Peak Hour	16:00	16:30			16:30
7 - 9 Pk Volume	1372	548	0	0	1920	4 - 6 Pk Volume	547	1541	0	0	2085
Pk Hr Factor	0.920	0.765	0.000	0.000	0.958	Pk Hr Factor	0.855	0.909	0.000	0.000	0.924

Prepared by NDS/ATD

VOLUME

Grant Line Rd Bet. White Rock Rd & Douglas Rd

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_015

DAILY TOTALS	NB	SB	EB	WB	Total
	5,394	4,757	0	0	10,151

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	5		2				7		12:00	53		48				101	
00:15	6		2				8		12:15	69		46				115	
00:30	1		4				5		12:30	44		61				105	
00:45	2	14	3	11			5	25	12:45	66	232	47	202			113	434
01:00	2		4				6		13:00	58		47				105	
01:15	0		4				4		13:15	54		53				107	
01:30	2		1				3		13:30	66		60				126	
01:45	2	6	2	11			4	17	13:45	63	241	70	230			133	471
02:00	0		0				0		14:00	46		53				99	
02:15	1		1				2		14:15	84		65				149	
02:30	6		3				9		14:30	83		89				172	
02:45	3	10	3	7			6	17	14:45	58	271	91	298			149	569
03:00	3		2				5		15:00	75		91				166	
03:15	3		0				3		15:15	78		114				192	
03:30	6		0				6		15:30	102		122				224	
03:45	2	14	3	5			5	19	15:45	120	375	151	478			271	853
04:00	4		5				9		16:00	121		122				243	
04:15	7		6				13		16:15	136		155				291	
04:30	13		5				18		16:30	127		130				257	
04:45	9	33	12	28			21	61	16:45	98	482	152	559			250	1041
05:00	22		18				40		17:00	134		141				275	
05:15	27		20				47		17:15	125		166				291	
05:30	37		15				52		17:30	122		143				265	
05:45	54	140	30	83			84	223	17:45	129	510	109	559			238	1069
06:00	41		35				76		18:00	75		100				175	
06:15	71		64				135		18:15	89		85				174	
06:30	100		63				163		18:30	67		68				135	
06:45	116	328	75	237			191	565	18:45	50	281	62	315			112	596
07:00	102		81				183		19:00	47		34				81	
07:15	135		73				208		19:15	30		56				86	
07:30	175		123				298		19:30	23		35				58	
07:45	175	587	93	370			268	957	19:45	26	126	39	164			65	290
08:00	161		86				247		20:00	31		42				73	
08:15	176		64				240		20:15	35		31				66	
08:30	171		67				238		20:30	15		20				35	
08:45	176	684	54	271			230	955	20:45	21	102	30	123			51	225
09:00	107		48				155		21:00	14		27				41	
09:15	90		58				148		21:15	18		23				41	
09:30	91		55				146		21:30	19		23				42	
09:45	63	351	42	203			105	554	21:45	19	70	24	97			43	167
10:00	59		56				115		22:00	4		13				17	
10:15	58		42				100		22:15	11		21				32	
10:30	68		38				106		22:30	10		11				21	
10:45	67	252	47	183			114	435	22:45	5	30	16	61			21	91
11:00	55		47				102		23:00	6		9				15	
11:15	70		62				132		23:15	7		9				16	
11:30	54		60				114		23:30	4		9				13	
11:45	57	236	54	223			111	459	23:45	2	19	12	39			14	58
TOTALS		2655		1632				**4287**	**TOTALS**		2739		3125				**5864**
SPLIT %		61.9%		38.1%				**42.2%**	**SPLIT %**		46.7%		53.3%				**57.8%**

DAILY TOTALS	NB	SB	EB	WB	Total
	5,394	4,757	0	0	10,151

AM Peak Hour	07:30	07:15					**07:30**		**PM Peak Hour**	17:00	16:45					**16:45**		
AM Pk Volume	687	375					**1053**		**PM Pk Volume**	510	602					**1081**		
Pk Hr Factor	0.976	0.762					**0.883**		**Pk Hr Factor**	0.951	0.907					**0.929**		
7 - 9 Volume	1271	641	0	0			**1912**		**4 - 6 Volume**	992	1118	0	0			**2110**		
7 - 9 Peak Hour	07:30	07:15					**07:30**		**4 - 6 Peak Hour**	17:00	16:45					**16:45**		
7 - 9 Pk Volume	687	375	0	0			**1053**		**4 - 6 Pk Volume**	510	602	0	0			**1081**		
Pk Hr Factor	0.976	0.762	0.000	0.000			**0.883**		**Pk Hr Factor**	0.951	0.907	0.000	0.000			**0.929**		

Prepared by NDS/ATD

VOLUME

Grant Line Rd Bet. Douglas Rd & Jackson Rd/SR-16

Day: Tuesday
Date: 5/21/2019

City: Rancho Cordova
Project #: CA19_7203_016

DAILY TOTALS	NB	SB	EB	WB	Total
	4,000	3,501	0	0	7,501

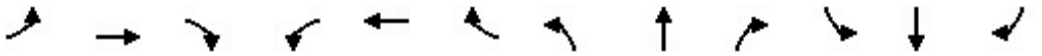
AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
00:00	3		4				7		12:00	48		42				90	
00:15	5		1				6		12:15	37		35				72	
00:30	2		3				5		12:30	42		37				79	
00:45	2	12	2	10			4	22	12:45	44	171	34	148			78	319
01:00	2		0				2		13:00	36		47				83	
01:15	1		3				4		13:15	43		35				78	
01:30	1		2				3		13:30	49		45				94	
01:45	2	6	3	8			5	14	13:45	41	169	54	181			95	350
02:00	0		0				0		14:00	54		50				104	
02:15	1		1				2		14:15	47		46				93	
02:30	4		2				6		14:30	56		74				130	
02:45	2	7	3	6			5	13	14:45	54	211	72	242			126	453
03:00	4		2				6		15:00	60		71				131	
03:15	3		0				3		15:15	80		73				153	
03:30	5		0				5		15:30	71		80				151	
03:45	2	14	3	5			5	19	15:45	81	292	104	328			185	620
04:00	6		1				7		16:00	81		88				169	
04:15	4		6				10		16:15	99		90				189	
04:30	9		5				14		16:30	84		108				192	
04:45	9	28	6	18			15	46	16:45	75	339	96	382			171	721
05:00	23		16				39		17:00	89		96				185	
05:15	22		13				35		17:15	100		109				209	
05:30	45		19				64		17:30	78		102				180	
05:45	49	139	16	64			65	203	17:45	87	354	68	375			155	729
06:00	43		32				75		18:00	58		73				131	
06:15	66		43				109		18:15	63		71				134	
06:30	84		61				145		18:30	42		37				79	
06:45	86	279	62	198			148	477	18:45	45	208	39	220			84	428
07:00	84		64				148		19:00	26		25				51	
07:15	113		62				175		19:15	29		33				62	
07:30	109		86				195		19:30	20		17				37	
07:45	113	419	74	286			187	705	19:45	17	92	18	93			35	185
08:00	118		63				181		20:00	18		21				39	
08:15	106		63				169		20:15	19		15				34	
08:30	130		61				191		20:30	18		17				35	
08:45	120	474	53	240			173	714	20:45	14	69	14	67			28	136
09:00	82		41				123		21:00	9		19				28	
09:15	67		42				109		21:15	17		12				29	
09:30	69		50				119		21:30	15		11				26	
09:45	34	252	43	176			77	428	21:45	9	50	20	62			29	112
10:00	46		43				89		22:00	8		7				15	
10:15	55		32				87		22:15	10		12				22	
10:30	55		45				100		22:30	5		8				13	
10:45	47	203	45	165			92	368	22:45	7	30	10	37			17	67
11:00	58		42				100		23:00	3		5				8	
11:15	32		35				67		23:15	7		7				14	
11:30	29		49				78		23:30	1		5				6	
11:45	50	169	38	164			88	333	23:45	2	13	9	26			11	39
TOTALS		2002		1340				3342	TOTALS		1998		2161				4159
SPLIT %		59.9%		40.1%				44.6%	SPLIT %		48.0%		52.0%				55.4%

DAILY TOTALS	NB	SB	EB	WB	Total
	4,000	3,501	0	0	7,501

AM Peak Hour	08:00	07:00				07:15	PM Peak Hour	17:00	16:30				16:30
AM Pk Volume	474	286				738	PM Pk Volume	354	409				757
Pk Hr Factor	0.912	0.831				0.946	Pk Hr Factor	0.885	0.938				0.906
7 - 9 Volume	893	526	0	0		1419	4 - 6 Volume	693	757	0	0		1450
7 - 9 Peak Hour	08:00	07:00				07:15	4 - 6 Peak Hour	17:00	16:30				16:30
7 - 9 Pk Volume	474	286	0	0		738	4 - 6 Pk Volume	354	409	0	0		757
Pk Hr Factor	0.912	0.831	0.000	0.000		0.946	Pk Hr Factor	0.885	0.938	0.000	0.000		0.906

Appendix B

Analysis Worksheets for Existing (2019) Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	978	0	240	0	740	450	0	755	390
Future Volume (veh/h)	0	0	0	978	0	240	0	740	450	0	755	390
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				700	594	276	0	771	0	0	803	0
Peak Hour Factor				0.87	0.87	0.87	0.96	0.96	0.96	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				568	384	178	0	2869		0	2869	
Arrive On Green				0.32	0.32	0.32	0.00	0.81	0.00	0.00	0.81	0.00
Sat Flow, veh/h				1781	1203	559	0	3741	0	0	3741	0
Grp Volume(v), veh/h				700	0	870	0	771	0	0	803	0
Grp Sat Flow(s),veh/h/ln				1781	0	1762	0	1777	0	0	1777	0
Q Serve(g_s), s				35.1	0.0	35.1	0.0	5.9	0.0	0.0	6.2	0.0
Cycle Q Clear(g_c), s				35.1	0.0	35.1	0.0	5.9	0.0	0.0	6.2	0.0
Prop In Lane				1.00		0.32	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				568	0	562	0	2869		0	2869	
V/C Ratio(X)				1.23	0.00	1.55	0.00	0.27		0.00	0.28	
Avail Cap(c_a), veh/h				568	0	562	0	2869		0	2869	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				37.4	0.0	37.5	0.0	2.6	0.0	0.0	2.6	0.0
Incr Delay (d2), s/veh				118.9	0.0	255.2	0.0	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				33.7	0.0	54.6	0.0	1.2	0.0	0.0	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				156.4	0.0	292.7	0.0	2.8	0.0	0.0	2.9	0.0
LnGrp LOS				F	A	F	A	A		A	A	
Approach Vol, veh/h					1570			771	A		803	A
Approach Delay, s/veh					231.9			2.8			2.9	
Approach LOS					F			A			A	

Timer - Assigned Phs	2		6		8							
Phs Duration (G+Y+Rc), s	94.5		94.5		40.0							
Change Period (Y+Rc), s	* 5		5.0		4.9							
Max Green Setting (Gmax), s	* 66		65.0		35.1							
Max Q Clear Time (g_c+I1), s	8.2		7.9		37.1							
Green Ext Time (p_c), s	1.8		1.7		0.0							

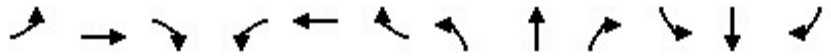
Intersection Summary		
HCM 6th Ctrl Delay	117.2	
HCM 6th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	312	0	1173	0	0	0	0	880	333	0	1419	317
Future Volume (veh/h)	312	0	1173	0	0	0	0	880	333	0	1419	317
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	219	0	1352				0	926	0	0	1526	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	560	0	994				0	3806		0	2649	
Arrive On Green	0.31	0.00	0.31				0.00	0.75	0.00	0.00	0.75	0.00
Sat Flow, veh/h	1781	0	3160				0	5443	0	0	3647	1585
Grp Volume(v), veh/h	219	0	1352				0	926	0	0	1526	0
Grp Sat Flow(s),veh/h/ln	1781	0	1580				0	1702	0	0	1777	1585
Q Serve(g_s), s	10.6	0.0	34.6				0.0	6.2	0.0	0.0	21.1	0.0
Cycle Q Clear(g_c), s	10.6	0.0	34.6				0.0	6.2	0.0	0.0	21.1	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	560	0	994				0	3806		0	2649	
V/C Ratio(X)	0.39	0.00	1.36				0.00	0.24		0.00	0.58	
Avail Cap(c_a), veh/h	560	0	994				0	3806		0	2649	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	29.5	0.0	37.7				0.0	4.4	0.0	0.0	6.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	168.7				0.0	0.2	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	36.4				0.0	1.6	0.0	0.0	6.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	206.4				0.0	4.5	0.0	0.0	7.2	0.0
LnGrp LOS	C	A	F				A	A		A	A	
Approach Vol, veh/h		1571						926	A		1526	A
Approach Delay, s/veh		181.7						4.5			7.2	
Approach LOS		F						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	87.5	40.0	87.5
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 66	* 35	65.0
Max Q Clear Time (g_c+I1), s	23.1	36.6	8.2
Green Ext Time (p_c), s	4.3	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	74.7
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	931	819	116	672	279	47
Future Volume (veh/h)	931	819	116	672	279	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1108	0	141	820	317	53
Peak Hour Factor	0.84	0.84	0.82	0.82	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2661		180	3655	443	203
Arrive On Green	0.52	0.00	0.10	0.72	0.13	0.13
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	1108	0	141	820	317	53
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	7.2	0.0	4.2	3.0	4.8	1.6
Cycle Q Clear(g_c), s	7.2	0.0	4.2	3.0	4.8	1.6
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2661		180	3655	443	203
V/C Ratio(X)	0.42		0.78	0.22	0.72	0.26
Avail Cap(c_a), veh/h	6088		650	6088	2314	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.0	0.0	23.9	2.6	22.8	21.4
Incr Delay (d2), s/veh	0.2	0.0	2.8	0.1	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.7	0.3	1.7	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.2	0.0	26.7	2.7	23.6	21.7
LnGrp LOS	A		C	A	C	C
Approach Vol, veh/h	1108	A		961	370	
Approach Delay, s/veh	8.2			6.2	23.3	
Approach LOS	A			A	C	

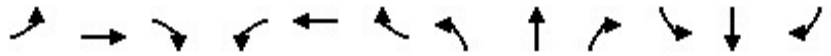
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	44.0			10.6	33.4	10.5
Change Period (Y+Rc), s	5.0			* 5.1	5.0	3.5
Max Green Setting (Gmax), s	65.0			* 20	65.0	36.5
Max Q Clear Time (g_c+I1), s	5.0			6.2	9.2	6.8
Green Ext Time (p_c), s	12.7			0.0	19.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1073	0	212	0	956	540	0	726	330
Future Volume (veh/h)	0	0	0	1073	0	212	0	956	540	0	726	330
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				1248	0	247	0	1017	0	0	748	0
Peak Hour Factor				0.86	0.86	0.86	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1292	0	593	0	2731		0	1900	
Arrive On Green				0.37	0.00	0.37	0.00	0.53	0.00	0.00	0.53	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	3647	1585
Grp Volume(v), veh/h				1248	0	247	0	1017	0	0	748	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1777	1585
Q Serve(g_s), s				44.2	0.0	14.4	0.0	14.5	0.0	0.0	15.5	0.0
Cycle Q Clear(g_c), s				44.2	0.0	14.4	0.0	14.5	0.0	0.0	15.5	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1292	0	593	0	2731		0	1900	
V/C Ratio(X)				0.97	0.00	0.42	0.00	0.37		0.00	0.39	
Avail Cap(c_a), veh/h				1333	0	611	0	2731		0	1900	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				38.3	0.0	29.0	0.0	16.9	0.0	0.0	17.1	0.0
Incr Delay (d2), s/veh				16.6	0.0	0.2	0.0	0.4	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				21.4	0.0	5.5	0.0	5.4	0.0	0.0	6.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.0	0.0	29.2	0.0	17.3	0.0	0.0	17.7	0.0
LnGrp LOS				D	A	C	A	B		A	B	
Approach Vol, veh/h					1495			1017	A		748	A
Approach Delay, s/veh					50.7			17.3			17.7	
Approach LOS					D			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	71.4		71.4		53.6			
Change Period (Y+Rc), s	4.6		4.6		6.8			
Max Green Setting (Gmax), s	65.4		65.4		48.2			
Max Q Clear Time (g_c+I1), s	17.5		16.5		46.2			
Green Ext Time (p_c), s	1.7		2.5		0.5			

Intersection Summary		
HCM 6th Ctrl Delay	32.7	
HCM 6th LOS	C	

Notes

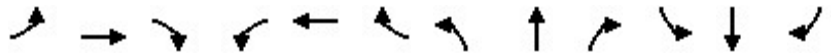
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	377	1	849	1095	102	27	985	469	15	1684	201
Future Volume (vph)	377	1	849	1095	102	27	985	469	15	1684	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.9		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.95	1.00
Frpb, ped/bikes		1.00	0.99	0.98	0.99		0.99			1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.94	0.85	0.85		0.95			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1603	3009	1417	2747		6064			3539	1545
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1603	3009	1417	2747		6064			3539	1545
Peak-hour factor, PHF	0.87	0.92	0.87	0.87	0.90	0.92	0.89	0.92	0.89	0.91	0.91
Adj. Flow (vph)	433	1	976	1259	113	29	1107	510	17	1851	221
RTOR Reduction (vph)	0	0	5	9	16	0	1	0	0	0	0
Lane Group Flow (vph)	0	434	1538	683	126	0	1633	0	0	1851	221
Confl. Peds. (#/hr)	6			6	3				3		6
Confl. Bikes (#/hr)									2		3
Turn Type	Split	Perm	NA	Perm	Perm		NA			NA	Free
Protected Phases	4		4				6			2	
Permitted Phases		4		4	8						Free
Actuated Green, G (s)		48.2	48.2	48.2	50.1		65.4			65.4	125.0
Effective Green, g (s)		48.2	48.2	48.2	50.1		65.4			65.4	125.0
Actuated g/C Ratio		0.39	0.39	0.39	0.40		0.52			0.52	1.00
Clearance Time (s)		6.8	6.8	6.8	4.9		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	3.0		1.0			1.0	
Lane Grp Cap (vph)		618	1160	546	1100		3172			1851	1545
v/s Ratio Prot							0.27			c0.52	
v/s Ratio Perm		0.27	0.51	0.48	0.05						0.14
v/c Ratio		0.70	1.33	1.25	0.11		0.51			1.00	0.14
Uniform Delay, d1		32.4	38.4	38.4	23.5		19.4			29.8	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.25	1.00
Incremental Delay, d2		3.0	152.7	127.8	0.0		0.6			17.4	0.1
Delay (s)		35.3	191.1	166.2	23.6		20.0			54.5	0.1
Level of Service		D	F	F	C		C			D	A
Approach Delay (s)			159.3				20.0			48.7	
Approach LOS			F				C			D	

Intersection Summary			
HCM 2000 Control Delay	86.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	101.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	101	30	25	87	241	40	1008	18	750	1373	658
Future Volume (veh/h)	215	101	30	25	87	241	40	1008	18	750	1373	658
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	117	35	29	101	280	44	1108	20	806	1476	708
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.91	0.91	0.91	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	320	935	256	60	300	1282	80	1365	25	862	2505	764
Arrive On Green	0.09	0.24	0.24	0.02	0.16	0.16	0.02	0.26	0.26	0.25	0.49	0.49
Sat Flow, veh/h	3456	3961	1085	3563	1870	3070	3456	5163	93	3456	5106	1557
Grp Volume(v), veh/h	250	99	53	29	101	280	44	730	398	806	1476	708
Grp Sat Flow(s),veh/h/ln	1728	1702	1642	1781	1870	1535	1728	1702	1852	1728	1702	1557
Q Serve(g_s), s	6.9	2.2	2.5	0.8	4.7	5.8	1.2	19.5	19.5	22.2	20.1	41.3
Cycle Q Clear(g_c), s	6.9	2.2	2.5	0.8	4.7	5.8	1.2	19.5	19.5	22.2	20.1	41.3
Prop In Lane	1.00		0.66	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	320	803	387	60	300	1282	80	900	490	862	2505	764
V/C Ratio(X)	0.78	0.12	0.14	0.49	0.34	0.22	0.55	0.81	0.81	0.94	0.59	0.93
Avail Cap(c_a), veh/h	693	2241	1081	715	1241	2827	693	2273	1237	871	3378	1030
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	29.2	29.3	47.4	36.2	18.6	47.0	33.5	33.5	35.7	17.7	23.1
Incr Delay (d2), s/veh	1.6	0.0	0.1	2.3	0.2	0.0	2.2	0.7	1.3	16.6	0.1	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.9	0.9	0.4	2.1	1.9	0.5	7.8	8.5	10.8	7.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.7	29.2	29.4	49.6	36.5	18.7	49.1	34.2	34.7	52.3	17.8	32.9
LnGrp LOS	D	C	C	D	D	B	D	C	C	D	B	C
Approach Vol, veh/h		402			410			1172			2990	
Approach Delay, s/veh		38.9			25.2			34.9			30.7	
Approach LOS		D			C			C			C	

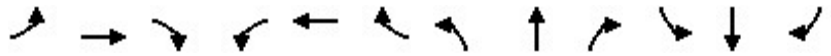
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	53.4	14.5	21.6	29.7	31.4	7.1	28.9
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	* 65	24.5	* 65	19.5	* 64
Max Q Clear Time (g_c+I1), s	3.2	43.3	8.9	7.8	24.2	21.5	2.8	4.5
Green Ext Time (p_c), s	0.0	4.3	0.1	0.4	0.0	2.6	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



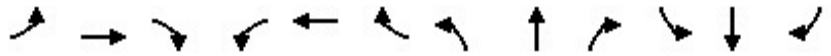
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	337	63	92	367	101	266	872	102	148	426	259
Future Volume (veh/h)	116	337	63	92	367	101	266	872	102	148	426	259
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	383	72	108	432	119	274	899	105	174	501	305
Peak Hour Factor	0.88	0.88	0.88	0.85	0.85	0.85	0.97	0.97	0.97	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	653	119	185	722	220	655	1841	570	270	848	389
Arrive On Green	0.06	0.15	0.15	0.05	0.14	0.14	0.19	0.36	0.36	0.08	0.25	0.25
Sat Flow, veh/h	3456	4328	788	3456	5106	1554	3456	5106	1581	3456	3404	1563
Grp Volume(v), veh/h	132	299	156	108	432	119	274	899	105	174	501	305
Grp Sat Flow(s),veh/h/ln	1728	1702	1712	1728	1702	1554	1728	1702	1581	1728	1702	1563
Q Serve(g_s), s	2.3	5.1	5.4	1.9	5.0	4.5	4.4	8.6	2.9	3.1	8.1	11.4
Cycle Q Clear(g_c), s	2.3	5.1	5.4	1.9	5.0	4.5	4.4	8.6	2.9	3.1	8.1	11.4
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	514	258	185	722	220	655	1841	570	270	848	389
V/C Ratio(X)	0.61	0.58	0.61	0.58	0.60	0.54	0.42	0.49	0.18	0.64	0.59	0.78
Avail Cap(c_a), veh/h	1074	1855	933	1074	2782	847	1074	5239	1622	1074	3492	1603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	24.8	24.9	29.0	25.3	25.1	22.4	15.6	13.7	28.1	20.8	22.0
Incr Delay (d2), s/veh	1.0	0.4	0.9	1.1	0.3	0.8	0.2	0.1	0.1	1.0	0.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.9	2.0	0.8	1.8	1.5	1.6	2.8	0.9	1.2	2.8	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	25.2	25.8	30.1	25.6	25.8	22.5	15.7	13.8	29.0	21.0	23.3
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	C
Approach Vol, veh/h		587			659			1278			980	
Approach Delay, s/veh		26.3			26.4			17.0			23.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	21.2	9.5	14.7	10.4	28.2	8.9	15.3
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.2	19.5	* 64	19.5	34.2
Max Q Clear Time (g_c+I1), s	16.4	13.4	4.3	7.0	5.1	10.6	3.9	7.4
Green Ext Time (p_c), s	0.1	1.8	0.1	1.0	0.1	2.2	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	14	263	37	20	32	302	2204	10	32	3198	77
Future Volume (veh/h)	111	14	263	37	20	32	302	2204	10	32	3198	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	134	223	45	24	39	311	2272	10	35	3476	84
Peak Hour Factor	0.87	0.87	0.87	0.82	0.82	0.82	0.97	0.97	0.97	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	155	262	100	36	58	363	3102	14	45	2598	786
Arrive On Green	0.17	0.17	0.17	0.06	0.06	0.06	0.11	0.59	0.59	0.03	0.51	0.51
Sat Flow, veh/h	892	934	1574	1781	639	1038	3456	5247	23	1781	5106	1545
Grp Volume(v), veh/h	262	0	223	45	0	63	311	1474	808	35	3476	84
Grp Sat Flow(s),veh/h/ln	1826	0	1574	1781	0	1677	1728	1702	1866	1781	1702	1545
Q Serve(g_s), s	17.9	0.0	17.6	3.1	0.0	4.7	11.3	40.0	40.0	2.5	65.2	3.6
Cycle Q Clear(g_c), s	17.9	0.0	17.6	3.1	0.0	4.7	11.3	40.0	40.0	2.5	65.2	3.6
Prop In Lane	0.49		1.00	1.00		0.62	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	304	0	262	100	0	94	363	2013	1103	45	2598	786
V/C Ratio(X)	0.86	0.00	0.85	0.45	0.00	0.67	0.86	0.73	0.73	0.78	1.34	0.11
Avail Cap(c_a), veh/h	492	0	424	480	0	451	537	2013	1103	281	2598	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	0.0	51.9	58.6	0.0	59.3	56.4	18.9	18.9	62.1	31.5	16.3
Incr Delay (d2), s/veh	4.9	0.0	4.8	1.2	0.0	3.1	6.1	1.2	2.2	10.5	154.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	7.3	1.5	0.0	2.1	5.1	14.6	16.3	1.2	61.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	0.0	56.6	59.8	0.0	62.4	62.5	20.1	21.1	72.7	186.2	16.4
LnGrp LOS	E	A	E	E	A	E	E	C	C	E	F	B
Approach Vol, veh/h		485			108			2593			3595	
Approach Delay, s/veh		56.8			61.3			25.5			181.2	
Approach LOS		E			E			C			F	

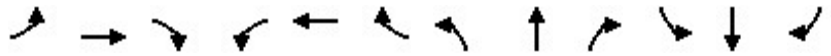
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.6	70.1		26.8	8.0	80.7		12.7
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 20	* 65		34.5	* 20	* 65		34.5
Max Q Clear Time (g_c+I1), s	13.3	67.2		19.9	4.5	42.0		6.7
Green Ext Time (p_c), s	0.1	0.0		0.6	0.0	6.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	110.8
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	501	0	440	0	2052	269	0	1949	1594
Future Volume (veh/h)	0	0	0	501	0	440	0	2052	269	0	1949	1594
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				589	0	518	0	2138	0	0	1989	0
Peak Hour Factor				0.85	0.85	0.85	0.96	0.96	0.96	0.98	0.98	0.98
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				716	0	578	0	3837		0	3491	
Arrive On Green				0.21	0.00	0.21	0.00	0.68	0.00	0.00	0.68	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				589	0	518	0	2138	0	0	1989	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				17.9	0.0	19.9	0.0	21.4	0.0	0.0	22.2	0.0
Cycle Q Clear(g_c), s				17.9	0.0	19.9	0.0	21.4	0.0	0.0	22.2	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				716	0	578	0	3837		0	3491	
V/C Ratio(X)				0.82	0.00	0.90	0.00	0.56		0.00	0.57	
Avail Cap(c_a), veh/h				1037	0	837	0	3837		0	3491	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				41.7	0.0	42.5	0.0	8.9	0.0	0.0	9.0	0.0
Incr Delay (d2), s/veh				2.3	0.0	7.0	0.0	0.6	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.8	0.0	7.4	0.0	7.2	0.0	0.0	6.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				44.0	0.0	49.5	0.0	9.5	0.0	0.0	9.7	0.0
LnGrp LOS				D	A	D	A	A		A	A	
Approach Vol, veh/h					1107			2138	A		1989	A
Approach Delay, s/veh					46.6			9.5			9.7	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	80.2		80.2		29.8			
Change Period (Y+Rc), s	* 5		5.0		7.0			
Max Green Setting (Gmax), s	* 65		65.0		33.0			
Max Q Clear Time (g_c+I1), s	24.2		23.4		21.9			
Green Ext Time (p_c), s	6.5		7.4		0.9			

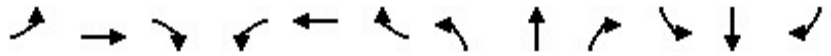
Intersection Summary		
HCM 6th Ctrl Delay		17.4
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1198	0	601	0	0	0	0	1106	459	0	2100	362
Future Volume (veh/h)	1198	0	601	0	0	0	0	1106	459	0	2100	362
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1235	0	620				0	1366	0	0	2143	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.98	0.98	0.98
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1349	0	749				0	4696		0	3522	
Arrive On Green	0.27	0.00	0.27				0.00	0.63	0.00	0.00	0.63	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1235	0	620				0	1366	0	0	2143	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	26.2	0.0	23.0				0.0	9.1	0.0	0.0	25.3	0.0
Cycle Q Clear(g_c), s	26.2	0.0	23.0				0.0	9.1	0.0	0.0	25.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1349	0	749				0	4696		0	3522	
V/C Ratio(X)	0.92	0.00	0.83				0.00	0.29		0.00	0.61	
Avail Cap(c_a), veh/h	1521	0	845				0	4696		0	3522	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	0.0	37.8				0.0	9.3	0.0	0.0	12.3	0.0
Incr Delay (d2), s/veh	7.8	0.0	5.5				0.0	0.2	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	8.3				0.0	3.3	0.0	0.0	9.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	43.3				0.0	9.5	0.0	0.0	13.1	0.0
LnGrp LOS	D	A	D				A	A		A	B	
Approach Vol, veh/h		1855						1366	A		2143	A
Approach Delay, s/veh		45.7						9.5			13.1	
Approach LOS		D						A			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	73.7	36.3	73.7
Change Period (Y+Rc), s	* 4.7	6.7	4.7
Max Green Setting (Gmax), s	* 66	33.3	65.3
Max Q Clear Time (g_c+I1), s	27.3	28.2	11.1
Green Ext Time (p_c), s	7.4	1.3	3.7

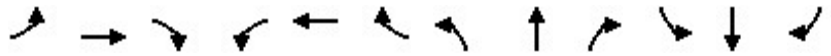
Intersection Summary	
HCM 6th Ctrl Delay	23.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	171	93	272	216	129	72	1246	103	230	2129	309
Future Volume (veh/h)	213	171	93	272	216	129	72	1246	103	230	2129	309
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	239	192	104	306	266	129	76	1312	108	240	2218	322
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	563	245	363	655	267	124	3015	741	295	2646	814
Arrive On Green	0.09	0.16	0.16	0.10	0.18	0.18	0.04	0.47	0.47	0.09	0.52	0.52
Sat Flow, veh/h	3456	3554	1546	3563	3741	1524	3456	6434	1581	3456	5106	1571
Grp Volume(v), veh/h	239	192	104	306	266	129	76	1312	108	240	2218	322
Grp Sat Flow(s),veh/h/ln	1728	1777	1546	1781	1870	1524	1728	1609	1581	1728	1702	1571
Q Serve(g_s), s	8.3	5.9	7.5	10.4	7.8	9.4	2.7	16.7	4.8	8.4	45.5	15.3
Cycle Q Clear(g_c), s	8.3	5.9	7.5	10.4	7.8	9.4	2.7	16.7	4.8	8.4	45.5	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	563	245	363	655	267	124	3015	741	295	2646	814
V/C Ratio(X)	0.81	0.34	0.42	0.84	0.41	0.48	0.61	0.44	0.15	0.81	0.84	0.40
Avail Cap(c_a), veh/h	549	986	429	565	1035	422	549	3362	826	549	2677	824
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	46.0	46.6	54.2	45.0	45.7	58.4	21.8	18.6	55.2	25.2	17.9
Incr Delay (d2), s/veh	2.1	0.5	1.7	3.9	0.7	2.3	3.0	0.1	0.1	2.1	2.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.7	3.0	4.8	3.7	3.7	1.2	6.0	1.8	3.6	17.5	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.3	46.5	48.4	58.1	45.7	48.0	61.4	21.8	18.7	57.3	28.0	18.6
LnGrp LOS	E	D	D	E	D	D	E	C	B	E	C	B
Approach Vol, veh/h		535			701			1496			2780	
Approach Delay, s/veh		51.7			51.5			23.6			29.4	
Approach LOS		D			D			C			C	

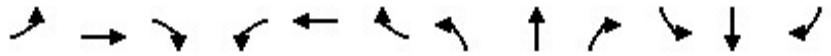
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	69.5	16.0	27.5	16.0	63.4	18.0	25.5
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	* 34
Max Q Clear Time (g_c+I1), s	4.7	47.5	10.3	11.4	10.4	18.7	12.4	9.5
Green Ext Time (p_c), s	0.1	16.2	0.1	3.6	0.1	8.5	0.2	2.3

Intersection Summary	
HCM 6th Ctrl Delay	32.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



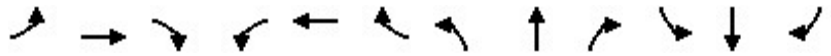
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	206	75	148	266	116	333	1085	82	252	851	254
Future Volume (veh/h)	166	206	75	148	266	116	333	1085	82	252	851	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	173	215	78	163	292	127	362	1179	89	262	886	265
Peak Hour Factor	0.96	0.96	0.96	0.91	0.91	0.91	0.92	0.92	0.92	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	531	232	223	747	231	423	1953	598	324	1807	552
Arrive On Green	0.08	0.17	0.17	0.07	0.16	0.16	0.14	0.43	0.43	0.10	0.39	0.39
Sat Flow, veh/h	3110	3198	1399	3110	4595	1419	3110	4595	1407	3110	4595	1404
Grp Volume(v), veh/h	173	215	78	163	292	127	362	1179	89	262	886	265
Grp Sat Flow(s),veh/h/ln	1555	1599	1399	1555	1532	1419	1555	1532	1407	1555	1532	1404
Q Serve(g_s), s	5.3	5.9	4.8	5.0	5.6	8.0	11.1	19.4	3.8	8.1	14.2	13.8
Cycle Q Clear(g_c), s	5.3	5.9	4.8	5.0	5.6	8.0	11.1	19.4	3.8	8.1	14.2	13.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	531	232	223	747	231	423	1953	598	324	1807	552
V/C Ratio(X)	0.74	0.41	0.34	0.73	0.39	0.55	0.86	0.60	0.15	0.81	0.49	0.48
Avail Cap(c_a), veh/h	620	2094	916	620	1598	493	620	3027	927	620	3018	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	36.5	36.0	44.5	36.6	37.6	41.3	21.7	17.3	42.8	22.3	22.2
Incr Delay (d2), s/veh	1.7	1.0	1.7	1.7	1.1	6.9	5.5	0.6	0.2	1.9	0.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	2.3	1.7	1.9	2.1	3.1	4.4	6.5	1.2	3.1	4.8	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	37.5	37.7	46.2	37.7	44.5	46.8	22.4	17.5	44.7	22.7	23.5
LnGrp LOS	D	D	D	D	D	D	D	C	B	D	C	C
Approach Vol, veh/h		466			582			1630			1413	
Approach Delay, s/veh		40.7			41.6			27.5			26.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	44.2	12.8	21.9	15.7	47.4	12.5	22.2
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	64.0
Max Q Clear Time (g_c+I1), s	13.1	16.2	7.3	10.0	10.1	21.4	7.0	7.9
Green Ext Time (p_c), s	0.2	17.1	0.1	5.3	0.1	20.2	0.1	3.3

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	304	185	2	12	339	444	6	179	44	175	27	72
Future Volume (veh/h)	304	185	2	12	339	444	6	179	44	175	27	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	323	197	2	14	404	529	7	218	54	194	30	80
Peak Hour Factor	0.94	0.94	0.94	0.84	0.84	0.84	0.82	0.82	0.82	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	1959	20	17	672	557	9	247	61	260	450	382
Arrive On Green	0.19	0.54	0.54	0.01	0.36	0.36	0.01	0.17	0.17	0.08	0.24	0.24
Sat Flow, veh/h	1781	3604	37	1781	1870	1550	1781	1447	359	3456	1870	1585
Grp Volume(v), veh/h	323	97	102	14	404	529	7	0	272	194	30	80
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1870	1550	1781	0	1806	1728	1870	1585
Q Serve(g_s), s	18.4	2.7	2.7	0.8	18.1	34.1	0.4	0.0	15.1	5.6	1.3	4.1
Cycle Q Clear(g_c), s	18.4	2.7	2.7	0.8	18.1	34.1	0.4	0.0	15.1	5.6	1.3	4.1
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	338	966	1013	17	672	557	9	0	309	260	450	382
V/C Ratio(X)	0.95	0.10	0.10	0.82	0.60	0.95	0.74	0.00	0.88	0.75	0.07	0.21
Avail Cap(c_a), veh/h	338	1127	1182	345	1188	985	338	0	1147	657	1183	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	11.3	11.3	50.7	26.9	32.0	51.0	0.0	41.5	46.5	30.1	31.2
Incr Delay (d2), s/veh	36.6	0.0	0.0	28.0	0.3	6.9	34.1	0.0	3.3	1.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	0.9	1.0	0.5	7.4	12.9	0.3	0.0	6.7	2.4	0.6	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	77.7	11.3	11.3	78.7	27.2	38.9	85.1	0.0	44.8	48.1	30.1	31.3
LnGrp LOS	E	B	B	E	C	D	F	A	D	D	C	C
Approach Vol, veh/h		522			947			279			304	
Approach Delay, s/veh		52.4			34.5			45.8			41.9	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	41.8	6.0	29.8	6.1	60.7	13.2	22.6
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	19.5	* 65	19.5	* 65	* 20	* 65	19.5	* 65
Max Q Clear Time (g_c+I1), s	20.4	36.1	2.4	6.1	2.8	4.7	7.6	17.1
Green Ext Time (p_c), s	0.0	0.8	0.0	0.1	0.0	0.3	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	41.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



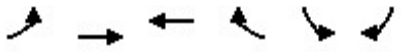
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	111	129	82	313	215	456	1398	63	88	487	58
Future Volume (veh/h)	256	111	129	82	313	215	456	1398	63	88	487	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	113	132	93	356	244	518	1589	72	99	547	65
Peak Hour Factor	0.98	0.98	0.98	0.88	0.88	0.88	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	1206	374	156	646	288	598	1845	565	164	1203	374
Arrive On Green	0.10	0.24	0.24	0.05	0.18	0.18	0.17	0.36	0.36	0.05	0.24	0.24
Sat Flow, veh/h	3456	5106	1585	3456	3554	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	261	113	132	93	356	244	518	1589	72	99	547	65
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1777	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	6.0	1.4	5.6	2.1	7.4	12.1	11.9	23.5	2.5	2.3	7.5	2.7
Cycle Q Clear(g_c), s	6.0	1.4	5.6	2.1	7.4	12.1	11.9	23.5	2.5	2.3	7.5	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1206	374	156	646	288	598	1845	565	164	1203	374
V/C Ratio(X)	0.76	0.09	0.35	0.60	0.55	0.85	0.87	0.86	0.13	0.60	0.45	0.17
Avail Cap(c_a), veh/h	829	2091	649	829	1451	647	829	3937	1207	829	3931	1220
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	24.3	25.9	38.1	30.2	32.2	32.7	24.1	17.4	38.0	26.6	24.8
Incr Delay (d2), s/veh	1.3	0.0	0.2	1.4	0.3	2.6	5.5	0.5	0.0	1.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.5	1.9	0.9	2.9	4.4	4.9	8.1	0.8	0.9	2.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.0	24.3	26.1	39.4	30.5	34.8	38.2	24.6	17.4	39.3	26.7	24.9
LnGrp LOS	D	C	C	D	C	C	D	C	B	D	C	C
Approach Vol, veh/h		506			693			2179			711	
Approach Delay, s/veh		31.3			33.2			27.6			28.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	36.8	9.2	26.0	19.6	26.6	13.6	21.6
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	19.5	* 63	19.5	* 33	19.5	* 63	19.5	33.2
Max Q Clear Time (g_c+I1), s	14.3	25.5	4.1	7.6	13.9	9.5	8.0	14.1
Green Ext Time (p_c), s	0.0	3.9	0.0	0.2	0.2	1.1	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	29.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



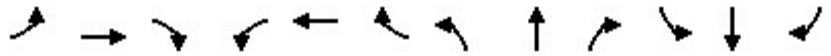
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	57	197	89	5	5	72
Future Volume (veh/h)	57	197	89	5	5	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	66	226	99	6	6	94
Peak Hour Factor	0.87	0.87	0.90	0.90	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	80	1381	402	179	253	225
Arrive On Green	0.04	0.39	0.11	0.11	0.14	0.14
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	66	226	99	6	6	94
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	0.9	1.0	0.6	0.1	0.1	1.3
Cycle Q Clear(g_c), s	0.9	1.0	0.6	0.1	0.1	1.3
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	80	1381	402	179	253	225
V/C Ratio(X)	0.83	0.16	0.25	0.03	0.02	0.42
Avail Cap(c_a), veh/h	1491	9787	9802	4372	2586	2301
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.1	4.7	9.5	9.2	8.7	9.2
Incr Delay (d2), s/veh	7.9	0.0	0.1	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.0	0.0	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.0	4.7	9.6	9.3	8.7	9.6
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h		292	105		100	
Approach Delay, s/veh		7.9	9.6		9.6	
Approach LOS		A	A		A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	8.2		8.8		14.6
Change Period (Y+Rc), s	* 5.4	* 5.5		5.5		* 5.5
Max Green Setting (Gmax), s	* 2.8	* 65		34.0		* 65
Max Q Clear Time (g_c+I1), s	2.9	2.6		3.3		3.0
Green Ext Time (p_c), s	0.0	0.2		0.1		0.4

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



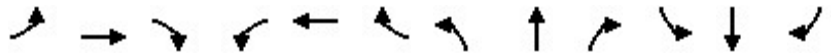
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	192	6	30	361	278	4	856	44	95	502	85
Future Volume (veh/h)	73	192	6	30	361	278	4	856	44	95	502	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	226	7	33	401	309	4	941	48	116	612	104
Peak Hour Factor	0.85	0.85	0.85	0.90	0.90	0.90	0.91	0.91	0.91	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	497	421	42	429	364	39	826	42	141	982	927
Arrive On Green	0.06	0.27	0.27	0.02	0.23	0.23	0.02	0.47	0.47	0.08	0.53	0.53
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1764	90	1781	1870	1585
Grp Volume(v), veh/h	86	226	7	33	401	309	4	0	989	116	612	104
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1854	1781	1870	1585
Q Serve(g_s), s	6.5	13.7	0.4	2.5	28.6	25.4	0.3	0.0	63.6	8.7	31.4	4.0
Cycle Q Clear(g_c), s	6.5	13.7	0.4	2.5	28.6	25.4	0.3	0.0	63.6	8.7	31.4	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	107	497	421	42	429	364	39	0	868	141	982	927
V/C Ratio(X)	0.80	0.45	0.02	0.78	0.93	0.85	0.10	0.00	1.14	0.82	0.62	0.11
Avail Cap(c_a), veh/h	269	497	421	269	457	387	269	0	868	321	982	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.1	41.6	36.8	66.0	51.4	50.1	65.1	0.0	36.1	61.6	22.8	12.5
Incr Delay (d2), s/veh	5.2	0.2	0.0	11.1	25.1	14.5	0.4	0.0	76.7	4.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	6.1	0.2	1.2	15.8	11.1	0.1	0.0	44.7	4.0	12.9	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.3	41.9	36.8	77.1	76.4	64.6	65.5	0.0	112.8	66.2	23.7	12.5
LnGrp LOS	E	D	D	E	E	E	E	A	F	E	C	B
Approach Vol, veh/h		319			743			993			832	
Approach Delay, s/veh		48.9			71.5			112.7			28.2	
Approach LOS		D			E			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	38.0	7.5	77.7	7.7	42.9	15.2	70.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	20.5	33.2	20.5	* 64	20.5	33.2	24.5	63.6
Max Q Clear Time (g_c+I1), s	8.5	30.6	2.3	33.4	4.5	15.7	10.7	65.6
Green Ext Time (p_c), s	0.0	0.6	0.0	2.2	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	70.7
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	259	0	36	640	34	3	316	16	23	219	64
Future Volume (veh/h)	83	259	0	36	640	34	3	316	16	23	219	64
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	278	0	40	711	38	3	351	18	26	246	72
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	761	0	52	660	35	3	370	19	28	261	76
Arrive On Green	0.06	0.41	0.00	0.03	0.38	0.38	0.21	0.21	0.21	0.20	0.20	0.20
Sat Flow, veh/h	1781	1870	0	1781	1759	94	15	1749	90	136	1284	376
Grp Volume(v), veh/h	89	278	0	40	0	749	372	0	0	344	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1853	1853	0	0	1796	0	0
Q Serve(g_s), s	8.3	17.4	0.0	3.8	0.0	63.2	33.3	0.0	0.0	31.8	0.0	0.0
Cycle Q Clear(g_c), s	8.3	17.4	0.0	3.8	0.0	63.2	33.3	0.0	0.0	31.8	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.05	0.01		0.05	0.08		0.21
Lane Grp Cap(c), veh/h	108	761	0	52	0	696	393	0	0	365	0	0
V/C Ratio(X)	0.83	0.37	0.00	0.78	0.00	1.08	0.95	0.00	0.00	0.94	0.00	0.00
Avail Cap(c_a), veh/h	270	761	0	217	0	696	418	0	0	407	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	78.2	34.8	0.0	81.2	0.0	52.6	65.4	0.0	0.0	66.1	0.0	0.0
Incr Delay (d2), s/veh	5.9	0.1	0.0	8.9	0.0	56.6	29.4	0.0	0.0	27.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	7.8	0.0	1.8	0.0	39.0	18.5	0.0	0.0	17.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	84.1	34.9	0.0	90.1	0.0	109.2	94.9	0.0	0.0	93.8	0.0	0.0
LnGrp LOS	F	C	A	F	A	F	F	A	A	F	A	A
Approach Vol, veh/h		367			789			372			344	
Approach Delay, s/veh		46.8			108.3			94.9			93.8	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.7	70.0		41.0	9.4	75.3		42.7
Change Period (Y+Rc), s	4.5	6.8		6.8	4.5	* 6.8		7.0
Max Green Setting (Gmax), s	25.5	63.2		38.2	20.5	* 64		38.0
Max Q Clear Time (g_c+I1), s	10.3	65.2		33.8	5.8	19.4		35.3
Green Ext Time (p_c), s	0.0	0.0		0.5	0.0	0.8		0.3

Intersection Summary	
HCM 6th Ctrl Delay	90.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	16.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	13	0	166	1	439	15	50	288	0
Future Vol, veh/h	1	0	0	13	0	166	1	439	15	50	288	0
Peak Hour Factor	0.70	0.70	0.70	0.84	0.84	0.84	0.96	0.96	0.96	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	15	0	198	1	457	16	63	365	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10	11.4	18.3	16.6
HCM LOS	A	B	C	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	7%	15%
Vol Thru, %	96%	0%	0%	85%
Vol Right, %	3%	0%	93%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	455	1	179	338
LT Vol	1	1	13	50
Through Vol	439	0	0	288
RT Vol	15	0	166	0
Lane Flow Rate	474	1	213	428
Geometry Grp	1	1	1	1
Degree of Util (X)	0.677	0.003	0.331	0.623
Departure Headway (Hd)	5.144	6.92	5.597	5.246
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	701	515	641	689
Service Time	3.179	4.994	3.643	3.281
HCM Lane V/C Ratio	0.676	0.002	0.332	0.621
HCM Control Delay	18.3	10	11.4	16.6
HCM Lane LOS	C	A	B	C
HCM 95th-tile Q	5.3	0	1.4	4.4



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	196	22	94	481	300	72
Future Volume (veh/h)	196	22	94	481	300	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	280	31	108	553	341	82
Peak Hour Factor	0.70	0.70	0.87	0.87	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	358	319	135	868	459	389
Arrive On Green	0.20	0.20	0.08	0.46	0.25	0.25
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	280	31	108	553	341	82
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	4.8	0.5	1.9	7.3	5.4	1.3
Cycle Q Clear(g_c), s	4.8	0.5	1.9	7.3	5.4	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	358	319	135	868	459	389
V/C Ratio(X)	0.78	0.10	0.80	0.64	0.74	0.21
Avail Cap(c_a), veh/h	1950	1735	1127	3724	3707	3141
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	10.5	14.7	6.6	11.2	9.7
Incr Delay (d2), s/veh	1.4	0.0	4.0	0.3	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.1	0.6	0.7	1.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.6	10.5	18.7	6.9	12.1	9.8
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	311			661	423	
Approach Delay, s/veh	13.3			8.8	11.7	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.0	14.0			21.1	11.2
Change Period (Y+Rc), s	* 4.6	* 6.1			* 6.1	4.7
Max Green Setting (Gmax), s	* 26	* 64			* 64	35.3
Max Q Clear Time (g_c+I1), s	3.9	7.4			9.3	6.8
Green Ext Time (p_c), s	0.0	0.5			0.8	0.1

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	48	2	3	699	400	17
Future Vol, veh/h	48	2	3	699	400	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	86	86	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	3	3	813	435	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1263	444	453	0	-	0
Stage 1	444	-	-	-	-	-
Stage 2	819	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	187	614	1108	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	186	614	1108	-	-	-
Mov Cap-2 Maneuver	186	-	-	-	-	-
Stage 1	644	-	-	-	-	-
Stage 2	433	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	37	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1108	-	191	-	-
HCM Lane V/C Ratio	0.003	-	0.422	-	-
HCM Control Delay (s)	8.3	-	37	-	-
HCM Lane LOS	A	-	E	-	-
HCM 95th %tile Q(veh)	0	-	1.9	-	-

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	42	15	28	783	0	399	296
Future Volume (veh/h)	42	15	28	783	0	399	296
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	53	19	32	890		420	312
Peak Hour Factor	0.79	0.79	0.88	0.88		0.95	0.95
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	160	111	42	1769		966	504
Arrive On Green	0.05	0.05	0.02	0.50		0.27	0.27
Sat Flow, veh/h	3456	1585	1781	3647		3647	1585
Grp Volume(v), veh/h	53	19	32	890		420	312
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777		1777	1585
Q Serve(g_s), s	0.4	0.3	0.5	4.6		2.7	4.5
Cycle Q Clear(g_c), s	0.4	0.3	0.5	4.6		2.7	4.5
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	160	111	42	1769		966	504
V/C Ratio(X)	0.33	0.17	0.76	0.50		0.43	0.62
Avail Cap(c_a), veh/h	6926	3214	1277	6979		6940	3169
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	12.6	11.9	13.2	4.6		8.2	7.9
Incr Delay (d2), s/veh	0.4	0.3	9.8	0.1		0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.3	0.2	0.0		0.4	0.7
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	13.0	12.2	23.0	4.7		8.3	8.3
LnGrp LOS	B	B	C	A		A	A
Approach Vol, veh/h	72			922		732	
Approach Delay, s/veh	12.8			5.3		8.3	
Approach LOS	B			A		A	

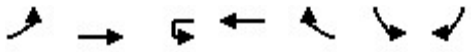
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	6.1	14.3		6.8		20.4	
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9	
Max Green Setting (Gmax), s	19.5	* 53		54.5		* 53	
Max Q Clear Time (g_c+I1), s	2.5	6.5		2.4		6.6	
Green Ext Time (p_c), s	0.0	0.8		0.0		1.8	

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	434	375	0	414	109	31	245
Future Volume (veh/h)	434	375	0	414	109	31	245
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	477	412		505	133	37	292
Peak Hour Factor	0.91	0.91		0.82	0.82	0.84	0.84
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	526	2035		662	295	381	339
Arrive On Green	0.30	0.57		0.19	0.19	0.21	0.21
Sat Flow, veh/h	1781	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	477	412		505	133	37	292
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1781	1585
Q Serve(g_s), s	14.7	3.2		7.7	4.3	1.0	10.1
Cycle Q Clear(g_c), s	14.7	3.2		7.7	4.3	1.0	10.1
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	526	2035		662	295	381	339
V/C Ratio(X)	0.91	0.20		0.76	0.45	0.10	0.86
Avail Cap(c_a), veh/h	929	3942		3936	1756	1075	957
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	5.9		22.0	20.6	18.0	21.6
Incr Delay (d2), s/veh	3.3	0.0		0.7	0.4	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.7		2.7	1.3	0.3	3.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	22.6	5.9		22.7	21.0	18.1	24.2
LnGrp LOS	C	A		C	C	B	C
Approach Vol, veh/h		889		638		329	
Approach Delay, s/veh		14.9		22.4		23.5	
Approach LOS		B		C		C	

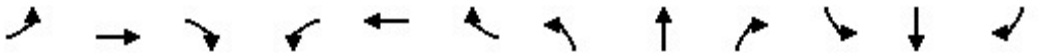
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	22.1	17.4			39.4	17.7
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 36	* 63			* 63	34.5
Max Q Clear Time (g_c+I1), s	16.7	9.7			5.2	12.1
Green Ext Time (p_c), s	0.1	1.0			0.7	0.1

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	401	0	353	0	1148	966	0	583	359
Future Volume (veh/h)	0	0	0	401	0	353	0	1148	966	0	583	359
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				448	40	420	0	1171	0	0	678	0
Peak Hour Factor				0.84	0.84	0.84	0.98	0.98	0.98	0.86	0.86	0.86
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				547	42	442	0	2143		0	2143	
Arrive On Green				0.31	0.31	0.31	0.00	0.60	0.00	0.00	0.60	0.00
Sat Flow, veh/h				1781	137	1441	0	3741	0	0	3741	0
Grp Volume(v), veh/h				448	0	460	0	1171	0	0	678	0
Grp Sat Flow(s),veh/h/ln				1781	0	1579	0	1777	0	0	1777	0
Q Serve(g_s), s				25.6	0.0	31.4	0.0	21.5	0.0	0.0	10.3	0.0
Cycle Q Clear(g_c), s				25.6	0.0	31.4	0.0	21.5	0.0	0.0	10.3	0.0
Prop In Lane				1.00		0.91	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				547	0	484	0	2143		0	2143	
V/C Ratio(X)				0.82	0.00	0.95	0.00	0.55		0.00	0.32	
Avail Cap(c_a), veh/h				568	0	504	0	2143		0	2143	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				35.3	0.0	37.3	0.0	12.9	0.0	0.0	10.7	0.0
Incr Delay (d2), s/veh				8.3	0.0	26.9	0.0	1.0	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.2	0.0	15.5	0.0	7.8	0.0	0.0	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				43.6	0.0	64.2	0.0	13.9	0.0	0.0	11.1	0.0
LnGrp LOS				D	A	E	A	B		A	B	
Approach Vol, veh/h					908			1171	A		678	A
Approach Delay, s/veh					54.0			13.9			11.1	
Approach LOS					D			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	71.3		71.3		38.7			
Change Period (Y+Rc), s	* 5		5.0		4.9			
Max Green Setting (Gmax), s	* 66		65.0		35.1			
Max Q Clear Time (g_c+I1), s	12.3		23.5		33.4			
Green Ext Time (p_c), s	1.5		2.9		0.4			

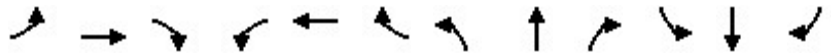
Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	534	0	585	0	0	0	0	1571	715	0	744	231
Future Volume (veh/h)	534	0	585	0	0	0	0	1571	715	0	744	231
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	832	0	438				0	1689	0	0	800	0
Peak Hour Factor	0.87	0.87	0.87				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	1047	0	464				0	3123		0	2174	
Arrive On Green	0.29	0.00	0.29				0.00	0.61	0.00	0.00	0.61	0.00
Sat Flow, veh/h	3563	0	1580				0	5443	0	0	3647	1585
Grp Volume(v), veh/h	832	0	438				0	1689	0	0	800	0
Grp Sat Flow(s),veh/h/ln	1781	0	1580				0	1702	0	0	1777	1585
Q Serve(g_s), s	23.7	0.0	29.8				0.0	21.1	0.0	0.0	12.4	0.0
Cycle Q Clear(g_c), s	23.7	0.0	29.8				0.0	21.1	0.0	0.0	12.4	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	1047	0	464				0	3123		0	2174	
V/C Ratio(X)	0.79	0.00	0.94				0.00	0.54		0.00	0.37	
Avail Cap(c_a), veh/h	1121	0	497				0	3123		0	2174	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	38.0				0.0	12.4	0.0	0.0	10.7	0.0
Incr Delay (d2), s/veh	3.4	0.0	25.3				0.0	0.7	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	14.6				0.0	7.2	0.0	0.0	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	0.0	63.3				0.0	13.1	0.0	0.0	11.2	0.0
LnGrp LOS	D	A	E				A	B		A	B	
Approach Vol, veh/h		1270						1689	A		800	A
Approach Delay, s/veh		47.5						13.1			11.2	
Approach LOS		D						B			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	72.3	37.7	72.3
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 66	* 35	65.0
Max Q Clear Time (g_c+I1), s	14.4	31.8	23.1
Green Ext Time (p_c), s	1.8	0.5	5.0

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	781	224	109	1047	677	96
Future Volume (veh/h)	781	224	109	1047	677	96
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	849	0	124	1190	967	137
Peak Hour Factor	0.92	0.92	0.88	0.88	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1912		159	2796	1079	495
Arrive On Green	0.37	0.00	0.09	0.55	0.31	0.31
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	849	0	124	1190	967	137
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	7.6	0.0	4.1	8.3	16.2	3.9
Cycle Q Clear(g_c), s	7.6	0.0	4.1	8.3	16.2	3.9
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1912		159	2796	1079	495
V/C Ratio(X)	0.44		0.78	0.43	0.90	0.28
Avail Cap(c_a), veh/h	5473		585	5473	2080	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	27.0	8.1	19.9	15.7
Incr Delay (d2), s/veh	0.3	0.0	3.1	0.2	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.7	2.1	5.6	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.6	0.0	30.2	8.3	21.0	15.8
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	849	A		1314	1104	
Approach Delay, s/veh	14.6			10.4	20.4	
Approach LOS	B			B	C	

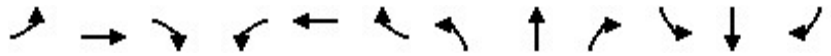
Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	38.2		10.5	27.7	22.4
Change Period (Y+Rc), s	5.0		* 5.1	5.0	3.5
Max Green Setting (Gmax), s	65.0		* 20	65.0	36.5
Max Q Clear Time (g_c+I1), s	10.3		6.1	9.6	18.2
Green Ext Time (p_c), s	21.1		0.0	13.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	394	0	310	0	1655	1725	0	775	567
Future Volume (veh/h)	0	0	0	394	0	310	0	1655	1725	0	775	567
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				464	0	365	0	1689	0	0	807	0
Peak Hour Factor				0.85	0.85	0.85	0.98	0.98	0.98	0.96	0.96	0.96
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				850	0	390	0	3384		0	2355	
Arrive On Green				0.25	0.00	0.25	0.00	0.66	0.00	0.00	0.66	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	3647	1585
Grp Volume(v), veh/h				464	0	365	0	1689	0	0	807	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1777	1585
Q Serve(g_s), s				14.6	0.0	28.2	0.0	20.8	0.0	0.0	12.4	0.0
Cycle Q Clear(g_c), s				14.6	0.0	28.2	0.0	20.8	0.0	0.0	12.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				850	0	390	0	3384		0	2355	
V/C Ratio(X)				0.55	0.00	0.94	0.00	0.50		0.00	0.34	
Avail Cap(c_a), veh/h				1333	0	611	0	3384		0	2355	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				41.0	0.0	46.2	0.0	10.6	0.0	0.0	9.2	0.0
Incr Delay (d2), s/veh				0.2	0.0	12.2	0.0	0.5	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.3	0.0	12.4	0.0	7.0	0.0	0.0	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				41.2	0.0	58.4	0.0	11.2	0.0	0.0	9.6	0.0
LnGrp LOS				D	A	E	A	B		A	A	
Approach Vol, veh/h					829			1689	A		807	A
Approach Delay, s/veh					48.8			11.2			9.6	
Approach LOS					D			B			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	87.4		87.4		37.6			
Change Period (Y+Rc), s	4.6		4.6		6.8			
Max Green Setting (Gmax), s	65.4		65.4		48.2			
Max Q Clear Time (g_c+I1), s	14.4		22.8		30.2			
Green Ext Time (p_c), s	1.8		5.0		0.6			

Intersection Summary		
HCM 6th Ctrl Delay		20.2
HCM 6th LOS		C

Notes

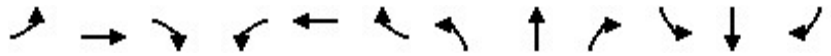
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	692	0	130	676	736	127	1938	464	7	1057	114
Future Volume (vph)	692	0	130	676	736	127	1938	464	7	1057	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.6		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.95	1.00
Frpb, ped/bikes		1.00	0.99	0.98	1.00		1.00			1.00	0.97
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.89	0.85	0.85		0.97			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1610	2815	1411	2787		6185			3539	1540
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1610	2815	1411	2787		6185			3539	1540
Peak-hour factor, PHF	0.97	0.92	0.97	0.97	0.89	0.92	0.98	0.92	0.98	0.87	0.87
Adj. Flow (vph)	713	0	134	697	827	138	1978	504	7	1215	131
RTOR Reduction (vph)	0	0	28	28	16	0	0	0	0	0	0
Lane Group Flow (vph)	0	713	455	320	949	0	2489	0	0	1215	131
Confl. Peds. (#/hr)	11			11	3				3		11
Confl. Bikes (#/hr)									8		5
Turn Type	Split	Split	NA	Perm	Prot		NA			NA	Free
Protected Phases	4	4	4		2!		6!			2	
Permitted Phases				4	2						Free
Actuated Green, G (s)		48.2	48.2	48.2	65.4		65.4			65.4	125.0
Effective Green, g (s)		48.2	48.2	48.2	65.4		65.4			65.4	125.0
Actuated g/C Ratio		0.39	0.39	0.39	0.52		0.52			0.52	1.00
Clearance Time (s)		6.8	6.8	6.8	4.6		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0			1.0	
Lane Grp Cap (vph)		620	1085	544	1458		3235			1851	1540
v/s Ratio Prot		c0.44	0.16		0.34		c0.40			0.34	
v/s Ratio Perm				0.23							0.09
v/c Ratio		1.15	0.42	0.59	0.65		0.77			0.66	0.09
Uniform Delay, d1		38.4	28.1	30.5	21.5		23.8			21.6	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.18	1.00
Incremental Delay, d2		85.1	0.1	1.1	2.3		1.8			1.8	0.1
Delay (s)		123.5	28.2	31.6	23.8		25.6			27.3	0.1
Level of Service		F	C	C	C		C			C	A
Approach Delay (s)			73.0				25.6			24.7	
Approach LOS			E				C			C	

Intersection Summary			
HCM 2000 Control Delay	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	118.2%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	605	173	42	42	124	696	59	1128	19	356	1129	263
Future Volume (veh/h)	605	173	42	42	124	696	59	1128	19	356	1129	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	624	178	43	45	133	748	61	1163	20	371	1176	274
Peak Hour Factor	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	596	1621	369	82	451	1137	104	1348	23	431	1815	558
Arrive On Green	0.17	0.39	0.39	0.02	0.24	0.24	0.03	0.26	0.26	0.12	0.36	0.36
Sat Flow, veh/h	3456	4149	945	3563	1870	3077	3456	5168	89	3456	5106	1569
Grp Volume(v), veh/h	624	144	77	45	133	748	61	766	417	371	1176	274
Grp Sat Flow(s),veh/h/ln	1728	1702	1690	1781	1870	1539	1728	1702	1852	1728	1702	1569
Q Serve(g_s), s	19.5	3.0	3.3	1.4	6.6	23.0	2.0	24.3	24.3	11.9	21.8	15.4
Cycle Q Clear(g_c), s	19.5	3.0	3.3	1.4	6.6	23.0	2.0	24.3	24.3	11.9	21.8	15.4
Prop In Lane	1.00		0.56	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	596	1330	660	82	451	1137	104	888	483	431	1815	558
V/C Ratio(X)	1.05	0.11	0.12	0.55	0.30	0.66	0.59	0.86	0.86	0.86	0.65	0.49
Avail Cap(c_a), veh/h	596	1928	957	615	1068	2152	596	1955	1064	749	2905	893
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	21.9	22.0	54.6	35.0	30.0	54.1	39.8	39.8	48.5	30.5	28.4
Incr Delay (d2), s/veh	49.6	0.0	0.0	2.1	0.1	0.2	1.9	1.0	1.8	2.0	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	1.2	1.3	0.6	2.9	8.1	0.9	9.9	10.9	5.1	8.5	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	96.3	21.9	22.0	56.8	35.2	30.3	56.0	40.8	41.7	50.5	30.6	28.7
LnGrp LOS	F	C	C	E	D	C	E	D	D	D	C	C
Approach Vol, veh/h		845			926			1244			1821	
Approach Delay, s/veh		76.9			32.3			41.9			34.4	
Approach LOS		E			C			D			C	

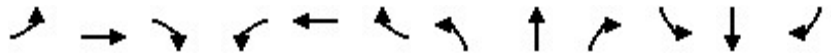
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	45.9	25.0	33.2	19.6	35.2	8.1	50.1
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	* 65	24.5	* 65	19.5	* 64
Max Q Clear Time (g_c+I1), s	14.0	23.8	21.5	25.0	13.9	26.3	3.4	5.3
Green Ext Time (p_c), s	0.0	3.1	0.0	0.9	0.2	2.7	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	43.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



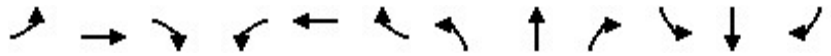
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	498	232	181	354	115	124	448	54	175	864	128
Future Volume (veh/h)	305	498	232	181	354	115	124	448	54	175	864	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	332	541	252	218	427	139	133	482	58	199	982	145
Peak Hour Factor	0.92	0.92	0.92	0.83	0.83	0.83	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	808	362	297	1040	309	466	1706	515	277	1249	184
Arrive On Green	0.12	0.24	0.24	0.09	0.20	0.20	0.13	0.33	0.33	0.08	0.28	0.28
Sat Flow, veh/h	3456	3411	1530	3456	5106	1519	3456	5106	1543	3456	4473	658
Grp Volume(v), veh/h	332	540	253	218	427	139	133	482	58	199	747	380
Grp Sat Flow(s),veh/h/ln	1728	1702	1536	1728	1702	1519	1728	1702	1543	1728	1702	1727
Q Serve(g_s), s	8.0	12.2	12.8	5.2	6.2	6.8	2.9	5.9	2.2	4.8	17.2	17.3
Cycle Q Clear(g_c), s	8.0	12.2	12.8	5.2	6.2	6.8	2.9	5.9	2.2	4.8	17.2	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	411	807	364	297	1040	309	466	1706	515	277	951	482
V/C Ratio(X)	0.81	0.67	0.70	0.73	0.41	0.45	0.29	0.28	0.11	0.72	0.79	0.79
Avail Cap(c_a), veh/h	791	1367	617	791	2051	610	791	3861	1167	791	2574	1306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	29.5	29.7	38.0	29.5	29.7	33.1	20.9	19.6	38.2	28.3	28.4
Incr Delay (d2), s/veh	1.4	0.4	0.9	1.3	0.1	0.4	0.1	0.0	0.0	1.3	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	4.7	4.5	2.2	2.4	2.4	1.2	2.2	0.7	2.0	6.5	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.0	29.8	30.6	39.3	29.6	30.1	33.3	20.9	19.7	39.5	28.9	29.5
LnGrp LOS	D	C	C	D	C	C	C	C	B	D	C	C
Approach Vol, veh/h		1125			784			673			1326	
Approach Delay, s/veh		32.4			32.4			23.2			30.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	29.4	15.6	23.2	12.3	34.0	12.8	26.0
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.2	19.5	* 64	19.5	34.2
Max Q Clear Time (g_c+I1), s	14.9	19.3	10.0	8.8	6.8	7.9	7.2	14.8
Green Ext Time (p_c), s	0.1	2.5	0.2	1.0	0.1	1.1	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	32	176	59	24	60	214	2760	22	52	2119	97
Future Volume (veh/h)	191	32	176	59	24	60	214	2760	22	52	2119	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	36	196	71	29	72	228	2936	23	60	2436	111
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.94	0.94	0.94	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	43	256	179	46	115	280	2791	22	77	2523	777
Arrive On Green	0.16	0.16	0.16	0.10	0.10	0.10	0.08	0.53	0.53	0.04	0.49	0.49
Sat Flow, veh/h	1533	260	1568	1781	462	1148	3456	5225	41	1781	5106	1572
Grp Volume(v), veh/h	248	0	196	71	0	101	228	1910	1049	60	2436	111
Grp Sat Flow(s),veh/h/ln	1794	0	1568	1781	0	1611	1728	1702	1862	1781	1702	1572
Q Serve(g_s), s	17.5	0.0	15.6	4.9	0.0	7.8	8.5	69.6	69.6	4.3	60.2	5.0
Cycle Q Clear(g_c), s	17.5	0.0	15.6	4.9	0.0	7.8	8.5	69.6	69.6	4.3	60.2	5.0
Prop In Lane	0.85		1.00	1.00		0.71	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	293	0	256	179	0	161	280	1818	995	77	2523	777
V/C Ratio(X)	0.85	0.00	0.76	0.40	0.00	0.63	0.81	1.05	1.05	0.78	0.97	0.14
Avail Cap(c_a), veh/h	475	0	415	471	0	426	528	1818	995	276	2554	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	0.0	52.1	55.0	0.0	56.3	58.9	30.4	30.4	61.7	31.9	18.0
Incr Delay (d2), s/veh	3.9	0.0	1.8	0.5	0.0	1.5	2.2	35.7	44.1	6.2	10.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	0.0	6.3	2.2	0.0	3.3	3.7	35.0	40.6	2.1	25.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.8	0.0	53.9	55.5	0.0	57.8	61.1	66.1	74.5	68.0	42.7	18.0
LnGrp LOS	E	A	D	E	A	E	E	F	F	E	D	B
Approach Vol, veh/h		444			172			3187			2607	
Approach Delay, s/veh		55.5			56.8			68.5			42.2	
Approach LOS		E			E			E			D	

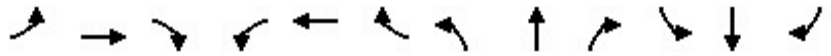
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.7	69.3		26.8	10.4	74.5		18.6
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 20	* 65		34.5	* 20	* 65		34.5
Max Q Clear Time (g_c+I1), s	10.5	62.2		19.5	6.3	71.6		9.8
Green Ext Time (p_c), s	0.1	2.2		0.6	0.0	0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	56.6
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	315	0	312	0	2659	458	0	1284	1099
Future Volume (veh/h)	0	0	0	315	0	312	0	2659	458	0	1284	1099
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				354	0	351	0	2890	0	0	1352	0
Peak Hour Factor				0.89	0.89	0.89	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				506	0	408	0	4178		0	3802	
Arrive On Green				0.15	0.00	0.15	0.00	0.74	0.00	0.00	0.74	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				354	0	351	0	2890	0	0	1352	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				10.7	0.0	13.5	0.0	29.8	0.0	0.0	10.1	0.0
Cycle Q Clear(g_c), s				10.7	0.0	13.5	0.0	29.8	0.0	0.0	10.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				506	0	408	0	4178		0	3802	
V/C Ratio(X)				0.70	0.00	0.86	0.00	0.69		0.00	0.36	
Avail Cap(c_a), veh/h				1037	0	837	0	4178		0	3802	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				44.7	0.0	45.9	0.0	7.4	0.0	0.0	4.9	0.0
Incr Delay (d2), s/veh				0.7	0.0	2.1	0.0	1.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.6	0.0	4.8	0.0	8.8	0.0	0.0	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.3	0.0	48.0	0.0	8.4	0.0	0.0	5.1	0.0
LnGrp LOS				D	A	D	A	A		A	A	
Approach Vol, veh/h					705			2890	A		1352	A
Approach Delay, s/veh					46.6			8.4			5.1	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	86.9		86.9		23.1			
Change Period (Y+Rc), s	* 5		5.0		7.0			
Max Green Setting (Gmax), s	* 65		65.0		33.0			
Max Q Clear Time (g_c+I1), s	12.1		31.8		15.5			
Green Ext Time (p_c), s	3.6		13.1		0.6			

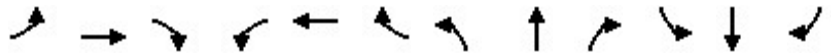
Intersection Summary		
HCM 6th Ctrl Delay		12.9
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1163	0	327	0	0	0	0	1990	432	0	1256	347
Future Volume (veh/h)	1163	0	327	0	0	0	0	1990	432	0	1256	347
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1292	0	363				0	2187	0	0	1295	0
Peak Hour Factor	0.90	0.90	0.90				0.91	0.91	0.91	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1393	0	774				0	4631		0	3473	
Arrive On Green	0.28	0.00	0.28				0.00	0.62	0.00	0.00	0.62	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1292	0	363				0	2187	0	0	1295	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	27.5	0.0	11.9				0.0	17.3	0.0	0.0	12.6	0.0
Cycle Q Clear(g_c), s	27.5	0.0	11.9				0.0	17.3	0.0	0.0	12.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1393	0	774				0	4631		0	3473	
V/C Ratio(X)	0.93	0.00	0.47				0.00	0.47		0.00	0.37	
Avail Cap(c_a), veh/h	1521	0	845				0	4631		0	3473	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.7	0.0	33.0				0.0	11.3	0.0	0.0	10.4	0.0
Incr Delay (d2), s/veh	9.3	0.0	0.2				0.0	0.3	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	0.0	4.0				0.0	6.4	0.0	0.0	4.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	33.2				0.0	11.6	0.0	0.0	10.7	0.0
LnGrp LOS	D	A	C				A	B		A	B	
Approach Vol, veh/h		1655						2187	A		1295	A
Approach Delay, s/veh		44.7						11.6			10.7	
Approach LOS		D						B			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	72.8	37.2	72.8
Change Period (Y+Rc), s	* 4.7	6.7	4.7
Max Green Setting (Gmax), s	* 66	33.3	65.3
Max Q Clear Time (g_c+I1), s	14.6	29.5	19.3
Green Ext Time (p_c), s	3.4	1.0	7.7

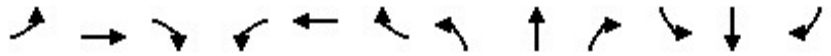
Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	422	347	107	206	244	252	121	1639	225	241	1122	245
Future Volume (veh/h)	422	347	107	206	244	252	121	1639	225	241	1122	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	431	354	109	231	234	309	132	1782	245	265	1233	269
Peak Hour Factor	0.98	0.98	0.98	0.89	0.89	0.89	0.92	0.92	0.92	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	489	878	384	293	352	582	193	2418	588	325	2113	654
Arrive On Green	0.14	0.25	0.25	0.08	0.19	0.19	0.06	0.38	0.38	0.09	0.41	0.41
Sat Flow, veh/h	3456	3554	1555	3563	1870	3096	3456	6434	1564	3456	5106	1579
Grp Volume(v), veh/h	431	354	109	231	234	309	132	1782	245	265	1233	269
Grp Sat Flow(s),veh/h/ln	1728	1777	1555	1781	1870	1548	1728	1609	1564	1728	1702	1579
Q Serve(g_s), s	13.9	9.5	6.4	7.2	13.2	10.2	4.3	27.1	13.2	8.5	21.2	13.7
Cycle Q Clear(g_c), s	13.9	9.5	6.4	7.2	13.2	10.2	4.3	27.1	13.2	8.5	21.2	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	489	878	384	293	352	582	193	2418	588	325	2113	654
V/C Ratio(X)	0.88	0.40	0.28	0.79	0.67	0.53	0.68	0.74	0.42	0.82	0.58	0.41
Avail Cap(c_a), veh/h	593	1067	467	612	560	927	593	3638	884	593	2896	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	35.7	34.6	51.1	42.8	41.6	52.6	30.6	26.2	50.5	25.7	23.5
Incr Delay (d2), s/veh	11.3	0.4	0.6	1.8	3.7	1.3	2.6	0.3	0.3	1.9	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	4.2	2.5	3.3	6.4	4.0	1.9	10.0	4.9	3.7	8.2	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.1	36.2	35.2	52.9	46.5	42.9	55.2	30.9	26.5	52.4	26.2	24.4
LnGrp LOS	E	D	D	D	D	D	E	C	C	D	C	C
Approach Vol, veh/h		894			774			2159			1767	
Approach Delay, s/veh		47.1			47.0			31.9			29.9	
Approach LOS		D			D			C			C	

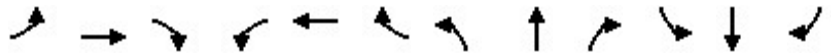
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	52.8	21.6	27.4	16.2	48.5	14.8	34.1
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	* 34
Max Q Clear Time (g_c+I1), s	6.3	23.2	15.9	15.2	10.5	29.1	9.2	11.5
Green Ext Time (p_c), s	0.2	23.2	0.2	4.3	0.1	13.5	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	35.8
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



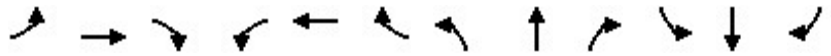
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	548	226	208	333	212	303	939	197	253	1230	118
Future Volume (veh/h)	308	548	226	208	333	212	303	939	197	253	1230	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	380	677	279	267	427	272	340	1055	221	261	1268	122
Peak Hour Factor	0.81	0.81	0.81	0.78	0.78	0.78	0.89	0.89	0.89	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	893	396	305	1163	360	376	1753	542	299	1640	506
Arrive On Green	0.12	0.28	0.28	0.10	0.25	0.25	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	3110	3198	1417	3110	4595	1423	3110	4595	1420	3110	4595	1419
Grp Volume(v), veh/h	380	677	279	267	427	272	340	1055	221	261	1268	122
Grp Sat Flow(s),veh/h/ln	1555	1599	1417	1555	1532	1423	1555	1532	1420	1555	1532	1419
Q Serve(g_s), s	19.2	30.4	27.7	13.3	12.0	27.7	17.0	29.0	17.9	13.0	38.5	9.5
Cycle Q Clear(g_c), s	19.2	30.4	27.7	13.3	12.0	27.7	17.0	29.0	17.9	13.0	38.5	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	386	893	396	305	1163	360	376	1753	542	299	1640	506
V/C Ratio(X)	0.98	0.76	0.70	0.88	0.37	0.75	0.91	0.60	0.41	0.87	0.77	0.24
Avail Cap(c_a), veh/h	386	1303	577	386	1163	360	386	1884	582	386	1878	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.7	51.8	50.8	69.9	48.3	54.2	68.2	39.0	35.6	70.1	44.9	35.6
Incr Delay (d2), s/veh	41.4	2.8	4.6	14.4	0.7	12.1	23.1	0.8	1.0	13.6	2.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	12.3	10.2	5.8	4.6	11.0	7.8	10.8	6.3	5.7	14.7	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.1	54.6	55.4	84.3	49.0	66.3	91.3	39.8	36.6	83.6	47.2	36.1
LnGrp LOS	F	D	E	F	D	E	F	D	D	F	D	D
Approach Vol, veh/h		1336			966			1616			1651	
Approach Delay, s/veh		70.5			63.6			50.2			52.1	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.5	61.9	25.0	45.8	20.6	65.7	20.9	49.9
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	64.0
Max Q Clear Time (g_c+I1), s	19.0	40.5	21.2	29.7	15.0	31.0	15.3	32.4
Green Ext Time (p_c), s	0.0	15.5	0.0	2.5	0.1	17.1	0.1	11.5

Intersection Summary	
HCM 6th Ctrl Delay	58.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



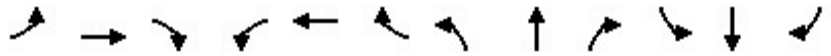
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	301	15	62	205	251	4	53	39	609	150	349
Future Volume (veh/h)	76	301	15	62	205	251	4	53	39	609	150	349
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	327	16	65	216	264	5	69	51	648	160	371
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.77	0.77	0.77	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	779	38	81	383	325	7	108	80	775	615	521
Arrive On Green	0.06	0.23	0.23	0.05	0.20	0.20	0.00	0.11	0.11	0.22	0.33	0.33
Sat Flow, veh/h	1781	3444	168	1781	1870	1585	1781	999	738	3456	1870	1585
Grp Volume(v), veh/h	83	168	175	65	216	264	5	0	120	648	160	371
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1781	1870	1585	1781	0	1737	1728	1870	1585
Q Serve(g_s), s	2.4	4.2	4.2	1.9	5.4	8.3	0.1	0.0	3.4	9.3	3.3	10.7
Cycle Q Clear(g_c), s	2.4	4.2	4.2	1.9	5.4	8.3	0.1	0.0	3.4	9.3	3.3	10.7
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	106	402	415	81	383	325	7	0	188	775	615	521
V/C Ratio(X)	0.79	0.42	0.42	0.80	0.56	0.81	0.70	0.00	0.64	0.84	0.26	0.71
Avail Cap(c_a), veh/h	667	2221	2294	681	2341	1984	667	0	2175	1294	2330	1975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	17.2	17.2	24.6	18.6	19.8	25.9	0.0	22.2	19.3	12.8	15.3
Incr Delay (d2), s/veh	4.8	0.3	0.3	6.6	0.5	1.9	36.7	0.0	1.3	1.0	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.4	1.4	0.8	1.9	2.7	0.1	0.0	1.3	3.2	1.1	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	17.5	17.5	31.2	19.1	21.7	62.6	0.0	23.6	20.2	12.9	16.0
LnGrp LOS	C	B	B	C	B	C	E	A	C	C	B	B
Approach Vol, veh/h		426			545			125			1179	
Approach Delay, s/veh		19.7			21.8			25.1			17.9	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	15.6	5.7	22.2	7.5	16.7	17.2	10.7
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	19.5	* 65	19.5	* 65	* 20	* 65	19.5	* 65
Max Q Clear Time (g_c+I1), s	4.4	10.3	2.1	12.7	3.9	6.2	11.3	5.4
Green Ext Time (p_c), s	0.0	0.4	0.0	0.4	0.0	0.5	0.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



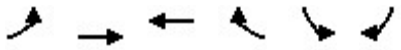
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	460	373	109	138	144	210	538	81	262	1633	131
Future Volume (veh/h)	161	460	373	109	138	144	210	538	81	262	1633	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	523	424	120	152	158	228	585	88	285	1775	142
Peak Hour Factor	0.88	0.88	0.88	0.91	0.91	0.91	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1410	438	174	914	403	284	1869	573	341	1953	606
Arrive On Green	0.07	0.28	0.28	0.05	0.26	0.26	0.08	0.37	0.37	0.10	0.38	0.38
Sat Flow, veh/h	3456	5106	1585	3456	3554	1565	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	183	523	424	120	152	158	228	585	88	285	1775	142
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1777	1565	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	6.3	10.0	31.9	4.1	4.0	10.1	7.8	9.9	4.6	9.8	39.7	7.3
Cycle Q Clear(g_c), s	6.3	10.0	31.9	4.1	4.0	10.1	7.8	9.9	4.6	9.8	39.7	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1410	438	174	914	403	284	1869	573	341	1953	606
V/C Ratio(X)	0.77	0.37	0.97	0.69	0.17	0.39	0.80	0.31	0.15	0.84	0.91	0.23
Avail Cap(c_a), veh/h	559	1410	438	559	978	431	559	2655	814	559	2651	823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	35.2	43.1	56.3	34.7	37.0	54.4	27.4	25.7	53.4	35.3	25.3
Incr Delay (d2), s/veh	1.9	0.1	34.6	1.8	0.0	0.2	2.0	0.0	0.0	2.6	3.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	3.9	15.9	1.8	1.7	3.7	3.3	3.8	1.6	4.2	15.7	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.1	35.3	77.8	58.2	34.8	37.2	56.4	27.4	25.7	56.0	38.6	25.3
LnGrp LOS	E	D	E	E	C	D	E	C	C	E	D	C
Approach Vol, veh/h		1130			430			901			2202	
Approach Delay, s/veh		54.7			42.2			34.6			40.0	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	51.5	11.6	40.1	15.4	53.5	13.8	37.8
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	19.5	* 63	19.5	* 33	19.5	* 63	19.5	33.2
Max Q Clear Time (g_c+I1), s	11.9	11.9	6.1	33.9	9.8	41.7	8.3	12.1
Green Ext Time (p_c), s	0.1	1.2	0.0	0.0	0.1	4.4	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	42.7
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



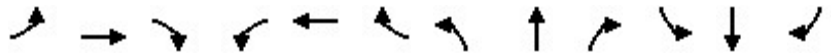
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	98	310	177	1	5	53
Future Volume (veh/h)	98	310	177	1	5	53
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	117	369	239	1	7	74
Peak Hour Factor	0.84	0.84	0.74	0.74	0.72	0.72
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	145	1586	546	244	219	195
Arrive On Green	0.08	0.45	0.15	0.15	0.12	0.12
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	117	369	239	1	7	74
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	1.6	1.6	1.6	0.0	0.1	1.1
Cycle Q Clear(g_c), s	1.6	1.6	1.6	0.0	0.1	1.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	145	1586	546	244	219	195
V/C Ratio(X)	0.81	0.23	0.44	0.00	0.03	0.38
Avail Cap(c_a), veh/h	1367	8974	8988	4009	2371	2110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.5	4.4	9.8	9.2	9.9	10.3
Incr Delay (d2), s/veh	4.0	0.0	0.2	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	0.0	0.0	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.6	4.4	10.0	9.2	9.9	10.8
LnGrp LOS	B	A	B	A	A	B
Approach Vol, veh/h		486	240		81	
Approach Delay, s/veh		7.1	10.0		10.7	
Approach LOS		A	B		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.5	9.4		8.6		16.9
Change Period (Y+Rc), s	* 5.4	* 5.5		5.5		* 5.5
Max Green Setting (Gmax), s	2.6	* 65		34.0		* 65
Max Q Clear Time (g_c+I1), s	3.6	3.6		3.1		3.6
Green Ext Time (p_c), s	0.0	0.4		0.0		0.7

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



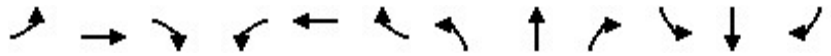
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	414	6	36	222	120	3	337	62	277	947	75
Future Volume (veh/h)	85	414	6	36	222	120	3	337	62	277	947	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	436	6	45	278	150	3	370	68	295	1007	80
Peak Hour Factor	0.95	0.95	0.95	0.80	0.80	0.80	0.91	0.91	0.91	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	464	393	58	408	346	43	555	102	319	965	917
Arrive On Green	0.06	0.25	0.25	0.03	0.22	0.22	0.02	0.36	0.36	0.18	0.52	0.52
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1537	282	1781	1870	1585
Grp Volume(v), veh/h	89	436	6	45	278	150	3	0	438	295	1007	80
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1820	1781	1870	1585
Q Serve(g_s), s	6.1	28.3	0.4	3.1	16.9	10.1	0.2	0.0	25.1	20.2	64.0	2.8
Cycle Q Clear(g_c), s	6.1	28.3	0.4	3.1	16.9	10.1	0.2	0.0	25.1	20.2	64.0	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	111	464	393	58	408	346	43	0	657	319	965	917
V/C Ratio(X)	0.80	0.94	0.02	0.78	0.68	0.43	0.07	0.00	0.67	0.92	1.04	0.09
Avail Cap(c_a), veh/h	294	501	424	294	501	424	294	0	933	352	965	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	45.7	35.2	59.5	44.5	41.9	59.1	0.0	33.3	50.1	30.0	11.6
Incr Delay (d2), s/veh	4.9	24.2	0.0	8.0	1.7	0.3	0.2	0.0	0.4	26.9	40.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	15.6	0.1	1.5	7.7	3.8	0.1	0.0	10.5	11.0	36.2	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.2	69.9	35.2	67.6	46.2	42.2	59.4	0.0	33.8	76.9	70.9	11.6
LnGrp LOS	E	E	D	E	D	D	E	A	C	E	F	B
Approach Vol, veh/h		531			473			441			1382	
Approach Delay, s/veh		68.2			47.0			34.0			68.7	
Approach LOS		E			D			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	33.9	7.5	70.4	8.5	37.6	26.7	51.2
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	20.5	33.2	20.5	* 64	20.5	33.2	24.5	63.6
Max Q Clear Time (g_c+I1), s	8.1	18.9	2.2	66.0	5.1	30.3	22.2	27.1
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.0	0.4	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	59.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	684	0	57	334	40	3	273	58	37	323	51
Future Volume (veh/h)	59	684	0	57	334	40	3	273	58	37	323	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	64	743	0	67	393	47	4	329	70	42	363	57
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.83	0.83	0.83	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	80	688	0	84	604	72	4	325	69	37	316	50
Arrive On Green	0.05	0.37	0.00	0.05	0.37	0.37	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	1870	0	1781	1635	196	18	1480	315	166	1431	225
Grp Volume(v), veh/h	64	743	0	67	0	440	403	0	0	462	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1830	1813	0	0	1822	0	0
Q Serve(g_s), s	6.2	63.6	0.0	6.4	0.0	34.5	38.0	0.0	0.0	38.2	0.0	0.0
Cycle Q Clear(g_c), s	6.2	63.6	0.0	6.4	0.0	34.5	38.0	0.0	0.0	38.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.11	0.01		0.17	0.09		0.12
Lane Grp Cap(c), veh/h	80	688	0	84	0	676	398	0	0	402	0	0
V/C Ratio(X)	0.80	1.08	0.00	0.80	0.00	0.65	1.01	0.00	0.00	1.15	0.00	0.00
Avail Cap(c_a), veh/h	263	688	0	211	0	676	398	0	0	402	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	81.8	54.7	0.0	81.7	0.0	45.3	67.5	0.0	0.0	67.4	0.0	0.0
Incr Delay (d2), s/veh	6.6	58.2	0.0	6.5	0.0	1.8	48.2	0.0	0.0	92.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	39.8	0.0	3.1	0.0	15.5	22.4	0.0	0.0	27.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.4	112.9	0.0	88.1	0.0	47.0	115.7	0.0	0.0	159.5	0.0	0.0
LnGrp LOS	F	F	A	F	A	D	F	A	A	F	A	A
Approach Vol, veh/h		807			507			403			462	
Approach Delay, s/veh		111.0			52.5			115.7			159.5	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.3	70.7		45.0	12.6	70.4		45.0
Change Period (Y+Rc), s	4.5	6.8		6.8	4.5	* 6.8		7.0
Max Green Setting (Gmax), s	25.5	63.2		38.2	20.5	* 64		38.0
Max Q Clear Time (g_c+I1), s	8.2	36.5		40.2	8.4	65.6		40.0
Green Ext Time (p_c), s	0.0	1.4		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	108.5
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	17.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	2	0	23	0	33	2	356	0	145	393	4
Future Vol, veh/h	2	2	0	23	0	33	2	356	0	145	393	4
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.91	0.91	0.91	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	3	0	33	0	47	2	391	0	156	423	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.6	9.8	13.2	20.8
HCM LOS	A	A	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	50%	41%	27%
Vol Thru, %	99%	50%	0%	73%
Vol Right, %	0%	0%	59%	1%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	358	4	56	542
LT Vol	2	2	23	145
Through Vol	356	2	0	393
RT Vol	0	0	33	4
Lane Flow Rate	393	6	80	583
Geometry Grp	1	1	1	1
Degree of Util (X)	0.526	0.01	0.131	0.756
Departure Headway (Hd)	4.817	6.504	5.913	4.667
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	744	553	610	769
Service Time	2.888	4.508	3.913	2.73
HCM Lane V/C Ratio	0.528	0.011	0.131	0.758
HCM Control Delay	13.2	9.6	9.8	20.8
HCM Lane LOS	B	A	A	C
HCM 95th-tile Q	3.1	0	0.4	7.1



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	144	101	20	365	432	163
Future Volume (veh/h)	144	101	20	365	432	163
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	123	24	435	480	181
Peak Hour Factor	0.82	0.82	0.84	0.84	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	267	237	32	924	606	513
Arrive On Green	0.15	0.15	0.02	0.49	0.32	0.32
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	176	123	24	435	480	181
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	2.8	2.2	0.4	4.6	7.1	2.6
Cycle Q Clear(g_c), s	2.8	2.2	0.4	4.6	7.1	2.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	267	237	32	924	606	513
V/C Ratio(X)	0.66	0.52	0.74	0.47	0.79	0.35
Avail Cap(c_a), veh/h	2075	1847	1199	3963	3944	3343
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	11.9	14.8	5.1	9.3	7.8
Incr Delay (d2), s/veh	1.0	0.7	11.8	0.1	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.5	0.2	0.2	1.2	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	12.5	26.6	5.2	10.2	8.0
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	299			459	661	
Approach Delay, s/veh	12.9			6.3	9.6	
Approach LOS	B			A	A	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.1	15.9			21.1	9.2
Change Period (Y+Rc), s	* 4.6	* 6.1			* 6.1	4.7
Max Green Setting (Gmax), s	* 28	* 64			* 64	35.3
Max Q Clear Time (g_c+I1), s	2.4	9.1			6.6	4.8
Green Ext Time (p_c), s	0.0	0.7			0.6	0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.2
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	16	2	3	542	670	29
Future Vol, veh/h	16	2	3	542	670	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	98	98	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	4	3	553	728	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1303	744	760	0	-	0
Stage 1	744	-	-	-	-	-
Stage 2	559	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	177	415	852	-	-	-
Stage 1	470	-	-	-	-	-
Stage 2	572	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	176	415	852	-	-	-
Mov Cap-2 Maneuver	176	-	-	-	-	-
Stage 1	468	-	-	-	-	-
Stage 2	572	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.1	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	852	-	188	-	-
HCM Lane V/C Ratio	0.004	-	0.171	-	-
HCM Control Delay (s)	9.2	-	28.1	-	-
HCM Lane LOS	A	-	D	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-



Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	601	18	8	564	0	673	51
Future Volume (veh/h)	601	18	8	564	0	673	51
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	724	22	9	606		716	54
Peak Hour Factor	0.83	0.83	0.93	0.93		0.94	0.94
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	903	426	13	1491		963	844
Arrive On Green	0.26	0.26	0.01	0.42		0.27	0.27
Sat Flow, veh/h	3456	1585	1781	3647		3647	1585
Grp Volume(v), veh/h	724	22	9	606		716	54
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777		1777	1585
Q Serve(g_s), s	7.6	0.4	0.2	4.6		7.2	0.6
Cycle Q Clear(g_c), s	7.6	0.4	0.2	4.6		7.2	0.6
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	903	426	13	1491		963	844
V/C Ratio(X)	0.80	0.05	0.71	0.41		0.74	0.06
Avail Cap(c_a), veh/h	4845	2234	894	4882		4854	2580
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	13.4	10.5	19.3	7.9		12.9	4.4
Incr Delay (d2), s/veh	0.6	0.0	23.2	0.1		0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.4	0.1	0.8		1.8	0.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	14.1	10.6	42.5	8.0		13.4	4.4
LnGrp LOS	B	B	D	A		B	A
Approach Vol, veh/h	746			615		770	
Approach Delay, s/veh	13.9			8.5		12.7	
Approach LOS	B			A		B	

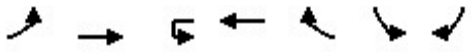
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	5.8	17.4		15.7		23.2	
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9	
Max Green Setting (Gmax), s	19.5	* 53		54.5		* 53	
Max Q Clear Time (g_c+I1), s	2.2	9.2		9.6		6.6	
Green Ext Time (p_c), s	0.0	1.4		0.6		1.1	

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	387	789	0	340	96	104	375
Future Volume (veh/h)	387	789	0	340	96	104	375
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	450	917		362	102	114	412
Peak Hour Factor	0.86	0.86		0.94	0.94	0.91	0.91
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	497	1806		504	225	512	456
Arrive On Green	0.28	0.51		0.14	0.14	0.29	0.29
Sat Flow, veh/h	1781	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	450	917		362	102	114	412
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1781	1585
Q Serve(g_s), s	14.6	10.2		5.8	3.5	2.9	14.9
Cycle Q Clear(g_c), s	14.6	10.2		5.8	3.5	2.9	14.9
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	497	1806		504	225	512	456
V/C Ratio(X)	0.90	0.51		0.72	0.45	0.22	0.90
Avail Cap(c_a), veh/h	888	3771		3765	1679	1029	915
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	9.7		24.5	23.5	16.2	20.5
Incr Delay (d2), s/veh	3.0	0.1		0.7	0.5	0.1	2.8
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	2.6		2.1	1.1	1.0	4.7
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	23.7	9.8		25.2	24.0	16.3	23.3
LnGrp LOS	C	A		C	C	B	C
Approach Vol, veh/h		1367		464		526	
Approach Delay, s/veh		14.4		25.0		21.8	
Approach LOS		B		C		C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	21.9	15.2			37.1	22.7
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 36	* 63			* 63	34.5
Max Q Clear Time (g_c+I1), s	16.6	7.8			12.2	16.9
Green Ext Time (p_c), s	0.1	0.7			1.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

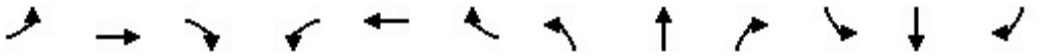
Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix C

Analysis Worksheets for
Existing (2019) plus Proposed Project Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	978	0	240	0	740	450	0	755	390
Future Volume (veh/h)	0	0	0	978	0	240	0	740	450	0	755	390
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				700	594	276	0	771	0	0	803	0
Peak Hour Factor				0.87	0.87	0.87	0.96	0.96	0.96	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				568	384	178	0	2869		0	2869	
Arrive On Green				0.32	0.32	0.32	0.00	0.81	0.00	0.00	0.81	0.00
Sat Flow, veh/h				1781	1203	559	0	3741	0	0	3741	0
Grp Volume(v), veh/h				700	0	870	0	771	0	0	803	0
Grp Sat Flow(s),veh/h/ln				1781	0	1762	0	1777	0	0	1777	0
Q Serve(g_s), s				35.1	0.0	35.1	0.0	5.9	0.0	0.0	6.2	0.0
Cycle Q Clear(g_c), s				35.1	0.0	35.1	0.0	5.9	0.0	0.0	6.2	0.0
Prop In Lane				1.00		0.32	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				568	0	562	0	2869		0	2869	
V/C Ratio(X)				1.23	0.00	1.55	0.00	0.27		0.00	0.28	
Avail Cap(c_a), veh/h				568	0	562	0	2869		0	2869	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				37.4	0.0	37.5	0.0	2.6	0.0	0.0	2.6	0.0
Incr Delay (d2), s/veh				118.9	0.0	255.2	0.0	0.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				33.7	0.0	54.6	0.0	1.2	0.0	0.0	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				156.4	0.0	292.7	0.0	2.8	0.0	0.0	2.9	0.0
LnGrp LOS				F	A	F	A	A		A	A	
Approach Vol, veh/h					1570			771	A		803	A
Approach Delay, s/veh					231.9			2.8			2.9	
Approach LOS					F			A			A	

Timer - Assigned Phs	2		6		8							
Phs Duration (G+Y+Rc), s	94.5		94.5		40.0							
Change Period (Y+Rc), s	* 5		5.0		4.9							
Max Green Setting (Gmax), s	* 66		65.0		35.1							
Max Q Clear Time (g_c+I1), s	8.2		7.9		37.1							
Green Ext Time (p_c), s	1.8		1.7		0.0							

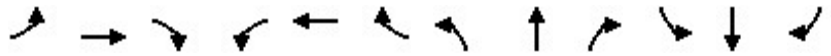
Intersection Summary		
HCM 6th Ctrl Delay	117.2	
HCM 6th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	312	0	1173	0	0	0	0	880	333	0	1419	317
Future Volume (veh/h)	312	0	1173	0	0	0	0	880	333	0	1419	317
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	219	0	1352				0	926	0	0	1526	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	560	0	994				0	3806		0	2649	
Arrive On Green	0.31	0.00	0.31				0.00	0.75	0.00	0.00	0.75	0.00
Sat Flow, veh/h	1781	0	3160				0	5443	0	0	3647	1585
Grp Volume(v), veh/h	219	0	1352				0	926	0	0	1526	0
Grp Sat Flow(s),veh/h/ln	1781	0	1580				0	1702	0	0	1777	1585
Q Serve(g_s), s	10.6	0.0	34.6				0.0	6.2	0.0	0.0	21.1	0.0
Cycle Q Clear(g_c), s	10.6	0.0	34.6				0.0	6.2	0.0	0.0	21.1	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	560	0	994				0	3806		0	2649	
V/C Ratio(X)	0.39	0.00	1.36				0.00	0.24		0.00	0.58	
Avail Cap(c_a), veh/h	560	0	994				0	3806		0	2649	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	29.5	0.0	37.7				0.0	4.4	0.0	0.0	6.2	0.0
Incr Delay (d2), s/veh	0.2	0.0	168.7				0.0	0.2	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	36.4				0.0	1.6	0.0	0.0	6.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	0.0	206.4				0.0	4.5	0.0	0.0	7.2	0.0
LnGrp LOS	C	A	F				A	A		A	A	
Approach Vol, veh/h		1571						926	A		1526	A
Approach Delay, s/veh		181.7						4.5			7.2	
Approach LOS		F						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	87.5	40.0	87.5
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 66	* 35	65.0
Max Q Clear Time (g_c+I1), s	23.1	36.6	8.2
Green Ext Time (p_c), s	4.3	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	74.7
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	931	819	116	672	279	47
Future Volume (veh/h)	931	819	116	672	279	47
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1108	0	141	820	317	53
Peak Hour Factor	0.84	0.84	0.82	0.82	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2661		180	3655	443	203
Arrive On Green	0.52	0.00	0.10	0.72	0.13	0.13
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	1108	0	141	820	317	53
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	7.2	0.0	4.2	3.0	4.8	1.6
Cycle Q Clear(g_c), s	7.2	0.0	4.2	3.0	4.8	1.6
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2661		180	3655	443	203
V/C Ratio(X)	0.42		0.78	0.22	0.72	0.26
Avail Cap(c_a), veh/h	6088		650	6088	2314	1061
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.0	0.0	23.9	2.6	22.8	21.4
Incr Delay (d2), s/veh	0.2	0.0	2.8	0.1	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	1.7	0.3	1.7	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.2	0.0	26.7	2.7	23.6	21.7
LnGrp LOS	A		C	A	C	C
Approach Vol, veh/h	1108	A		961	370	
Approach Delay, s/veh	8.2			6.2	23.3	
Approach LOS	A			A	C	

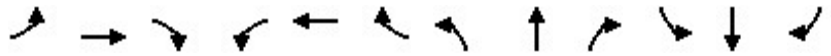
Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	44.0		10.6	33.4	10.5
Change Period (Y+Rc), s	5.0		* 5.1	5.0	3.5
Max Green Setting (Gmax), s	65.0		* 20	65.0	36.5
Max Q Clear Time (g_c+I1), s	5.0		6.2	9.2	6.8
Green Ext Time (p_c), s	12.7		0.0	19.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1073	0	212	0	963	564	0	728	330
Future Volume (veh/h)	0	0	0	1073	0	212	0	963	564	0	728	330
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				1248	0	247	0	1024	0	0	751	0
Peak Hour Factor				0.86	0.86	0.86	0.94	0.94	0.94	0.97	0.97	0.97
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1292	0	593	0	2731		0	1900	
Arrive On Green				0.37	0.00	0.37	0.00	0.53	0.00	0.00	0.53	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	3647	1585
Grp Volume(v), veh/h				1248	0	247	0	1024	0	0	751	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1777	1585
Q Serve(g_s), s				44.2	0.0	14.4	0.0	14.6	0.0	0.0	15.6	0.0
Cycle Q Clear(g_c), s				44.2	0.0	14.4	0.0	14.6	0.0	0.0	15.6	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1292	0	593	0	2731		0	1900	
V/C Ratio(X)				0.97	0.00	0.42	0.00	0.38		0.00	0.40	
Avail Cap(c_a), veh/h				1333	0	611	0	2731		0	1900	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				38.3	0.0	29.0	0.0	16.9	0.0	0.0	17.2	0.0
Incr Delay (d2), s/veh				16.6	0.0	0.2	0.0	0.4	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				21.4	0.0	5.5	0.0	5.5	0.0	0.0	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				55.0	0.0	29.2	0.0	17.3	0.0	0.0	17.8	0.0
LnGrp LOS				D	A	C	A	B		A	B	
Approach Vol, veh/h					1495			1024	A		751	A
Approach Delay, s/veh					50.7			17.3			17.8	
Approach LOS					D			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	71.4		71.4		53.6			
Change Period (Y+Rc), s	4.6		4.6		6.8			
Max Green Setting (Gmax), s	65.4		65.4		48.2			
Max Q Clear Time (g_c+I1), s	17.6		16.6		46.2			
Green Ext Time (p_c), s	1.7		2.5		0.5			

Intersection Summary		
HCM 6th Ctrl Delay	32.7	
HCM 6th LOS	C	

Notes

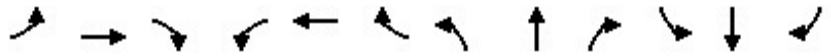
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	377	1	849	1103	102	27	1016	469	15	1686	201
Future Volume (vph)	377	1	849	1103	102	27	1016	469	15	1686	201
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.9		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.95	1.00
Frpb, ped/bikes		1.00	0.99	0.98	0.99		0.99			1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.94	0.85	0.85		0.95			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1603	3008	1417	2747		6071			3539	1545
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1603	3008	1417	2747		6071			3539	1545
Peak-hour factor, PHF	0.87	0.92	0.87	0.87	0.90	0.92	0.89	0.92	0.89	0.91	0.91
Adj. Flow (vph)	433	1	976	1268	113	29	1142	510	17	1853	221
RTOR Reduction (vph)	0	0	5	9	16	0	1	0	0	0	0
Lane Group Flow (vph)	0	434	1542	688	126	0	1668	0	0	1853	221
Confl. Peds. (#/hr)	6			6	3				3		6
Confl. Bikes (#/hr)									2		3
Turn Type	Split	Perm	NA	Perm	Perm		NA			NA	Free
Protected Phases	4		4				6			2	
Permitted Phases		4		4	8						Free
Actuated Green, G (s)		48.2	48.2	48.2	50.1		65.4			65.4	125.0
Effective Green, g (s)		48.2	48.2	48.2	50.1		65.4			65.4	125.0
Actuated g/C Ratio		0.39	0.39	0.39	0.40		0.52			0.52	1.00
Clearance Time (s)		6.8	6.8	6.8	4.9		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	3.0		1.0			1.0	
Lane Grp Cap (vph)		618	1159	546	1100		3176			1851	1545
v/s Ratio Prot							0.27			c0.52	
v/s Ratio Perm		0.27	0.51	0.49	0.05						0.14
v/c Ratio		0.70	1.33	1.26	0.11		0.53			1.00	0.14
Uniform Delay, d1		32.4	38.4	38.4	23.5		19.6			29.8	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.25	1.00
Incremental Delay, d2		3.0	154.7	131.6	0.0		0.6			17.6	0.1
Delay (s)		35.3	193.1	170.0	23.6		20.2			54.8	0.1
Level of Service		D	F	F	C		C			D	A
Approach Delay (s)			161.5				20.2			48.9	
Approach LOS			F				C			D	

Intersection Summary			
HCM 2000 Control Delay	87.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	102.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	101	30	25	87	272	40	1008	18	760	1373	658
Future Volume (veh/h)	215	101	30	25	87	272	40	1008	18	760	1373	658
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	117	35	29	101	316	44	1108	20	817	1476	708
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.91	0.91	0.91	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	933	255	60	299	1286	80	1364	25	868	2512	766
Arrive On Green	0.09	0.24	0.24	0.02	0.16	0.16	0.02	0.26	0.26	0.25	0.49	0.49
Sat Flow, veh/h	3456	3961	1085	3563	1870	3069	3456	5163	93	3456	5106	1557
Grp Volume(v), veh/h	250	99	53	29	101	316	44	730	398	817	1476	708
Grp Sat Flow(s),veh/h/ln	1728	1702	1642	1781	1870	1535	1728	1702	1852	1728	1702	1557
Q Serve(g_s), s	6.9	2.2	2.5	0.8	4.7	6.6	1.2	19.6	19.6	22.6	20.2	41.3
Cycle Q Clear(g_c), s	6.9	2.2	2.5	0.8	4.7	6.6	1.2	19.6	19.6	22.6	20.2	41.3
Prop In Lane	1.00		0.66	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	319	802	387	60	299	1286	80	899	489	868	2512	766
V/C Ratio(X)	0.78	0.12	0.14	0.49	0.34	0.25	0.55	0.81	0.81	0.94	0.59	0.92
Avail Cap(c_a), veh/h	691	2233	1077	712	1236	2825	691	2264	1232	868	3365	1026
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	29.4	29.5	47.6	36.4	18.9	47.2	33.6	33.6	35.8	17.7	23.1
Incr Delay (d2), s/veh	1.6	0.0	0.1	2.3	0.2	0.0	2.2	0.7	1.3	17.8	0.1	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.9	0.9	0.4	2.1	2.2	0.5	7.8	8.6	11.1	7.1	15.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.9	29.4	29.5	49.8	36.7	18.9	49.3	34.3	34.9	53.6	17.8	32.7
LnGrp LOS	D	C	C	D	D	B	D	C	C	D	B	C
Approach Vol, veh/h		402			446			1172			3001	
Approach Delay, s/veh		39.1			24.9			35.1			31.1	
Approach LOS		D			C			D			C	

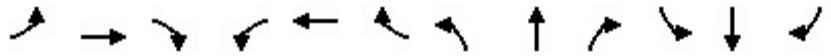
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	53.7	14.5	21.6	30.0	31.5	7.1	29.0
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	* 65	24.5	* 65	19.5	* 64
Max Q Clear Time (g_c+I1), s	3.2	43.3	8.9	8.6	24.6	21.6	2.8	4.5
Green Ext Time (p_c), s	0.0	4.3	0.1	0.4	0.0	2.6	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	32.1
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



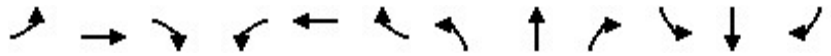
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	337	63	92	367	101	266	872	102	148	426	259
Future Volume (veh/h)	116	337	63	92	367	101	266	872	102	148	426	259
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	132	383	72	108	432	119	274	899	105	174	501	305
Peak Hour Factor	0.88	0.88	0.88	0.85	0.85	0.85	0.97	0.97	0.97	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	653	119	185	722	220	655	1841	570	270	848	389
Arrive On Green	0.06	0.15	0.15	0.05	0.14	0.14	0.19	0.36	0.36	0.08	0.25	0.25
Sat Flow, veh/h	3456	4328	788	3456	5106	1554	3456	5106	1581	3456	3404	1563
Grp Volume(v), veh/h	132	299	156	108	432	119	274	899	105	174	501	305
Grp Sat Flow(s),veh/h/ln	1728	1702	1712	1728	1702	1554	1728	1702	1581	1728	1702	1563
Q Serve(g_s), s	2.3	5.1	5.4	1.9	5.0	4.5	4.4	8.6	2.9	3.1	8.1	11.4
Cycle Q Clear(g_c), s	2.3	5.1	5.4	1.9	5.0	4.5	4.4	8.6	2.9	3.1	8.1	11.4
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	514	258	185	722	220	655	1841	570	270	848	389
V/C Ratio(X)	0.61	0.58	0.61	0.58	0.60	0.54	0.42	0.49	0.18	0.64	0.59	0.78
Avail Cap(c_a), veh/h	1074	1855	933	1074	2782	847	1074	5239	1622	1074	3492	1603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	24.8	24.9	29.0	25.3	25.1	22.4	15.6	13.7	28.1	20.8	22.0
Incr Delay (d2), s/veh	1.0	0.4	0.9	1.1	0.3	0.8	0.2	0.1	0.1	1.0	0.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.9	2.0	0.8	1.8	1.5	1.6	2.8	0.9	1.2	2.8	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	25.2	25.8	30.1	25.6	25.8	22.5	15.7	13.8	29.0	21.0	23.3
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	C
Approach Vol, veh/h		587			659			1278			980	
Approach Delay, s/veh		26.3			26.4			17.0			23.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	21.2	9.5	14.7	10.4	28.2	8.9	15.3
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.2	19.5	* 64	19.5	34.2
Max Q Clear Time (g_c+I1), s	16.4	13.4	4.3	7.0	5.1	10.6	3.9	7.4
Green Ext Time (p_c), s	0.1	1.8	0.1	1.0	0.1	2.2	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	14	263	37	20	32	302	2230	10	32	3207	77
Future Volume (veh/h)	111	14	263	37	20	32	302	2230	10	32	3207	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	128	134	223	45	24	39	311	2299	10	35	3486	84
Peak Hour Factor	0.87	0.87	0.87	0.82	0.82	0.82	0.97	0.97	0.97	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	155	262	100	36	58	363	3102	13	45	2598	786
Arrive On Green	0.17	0.17	0.17	0.06	0.06	0.06	0.11	0.59	0.59	0.03	0.51	0.51
Sat Flow, veh/h	892	934	1574	1781	639	1038	3456	5247	23	1781	5106	1545
Grp Volume(v), veh/h	262	0	223	45	0	63	311	1491	818	35	3486	84
Grp Sat Flow(s),veh/h/ln	1826	0	1574	1781	0	1677	1728	1702	1866	1781	1702	1545
Q Serve(g_s), s	17.9	0.0	17.6	3.1	0.0	4.7	11.3	40.8	40.9	2.5	65.2	3.6
Cycle Q Clear(g_c), s	17.9	0.0	17.6	3.1	0.0	4.7	11.3	40.8	40.9	2.5	65.2	3.6
Prop In Lane	0.49		1.00	1.00		0.62	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	304	0	262	100	0	94	363	2013	1103	45	2598	786
V/C Ratio(X)	0.86	0.00	0.85	0.45	0.00	0.67	0.86	0.74	0.74	0.78	1.34	0.11
Avail Cap(c_a), veh/h	492	0	424	480	0	451	537	2013	1103	281	2598	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	0.0	51.9	58.6	0.0	59.3	56.4	19.1	19.1	62.1	31.5	16.3
Incr Delay (d2), s/veh	4.9	0.0	4.8	1.2	0.0	3.1	6.1	1.3	2.4	10.5	156.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	7.3	1.5	0.0	2.1	5.1	14.9	16.7	1.2	62.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	0.0	56.6	59.8	0.0	62.4	62.5	20.4	21.5	72.7	187.9	16.4
LnGrp LOS	E	A	E	E	A	E	E	C	C	E	F	B
Approach Vol, veh/h		485			108			2620			3605	
Approach Delay, s/veh		56.8			61.3			25.7			182.8	
Approach LOS		E			E			C			F	

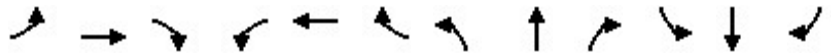
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.6	70.1		26.8	8.0	80.7		12.7
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 20	* 65		34.5	* 20	* 65		34.5
Max Q Clear Time (g_c+I1), s	13.3	67.2		19.9	4.5	42.9		6.7
Green Ext Time (p_c), s	0.1	0.0		0.6	0.0	6.3		0.1

Intersection Summary	
HCM 6th Ctrl Delay	111.6
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	501	0	440	0	2078	269	0	1958	1594
Future Volume (veh/h)	0	0	0	501	0	440	0	2078	269	0	1958	1594
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				589	0	518	0	2165	0	0	1998	0
Peak Hour Factor				0.85	0.85	0.85	0.96	0.96	0.96	0.98	0.98	0.98
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				716	0	578	0	3837		0	3491	
Arrive On Green				0.21	0.00	0.21	0.00	0.68	0.00	0.00	0.68	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				589	0	518	0	2165	0	0	1998	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				17.9	0.0	19.9	0.0	21.9	0.0	0.0	22.4	0.0
Cycle Q Clear(g_c), s				17.9	0.0	19.9	0.0	21.9	0.0	0.0	22.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				716	0	578	0	3837		0	3491	
V/C Ratio(X)				0.82	0.00	0.90	0.00	0.56		0.00	0.57	
Avail Cap(c_a), veh/h				1037	0	837	0	3837		0	3491	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				41.7	0.0	42.5	0.0	9.0	0.0	0.0	9.0	0.0
Incr Delay (d2), s/veh				2.3	0.0	7.0	0.0	0.6	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.8	0.0	7.4	0.0	7.4	0.0	0.0	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				44.0	0.0	49.5	0.0	9.6	0.0	0.0	9.7	0.0
LnGrp LOS				D	A	D	A	A		A	A	
Approach Vol, veh/h					1107			2165	A		1998	A
Approach Delay, s/veh					46.6			9.6			9.7	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		6		8	
Phs Duration (G+Y+Rc), s	80.2		80.2		29.8	
Change Period (Y+Rc), s	* 5		5.0		7.0	
Max Green Setting (Gmax), s	* 65		65.0		33.0	
Max Q Clear Time (g_c+I1), s	24.4		23.9		21.9	
Green Ext Time (p_c), s	6.5		7.5		0.9	

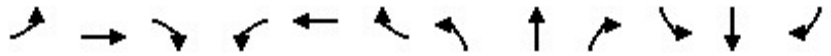
Intersection Summary		
HCM 6th Ctrl Delay		17.4
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1198	0	601	0	0	0	0	1132	459	0	2109	362
Future Volume (veh/h)	1198	0	601	0	0	0	0	1132	459	0	2109	362
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1235	0	620				0	1384	0	0	2152	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.98	0.98	0.98
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1349	0	749				0	4696		0	3522	
Arrive On Green	0.27	0.00	0.27				0.00	0.63	0.00	0.00	0.63	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1235	0	620				0	1384	0	0	2152	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	26.2	0.0	23.0				0.0	9.3	0.0	0.0	25.5	0.0
Cycle Q Clear(g_c), s	26.2	0.0	23.0				0.0	9.3	0.0	0.0	25.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1349	0	749				0	4696		0	3522	
V/C Ratio(X)	0.92	0.00	0.83				0.00	0.29		0.00	0.61	
Avail Cap(c_a), veh/h	1521	0	845				0	4696		0	3522	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	0.0	37.8				0.0	9.4	0.0	0.0	12.4	0.0
Incr Delay (d2), s/veh	7.8	0.0	5.5				0.0	0.2	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	8.3				0.0	3.4	0.0	0.0	9.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.8	0.0	43.3				0.0	9.5	0.0	0.0	13.2	0.0
LnGrp LOS	D	A	D				A	A		A	B	
Approach Vol, veh/h		1855						1384	A		2152	A
Approach Delay, s/veh		45.7						9.5			13.2	
Approach LOS		D						A			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	73.7	36.3	73.7
Change Period (Y+Rc), s	* 4.7	6.7	4.7
Max Green Setting (Gmax), s	* 66	33.3	65.3
Max Q Clear Time (g_c+I1), s	27.5	28.2	11.3
Green Ext Time (p_c), s	7.4	1.3	3.7

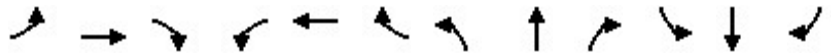
Intersection Summary	
HCM 6th Ctrl Delay	23.4
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	171	93	274	216	129	72	1272	108	230	2138	309
Future Volume (veh/h)	213	171	93	274	216	129	72	1272	108	230	2138	309
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	239	192	104	308	266	129	76	1339	114	240	2227	322
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	561	244	365	655	267	124	3016	741	295	2647	814
Arrive On Green	0.09	0.16	0.16	0.10	0.18	0.18	0.04	0.47	0.47	0.09	0.52	0.52
Sat Flow, veh/h	3456	3554	1546	3563	3741	1524	3456	6434	1581	3456	5106	1571
Grp Volume(v), veh/h	239	192	104	308	266	129	76	1339	114	240	2227	322
Grp Sat Flow(s),veh/h/ln	1728	1777	1546	1781	1870	1524	1728	1609	1581	1728	1702	1571
Q Serve(g_s), s	8.4	5.9	7.5	10.4	7.8	9.4	2.7	17.2	5.1	8.4	45.8	15.3
Cycle Q Clear(g_c), s	8.4	5.9	7.5	10.4	7.8	9.4	2.7	17.2	5.1	8.4	45.8	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	295	561	244	365	655	267	124	3016	741	295	2647	814
V/C Ratio(X)	0.81	0.34	0.43	0.84	0.41	0.48	0.61	0.44	0.15	0.81	0.84	0.40
Avail Cap(c_a), veh/h	548	986	429	565	1035	422	548	3361	826	548	2676	823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	46.1	46.7	54.2	45.0	45.7	58.4	21.9	18.7	55.2	25.3	17.9
Incr Delay (d2), s/veh	2.1	0.5	1.7	4.1	0.7	2.3	3.0	0.1	0.1	2.1	2.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.7	3.0	4.9	3.7	3.7	1.2	6.2	1.9	3.7	17.6	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.3	46.6	48.5	58.3	45.7	48.0	61.4	22.0	18.7	57.3	28.1	18.6
LnGrp LOS	E	D	D	E	D	D	E	C	B	E	C	B
Approach Vol, veh/h		535			703			1529			2789	
Approach Delay, s/veh		51.7			51.6			23.7			29.5	
Approach LOS		D			D			C			C	

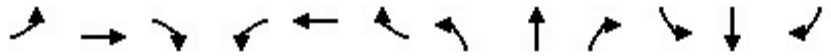
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	69.5	16.0	27.5	16.0	63.4	18.1	25.4
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	* 34
Max Q Clear Time (g_c+I1), s	4.7	47.8	10.4	11.4	10.4	19.2	12.4	9.5
Green Ext Time (p_c), s	0.1	15.9	0.1	3.6	0.1	8.7	0.2	2.3

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



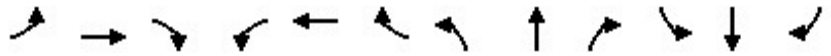
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	219	75	148	306	151	333	1085	82	264	851	254
Future Volume (veh/h)	166	219	75	148	306	151	333	1085	82	264	851	254
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	173	228	78	163	336	166	362	1179	89	275	886	265
Peak Hour Factor	0.96	0.96	0.96	0.91	0.91	0.91	0.92	0.92	0.92	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	612	268	220	865	267	419	1893	579	333	1766	540
Arrive On Green	0.07	0.19	0.19	0.07	0.19	0.19	0.13	0.41	0.41	0.11	0.38	0.38
Sat Flow, veh/h	3110	3198	1400	3110	4595	1420	3110	4595	1407	3110	4595	1404
Grp Volume(v), veh/h	173	228	78	163	336	166	362	1179	89	275	886	265
Grp Sat Flow(s),veh/h/ln	1555	1599	1400	1555	1532	1420	1555	1532	1407	1555	1532	1404
Q Serve(g_s), s	5.7	6.5	5.0	5.4	6.7	11.2	11.9	21.1	4.1	9.0	15.3	14.9
Cycle Q Clear(g_c), s	5.7	6.5	5.0	5.4	6.7	11.2	11.9	21.1	4.1	9.0	15.3	14.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	612	268	220	865	267	419	1893	579	333	1766	540
V/C Ratio(X)	0.75	0.37	0.29	0.74	0.39	0.62	0.86	0.62	0.15	0.83	0.50	0.49
Avail Cap(c_a), veh/h	582	1965	860	582	1500	463	582	2841	870	582	2832	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	36.7	36.1	47.5	37.0	38.9	44.1	24.2	19.2	45.6	24.5	24.3
Incr Delay (d2), s/veh	1.9	0.8	1.2	1.8	1.0	7.9	7.4	0.7	0.2	2.0	0.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	2.5	1.7	2.1	2.5	4.3	4.8	7.2	1.3	3.5	5.3	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.1	37.4	37.3	49.3	38.0	46.7	51.6	24.9	19.5	47.6	24.9	25.7
LnGrp LOS	D	D	D	D	D	D	D	C	B	D	C	C
Approach Vol, veh/h		479			665			1630			1426	
Approach Delay, s/veh		41.6			43.0			30.5			29.4	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	45.8	13.2	25.6	16.6	48.7	12.9	25.9
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	64.0
Max Q Clear Time (g_c+I1), s	13.9	17.3	7.7	13.2	11.0	23.1	7.4	8.5
Green Ext Time (p_c), s	0.1	17.0	0.1	5.9	0.1	19.8	0.1	3.4

Intersection Summary	
HCM 6th Ctrl Delay	33.4
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



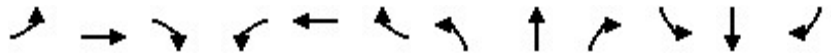
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	304	186	2	15	341	444	6	179	45	175	27	72
Future Volume (veh/h)	304	186	2	15	341	444	6	179	45	175	27	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	323	198	2	18	406	529	7	218	55	194	30	80
Peak Hour Factor	0.94	0.94	0.94	0.84	0.84	0.84	0.82	0.82	0.82	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	1950	20	21	672	557	9	247	62	259	451	383
Arrive On Green	0.19	0.54	0.54	0.01	0.36	0.36	0.01	0.17	0.17	0.08	0.24	0.24
Sat Flow, veh/h	1781	3604	36	1781	1870	1550	1781	1441	364	3456	1870	1585
Grp Volume(v), veh/h	323	98	102	18	406	529	7	0	273	194	30	80
Grp Sat Flow(s),veh/h/ln	1781	1777	1864	1781	1870	1550	1781	0	1805	1728	1870	1585
Q Serve(g_s), s	18.4	2.7	2.7	1.0	18.3	34.1	0.4	0.0	15.2	5.7	1.3	4.1
Cycle Q Clear(g_c), s	18.4	2.7	2.7	1.0	18.3	34.1	0.4	0.0	15.2	5.7	1.3	4.1
Prop In Lane	1.00		0.02	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	338	961	1008	21	672	557	9	0	310	259	451	383
V/C Ratio(X)	0.96	0.10	0.10	0.85	0.60	0.95	0.74	0.00	0.88	0.75	0.07	0.21
Avail Cap(c_a), veh/h	338	1125	1180	345	1186	983	338	0	1145	656	1181	1001
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	11.5	11.5	50.7	26.9	32.0	51.0	0.0	41.6	46.6	30.1	31.2
Incr Delay (d2), s/veh	37.0	0.0	0.0	27.5	0.3	7.0	34.2	0.0	3.3	1.6	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	0.9	1.0	0.6	7.5	12.9	0.3	0.0	6.7	2.4	0.6	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	78.2	11.5	11.5	78.2	27.3	39.0	85.2	0.0	44.8	48.2	30.1	31.3
LnGrp LOS	E	B	B	E	C	D	F	A	D	D	C	C
Approach Vol, veh/h		523			953			280			304	
Approach Delay, s/veh		52.7			34.7			45.8			42.0	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	41.8	6.0	29.9	6.3	60.5	13.2	22.7
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	19.5	* 65	19.5	* 65	* 20	* 65	19.5	* 65
Max Q Clear Time (g_c+I1), s	20.4	36.1	2.4	6.1	3.0	4.7	7.7	17.2
Green Ext Time (p_c), s	0.0	0.8	0.0	0.1	0.0	0.3	0.1	0.5

Intersection Summary	
HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



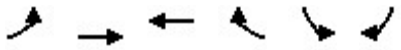
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	113	129	84	318	217	456	1398	64	89	487	58
Future Volume (veh/h)	256	113	129	84	318	217	456	1398	64	89	487	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	115	132	95	361	247	518	1589	73	100	547	65
Peak Hour Factor	0.98	0.98	0.98	0.88	0.88	0.88	0.88	0.88	0.88	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	343	1210	376	159	653	291	598	1843	565	165	1204	374
Arrive On Green	0.10	0.24	0.24	0.05	0.18	0.18	0.17	0.36	0.36	0.05	0.24	0.24
Sat Flow, veh/h	3456	5106	1585	3456	3554	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	261	115	132	95	361	247	518	1589	73	100	547	65
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1777	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	6.0	1.4	5.7	2.2	7.5	12.3	11.9	23.6	2.6	2.3	7.5	2.7
Cycle Q Clear(g_c), s	6.0	1.4	5.7	2.2	7.5	12.3	11.9	23.6	2.6	2.3	7.5	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	343	1210	376	159	653	291	598	1843	565	165	1204	374
V/C Ratio(X)	0.76	0.10	0.35	0.60	0.55	0.85	0.87	0.86	0.13	0.60	0.45	0.17
Avail Cap(c_a), veh/h	824	2079	645	824	1443	644	824	3915	1200	824	3909	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	24.3	26.0	38.3	30.3	32.3	32.9	24.2	17.5	38.2	26.7	24.9
Incr Delay (d2), s/veh	1.3	0.0	0.2	1.3	0.3	2.7	5.7	0.5	0.0	1.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.5	1.9	0.9	2.9	4.5	5.0	8.2	0.8	0.9	2.7	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	24.4	26.2	39.6	30.6	34.9	38.5	24.7	17.5	39.5	26.8	25.0
LnGrp LOS	D	C	C	D	C	C	D	C	B	D	C	C
Approach Vol, veh/h		508			703			2180			712	
Approach Delay, s/veh		31.4			33.3			27.8			28.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	36.9	9.3	26.2	19.6	26.7	13.6	21.8
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	19.5	* 63	19.5	* 33	19.5	* 63	19.5	33.2
Max Q Clear Time (g_c+I1), s	14.3	25.6	4.2	7.7	13.9	9.5	8.0	14.3
Green Ext Time (p_c), s	0.0	3.9	0.0	0.2	0.2	1.1	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



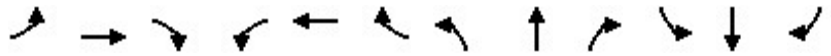
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	63	197	89	5	5	91
Future Volume (veh/h)	63	197	89	5	5	91
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	72	226	99	6	6	118
Peak Hour Factor	0.87	0.87	0.90	0.90	0.77	0.77
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	85	1369	396	177	275	245
Arrive On Green	0.05	0.39	0.11	0.11	0.15	0.15
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	72	226	99	6	6	118
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	1.0	1.0	0.6	0.1	0.1	1.6
Cycle Q Clear(g_c), s	1.0	1.0	0.6	0.1	0.1	1.6
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	85	1369	396	177	275	245
V/C Ratio(X)	0.85	0.17	0.25	0.03	0.02	0.48
Avail Cap(c_a), veh/h	1461	9590	9605	4284	2534	2255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.3	4.8	9.7	9.5	8.6	9.2
Incr Delay (d2), s/veh	8.4	0.0	0.1	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.1	0.0	0.0	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.7	4.8	9.8	9.5	8.6	9.8
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h		298	105		124	
Approach Delay, s/veh		8.4	9.8		9.7	
Approach LOS		A	A		A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.5	8.2		9.2		14.7
Change Period (Y+Rc), s	* 5.4	* 5.5		5.5		* 5.5
Max Green Setting (Gmax), s	* 26	* 65		34.0		* 65
Max Q Clear Time (g_c+I1), s	3.0	2.6		3.6		3.0
Green Ext Time (p_c), s	0.0	0.2		0.1		0.4

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	194	6	37	366	278	4	856	46	95	502	85
Future Volume (veh/h)	73	194	6	37	366	278	4	856	46	95	502	85
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	86	228	7	41	407	309	4	941	51	116	612	104
Peak Hour Factor	0.85	0.85	0.85	0.90	0.90	0.90	0.91	0.91	0.91	0.82	0.82	0.82
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	107	491	416	53	434	368	39	820	44	141	979	925
Arrive On Green	0.06	0.26	0.26	0.03	0.23	0.23	0.02	0.47	0.47	0.08	0.52	0.52
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1758	95	1781	1870	1585
Grp Volume(v), veh/h	86	228	7	41	407	309	4	0	992	116	612	104
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1853	1781	1870	1585
Q Serve(g_s), s	6.5	14.0	0.4	3.1	29.1	25.4	0.3	0.0	63.6	8.8	31.6	4.0
Cycle Q Clear(g_c), s	6.5	14.0	0.4	3.1	29.1	25.4	0.3	0.0	63.6	8.8	31.6	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	107	491	416	53	434	368	39	0	864	141	979	925
V/C Ratio(X)	0.80	0.46	0.02	0.78	0.94	0.84	0.10	0.00	1.15	0.82	0.63	0.11
Avail Cap(c_a), veh/h	268	491	416	268	455	386	268	0	864	320	979	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	42.3	37.3	65.7	51.4	50.0	65.4	0.0	36.4	61.9	23.0	12.7
Incr Delay (d2), s/veh	5.2	0.3	0.0	8.7	26.2	13.7	0.4	0.0	80.1	4.5	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	6.2	0.2	1.5	16.2	11.0	0.1	0.0	45.5	4.0	13.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	68.5	42.5	37.3	74.5	77.6	63.7	65.8	0.0	116.5	66.4	24.0	12.7
LnGrp LOS	E	D	D	E	E	E	E	A	F	E	C	B
Approach Vol, veh/h		321			757			996			832	
Approach Delay, s/veh		49.4			71.8			116.3			28.5	
Approach LOS		D			E			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	38.4	7.5	77.8	8.5	42.6	15.3	70.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	20.5	33.2	20.5	* 64	20.5	33.2	24.5	63.6
Max Q Clear Time (g_c+I1), s	8.5	31.1	2.3	33.6	5.1	16.0	10.8	65.6
Green Ext Time (p_c), s	0.0	0.5	0.0	2.2	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	72.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	259	0	36	640	34	3	324	16	23	245	76
Future Volume (veh/h)	87	259	0	36	640	34	3	324	16	23	245	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	278	0	40	711	38	3	360	18	26	275	85
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	112	739	0	52	635	34	3	376	19	26	279	86
Arrive On Green	0.06	0.39	0.00	0.03	0.36	0.36	0.21	0.21	0.21	0.22	0.22	0.22
Sat Flow, veh/h	1781	1870	0	1781	1759	94	15	1752	88	121	1278	395
Grp Volume(v), veh/h	94	278	0	40	0	749	381	0	0	386	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1853	1854	0	0	1793	0	0
Q Serve(g_s), s	9.1	18.5	0.0	3.9	0.0	63.2	35.6	0.0	0.0	37.6	0.0	0.0
Cycle Q Clear(g_c), s	9.1	18.5	0.0	3.9	0.0	63.2	35.6	0.0	0.0	37.6	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.05	0.01		0.05	0.07		0.22
Lane Grp Cap(c), veh/h	112	739	0	52	0	669	398	0	0	391	0	0
V/C Ratio(X)	0.84	0.38	0.00	0.78	0.00	1.12	0.96	0.00	0.00	0.99	0.00	0.00
Avail Cap(c_a), veh/h	259	739	0	208	0	669	402	0	0	391	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	81.2	37.7	0.0	84.5	0.0	56.0	68.0	0.0	0.0	68.3	0.0	0.0
Incr Delay (d2), s/veh	6.1	0.1	0.0	8.9	0.0	72.8	33.3	0.0	0.0	41.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	8.3	0.0	1.9	0.0	41.9	20.1	0.0	0.0	21.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.2	37.8	0.0	93.4	0.0	128.8	101.2	0.0	0.0	110.2	0.0	0.0
LnGrp LOS	F	D	A	F	A	F	F	A	A	F	A	A
Approach Vol, veh/h		372			789			381			386	
Approach Delay, s/veh		50.3			127.0			101.2			110.2	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.6	70.0		45.0	9.6	76.0		44.6
Change Period (Y+Rc), s	4.5	6.8		6.8	4.5	* 6.8		7.0
Max Green Setting (Gmax), s	25.5	63.2		38.2	20.5	* 64		38.0
Max Q Clear Time (g_c+I1), s	11.1	65.2		39.6	5.9	20.5		37.6
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.8		0.1

Intersection Summary		
HCM 6th Ctrl Delay	103.7	
HCM 6th LOS	F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	19.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	13	0	170	1	451	15	61	326	0
Future Vol, veh/h	1	0	0	13	0	170	1	451	15	61	326	0
Peak Hour Factor	0.70	0.70	0.70	0.84	0.84	0.84	0.96	0.96	0.96	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	0	0	15	0	202	1	470	16	77	413	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.3	12	20.4	21.1
HCM LOS	B	B	C	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	100%	7%	16%
Vol Thru, %	97%	0%	0%	84%
Vol Right, %	3%	0%	93%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	467	1	183	387
LT Vol	1	1	13	61
Through Vol	451	0	0	326
RT Vol	15	0	170	0
Lane Flow Rate	486	1	218	490
Geometry Grp	1	1	1	1
Degree of Util (X)	0.713	0.003	0.35	0.724
Departure Headway (Hd)	5.279	7.191	5.786	5.32
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	686	494	619	681
Service Time	3.322	5.285	3.845	3.362
HCM Lane V/C Ratio	0.708	0.002	0.352	0.72
HCM Control Delay	20.4	10.3	12	21.1
HCM Lane LOS	C	B	B	C
HCM 95th-tile Q	6	0	1.6	6.2



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	196	22	94	497	349	72
Future Volume (veh/h)	196	22	94	497	349	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	280	31	108	571	397	82
Peak Hour Factor	0.70	0.70	0.87	0.87	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	356	317	136	904	508	431
Arrive On Green	0.20	0.20	0.08	0.48	0.27	0.27
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	280	31	108	571	397	82
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	5.1	0.5	2.0	7.7	6.7	1.4
Cycle Q Clear(g_c), s	5.1	0.5	2.0	7.7	6.7	1.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	356	317	136	904	508	431
V/C Ratio(X)	0.79	0.10	0.80	0.63	0.78	0.19
Avail Cap(c_a), veh/h	1846	1643	1067	3525	3509	2974
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	11.1	15.5	6.5	11.5	9.5
Incr Delay (d2), s/veh	1.5	0.0	3.9	0.3	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.1	0.7	0.8	1.6	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.4	11.2	19.4	6.8	12.5	9.6
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	311			679	479	
Approach Delay, s/veh	14.1			8.8	12.0	
Approach LOS	B			A	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	7.2	15.4			22.6	11.5
Change Period (Y+Rc), s	* 4.6	* 6.1			* 6.1	4.7
Max Green Setting (Gmax), s	* 26	* 64			* 64	35.3
Max Q Clear Time (g_c+I1), s	4.0	8.7			9.7	7.1
Green Ext Time (p_c), s	0.0	0.6			0.8	0.1

Intersection Summary		
HCM 6th Ctrl Delay	11.0	
HCM 6th LOS	B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	146.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	215	51	19	699	400	73
Future Vol, veh/h	215	51	19	699	400	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	62	62	86	86	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	347	82	22	813	435	79

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1332	475	514	0	-	0
Stage 1	475	-	-	-	-	-
Stage 2	857	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 170	590	1052	-	-	-
Stage 1	626	-	-	-	-	-
Stage 2	416	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 166	590	1052	-	-	-
Mov Cap-2 Maneuver	~ 166	-	-	-	-	-
Stage 1	613	-	-	-	-	-
Stage 2	416	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 606	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1052	-	193	-	-
HCM Lane V/C Ratio	0.021	-	2.223	-	-
HCM Control Delay (s)	8.5	-	$ 606	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q(veh)	0.1	-	34.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	42	41	108	870	0	429	296
Future Volume (veh/h)	42	41	108	870	0	429	296
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	53	52	123	989		452	312
Peak Hour Factor	0.79	0.79	0.88	0.88		0.95	0.95
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	201	230	155	1889		933	508
Arrive On Green	0.06	0.06	0.09	0.53		0.26	0.26
Sat Flow, veh/h	3456	1585	1781	3647		3647	1585
Grp Volume(v), veh/h	53	52	123	989		452	312
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777		1777	1585
Q Serve(g_s), s	0.4	0.9	2.0	5.5		3.2	5.0
Cycle Q Clear(g_c), s	0.4	0.9	2.0	5.5		3.2	5.0
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	201	230	155	1889		933	508
V/C Ratio(X)	0.26	0.23	0.79	0.52		0.48	0.61
Avail Cap(c_a), veh/h	6233	2996	1149	6280		6245	2877
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	13.6	11.4	13.5	4.6		9.4	8.7
Incr Delay (d2), s/veh	0.3	0.2	3.5	0.1		0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.6	0.0		0.6	0.9
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	13.9	11.6	17.0	4.7		9.6	9.1
LnGrp LOS	B	B	B	A		A	A
Approach Vol, veh/h	105			1112		764	
Approach Delay, s/veh	12.7			6.0		9.4	
Approach LOS	B			A		A	

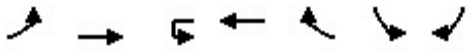
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	8.1	14.8		7.3		23.0	
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9	
Max Green Setting (Gmax), s	19.5	* 53		54.5		* 53	
Max Q Clear Time (g_c+I1), s	4.0	7.0		2.9		7.5	
Green Ext Time (p_c), s	0.0	0.9		0.1		2.0	

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	486	410	0	426	109	31	263
Future Volume (veh/h)	486	410	0	426	109	31	263
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	534	451		520	133	37	313
Peak Hour Factor	0.91	0.91		0.82	0.82	0.84	0.84
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	575	2091		659	294	399	355
Arrive On Green	0.32	0.59		0.19	0.19	0.22	0.22
Sat Flow, veh/h	1781	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	534	451		520	133	37	313
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1781	1585
Q Serve(g_s), s	18.8	3.9		9.1	4.8	1.1	12.4
Cycle Q Clear(g_c), s	18.8	3.9		9.1	4.8	1.1	12.4
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	575	2091		659	294	399	355
V/C Ratio(X)	0.93	0.22		0.79	0.45	0.09	0.88
Avail Cap(c_a), veh/h	817	3466		3461	1544	945	841
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	6.3		25.3	23.5	20.0	24.4
Incr Delay (d2), s/veh	11.0	0.0		0.8	0.4	0.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.9		3.3	1.6	0.4	4.2
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	32.2	6.3		26.1	23.9	20.0	27.3
LnGrp LOS	C	A		C	C	C	C
Approach Vol, veh/h		985		653		350	
Approach Delay, s/veh		20.4		25.6		26.5	
Approach LOS		C		C		C	

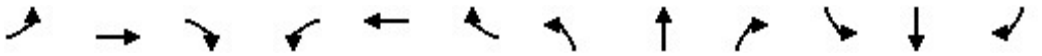
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	26.2	18.8			45.0	20.0
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 38	* 63			* 63	34.5
Max Q Clear Time (g_c+I1), s	20.8	11.1			5.9	14.4
Green Ext Time (p_c), s	0.2	1.0			0.8	0.2

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	401	0	353	0	1148	966	0	583	359
Future Volume (veh/h)	0	0	0	401	0	353	0	1148	966	0	583	359
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				448	40	420	0	1171	0	0	678	0
Peak Hour Factor				0.84	0.84	0.84	0.98	0.98	0.98	0.86	0.86	0.86
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				547	42	442	0	2143		0	2143	
Arrive On Green				0.31	0.31	0.31	0.00	0.60	0.00	0.00	0.60	0.00
Sat Flow, veh/h				1781	137	1441	0	3741	0	0	3741	0
Grp Volume(v), veh/h				448	0	460	0	1171	0	0	678	0
Grp Sat Flow(s),veh/h/ln				1781	0	1579	0	1777	0	0	1777	0
Q Serve(g_s), s				25.6	0.0	31.4	0.0	21.5	0.0	0.0	10.3	0.0
Cycle Q Clear(g_c), s				25.6	0.0	31.4	0.0	21.5	0.0	0.0	10.3	0.0
Prop In Lane				1.00		0.91	0.00		0.00	0.00		0.00
Lane Grp Cap(c), veh/h				547	0	484	0	2143		0	2143	
V/C Ratio(X)				0.82	0.00	0.95	0.00	0.55		0.00	0.32	
Avail Cap(c_a), veh/h				568	0	504	0	2143		0	2143	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				35.3	0.0	37.3	0.0	12.9	0.0	0.0	10.7	0.0
Incr Delay (d2), s/veh				8.3	0.0	26.9	0.0	1.0	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				12.2	0.0	15.5	0.0	7.8	0.0	0.0	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				43.6	0.0	64.2	0.0	13.9	0.0	0.0	11.1	0.0
LnGrp LOS				D	A	E	A	B		A	B	
Approach Vol, veh/h					908			1171	A		678	A
Approach Delay, s/veh					54.0			13.9			11.1	
Approach LOS					D			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	71.3		71.3		38.7			
Change Period (Y+Rc), s	* 5		5.0		4.9			
Max Green Setting (Gmax), s	* 66		65.0		35.1			
Max Q Clear Time (g_c+I1), s	12.3		23.5		33.4			
Green Ext Time (p_c), s	1.5		2.9		0.4			

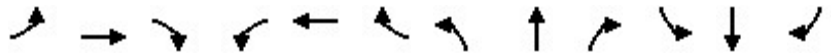
Intersection Summary		
HCM 6th Ctrl Delay	26.4	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	534	0	585	0	0	0	0	1571	715	0	744	231
Future Volume (veh/h)	534	0	585	0	0	0	0	1571	715	0	744	231
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	832	0	438				0	1689	0	0	800	0
Peak Hour Factor	0.87	0.87	0.87				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	1047	0	464				0	3123		0	2174	
Arrive On Green	0.29	0.00	0.29				0.00	0.61	0.00	0.00	0.61	0.00
Sat Flow, veh/h	3563	0	1580				0	5443	0	0	3647	1585
Grp Volume(v), veh/h	832	0	438				0	1689	0	0	800	0
Grp Sat Flow(s),veh/h/ln	1781	0	1580				0	1702	0	0	1777	1585
Q Serve(g_s), s	23.7	0.0	29.8				0.0	21.1	0.0	0.0	12.4	0.0
Cycle Q Clear(g_c), s	23.7	0.0	29.8				0.0	21.1	0.0	0.0	12.4	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	1047	0	464				0	3123		0	2174	
V/C Ratio(X)	0.79	0.00	0.94				0.00	0.54		0.00	0.37	
Avail Cap(c_a), veh/h	1121	0	497				0	3123		0	2174	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	35.8	0.0	38.0				0.0	12.4	0.0	0.0	10.7	0.0
Incr Delay (d2), s/veh	3.4	0.0	25.3				0.0	0.7	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	14.6				0.0	7.2	0.0	0.0	4.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	0.0	63.3				0.0	13.1	0.0	0.0	11.2	0.0
LnGrp LOS	D	A	E				A	B		A	B	
Approach Vol, veh/h		1270						1689	A		800	A
Approach Delay, s/veh		47.5						13.1			11.2	
Approach LOS		D						B			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	72.3	37.7	72.3
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 66	* 35	65.0
Max Q Clear Time (g_c+I1), s	14.4	31.8	23.1
Green Ext Time (p_c), s	1.8	0.5	5.0

Intersection Summary	
HCM 6th Ctrl Delay	24.3
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	781	224	109	1047	677	96
Future Volume (veh/h)	781	224	109	1047	677	96
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	849	0	124	1190	967	137
Peak Hour Factor	0.92	0.92	0.88	0.88	0.70	0.70
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1912		159	2796	1079	495
Arrive On Green	0.37	0.00	0.09	0.55	0.31	0.31
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	849	0	124	1190	967	137
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	7.6	0.0	4.1	8.3	16.2	3.9
Cycle Q Clear(g_c), s	7.6	0.0	4.1	8.3	16.2	3.9
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1912		159	2796	1079	495
V/C Ratio(X)	0.44		0.78	0.43	0.90	0.28
Avail Cap(c_a), veh/h	5473		585	5473	2080	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.2	0.0	27.0	8.1	19.9	15.7
Incr Delay (d2), s/veh	0.3	0.0	3.1	0.2	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	1.7	2.1	5.6	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.6	0.0	30.2	8.3	21.0	15.8
LnGrp LOS	B		C	A	C	B
Approach Vol, veh/h	849	A		1314	1104	
Approach Delay, s/veh	14.6			10.4	20.4	
Approach LOS	B			B	C	

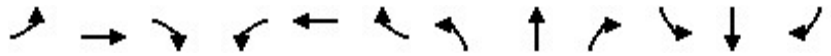
Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	38.2		10.5	27.7	22.4
Change Period (Y+Rc), s	5.0		* 5.1	5.0	3.5
Max Green Setting (Gmax), s	65.0		* 20	65.0	36.5
Max Q Clear Time (g_c+I1), s	10.3		6.1	9.6	18.2
Green Ext Time (p_c), s	21.1		0.0	13.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	394	0	310	0	1660	1740	0	783	567
Future Volume (veh/h)	0	0	0	394	0	310	0	1660	1740	0	783	567
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				464	0	365	0	1694	0	0	816	0
Peak Hour Factor				0.85	0.85	0.85	0.98	0.98	0.98	0.96	0.96	0.96
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				850	0	390	0	3384		0	2355	
Arrive On Green				0.25	0.00	0.25	0.00	0.66	0.00	0.00	0.66	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	3647	1585
Grp Volume(v), veh/h				464	0	365	0	1694	0	0	816	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1777	1585
Q Serve(g_s), s				14.6	0.0	28.2	0.0	20.9	0.0	0.0	12.6	0.0
Cycle Q Clear(g_c), s				14.6	0.0	28.2	0.0	20.9	0.0	0.0	12.6	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				850	0	390	0	3384		0	2355	
V/C Ratio(X)				0.55	0.00	0.94	0.00	0.50		0.00	0.35	
Avail Cap(c_a), veh/h				1333	0	611	0	3384		0	2355	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				41.0	0.0	46.2	0.0	10.6	0.0	0.0	9.2	0.0
Incr Delay (d2), s/veh				0.2	0.0	12.2	0.0	0.5	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.3	0.0	12.4	0.0	7.1	0.0	0.0	4.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				41.2	0.0	58.4	0.0	11.2	0.0	0.0	9.6	0.0
LnGrp LOS				D	A	E	A	B		A	A	
Approach Vol, veh/h					829			1694	A		816	A
Approach Delay, s/veh					48.8			11.2			9.6	
Approach LOS					D			B			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	87.4		87.4		37.6			
Change Period (Y+Rc), s	4.6		4.6		6.8			
Max Green Setting (Gmax), s	65.4		65.4		48.2			
Max Q Clear Time (g_c+I1), s	14.6		22.9		30.2			
Green Ext Time (p_c), s	1.9		5.0		0.6			

Intersection Summary		
HCM 6th Ctrl Delay		20.1
HCM 6th LOS		C

Notes

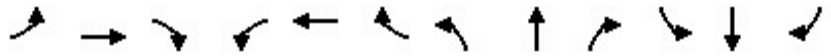
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	702	0	130	702	736	127	1958	464	7	1065	114
Future Volume (vph)	702	0	130	702	736	127	1958	464	7	1065	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.6		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.95	1.00
Frpb, ped/bikes		1.00	0.99	0.98	1.00		1.00			1.00	0.97
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.89	0.85	0.85		0.97			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1610	2811	1411	2787		6187			3539	1540
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1610	2811	1411	2787		6187			3539	1540
Peak-hour factor, PHF	0.97	0.92	0.97	0.97	0.89	0.92	0.98	0.92	0.98	0.87	0.87
Adj. Flow (vph)	724	0	134	724	827	138	1998	504	7	1224	131
RTOR Reduction (vph)	0	0	27	27	16	0	0	0	0	0	0
Lane Group Flow (vph)	0	724	469	335	949	0	2509	0	0	1224	131
Confl. Peds. (#/hr)	11			11	3				3		11
Confl. Bikes (#/hr)									8		5
Turn Type	Split	Split	NA	Perm	Prot		NA			NA	Free
Protected Phases	4	4	4		2!		6!			2	
Permitted Phases				4	2						Free
Actuated Green, G (s)		48.2	48.2	48.2	65.4		65.4			65.4	125.0
Effective Green, g (s)		48.2	48.2	48.2	65.4		65.4			65.4	125.0
Actuated g/C Ratio		0.39	0.39	0.39	0.52		0.52			0.52	1.00
Clearance Time (s)		6.8	6.8	6.8	4.6		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	1.0		1.0			1.0	
Lane Grp Cap (vph)		620	1083	544	1458		3237			1851	1540
v/s Ratio Prot		c0.45	0.17		0.34		c0.41			0.35	
v/s Ratio Perm				0.24							0.09
v/c Ratio		1.17	0.43	0.62	0.65		0.77			0.66	0.09
Uniform Delay, d1		38.4	28.3	30.9	21.5		23.9			21.7	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.18	1.00
Incremental Delay, d2		92.1	0.1	1.5	2.3		1.9			1.8	0.1
Delay (s)		130.5	28.4	32.4	23.8		25.8			27.4	0.1
Level of Service		F	C	C	C		C			C	A
Approach Delay (s)			76.0				25.8			24.7	
Approach LOS			E				C			C	

Intersection Summary			
HCM 2000 Control Delay	37.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	11.4
Intersection Capacity Utilization	119.1%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	605	173	42	42	124	716	59	1128	19	390	1129	263
Future Volume (veh/h)	605	173	42	42	124	716	59	1128	19	390	1129	263
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	624	178	43	45	133	770	61	1163	20	406	1176	274
Peak Hour Factor	0.97	0.97	0.97	0.93	0.93	0.93	0.97	0.97	0.97	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	582	1608	366	81	453	1171	104	1338	23	464	1855	570
Arrive On Green	0.17	0.39	0.39	0.02	0.24	0.24	0.03	0.26	0.26	0.13	0.36	0.36
Sat Flow, veh/h	3456	4149	945	3563	1870	3077	3456	5168	89	3456	5106	1569
Grp Volume(v), veh/h	624	144	77	45	133	770	61	766	417	406	1176	274
Grp Sat Flow(s),veh/h/ln	1728	1702	1690	1781	1870	1539	1728	1702	1852	1728	1702	1569
Q Serve(g_s), s	19.5	3.1	3.4	1.4	6.7	24.1	2.0	24.9	24.9	13.3	22.0	15.6
Cycle Q Clear(g_c), s	19.5	3.1	3.4	1.4	6.7	24.1	2.0	24.9	24.9	13.3	22.0	15.6
Prop In Lane	1.00		0.56	1.00		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	582	1319	655	81	453	1171	104	882	480	464	1855	570
V/C Ratio(X)	1.07	0.11	0.12	0.55	0.29	0.66	0.59	0.87	0.87	0.87	0.63	0.48
Avail Cap(c_a), veh/h	582	1883	935	600	1043	2141	582	1909	1039	732	2837	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	22.7	22.7	55.9	35.8	30.0	55.4	41.0	41.0	49.1	30.5	28.4
Incr Delay (d2), s/veh	57.9	0.0	0.0	2.2	0.1	0.2	2.0	1.1	1.9	4.5	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	1.2	1.3	0.7	3.0	8.5	0.9	10.2	11.3	5.9	8.6	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	106.0	22.7	22.8	58.1	35.9	30.3	57.4	42.1	42.9	53.6	30.6	28.6
LnGrp LOS	F	C	C	E	D	C	E	D	D	D	C	C
Approach Vol, veh/h		845			948			1244			1856	
Approach Delay, s/veh		84.2			32.4			43.1			35.4	
Approach LOS		F			C			D			D	

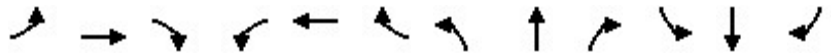
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	47.7	25.0	34.0	21.0	35.7	8.1	50.9
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	* 65	24.5	* 65	19.5	* 64
Max Q Clear Time (g_c+I1), s	14.0	24.0	21.5	26.1	15.3	26.9	3.4	5.4
Green Ext Time (p_c), s	0.0	3.1	0.0	1.0	0.2	2.7	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



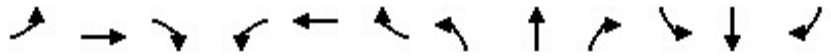
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	305	498	232	181	354	115	124	448	54	175	864	128
Future Volume (veh/h)	305	498	232	181	354	115	124	448	54	175	864	128
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	332	541	252	218	427	139	133	482	58	199	982	145
Peak Hour Factor	0.92	0.92	0.92	0.83	0.83	0.83	0.93	0.93	0.93	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	808	362	297	1040	309	466	1706	515	277	1249	184
Arrive On Green	0.12	0.24	0.24	0.09	0.20	0.20	0.13	0.33	0.33	0.08	0.28	0.28
Sat Flow, veh/h	3456	3411	1530	3456	5106	1519	3456	5106	1543	3456	4473	658
Grp Volume(v), veh/h	332	540	253	218	427	139	133	482	58	199	747	380
Grp Sat Flow(s),veh/h/ln	1728	1702	1536	1728	1702	1519	1728	1702	1543	1728	1702	1727
Q Serve(g_s), s	8.0	12.2	12.8	5.2	6.2	6.8	2.9	5.9	2.2	4.8	17.2	17.3
Cycle Q Clear(g_c), s	8.0	12.2	12.8	5.2	6.2	6.8	2.9	5.9	2.2	4.8	17.2	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	411	807	364	297	1040	309	466	1706	515	277	951	482
V/C Ratio(X)	0.81	0.67	0.70	0.73	0.41	0.45	0.29	0.28	0.11	0.72	0.79	0.79
Avail Cap(c_a), veh/h	791	1367	617	791	2051	610	791	3861	1167	791	2574	1306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	29.5	29.7	38.0	29.5	29.7	33.1	20.9	19.6	38.2	28.3	28.4
Incr Delay (d2), s/veh	1.4	0.4	0.9	1.3	0.1	0.4	0.1	0.0	0.0	1.3	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	4.7	4.5	2.2	2.4	2.4	1.2	2.2	0.7	2.0	6.5	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.0	29.8	30.6	39.3	29.6	30.1	33.3	20.9	19.7	39.5	28.9	29.5
LnGrp LOS	D	C	C	D	C	C	C	C	B	D	C	C
Approach Vol, veh/h		1125			784			673			1326	
Approach Delay, s/veh		32.4			32.4			23.2			30.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	29.4	15.6	23.2	12.3	34.0	12.8	26.0
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.2	19.5	* 64	19.5	34.2
Max Q Clear Time (g_c+I1), s	14.9	19.3	10.0	8.8	6.8	7.9	7.2	14.8
Green Ext Time (p_c), s	0.1	2.5	0.2	1.0	0.1	1.1	0.1	1.7

Intersection Summary	
HCM 6th Ctrl Delay	30.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	191	32	176	59	24	60	214	2777	22	52	2148	97
Future Volume (veh/h)	191	32	176	59	24	60	214	2777	22	52	2148	97
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	212	36	196	71	29	72	228	2954	23	60	2469	111
Peak Hour Factor	0.90	0.90	0.90	0.83	0.83	0.83	0.94	0.94	0.94	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	43	256	178	46	115	280	2798	22	77	2530	779
Arrive On Green	0.16	0.16	0.16	0.10	0.10	0.10	0.08	0.54	0.54	0.04	0.50	0.50
Sat Flow, veh/h	1533	260	1568	1781	462	1148	3456	5226	41	1781	5106	1572
Grp Volume(v), veh/h	248	0	196	71	0	101	228	1921	1056	60	2469	111
Grp Sat Flow(s),veh/h/ln	1794	0	1568	1781	0	1611	1728	1702	1862	1781	1702	1572
Q Serve(g_s), s	17.6	0.0	15.7	4.9	0.0	7.9	8.5	70.2	70.2	4.4	61.9	5.0
Cycle Q Clear(g_c), s	17.6	0.0	15.7	4.9	0.0	7.9	8.5	70.2	70.2	4.4	61.9	5.0
Prop In Lane	0.85		1.00	1.00		0.71	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	293	0	256	178	0	161	280	1823	997	77	2530	779
V/C Ratio(X)	0.85	0.00	0.77	0.40	0.00	0.63	0.82	1.05	1.06	0.78	0.98	0.14
Avail Cap(c_a), veh/h	472	0	413	469	0	424	525	1823	997	274	2539	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	0.0	52.4	55.3	0.0	56.6	59.3	30.5	30.5	62.1	32.3	18.0
Incr Delay (d2), s/veh	4.0	0.0	1.8	0.5	0.0	1.5	2.2	37.0	45.4	6.2	12.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	6.3	2.2	0.0	3.3	3.7	35.6	41.3	2.1	26.6	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.3	0.0	54.2	55.8	0.0	58.1	61.5	67.5	75.8	68.3	45.0	18.0
LnGrp LOS	E	A	D	E	A	E	E	F	F	E	D	B
Approach Vol, veh/h		444			172			3205			2640	
Approach Delay, s/veh		55.9			57.2			69.8			44.4	
Approach LOS		E			E			E			D	

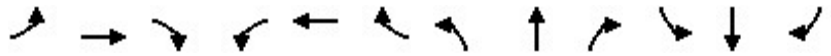
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.7	69.8		26.9	10.5	75.1		18.6
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 20	* 65		34.5	* 20	* 65		34.5
Max Q Clear Time (g_c+I1), s	10.5	63.9		19.6	6.4	72.2		9.9
Green Ext Time (p_c), s	0.1	1.0		0.6	0.0	0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	58.1
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	315	0	312	0	2676	458	0	1313	1099
Future Volume (veh/h)	0	0	0	315	0	312	0	2676	458	0	1313	1099
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				354	0	351	0	2909	0	0	1382	0
Peak Hour Factor				0.89	0.89	0.89	0.92	0.92	0.92	0.95	0.95	0.95
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				506	0	408	0	4178		0	3802	
Arrive On Green				0.15	0.00	0.15	0.00	0.74	0.00	0.00	0.74	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				354	0	351	0	2909	0	0	1382	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				10.7	0.0	13.5	0.0	30.2	0.0	0.0	10.4	0.0
Cycle Q Clear(g_c), s				10.7	0.0	13.5	0.0	30.2	0.0	0.0	10.4	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				506	0	408	0	4178		0	3802	
V/C Ratio(X)				0.70	0.00	0.86	0.00	0.70		0.00	0.36	
Avail Cap(c_a), veh/h				1037	0	837	0	4178		0	3802	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				44.7	0.0	45.9	0.0	7.4	0.0	0.0	4.9	0.0
Incr Delay (d2), s/veh				0.7	0.0	2.1	0.0	1.0	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.6	0.0	4.8	0.0	8.9	0.0	0.0	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				45.3	0.0	48.0	0.0	8.4	0.0	0.0	5.2	0.0
LnGrp LOS				D	A	D	A	A		A	A	
Approach Vol, veh/h					705			2909	A		1382	A
Approach Delay, s/veh					46.6			8.4			5.2	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		6		8	
Phs Duration (G+Y+Rc), s	86.9		86.9		23.1	
Change Period (Y+Rc), s	* 5		5.0		7.0	
Max Green Setting (Gmax), s	* 65		65.0		33.0	
Max Q Clear Time (g_c+I1), s	12.4		32.2		15.5	
Green Ext Time (p_c), s	3.7		13.3		0.6	

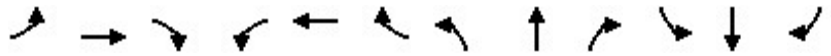
Intersection Summary		
HCM 6th Ctrl Delay		12.9
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1163	0	327	0	0	0	0	2007	432	0	1285	347
Future Volume (veh/h)	1163	0	327	0	0	0	0	2007	432	0	1285	347
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1292	0	363				0	2205	0	0	1325	0
Peak Hour Factor	0.90	0.90	0.90				0.91	0.91	0.91	0.97	0.97	0.97
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1393	0	774				0	4631		0	3473	
Arrive On Green	0.28	0.00	0.28				0.00	0.62	0.00	0.00	0.62	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1292	0	363				0	2205	0	0	1325	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	27.5	0.0	11.9				0.0	17.5	0.0	0.0	13.0	0.0
Cycle Q Clear(g_c), s	27.5	0.0	11.9				0.0	17.5	0.0	0.0	13.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1393	0	774				0	4631		0	3473	
V/C Ratio(X)	0.93	0.00	0.47				0.00	0.48		0.00	0.38	
Avail Cap(c_a), veh/h	1521	0	845				0	4631		0	3473	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.7	0.0	33.0				0.0	11.3	0.0	0.0	10.5	0.0
Incr Delay (d2), s/veh	9.3	0.0	0.2				0.0	0.4	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.3	0.0	4.0				0.0	6.4	0.0	0.0	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.9	0.0	33.2				0.0	11.7	0.0	0.0	10.8	0.0
LnGrp LOS	D	A	C				A	B		A	B	
Approach Vol, veh/h		1655						2205	A		1325	A
Approach Delay, s/veh		44.7						11.7			10.8	
Approach LOS		D						B			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	72.8	37.2	72.8
Change Period (Y+Rc), s	* 4.7	6.7	4.7
Max Green Setting (Gmax), s	* 66	33.3	65.3
Max Q Clear Time (g_c+I1), s	15.0	29.5	19.5
Green Ext Time (p_c), s	3.5	1.0	7.9

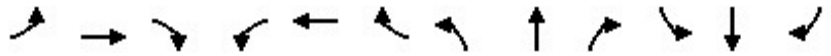
Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	422	347	107	211	244	252	121	1656	228	241	1151	245
Future Volume (veh/h)	422	347	107	211	244	252	121	1656	228	241	1151	245
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	431	354	109	237	234	309	132	1800	248	265	1265	269
Peak Hour Factor	0.98	0.98	0.98	0.89	0.89	0.89	0.92	0.92	0.92	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	488	870	381	299	351	580	193	2435	592	324	2126	658
Arrive On Green	0.14	0.24	0.24	0.08	0.19	0.19	0.06	0.38	0.38	0.09	0.42	0.42
Sat Flow, veh/h	3456	3554	1555	3563	1870	3096	3456	6434	1564	3456	5106	1579
Grp Volume(v), veh/h	431	354	109	237	234	309	132	1800	248	265	1265	269
Grp Sat Flow(s),veh/h/ln	1728	1777	1555	1781	1870	1548	1728	1609	1564	1728	1702	1579
Q Serve(g_s), s	14.0	9.6	6.5	7.5	13.3	10.3	4.3	27.6	13.4	8.6	22.0	13.7
Cycle Q Clear(g_c), s	14.0	9.6	6.5	7.5	13.3	10.3	4.3	27.6	13.4	8.6	22.0	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	488	870	381	299	351	580	193	2435	592	324	2126	658
V/C Ratio(X)	0.88	0.41	0.29	0.79	0.67	0.53	0.68	0.74	0.42	0.82	0.59	0.41
Avail Cap(c_a), veh/h	589	1058	463	607	555	919	589	3608	877	589	2872	888
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	36.3	35.1	51.5	43.2	42.0	53.1	30.7	26.3	50.9	25.9	23.5
Incr Delay (d2), s/veh	11.6	0.5	0.6	1.8	3.7	1.3	2.6	0.3	0.3	1.9	0.5	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	4.2	2.5	3.4	6.5	4.0	1.9	10.2	5.0	3.7	8.5	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.8	36.7	35.7	53.3	46.9	43.3	55.7	31.0	26.6	52.9	26.5	24.3
LnGrp LOS	E	D	D	D	D	D	E	C	C	D	C	C
Approach Vol, veh/h		894			780			2180			1799	
Approach Delay, s/veh		47.7			47.4			32.0			30.0	
Approach LOS		D			D			C			C	

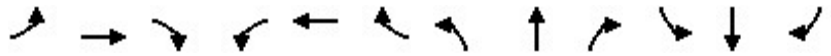
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	53.5	21.7	27.5	16.2	49.1	15.1	34.0
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	* 34
Max Q Clear Time (g_c+I1), s	6.3	24.0	16.0	15.3	10.6	29.6	9.5	11.6
Green Ext Time (p_c), s	0.2	23.5	0.2	4.3	0.1	13.7	0.1	3.9

Intersection Summary	
HCM 6th Ctrl Delay	36.0
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



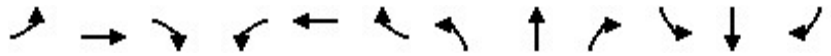
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	593	226	208	359	235	303	939	197	292	1230	118
Future Volume (veh/h)	308	593	226	208	359	235	303	939	197	292	1230	118
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	380	732	279	267	460	301	340	1055	221	301	1268	122
Peak Hour Factor	0.81	0.81	0.81	0.78	0.78	0.78	0.89	0.89	0.89	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	372	939	416	303	1248	386	372	1659	513	336	1607	496
Arrive On Green	0.12	0.29	0.29	0.10	0.27	0.27	0.12	0.36	0.36	0.11	0.35	0.35
Sat Flow, veh/h	3110	3198	1418	3110	4595	1423	3110	4595	1419	3110	4595	1419
Grp Volume(v), veh/h	380	732	279	267	460	301	340	1055	221	301	1268	122
Grp Sat Flow(s),veh/h/ln	1555	1599	1418	1555	1532	1423	1555	1532	1419	1555	1532	1419
Q Serve(g_s), s	19.5	34.2	28.2	13.8	13.2	31.9	17.6	31.1	19.2	15.6	40.4	10.0
Cycle Q Clear(g_c), s	19.5	34.2	28.2	13.8	13.2	31.9	17.6	31.1	19.2	15.6	40.4	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	372	939	416	303	1248	386	372	1659	513	336	1607	496
V/C Ratio(X)	1.02	0.78	0.67	0.88	0.37	0.78	0.91	0.64	0.43	0.89	0.79	0.25
Avail Cap(c_a), veh/h	372	1255	556	372	1248	386	372	1814	560	372	1808	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	71.8	52.8	50.7	72.7	48.1	54.9	71.0	43.2	39.4	71.8	47.6	37.7
Incr Delay (d2), s/veh	52.5	3.5	3.8	16.2	0.6	12.9	26.1	1.0	1.2	20.6	2.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	14.0	10.3	6.1	5.1	12.6	8.3	11.7	6.8	7.1	15.5	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	124.3	56.3	54.5	88.9	48.7	67.8	97.1	44.2	40.6	92.5	50.4	38.3
LnGrp LOS	F	E	D	F	D	E	F	D	D	F	D	D
Approach Vol, veh/h		1391			1028			1616			1691	
Approach Delay, s/veh		74.5			64.8			54.8			57.0	
Approach LOS		E			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	62.9	25.0	50.3	23.1	64.7	21.4	53.9
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	19.5	* 64	19.5	34.0	19.5	* 64	19.5	64.0
Max Q Clear Time (g_c+I1), s	19.5	42.4	21.5	33.9	17.6	33.1	15.8	36.2
Green Ext Time (p_c), s	0.0	14.6	0.0	0.1	0.1	16.5	0.1	11.7

Intersection Summary	
HCM 6th Ctrl Delay	62.0
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



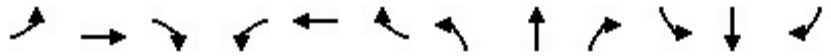
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	304	15	63	207	251	4	53	41	609	150	349
Future Volume (veh/h)	76	304	15	63	207	251	4	53	41	609	150	349
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	83	330	16	66	218	264	5	69	53	648	160	371
Peak Hour Factor	0.92	0.92	0.92	0.95	0.95	0.95	0.77	0.77	0.77	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	106	776	37	83	383	324	7	108	83	775	617	523
Arrive On Green	0.06	0.23	0.23	0.05	0.20	0.20	0.00	0.11	0.11	0.22	0.33	0.33
Sat Flow, veh/h	1781	3446	166	1781	1870	1585	1781	981	754	3456	1870	1585
Grp Volume(v), veh/h	83	170	176	66	218	264	5	0	122	648	160	371
Grp Sat Flow(s),veh/h/ln	1781	1777	1836	1781	1870	1585	1781	0	1735	1728	1870	1585
Q Serve(g_s), s	2.4	4.3	4.3	1.9	5.5	8.3	0.1	0.0	3.5	9.3	3.3	10.7
Cycle Q Clear(g_c), s	2.4	4.3	4.3	1.9	5.5	8.3	0.1	0.0	3.5	9.3	3.3	10.7
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.43	1.00		1.00
Lane Grp Cap(c), veh/h	106	400	413	83	383	324	7	0	190	775	617	523
V/C Ratio(X)	0.79	0.42	0.43	0.80	0.57	0.81	0.70	0.00	0.64	0.84	0.26	0.71
Avail Cap(c_a), veh/h	665	2215	2288	679	2335	1979	665	0	2166	1290	2324	1970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	17.3	17.3	24.7	18.7	19.8	26.0	0.0	22.3	19.3	12.8	15.3
Incr Delay (d2), s/veh	4.8	0.3	0.3	6.5	0.5	1.9	36.7	0.0	1.3	1.0	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.4	1.4	0.8	1.9	2.7	0.1	0.0	1.3	3.2	1.1	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.0	17.6	17.6	31.1	19.2	21.7	62.6	0.0	23.6	20.3	12.9	16.0
LnGrp LOS	C	B	B	C	B	C	E	A	C	C	B	B
Approach Vol, veh/h		429			548			127			1179	
Approach Delay, s/veh		19.8			21.8			25.1			17.9	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	15.6	5.7	22.3	7.5	16.7	17.2	10.8
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	19.5	* 65	19.5	* 65	* 20	* 65	19.5	* 65
Max Q Clear Time (g_c+I1), s	4.4	10.3	2.1	12.7	3.9	6.3	11.3	5.5
Green Ext Time (p_c), s	0.0	0.4	0.0	0.4	0.0	0.5	0.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	19.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



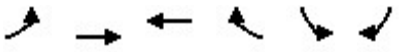
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	465	373	111	141	145	210	538	84	265	1633	131
Future Volume (veh/h)	161	465	373	111	141	145	210	538	84	265	1633	131
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	183	528	424	122	155	159	228	585	91	288	1775	142
Peak Hour Factor	0.88	0.88	0.88	0.91	0.91	0.91	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1409	437	176	915	403	284	1864	571	344	1952	606
Arrive On Green	0.07	0.28	0.28	0.05	0.26	0.26	0.08	0.37	0.37	0.10	0.38	0.38
Sat Flow, veh/h	3456	5106	1585	3456	3554	1565	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	183	528	424	122	155	159	228	585	91	288	1775	142
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1777	1565	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	6.3	10.1	31.9	4.2	4.1	10.1	7.8	9.9	4.7	9.9	39.7	7.3
Cycle Q Clear(g_c), s	6.3	10.1	31.9	4.2	4.1	10.1	7.8	9.9	4.7	9.9	39.7	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1409	437	176	915	403	284	1864	571	344	1952	606
V/C Ratio(X)	0.77	0.37	0.97	0.69	0.17	0.39	0.80	0.31	0.16	0.84	0.91	0.23
Avail Cap(c_a), veh/h	558	1409	437	558	977	430	558	2652	813	558	2648	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	35.3	43.2	56.4	34.8	37.0	54.4	27.5	25.8	53.4	35.3	25.3
Incr Delay (d2), s/veh	1.9	0.1	34.9	1.8	0.0	0.2	2.0	0.0	0.0	2.9	3.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	4.0	16.0	1.8	1.7	3.7	3.3	3.8	1.7	4.2	15.7	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.2	35.4	78.1	58.2	34.8	37.3	56.5	27.5	25.9	56.3	38.7	25.4
LnGrp LOS	E	D	E	E	C	D	E	C	C	E	D	C
Approach Vol, veh/h		1135			436			904			2205	
Approach Delay, s/veh		54.9			42.3			34.6			40.1	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	51.5	11.6	40.1	15.4	53.6	13.8	37.9
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	19.5	* 63	19.5	* 33	19.5	* 63	19.5	33.2
Max Q Clear Time (g_c+I1), s	11.9	11.9	6.2	33.9	9.8	41.7	8.3	12.1
Green Ext Time (p_c), s	0.1	1.2	0.1	0.0	0.1	4.4	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	42.8
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



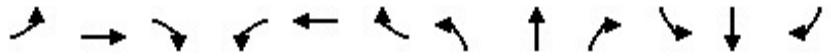
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	119	310	177	1	5	65
Future Volume (veh/h)	119	310	177	1	5	65
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	142	369	239	1	7	90
Peak Hour Factor	0.84	0.84	0.74	0.74	0.72	0.72
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	179	1617	536	239	231	206
Arrive On Green	0.10	0.46	0.15	0.15	0.13	0.13
Sat Flow, veh/h	1781	3647	3647	1585	1781	1585
Grp Volume(v), veh/h	142	369	239	1	7	90
Grp Sat Flow(s),veh/h/ln	1781	1777	1777	1585	1781	1585
Q Serve(g_s), s	2.1	1.7	1.6	0.0	0.1	1.4
Cycle Q Clear(g_c), s	2.1	1.7	1.6	0.0	0.1	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	179	1617	536	239	231	206
V/C Ratio(X)	0.79	0.23	0.45	0.00	0.03	0.44
Avail Cap(c_a), veh/h	1318	8650	8663	3864	2286	2034
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	4.4	10.2	9.6	10.1	10.6
Incr Delay (d2), s/veh	3.0	0.0	0.2	0.0	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.3	0.0	0.0	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	4.4	10.5	9.6	10.1	11.2
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h		511	240		97	
Approach Delay, s/veh		7.3	10.5		11.1	
Approach LOS		A	B		B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.1	9.5		8.9		17.6
Change Period (Y+Rc), s	* 5.4	* 5.5		5.5		* 5.5
Max Green Setting (Gmax), s	* 2.8	* 65		34.0		* 65
Max Q Clear Time (g_c+I1), s	4.1	3.6		3.4		3.7
Green Ext Time (p_c), s	0.0	0.4		0.1		0.7

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	419	6	41	225	120	3	337	70	277	947	75
Future Volume (veh/h)	85	419	6	41	225	120	3	337	70	277	947	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	89	441	6	51	281	150	3	370	77	295	1007	80
Peak Hour Factor	0.95	0.95	0.95	0.80	0.80	0.80	0.91	0.91	0.91	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	111	468	397	66	420	356	43	535	111	319	957	910
Arrive On Green	0.06	0.25	0.25	0.04	0.22	0.22	0.02	0.36	0.36	0.18	0.51	0.51
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	1502	312	1781	1870	1585
Grp Volume(v), veh/h	89	441	6	51	281	150	3	0	447	295	1007	80
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	0	1814	1781	1870	1585
Q Serve(g_s), s	6.2	28.9	0.4	3.6	17.2	10.1	0.2	0.0	26.3	20.4	64.0	2.8
Cycle Q Clear(g_c), s	6.2	28.9	0.4	3.6	17.2	10.1	0.2	0.0	26.3	20.4	64.0	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	111	468	397	66	420	356	43	0	646	319	957	910
V/C Ratio(X)	0.80	0.94	0.02	0.78	0.67	0.42	0.07	0.00	0.69	0.92	1.05	0.09
Avail Cap(c_a), veh/h	292	496	421	292	496	421	292	0	922	349	957	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	46.0	35.3	59.7	44.3	41.5	59.7	0.0	34.4	50.5	30.6	12.0
Incr Delay (d2), s/veh	4.9	25.3	0.0	7.1	1.7	0.3	0.3	0.0	0.5	27.4	44.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	16.0	0.1	1.7	7.8	3.8	0.1	0.0	11.0	11.1	37.1	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	71.3	35.3	66.8	46.0	41.8	60.0	0.0	34.9	77.9	74.5	12.0
LnGrp LOS	E	E	D	E	D	D	E	A	C	E	F	B
Approach Vol, veh/h		536			482			450			1382	
Approach Delay, s/veh		69.5			46.9			35.1			71.6	
Approach LOS		E			D			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	34.9	7.5	70.4	9.1	38.1	26.9	51.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	20.5	33.2	20.5	* 64	20.5	33.2	24.5	63.6
Max Q Clear Time (g_c+I1), s	8.2	19.2	2.2	66.0	5.6	30.9	22.4	28.3
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.0	0.4	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	61.3
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	684	0	57	334	40	3	302	58	37	340	59
Future Volume (veh/h)	72	684	0	57	334	40	3	302	58	37	340	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	743	0	67	393	47	4	364	70	42	382	66
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.83	0.83	0.83	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	688	0	84	590	71	4	332	64	34	313	54
Arrive On Green	0.05	0.37	0.00	0.05	0.36	0.36	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1781	1870	0	1781	1635	196	17	1510	290	156	1418	245
Grp Volume(v), veh/h	78	743	0	67	0	440	438	0	0	490	0	0
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1830	1817	0	0	1818	0	0
Q Serve(g_s), s	7.5	63.6	0.0	6.4	0.0	35.0	38.0	0.0	0.0	38.2	0.0	0.0
Cycle Q Clear(g_c), s	7.5	63.6	0.0	6.4	0.0	35.0	38.0	0.0	0.0	38.2	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.11	0.01		0.16	0.09		0.13
Lane Grp Cap(c), veh/h	96	688	0	84	0	660	399	0	0	401	0	0
V/C Ratio(X)	0.82	1.08	0.00	0.80	0.00	0.67	1.10	0.00	0.00	1.22	0.00	0.00
Avail Cap(c_a), veh/h	263	688	0	211	0	669	399	0	0	401	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	81.0	54.7	0.0	81.7	0.0	46.5	67.5	0.0	0.0	67.4	0.0	0.0
Incr Delay (d2), s/veh	6.2	58.2	0.0	6.5	0.0	2.0	74.0	0.0	0.0	119.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	39.8	0.0	3.1	0.0	15.8	25.3	0.0	0.0	30.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.2	112.9	0.0	88.1	0.0	48.5	141.5	0.0	0.0	187.2	0.0	0.0
LnGrp LOS	F	F	A	F	A	D	F	A	A	F	A	A
Approach Vol, veh/h		821			507			438			490	
Approach Delay, s/veh		110.5			53.8			141.5			187.2	
Approach LOS		F			D			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	69.2		45.0	12.6	70.4		45.0
Change Period (Y+Rc), s	4.5	6.8		6.8	4.5	* 6.8		7.0
Max Green Setting (Gmax), s	25.5	63.2		38.2	20.5	* 64		38.0
Max Q Clear Time (g_c+I1), s	9.5	37.0		40.2	8.4	65.6		40.0
Green Ext Time (p_c), s	0.0	1.4		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay	120.4	
HCM 6th LOS	F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	20.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	2	0	23	0	46	2	398	0	152	418	4
Future Vol, veh/h	2	2	0	23	0	46	2	398	0	152	418	4
Peak Hour Factor	0.70	0.70	0.70	0.70	0.70	0.70	0.91	0.91	0.91	0.93	0.93	0.93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	3	0	33	0	66	2	437	0	163	449	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	10.3	15.3	26.1
HCM LOS	A	B	C	D

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	50%	33%	26%
Vol Thru, %	99%	50%	0%	73%
Vol Right, %	0%	0%	67%	1%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	400	4	69	574
LT Vol	2	2	23	152
Through Vol	398	2	0	418
RT Vol	0	0	46	4
Lane Flow Rate	440	6	99	617
Geometry Grp	1	1	1	1
Degree of Util (X)	0.602	0.011	0.166	0.821
Departure Headway (Hd)	4.933	6.798	6.063	4.79
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	721	529	595	747
Service Time	3.029	4.805	4.063	2.878
HCM Lane V/C Ratio	0.61	0.011	0.166	0.826
HCM Control Delay	15.3	9.9	10.3	26.1
HCM Lane LOS	C	A	B	D
HCM 95th-tile Q	4.1	0	0.6	8.9



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	144	101	20	420	464	163
Future Volume (veh/h)	144	101	20	420	464	163
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	176	123	24	500	516	181
Peak Hour Factor	0.82	0.82	0.84	0.84	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	265	236	32	946	637	540
Arrive On Green	0.15	0.15	0.02	0.51	0.34	0.34
Sat Flow, veh/h	1781	1585	1781	1870	1870	1585
Grp Volume(v), veh/h	176	123	24	500	516	181
Grp Sat Flow(s),veh/h/ln	1781	1585	1781	1870	1870	1585
Q Serve(g_s), s	2.9	2.2	0.4	5.6	7.9	2.7
Cycle Q Clear(g_c), s	2.9	2.2	0.4	5.6	7.9	2.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	265	236	32	946	637	540
V/C Ratio(X)	0.66	0.52	0.75	0.53	0.81	0.34
Avail Cap(c_a), veh/h	2010	1789	1162	3839	3821	3238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	12.3	15.3	5.2	9.4	7.7
Incr Delay (d2), s/veh	1.1	0.7	11.9	0.2	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.5	0.2	0.2	1.4	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.6	12.9	27.2	5.4	10.3	7.8
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	299			524	697	
Approach Delay, s/veh	13.4			6.4	9.7	
Approach LOS	B			A	A	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.2	16.8			21.9	9.4
Change Period (Y+Rc), s	* 4.6	* 6.1			* 6.1	4.7
Max Green Setting (Gmax), s	* 26	* 64			* 64	35.3
Max Q Clear Time (g_c+I1), s	2.4	9.9			7.6	4.9
Green Ext Time (p_c), s	0.0	0.8			0.7	0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	84.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	126	34	58	542	670	215
Future Vol, veh/h	126	34	58	542	670	215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	120	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	98	98	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	225	61	59	553	728	234

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1516	845	962	0	-	0
Stage 1	845	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 131	363	715	-	-	-
Stage 1	421	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 120	363	715	-	-	-
Mov Cap-2 Maneuver	~ 120	-	-	-	-	-
Stage 1	386	-	-	-	-	-
Stage 2	508	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 545	1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	715	-	140	-	-
HCM Lane V/C Ratio	0.083	-	2.041	-	-
HCM Control Delay (s)	10.5	-	$ 545	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q(veh)	0.3	-	22.9	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	601	107	60	622	0	770	51
Future Volume (veh/h)	601	107	60	622	0	770	51
Initial Q (Qb), veh	0	0	0	0		0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00				1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00		1.00	1.00
Work Zone On Approach	No			No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870		1870	1870
Adj Flow Rate, veh/h	724	129	65	669		819	54
Peak Hour Factor	0.83	0.83	0.93	0.93		0.94	0.94
Percent Heavy Veh, %	2	2	2	2		2	2
Cap, veh/h	886	478	80	1645		1043	872
Arrive On Green	0.26	0.26	0.04	0.46		0.29	0.29
Sat Flow, veh/h	3456	1585	1781	3647		3647	1585
Grp Volume(v), veh/h	724	129	65	669		819	54
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777		1777	1585
Q Serve(g_s), s	8.7	2.7	1.6	5.5		9.3	0.7
Cycle Q Clear(g_c), s	8.7	2.7	1.6	5.5		9.3	0.7
Prop In Lane	1.00	1.00	1.00				1.00
Lane Grp Cap(c), veh/h	886	478	80	1645		1043	872
V/C Ratio(X)	0.82	0.27	0.81	0.41		0.79	0.06
Avail Cap(c_a), veh/h	4263	2027	786	4296		4271	2312
HCM Platoon Ratio	1.00	1.00	1.00	1.00		1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00		1.00	1.00
Uniform Delay (d), s/veh	15.5	11.7	20.9	7.8		14.3	4.6
Incr Delay (d2), s/veh	0.7	0.1	7.2	0.1		0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.7	0.7	1.1		2.6	0.3
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	16.2	11.8	28.1	7.9		14.8	4.6
LnGrp LOS	B	B	C	A		B	A
Approach Vol, veh/h	853			734		873	
Approach Delay, s/veh	15.5			9.7		14.2	
Approach LOS	B			A		B	

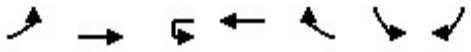
Timer - Assigned Phs	1	2		4		6	
Phs Duration (G+Y+Rc), s	7.5	19.9		16.8		27.4	
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9	
Max Green Setting (Gmax), s	19.5	* 53		54.5		* 53	
Max Q Clear Time (g_c+I1), s	3.6	11.3		10.7		7.5	
Green Ext Time (p_c), s	0.0	1.6		0.6		1.3	

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	422	812	0	379	96	104	433
Future Volume (veh/h)	422	812	0	379	96	104	433
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	491	944		403	102	114	476
Peak Hour Factor	0.86	0.86		0.94	0.94	0.91	0.91
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	528	1824		520	232	573	510
Arrive On Green	0.30	0.51		0.15	0.15	0.32	0.32
Sat Flow, veh/h	1781	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	491	944		403	102	114	476
Grp Sat Flow(s),veh/h/ln	1781	1777		1777	1585	1781	1585
Q Serve(g_s), s	19.8	13.0		8.1	4.3	3.4	21.5
Cycle Q Clear(g_c), s	19.8	13.0		8.1	4.3	3.4	21.5
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	528	1824		520	232	573	510
V/C Ratio(X)	0.93	0.52		0.77	0.44	0.20	0.93
Avail Cap(c_a), veh/h	718	3048		3043	1357	831	740
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	11.9		30.4	28.8	18.2	24.3
Incr Delay (d2), s/veh	13.2	0.1		0.9	0.5	0.1	12.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	3.9		3.1	1.5	1.2	8.5
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	38.5	12.0		31.3	29.3	18.2	36.4
LnGrp LOS	D	B		C	C	B	D
Approach Vol, veh/h		1435		505		590	
Approach Delay, s/veh		21.1		30.9		32.9	
Approach LOS		C		C		C	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	27.1	17.5			44.6	29.3
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 38	* 63			* 63	34.5
Max Q Clear Time (g_c+I1), s	21.8	10.1			15.0	23.5
Green Ext Time (p_c), s	0.1	0.7			1.9	0.3

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

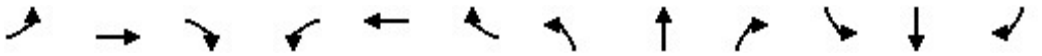
Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix D

Analysis Worksheets for Cumulative (2035) Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1120	0	300	0	1230	1080	0	1460	650
Future Volume (veh/h)	0	0	0	1120	0	300	0	1230	1080	0	1460	650
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				772	624	326	0	1337	0	0	1587	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				979	634	331	0	1531		0	1531	
Arrive On Green				0.55	0.55	0.55	0.00	0.30	0.00	0.00	0.30	0.00
Sat Flow, veh/h				1781	1154	603	0	5274	1585	0	5274	1585
Grp Volume(v), veh/h				772	0	950	0	1337	0	0	1587	0
Grp Sat Flow(s),veh/h/ln				1781	0	1757	0	1702	1585	0	1702	1585
Q Serve(g_s), s				22.6	0.0	34.9	0.0	16.3	0.0	0.0	19.7	0.0
Cycle Q Clear(g_c), s				22.6	0.0	34.9	0.0	16.3	0.0	0.0	19.7	0.0
Prop In Lane				1.00		0.34	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				979	0	965	0	1531		0	1531	
V/C Ratio(X)				0.79	0.00	0.98	0.00	0.87		0.00	1.04	
Avail Cap(c_a), veh/h				979	0	965	0	1531		0	1531	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				11.8	0.0	14.5	0.0	21.8	0.0	0.0	23.0	0.0
Incr Delay (d2), s/veh				4.0	0.0	25.0	0.0	5.7	0.0	0.0	33.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.3	0.0	17.7	0.0	6.4	0.0	0.0	11.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.8	0.0	39.5	0.0	27.5	0.0	0.0	56.0	0.0
LnGrp LOS				B	A	D	A	C		A	F	
Approach Vol, veh/h					1722			1337	A		1587	A
Approach Delay, s/veh					28.9			27.5			56.0	
Approach LOS					C			C			E	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	24.7		24.7		41.0			
Change Period (Y+Rc), s	* 5		5.0		4.9			
Max Green Setting (Gmax), s	* 20		19.0		36.1			
Max Q Clear Time (g_c+I1), s	21.7		18.3		36.9			
Green Ext Time (p_c), s	0.0		0.3		0.0			

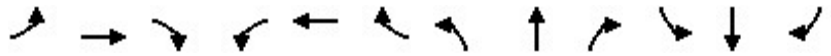
Intersection Summary		
HCM 6th Ctrl Delay	37.7	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	0	1170	0	0	0	0	1670	420	0	2010	480
Future Volume (veh/h)	310	0	1170	0	0	0	0	1670	420	0	2010	480
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	225	0	1392				0	1815	0	0	2185	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	784	0	1394				0	2322		0	2322	
Arrive On Green	0.44	0.00	0.44				0.00	0.45	0.00	0.00	0.45	0.00
Sat Flow, veh/h	1781	0	3166				0	5443	0	0	5274	1585
Grp Volume(v), veh/h	225	0	1392				0	1815	0	0	2185	0
Grp Sat Flow(s),veh/h/ln	1781	0	1583				0	1702	0	0	1702	1585
Q Serve(g_s), s	8.0	0.0	43.5				0.0	29.8	0.0	0.0	40.4	0.0
Cycle Q Clear(g_c), s	8.0	0.0	43.5				0.0	29.8	0.0	0.0	40.4	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	784	0	1394				0	2322		0	2322	
V/C Ratio(X)	0.29	0.00	1.00				0.00	0.78		0.00	0.94	
Avail Cap(c_a), veh/h	784	0	1394				0	2372		0	2398	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	17.8	0.0	27.7				0.0	22.8	0.0	0.0	25.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	23.7				0.0	1.6	0.0	0.0	8.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	20.1				0.0	11.1	0.0	0.0	16.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	0.0	51.4				0.0	24.4	0.0	0.0	33.7	0.0
LnGrp LOS	B	A	D				A	C		A	C	
Approach Vol, veh/h		1617						1815	A		2185	A
Approach Delay, s/veh		46.8						24.4			33.7	
Approach LOS		D						C			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	50.0	49.0	50.0
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 47	* 44	46.0
Max Q Clear Time (g_c+I1), s	42.4	45.5	31.8
Green Ext Time (p_c), s	2.6	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2110	1220	420	1910	450	70
Future Volume (veh/h)	2110	1220	420	1910	450	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2293	0	457	2076	489	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2809		353	4005	537	246
Arrive On Green	0.55	0.00	0.20	0.78	0.16	0.16
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	2293	0	457	2076	489	76
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	51.7	0.0	27.9	20.8	19.6	6.0
Cycle Q Clear(g_c), s	51.7	0.0	27.9	20.8	19.6	6.0
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2809		353	4005	537	246
V/C Ratio(X)	0.82		1.30	0.52	0.91	0.31
Avail Cap(c_a), veh/h	2879		353	4075	711	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	56.5	5.5	58.6	52.8
Incr Delay (d2), s/veh	2.1	0.0	152.8	0.2	11.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.1	0.0	27.2	5.8	9.3	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.0	0.0	209.4	5.7	69.9	53.1
LnGrp LOS	C		F	A	E	D
Approach Vol, veh/h	2293	A		2533	565	
Approach Delay, s/veh	28.0			42.5	67.6	
Approach LOS	C			D	E	

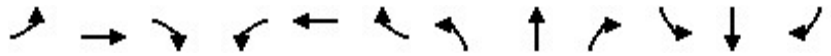
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	115.6			33.0	82.6	25.4
Change Period (Y+Rc), s	5.0			* 5.1	5.0	3.5
Max Green Setting (Gmax), s	112.5			* 28	79.5	29.0
Max Q Clear Time (g_c+I1), s	22.8			29.9	53.7	21.6
Green Ext Time (p_c), s	62.7			0.0	23.9	0.3

Intersection Summary		
HCM 6th Ctrl Delay	39.0	
HCM 6th LOS	D	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1570	0	370	0	1300	840	0	950	360
Future Volume (veh/h)	0	0	0	1570	0	370	0	1300	840	0	950	360
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				1707	0	402	0	1413	0	0	1033	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1732	0	795	0	1667		0	1667	
Arrive On Green				0.50	0.00	0.50	0.00	0.33	0.00	0.00	0.33	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	5274	1585
Grp Volume(v), veh/h				1707	0	402	0	1413	0	0	1033	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1702	1585
Q Serve(g_s), s				25.7	0.0	9.0	0.0	13.6	0.0	0.0	9.0	0.0
Cycle Q Clear(g_c), s				25.7	0.0	9.0	0.0	13.6	0.0	0.0	9.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1732	0	795	0	1667		0	1667	
V/C Ratio(X)				0.99	0.00	0.51	0.00	0.85		0.00	0.62	
Avail Cap(c_a), veh/h				1732	0	795	0	1874		0	1874	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				13.0	0.0	8.8	0.0	16.6	0.0	0.0	15.0	0.0
Incr Delay (d2), s/veh				18.2	0.0	0.5	0.0	3.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.9	0.0	2.5	0.0	4.6	0.0	0.0	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				31.1	0.0	9.3	0.0	19.7	0.0	0.0	15.3	0.0
LnGrp LOS				C	A	A	A	B		A	B	
Approach Vol, veh/h					2109			1413	A		1033	A
Approach Delay, s/veh					27.0			19.7			15.3	
Approach LOS					C			B			B	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	21.9	21.9	31.0
Change Period (Y+Rc), s	4.6	4.6	4.5
Max Green Setting (Gmax), s	19.4	19.4	26.5
Max Q Clear Time (g_c+I1), s	15.6	11.0	27.7
Green Ext Time (p_c), s	1.6	1.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.1
HCM 6th LOS	C

Notes

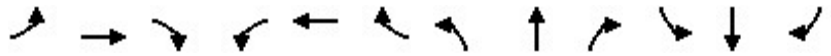
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	500	10	950	1270	100	30	1510	530	80	1770	230
Future Volume (vph)	500	10	950	1270	100	30	1510	530	80	1770	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.5		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.91	1.00
Frpb, ped/bikes		1.00	0.99	0.98	1.00		0.99			1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.94	0.85	0.85		0.96			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1610	3006	1418	2787		6100			5085	1545
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1610	3006	1418	2787		6100			5085	1545
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	543	11	1033	1380	109	33	1641	576	87	1924	250
RTOR Reduction (vph)	0	0	1	30	72	0	5	0	0	0	0
Lane Group Flow (vph)	0	553	1654	729	70	0	2299	0	0	1924	250
Confl. Peds. (#/hr)	6			6	3				3		6
Confl. Bikes (#/hr)									2		3
Turn Type	Split	Split	NA	Perm	Prot		NA			NA	Free
Protected Phases	4	4	4		5		6			2	
Permitted Phases				4							Free
Actuated Green, G (s)		55.2	55.2	55.2	6.3		42.4			53.2	119.8
Effective Green, g (s)		55.2	55.2	55.2	6.3		42.4			53.2	119.8
Actuated g/C Ratio		0.46	0.46	0.46	0.05		0.35			0.44	1.00
Clearance Time (s)		6.8	6.8	6.8	4.5		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	3.0		1.0			1.0	
Lane Grp Cap (vph)		741	1385	653	146		2158			2258	1545
v/s Ratio Prot		0.34	c0.55		0.03		c0.38			c0.38	
v/s Ratio Perm				0.51							0.16
v/c Ratio		0.75	1.19	1.12	0.48		1.16dr			0.85	0.16
Uniform Delay, d1		26.5	32.3	32.3	55.2		38.7			29.8	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2		3.6	94.7	71.9	2.5		39.6			3.2	0.2
Delay (s)		30.1	127.0	104.2	57.6		78.3			33.0	0.2
Level of Service		C	F	F	E		E			C	A
Approach Delay (s)			103.1				78.3			29.2	
Approach LOS			F				E			C	

Intersection Summary			
HCM 2000 Control Delay	73.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.14		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	15.9
Intersection Capacity Utilization	96.8%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	170	30	50	250	430	40	1420	80	910	1950	740
Future Volume (veh/h)	230	170	30	50	250	430	40	1420	80	910	1950	740
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	185	33	54	272	467	43	1543	87	989	2120	804
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	863	147	93	341	1382	76	1692	95	895	2958	903
Arrive On Green	0.04	0.20	0.20	0.03	0.18	0.18	0.02	0.34	0.34	0.26	0.58	0.58
Sat Flow, veh/h	3456	4373	743	3563	1870	3077	3456	4943	279	3456	5106	1558
Grp Volume(v), veh/h	250	142	76	54	272	467	43	1063	567	989	2120	804
Grp Sat Flow(s),veh/h/ln	1728	1702	1711	1781	1870	1539	1728	1702	1817	1728	1702	1558
Q Serve(g_s), s	5.3	4.5	4.8	1.9	18.0	12.9	1.6	38.6	38.6	33.5	38.6	58.0
Cycle Q Clear(g_c), s	5.3	4.5	4.8	1.9	18.0	12.9	1.6	38.6	38.6	33.5	38.6	58.0
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	142	672	338	93	341	1382	76	1165	622	895	2958	903
V/C Ratio(X)	1.77	0.21	0.23	0.58	0.80	0.34	0.57	0.91	0.91	1.11	0.72	0.89
Avail Cap(c_a), veh/h	142	737	370	204	442	1548	131	1420	758	895	3235	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.1	43.5	43.6	62.3	50.6	23.8	62.7	40.7	40.7	48.0	19.6	23.7
Incr Delay (d2), s/veh	372.1	0.1	0.1	2.1	5.7	0.1	2.5	7.2	12.3	63.3	0.6	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	1.9	2.0	0.9	8.8	4.6	0.7	16.9	18.9	21.8	14.1	21.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	434.1	43.6	43.8	64.4	56.3	23.9	65.2	47.9	53.0	111.3	20.1	32.7
LnGrp LOS	F	D	D	E	E	C	E	D	D	F	C	C
Approach Vol, veh/h		468			793			1673			3913	
Approach Delay, s/veh		252.2			37.8			50.1			45.8	
Approach LOS		F			D			D			D	

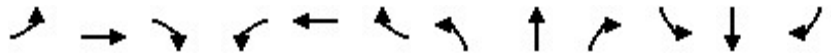
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	80.7	10.8	29.6	39.0	50.0	8.9	31.5
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	4.3	* 82	5.3	* 31	33.5	* 54	7.4	* 28
Max Q Clear Time (g_c+I1), s	3.6	60.0	7.3	20.0	35.5	40.6	3.9	6.8
Green Ext Time (p_c), s	0.0	7.4	0.0	0.8	0.0	3.7	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	60.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



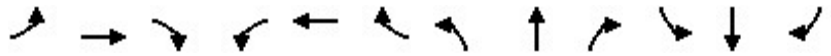
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	960	540	790	1430	130	1270	1500	480	180	1040	620
Future Volume (veh/h)	260	960	540	790	1430	130	1270	1500	480	180	1040	620
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	283	1043	587	859	1554	141	1380	1630	522	196	1130	674
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	779	357	393	1486	454	798	2211	685	241	925	425
Arrive On Green	0.05	0.23	0.23	0.11	0.29	0.29	0.23	0.43	0.43	0.07	0.27	0.27
Sat Flow, veh/h	3456	3404	1560	3456	5106	1560	3456	5106	1582	3456	3404	1563
Grp Volume(v), veh/h	283	1043	587	859	1554	141	1380	1630	522	196	1130	674
Grp Sat Flow(s),veh/h/ln	1728	1702	1560	1728	1702	1560	1728	1702	1582	1728	1702	1563
Q Serve(g_s), s	7.5	33.2	33.2	16.5	42.2	10.2	33.5	38.6	40.5	8.1	39.4	39.4
Cycle Q Clear(g_c), s	7.5	33.2	33.2	16.5	42.2	10.2	33.5	38.6	40.5	8.1	39.4	39.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	779	357	393	1486	454	798	2211	685	241	925	425
V/C Ratio(X)	1.58	1.34	1.64	2.18	1.05	0.31	1.73	0.74	0.76	0.81	1.22	1.59
Avail Cap(c_a), veh/h	179	779	357	393	1486	454	798	2211	685	265	925	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.8	55.9	55.9	64.3	51.4	40.1	55.8	34.2	34.8	66.5	52.8	52.8
Incr Delay (d2), s/veh	287.4	160.8	301.7	541.3	36.3	0.1	333.1	1.2	4.5	14.4	109.5	275.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	31.3	42.7	36.7	22.4	3.9	51.2	15.6	15.9	4.0	30.4	47.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	356.2	216.7	357.6	605.6	87.7	40.2	388.8	35.4	39.3	81.0	162.3	327.9
LnGrp LOS	F	F	F	F	F	D	F	D	D	F	F	F
Approach Vol, veh/h		1913			2554			3532			2000	
Approach Delay, s/veh		280.6			259.2			174.1			210.2	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	39.0	45.0	13.0	48.0	15.6	68.4	22.0	39.0
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	33.5	* 39	7.5	42.2	11.1	* 62	16.5	33.2
Max Q Clear Time (g_c+I1), s	35.5	41.4	9.5	44.2	10.1	42.5	18.5	35.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	223.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	320	40	20	30	350	2780	10	150	3800	80
Future Volume (veh/h)	110	10	320	40	20	30	350	2780	10	150	3800	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	174	240	43	22	33	380	3022	11	163	4130	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	203	295	94	35	53	256	2618	10	120	2498	756
Arrive On Green	0.19	0.19	0.19	0.05	0.05	0.05	0.07	0.50	0.50	0.07	0.49	0.49
Sat Flow, veh/h	748	1085	1575	1781	673	1009	3456	5252	19	1781	5106	1545
Grp Volume(v), veh/h	294	0	240	43	0	55	380	1957	1076	163	4130	87
Grp Sat Flow(s),veh/h/ln	1833	0	1575	1781	0	1682	1728	1702	1867	1781	1702	1545
Q Serve(g_s), s	16.6	0.0	15.6	2.5	0.0	3.4	7.9	53.2	53.2	7.2	52.2	3.3
Cycle Q Clear(g_c), s	16.6	0.0	15.6	2.5	0.0	3.4	7.9	53.2	53.2	7.2	52.2	3.3
Prop In Lane	0.41		1.00	1.00		0.60	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	343	0	295	94	0	89	256	1697	931	120	2498	756
V/C Ratio(X)	0.86	0.00	0.81	0.46	0.00	0.62	1.49	1.15	1.16	1.36	1.65	0.12
Avail Cap(c_a), veh/h	550	0	472	534	0	504	256	1697	931	120	2498	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	0.0	41.6	49.1	0.0	49.5	49.4	26.8	26.8	49.8	27.3	14.8
Incr Delay (d2), s/veh	4.2	0.0	2.5	1.3	0.0	2.6	238.2	76.3	82.3	204.9	295.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	6.2	1.1	0.0	1.5	11.8	37.1	42.3	9.9	87.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	0.0	44.0	50.4	0.0	52.1	287.6	103.0	109.0	254.7	323.2	14.8
LnGrp LOS	D	A	D	D	A	D	F	F	F	F	F	B
Approach Vol, veh/h		534			98			3413			4380	
Approach Delay, s/veh		45.2			51.3			125.5			314.5	
Approach LOS		D			D			F			F	

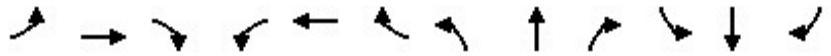
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	57.1		25.5	12.0	58.1		11.1
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 7.9	* 52		32.0	* 7.2	* 53		32.0
Max Q Clear Time (g_c+I1), s	9.9	54.2		18.6	9.2	55.2		5.4
Green Ext Time (p_c), s	0.0	0.0		0.7	0.0	0.0		0.1

Intersection Summary		
HCM 6th Ctrl Delay		217.8
HCM 6th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	500	0	450	0	2490	350	0	2520	1720
Future Volume (veh/h)	0	0	0	500	0	450	0	2490	350	0	2520	1720
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				543	0	489	0	2707	0	0	2739	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				774	0	625	0	3549		0	3229	
Arrive On Green				0.22	0.00	0.22	0.00	0.63	0.00	0.00	0.63	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				543	0	489	0	2707	0	0	2739	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				9.6	0.0	10.9	0.0	22.7	0.0	0.0	28.1	0.0
Cycle Q Clear(g_c), s				9.6	0.0	10.9	0.0	22.7	0.0	0.0	28.1	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				774	0	625	0	3549		0	3229	
V/C Ratio(X)				0.70	0.00	0.78	0.00	0.76		0.00	0.85	
Avail Cap(c_a), veh/h				914	0	738	0	5368		0	4862	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				23.6	0.0	24.2	0.0	8.6	0.0	0.0	9.6	0.0
Incr Delay (d2), s/veh				2.0	0.0	4.7	0.0	0.1	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.9	0.0	3.8	0.0	5.6	0.0	0.0	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				25.6	0.0	28.8	0.0	8.8	0.0	0.0	10.2	0.0
LnGrp LOS				C	A	C	A	A		A	B	
Approach Vol, veh/h					1032			2707	A		2739	A
Approach Delay, s/veh					27.1			8.8			10.2	
Approach LOS					C			A			B	

Timer - Assigned Phs	2		6		8	
Phs Duration (G+Y+Rc), s	46.8		46.8		19.3	
Change Period (Y+Rc), s	* 5		5.0		4.5	
Max Green Setting (Gmax), s	* 63		63.0		17.5	
Max Q Clear Time (g_c+I1), s	24.7		30.1		12.9	
Green Ext Time (p_c), s	11.9		11.7		1.9	

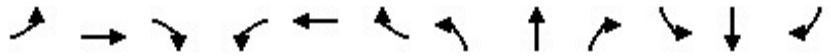
Intersection Summary		
HCM 6th Ctrl Delay		12.3
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1200	0	600	0	0	0	0	2270	560	0	2140	450
Future Volume (veh/h)	1200	0	600	0	0	0	0	2270	560	0	2140	450
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1304	0	652				0	2467	0	0	2326	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1688	0	937				0	3619		0	2715	
Arrive On Green	0.34	0.00	0.34				0.00	0.48	0.00	0.00	0.48	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1304	0	652				0	2467	0	0	2326	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	11.9	0.0	10.3				0.0	13.0	0.0	0.0	18.7	0.0
Cycle Q Clear(g_c), s	11.9	0.0	10.3				0.0	13.0	0.0	0.0	18.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1688	0	937				0	3619		0	2715	
V/C Ratio(X)	0.77	0.00	0.70				0.00	0.68		0.00	0.86	
Avail Cap(c_a), veh/h	1820	0	1011				0	4059		0	3000	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.2	0.0	14.7				0.0	10.2	0.0	0.0	11.6	0.0
Incr Delay (d2), s/veh	2.0	0.0	1.9				0.0	0.3	0.0	0.0	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	3.0				0.0	3.5	0.0	0.0	5.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.2	0.0	16.6				0.0	10.4	0.0	0.0	13.9	0.0
LnGrp LOS	B	A	B				A	B		A	B	
Approach Vol, veh/h		1956						2467	A		2326	A
Approach Delay, s/veh		17.0						10.4			13.9	
Approach LOS		B						B			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	29.4	21.7	29.4
Change Period (Y+Rc), s	* 4.7	4.5	4.7
Max Green Setting (Gmax), s	* 28	18.5	27.3
Max Q Clear Time (g_c+I1), s	15.0	13.9	20.7
Green Ext Time (p_c), s	6.6	3.3	4.0

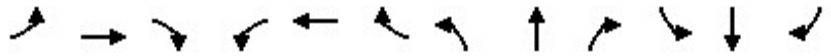
Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	310	130	370	330	140	100	1710	110	230	2170	320
Future Volume (veh/h)	250	310	130	370	330	140	100	1710	110	230	2170	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	272	337	141	402	359	152	109	1859	120	250	2359	348
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	688	301	327	712	291	115	2807	690	305	2507	771
Arrive On Green	0.10	0.19	0.19	0.09	0.19	0.19	0.03	0.44	0.44	0.09	0.49	0.49
Sat Flow, veh/h	3456	3554	1553	3563	3741	1528	3456	6434	1581	3456	5106	1571
Grp Volume(v), veh/h	272	337	141	402	359	152	109	1859	120	250	2359	348
Grp Sat Flow(s),veh/h/ln	1728	1777	1553	1781	1870	1528	1728	1609	1581	1728	1702	1571
Q Serve(g_s), s	9.3	10.1	9.6	11.0	10.3	10.7	3.8	27.4	5.5	8.5	52.4	17.4
Cycle Q Clear(g_c), s	9.3	10.1	9.6	11.0	10.3	10.7	3.8	27.4	5.5	8.5	52.4	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	688	301	327	712	291	115	2807	690	305	2507	771
V/C Ratio(X)	0.83	0.49	0.47	1.23	0.50	0.52	0.94	0.66	0.17	0.82	0.94	0.45
Avail Cap(c_a), veh/h	505	1145	500	327	999	408	115	2807	690	363	2510	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	43.1	42.9	54.4	43.5	43.6	57.8	26.8	20.6	53.7	28.8	19.9
Incr Delay (d2), s/veh	3.8	0.8	1.7	127.1	0.9	2.5	66.1	0.5	0.1	10.2	8.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.5	3.9	10.7	4.9	4.3	2.7	10.0	2.1	4.0	21.4	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.1	43.9	44.5	181.5	44.4	46.1	123.9	27.3	20.7	63.9	37.0	20.8
LnGrp LOS	E	D	D	F	D	D	F	C	C	E	D	C
Approach Vol, veh/h		750			913			2088			2957	
Approach Delay, s/veh		48.8			105.1			32.0			37.4	
Approach LOS		D			F			C			D	

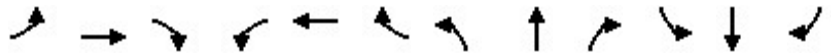
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	64.6	16.9	28.8	16.1	58.1	16.5	29.2
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	4.0	* 59	17.5	32.0	12.6	* 50	11.0	* 39
Max Q Clear Time (g_c+I1), s	5.8	54.4	11.3	12.7	10.5	29.4	13.0	12.1
Green Ext Time (p_c), s	0.0	4.5	0.1	4.5	0.0	10.9	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



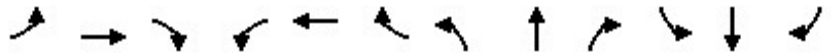
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	490	80	600	940	250	530	1380	100	260	970	260
Future Volume (veh/h)	170	490	80	600	940	250	530	1380	100	260	970	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	185	533	87	652	1022	272	576	1500	109	283	1054	283
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	619	271	664	1536	475	582	1553	475	296	1132	345
Arrive On Green	0.07	0.19	0.19	0.21	0.33	0.33	0.19	0.34	0.34	0.10	0.25	0.25
Sat Flow, veh/h	3110	3198	1400	3110	4595	1423	3110	4595	1406	3110	4595	1401
Grp Volume(v), veh/h	185	533	87	652	1022	272	576	1500	109	283	1054	283
Grp Sat Flow(s),veh/h/ln	1555	1599	1400	1555	1532	1423	1555	1532	1406	1555	1532	1401
Q Serve(g_s), s	8.4	23.0	7.6	29.8	27.2	22.5	26.4	45.8	7.9	12.9	32.0	27.2
Cycle Q Clear(g_c), s	8.4	23.0	7.6	29.8	27.2	22.5	26.4	45.8	7.9	12.9	32.0	27.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	619	271	664	1536	475	582	1553	475	296	1132	345
V/C Ratio(X)	0.82	0.86	0.32	0.98	0.67	0.57	0.99	0.97	0.23	0.96	0.93	0.82
Avail Cap(c_a), veh/h	316	672	294	664	1536	475	582	1554	476	296	1132	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.2	55.7	49.5	55.9	40.7	39.1	57.9	46.5	33.9	64.3	52.6	50.8
Incr Delay (d2), s/veh	7.7	11.7	1.4	30.1	1.9	3.9	34.8	15.6	0.5	40.0	13.8	15.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	10.1	2.7	14.2	10.3	8.2	13.0	19.1	2.7	6.7	13.4	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.9	67.4	50.9	86.0	42.6	43.0	92.7	62.1	34.4	104.3	66.4	66.7
LnGrp LOS	E	E	D	F	D	D	F	E	C	F	E	E
Approach Vol, veh/h		805			1946			2185			1620	
Approach Delay, s/veh		66.9			57.2			68.7			73.1	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.2	41.0	15.9	53.7	19.1	54.1	36.0	33.6
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	26.7	* 35	14.5	46.0	13.6	* 48	30.5	30.0
Max Q Clear Time (g_c+I1), s	28.4	34.0	10.4	29.2	14.9	47.8	31.8	25.0
Green Ext Time (p_c), s	0.0	0.8	0.0	12.6	0.0	0.5	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	66.2
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



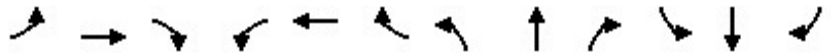
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	520	30	250	590	1290	10	790	90	470	230	120
Future Volume (veh/h)	580	520	30	250	590	1290	10	790	90	470	230	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	630	565	33	272	641	1402	11	859	98	511	250	130
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	1392	81	316	1942	595	13	495	57	218	1266	565
Arrive On Green	0.12	0.41	0.41	0.09	0.38	0.38	0.01	0.30	0.30	0.06	0.36	0.36
Sat Flow, veh/h	1781	3412	199	3456	5106	1564	1781	1648	188	3456	3554	1585
Grp Volume(v), veh/h	630	294	304	272	641	1402	11	0	957	511	250	130
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1728	1702	1564	1781	0	1837	1728	1777	1585
Q Serve(g_s), s	17.5	17.6	17.7	11.7	13.4	57.2	0.9	0.0	45.2	9.5	7.3	8.6
Cycle Q Clear(g_c), s	17.5	17.6	17.7	11.7	13.4	57.2	0.9	0.0	45.2	9.5	7.3	8.6
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	207	725	748	316	1942	595	13	0	552	218	1266	565
V/C Ratio(X)	3.04	0.41	0.41	0.86	0.33	2.36	0.84	0.00	1.73	2.34	0.20	0.23
Avail Cap(c_a), veh/h	207	725	748	423	1942	595	83	0	552	218	1266	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.5	31.6	31.6	67.4	33.0	46.6	74.6	0.0	52.6	70.5	33.5	33.9
Incr Delay (d2), s/veh	930.6	0.1	0.1	10.4	0.0	615.7	37.9	0.0	337.8	617.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	61.3	7.3	7.6	5.5	5.4	123.2	0.6	0.0	72.0	22.9	3.1	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	997.0	31.7	31.7	77.7	33.1	662.3	112.5	0.0	390.4	688.0	33.5	34.0
LnGrp LOS	F	C	C	E	C	F	F	A	F	F	C	C
Approach Vol, veh/h		1228			2315			968			891	
Approach Delay, s/veh		527.0			419.4			387.2			408.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	62.1	6.6	58.7	18.9	66.2	15.0	50.3
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	17.5	* 57	7.0	* 47	* 18	* 57	9.5	* 45
Max Q Clear Time (g_c+I1), s	19.5	59.2	2.9	10.6	13.7	19.7	11.5	47.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.1	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	436.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



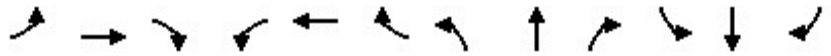
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	490	240	90	1180	460	970	2170	130	200	1060	310
Future Volume (veh/h)	470	490	240	90	1180	460	970	2170	130	200	1060	310
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	511	533	261	98	1283	500	1054	2359	141	217	1152	337
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	1539	478	142	1168	363	798	2206	676	179	1291	401
Arrive On Green	0.11	0.30	0.30	0.04	0.23	0.23	0.23	0.43	0.43	0.05	0.25	0.25
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	511	533	261	98	1283	500	1054	2359	141	217	1152	337
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	16.5	11.8	20.0	4.1	33.2	33.2	33.5	62.7	8.2	7.5	31.6	29.3
Cycle Q Clear(g_c), s	16.5	11.8	20.0	4.1	33.2	33.2	33.5	62.7	8.2	7.5	31.6	29.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	1539	478	142	1168	363	798	2206	676	179	1291	401
V/C Ratio(X)	1.30	0.35	0.55	0.69	1.10	1.38	1.32	1.07	0.21	1.21	0.89	0.84
Avail Cap(c_a), veh/h	393	1539	478	202	1168	363	798	2206	676	179	1291	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	39.5	42.4	68.7	56.0	56.0	55.8	41.2	25.7	68.8	52.3	51.4
Incr Delay (d2), s/veh	152.7	0.0	0.7	2.2	57.4	186.9	153.2	40.8	0.1	136.9	7.9	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.4	4.8	7.6	1.8	19.9	31.6	31.0	32.8	2.9	6.6	13.9	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	217.0	39.6	43.1	70.9	113.4	242.8	209.0	82.0	25.8	205.7	60.2	65.4
LnGrp LOS	F	D	D	E	F	F	F	F	C	F	E	E
Approach Vol, veh/h		1305			1881			3554			1706	
Approach Delay, s/veh		109.8			145.6			117.4			79.8	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	70.1	11.5	50.5	39.0	44.1	22.0	40.0
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	7.5	* 63	8.5	* 41	33.5	* 37	16.5	33.2
Max Q Clear Time (g_c+I1), s	9.5	64.7	6.1	22.0	35.5	33.6	18.5	35.2
Green Ext Time (p_c), s	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	114.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



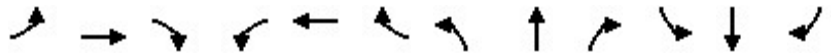
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	430	50	70	420	140	110	310	80	40	80	140
Future Volume (veh/h)	130	430	50	70	420	140	110	310	80	40	80	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	467	54	76	457	152	120	337	87	43	87	152
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	795	355	117	634	283	188	419	355	114	344	291
Arrive On Green	0.09	0.22	0.22	0.07	0.18	0.18	0.11	0.22	0.22	0.06	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	141	467	54	76	457	152	120	337	87	43	87	152
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	3.9	5.8	1.4	2.1	6.0	4.3	3.2	8.5	2.2	1.1	2.0	4.3
Cycle Q Clear(g_c), s	3.9	5.8	1.4	2.1	6.0	4.3	3.2	8.5	2.2	1.1	2.0	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	795	355	117	634	283	188	419	355	114	344	291
V/C Ratio(X)	0.85	0.59	0.15	0.65	0.72	0.54	0.64	0.81	0.25	0.38	0.25	0.52
Avail Cap(c_a), veh/h	165	1798	802	180	1769	789	826	867	735	934	980	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	17.2	15.5	22.6	19.2	18.5	21.3	18.2	15.8	22.3	17.3	18.3
Incr Delay (d2), s/veh	31.4	0.3	0.1	6.0	0.6	0.6	1.3	1.4	0.1	0.8	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	1.8	0.4	0.9	2.0	1.5	1.3	3.4	0.7	0.5	0.8	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.6	17.5	15.5	28.7	19.8	19.1	22.6	19.6	15.9	23.1	17.5	18.8
LnGrp LOS	D	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		662			685			544			282	
Approach Delay, s/veh		25.0			20.6			19.7			19.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	14.3	10.6	14.6	7.7	16.6	8.7	16.6
Change Period (Y+Rc), s	* 5.4	* 5.5	5.4	* 5.5	4.5	* 5.5	5.5	* 5.5
Max Green Setting (Gmax), s	* 4.6	* 25	23.0	* 26	5.0	* 25	26.0	* 23
Max Q Clear Time (g_c+I1), s	5.9	8.0	5.2	6.3	4.1	7.8	3.1	10.5
Green Ext Time (p_c), s	0.0	0.8	0.0	0.2	0.0	0.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



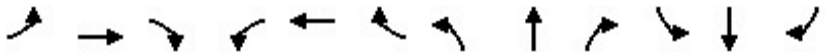
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	320	20	140	760	330	10	1620	210	100	1180	520
Future Volume (veh/h)	240	320	20	140	760	330	10	1620	210	100	1180	520
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	348	22	152	826	359	11	1761	228	109	1283	565
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	597	506	176	609	516	39	1220	544	134	1409	774
Arrive On Green	0.09	0.32	0.32	0.10	0.33	0.33	0.02	0.34	0.34	0.08	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	261	348	22	152	826	359	11	1761	228	109	1283	565
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	12.5	21.1	1.3	11.4	44.2	26.8	0.8	46.6	15.0	8.2	46.3	38.4
Cycle Q Clear(g_c), s	12.5	21.1	1.3	11.4	44.2	26.8	0.8	46.6	15.0	8.2	46.3	38.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	597	506	176	609	516	39	1220	544	134	1409	774
V/C Ratio(X)	1.59	0.58	0.04	0.87	1.36	0.70	0.28	1.44	0.42	0.81	0.91	0.73
Avail Cap(c_a), veh/h	164	597	506	221	609	516	249	1220	544	322	1409	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	38.6	31.9	60.3	45.8	39.9	65.3	44.6	34.2	61.8	38.7	27.6
Incr Delay (d2), s/veh	292.7	1.0	0.0	20.9	170.7	3.4	1.4	204.1	0.2	4.5	8.9	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	9.4	0.5	6.0	48.2	10.4	0.4	53.9	5.6	3.7	20.5	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	354.3	39.6	31.9	81.2	216.5	43.3	66.7	248.6	34.4	66.3	47.6	30.6
LnGrp LOS	F	D	C	F	F	D	E	F	C	E	D	C
Approach Vol, veh/h		631			1337			2000			1957	
Approach Delay, s/veh		169.5			154.6			223.2			43.7	
Approach LOS		F			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	51.0	7.5	60.2	17.9	50.1	14.7	53.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	12.5	44.2	19.0	* 53	16.8	39.9	24.5	46.6
Max Q Clear Time (g_c+I1), s	14.5	46.2	2.8	48.3	13.4	23.1	10.2	48.6
Green Ext Time (p_c), s	0.0	0.0	0.0	2.6	0.0	1.0	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay	142.7	
HCM 6th LOS	F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



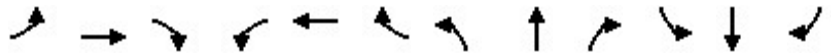
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	370	10	80	920	220	10	940	50	130	720	340
Future Volume (veh/h)	280	370	10	80	920	220	10	940	50	130	720	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	402	11	87	1000	239	11	1022	54	141	783	370
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	914	25	107	673	161	13	778	41	101	647	305
Arrive On Green	0.10	0.50	0.50	0.06	0.46	0.46	0.01	0.23	0.23	0.06	0.28	0.28
Sat Flow, veh/h	1781	1812	50	1781	1459	349	1781	3433	181	1781	2344	1105
Grp Volume(v), veh/h	304	0	413	87	0	1239	11	529	547	141	593	560
Grp Sat Flow(s),veh/h/ln	1781	0	1861	1781	0	1808	1781	1777	1838	1781	1777	1672
Q Serve(g_s), s	15.5	0.0	21.2	7.2	0.0	69.2	0.9	34.0	34.0	8.5	41.4	41.4
Cycle Q Clear(g_c), s	15.5	0.0	21.2	7.2	0.0	69.2	0.9	34.0	34.0	8.5	41.4	41.4
Prop In Lane	1.00		0.03	1.00		0.19	1.00		0.10	1.00		0.66
Lane Grp Cap(c), veh/h	184	0	939	107	0	834	13	403	417	101	490	461
V/C Ratio(X)	1.65	0.00	0.44	0.81	0.00	1.49	0.84	1.31	1.31	1.40	1.21	1.21
Avail Cap(c_a), veh/h	184	0	939	177	0	834	59	403	417	101	490	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.3	0.0	23.7	69.7	0.0	40.4	74.4	58.0	58.0	70.7	54.3	54.3
Incr Delay (d2), s/veh	316.2	0.0	0.1	5.5	0.0	225.0	37.8	157.7	157.3	227.8	112.1	114.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.0	0.0	8.9	3.4	0.0	80.7	0.6	32.3	33.4	10.2	33.0	31.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	383.4	0.0	23.8	75.2	0.0	265.4	112.2	215.7	215.3	298.5	166.4	169.1
LnGrp LOS	F	A	C	E	A	F	F	F	F	F	F	F
Approach Vol, veh/h		717			1326			1087			1294	
Approach Delay, s/veh		176.3			252.9			214.4			181.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	76.0	5.6	48.4	13.5	82.5	13.0	41.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 7	4.5	* 6.8	4.5	7.0
Max Green Setting (Gmax), s	15.5	69.2	5.0	* 38	14.9	* 70	8.5	34.0
Max Q Clear Time (g_c+I1), s	17.5	71.2	2.9	43.4	9.2	23.2	10.5	36.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	210.3
HCM 6th LOS	F

Notes

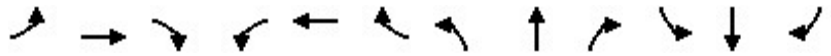
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	10	190	20	20	170	180	1050	20	50	900	120
Future Volume (veh/h)	190	10	190	20	20	170	180	1050	20	50	900	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	207	11	207	22	22	185	196	1141	22	54	978	130
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	384	326	45	282	239	277	1425	636	143	1425	636
Arrive On Green	0.08	0.21	0.21	0.03	0.15	0.15	0.08	0.40	0.40	0.08	0.40	0.40
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	207	11	207	22	22	185	196	1141	22	54	978	130
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.7	0.3	7.5	0.8	0.6	7.0	3.5	17.7	0.5	1.8	14.2	3.3
Cycle Q Clear(g_c), s	3.7	0.3	7.5	0.8	0.6	7.0	3.5	17.7	0.5	1.8	14.2	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	384	326	45	282	239	277	1425	636	143	1425	636
V/C Ratio(X)	0.75	0.03	0.64	0.49	0.08	0.77	0.71	0.80	0.03	0.38	0.69	0.20
Avail Cap(c_a), veh/h	277	539	457	143	539	457	277	1763	786	513	2503	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	19.8	22.7	30.0	22.8	25.5	28.0	16.5	11.4	27.3	15.5	12.2
Incr Delay (d2), s/veh	10.7	0.0	2.1	7.9	0.1	5.3	8.1	2.2	0.0	1.7	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.1	2.6	0.4	0.3	2.7	1.5	5.8	0.2	0.7	4.4	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.8	19.9	24.7	37.9	22.9	30.8	36.1	18.7	11.4	28.9	16.1	12.4
LnGrp LOS	D	B	C	D	C	C	D	B	B	C	B	B
Approach Vol, veh/h		425			229			1359			1162	
Approach Delay, s/veh		31.5			30.7			21.1			16.2	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	29.6	6.1	17.3	9.5	29.6	9.5	13.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	44.0	5.0	18.0	18.0	31.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	5.5	16.2	2.8	9.5	3.8	19.7	5.7	9.0
Green Ext Time (p_c), s	0.0	7.1	0.0	0.5	0.1	5.4	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	21.4
HCM 6th LOS	C



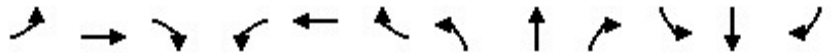
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	120	110	60	250	50	240	1400	80	30	1020	200
Future Volume (veh/h)	400	120	110	60	250	50	240	1400	80	30	1020	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	435	130	120	65	272	54	261	1522	87	33	1109	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	469	245	226	84	280	56	328	1606	716	53	1371	612
Arrive On Green	0.14	0.27	0.27	0.05	0.18	0.18	0.10	0.45	0.45	0.03	0.39	0.39
Sat Flow, veh/h	3456	895	826	1781	1515	301	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	435	0	250	65	0	326	261	1522	87	33	1109	217
Grp Sat Flow(s),veh/h/ln	1728	0	1722	1781	0	1816	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	12.5	0.0	12.4	3.6	0.0	17.9	7.4	41.1	3.2	1.8	27.9	9.8
Cycle Q Clear(g_c), s	12.5	0.0	12.4	3.6	0.0	17.9	7.4	41.1	3.2	1.8	27.9	9.8
Prop In Lane	1.00		0.48	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	469	0	471	84	0	335	328	1606	716	53	1371	612
V/C Ratio(X)	0.93	0.00	0.53	0.78	0.00	0.97	0.79	0.95	0.12	0.62	0.81	0.35
Avail Cap(c_a), veh/h	469	0	471	119	0	335	690	1724	769	89	1371	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	0.0	30.9	47.2	0.0	40.6	44.4	26.3	15.9	48.0	27.5	21.9
Incr Delay (d2), s/veh	24.7	0.0	0.6	18.2	0.0	41.5	1.7	10.9	0.0	11.1	3.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	4.8	2.0	0.0	11.7	3.1	17.4	1.0	0.9	11.2	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.5	0.0	31.5	65.5	0.0	82.1	46.0	37.2	15.9	59.1	30.9	22.0
LnGrp LOS	E	A	C	E	A	F	D	D	B	E	C	C
Approach Vol, veh/h		685			391			1870			1359	
Approach Delay, s/veh		54.4			79.3			37.4			30.2	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	44.8	18.1	23.2	7.5	51.4	9.2	32.1
Change Period (Y+Rc), s	* 4.6	* 6.1	4.5	* 4.7	4.5	* 6.1	4.5	* 4.7
Max Green Setting (Gmax), s	* 28	* 33	13.6	* 19	5.0	* 49	6.7	* 25
Max Q Clear Time (g_c+I1), s	19.4	29.9	14.5	19.9	3.8	43.1	5.6	14.4
Green Ext Time (p_c), s	0.1	1.1	0.0	0.0	0.0	2.1	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	41.6
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	30	140	80	20	290	120	1840	90	240	1090	170
Future Volume (veh/h)	360	30	140	80	20	290	120	1840	90	240	1090	170
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	391	33	152	87	22	315	130	2000	98	261	1185	185
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	24	111	172	44	190	152	1469	655	184	1533	684
Arrive On Green	0.24	0.24	0.24	0.12	0.12	0.12	0.09	0.41	0.41	0.10	0.43	0.43
Sat Flow, veh/h	1174	99	456	1436	363	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	576	0	0	109	0	315	130	2000	98	261	1185	185
Grp Sat Flow(s),veh/h/ln	1730	0	0	1799	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	36.5	0.0	0.0	8.5	0.0	18.0	10.8	62.0	5.8	15.5	42.7	11.3
Cycle Q Clear(g_c), s	36.5	0.0	0.0	8.5	0.0	18.0	10.8	62.0	5.8	15.5	42.7	11.3
Prop In Lane	0.68		0.26	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	421	0	0	216	0	190	152	1469	655	184	1533	684
V/C Ratio(X)	1.37	0.00	0.00	0.51	0.00	1.66	0.86	1.36	0.15	1.42	0.77	0.27
Avail Cap(c_a), veh/h	421	0	0	216	0	190	178	1469	655	184	1533	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	0.0	0.0	61.8	0.0	66.0	67.7	44.0	27.5	67.3	36.4	27.5
Incr Delay (d2), s/veh	180.5	0.0	0.0	1.9	0.0	317.5	28.1	167.2	0.1	216.9	2.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	37.0	0.0	0.0	4.0	0.0	24.1	6.0	59.7	2.2	17.9	18.1	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	237.2	0.0	0.0	63.7	0.0	383.5	95.8	211.2	27.6	284.1	38.9	27.7
LnGrp LOS	F	A	A	E	A	F	F	F	C	F	D	C
Approach Vol, veh/h		576			424			2228			1631	
Approach Delay, s/veh		237.2			301.3			196.4			76.9	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	20.0	66.5		41.0	17.3	69.2		22.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	15.5	62.0		36.5	15.0	62.5		18.0
Max Q Clear Time (g_c+I1), s	17.5	64.0		38.5	12.8	44.7		20.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	7.8		0.0

Intersection Summary		
HCM 6th Ctrl Delay		170.3
HCM 6th LOS		F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	480	250	430	2130	1260	1280
Future Volume (veh/h)	480	250	430	2130	1260	1280
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	522	272	467	2315	1370	1391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	593	655	430	2527	1484	934
Arrive On Green	0.17	0.17	0.24	0.71	0.42	0.42
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	522	272	467	2315	1370	1391
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	15.6	12.8	25.5	57.0	38.6	44.1
Cycle Q Clear(g_c), s	15.6	12.8	25.5	57.0	38.6	44.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	593	655	430	2527	1484	934
V/C Ratio(X)	0.88	0.42	1.09	0.92	0.92	1.49
Avail Cap(c_a), veh/h	1391	1021	430	2537	1484	934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	22.0	40.1	12.6	29.2	18.0
Incr Delay (d2), s/veh	1.7	0.2	68.5	5.7	9.8	226.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	18.5	16.9	16.6	82.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.4	22.1	108.5	18.3	38.9	244.1
LnGrp LOS	D	C	F	B	D	F
Approach Vol, veh/h	794			2782	2761	
Approach Delay, s/veh	36.8			33.5	142.3	
Approach LOS	D			C	F	

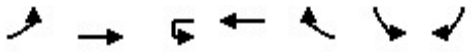
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	31.0	51.0		23.6		82.0
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9
Max Green Setting (Gmax), s	25.5	* 44		42.5		* 75
Max Q Clear Time (g_c+I1), s	27.5	46.1		17.6		59.0
Green Ext Time (p_c), s	0.0	0.0		0.5		6.5

Intersection Summary	
HCM 6th Ctrl Delay	81.3
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	1000	1600	0	1860	360	80	630
Future Volume (veh/h)	1000	1600	0	1860	360	80	630
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	1087	1739		2022	391	87	685
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	917	2684		1618	722	291	259
Arrive On Green	0.27	0.76		0.46	0.46	0.16	0.16
Sat Flow, veh/h	3456	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	1087	1739		2022	391	87	685
Grp Sat Flow(s),veh/h/ln	1728	1777		1777	1585	1781	1585
Q Serve(g_s), s	39.8	35.2		68.3	26.8	6.4	24.5
Cycle Q Clear(g_c), s	39.8	35.2		68.3	26.8	6.4	24.5
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	917	2684		1618	722	291	259
V/C Ratio(X)	1.19	0.65		1.25	0.54	0.30	2.65
Avail Cap(c_a), veh/h	917	2684		1618	722	291	259
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	8.8		40.9	29.5	55.2	62.8
Incr Delay (d2), s/veh	94.5	0.4		117.6	0.5	0.2	751.7
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.6	10.7		54.2	9.8	2.8	63.6
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	149.6	9.2		158.5	30.0	55.4	814.4
LnGrp LOS	F	A		F	C	E	F
Approach Vol, veh/h		2826		2413		772	
Approach Delay, s/veh		63.2		137.7		728.9	
Approach LOS		E		F		F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	45.0	75.0			120.0	30.0
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 40	* 68			* 1E2	24.5
Max Q Clear Time (g_c+I1), s	41.8	70.3			37.2	26.5
Green Ext Time (p_c), s	0.0	0.0			4.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	178.6
HCM 6th LOS	F

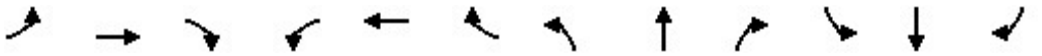
Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

The Preserve — Cumulative Conditions

1: Mather Field Rd & US-50 WB Ramps — PM Peak



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	590	0	490	0	1300	1670	0	960	620
Future Volume (veh/h)	0	0	0	590	0	490	0	1300	1670	0	960	620
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				587	76	533	0	1413	0	0	1043	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				727	81	570	0	1848		0	1848	
Arrive On Green				0.41	0.41	0.41	0.00	0.36	0.00	0.00	0.36	0.00
Sat Flow, veh/h				1781	199	1397	0	5274	1585	0	5274	1585
Grp Volume(v), veh/h				587	0	609	0	1413	0	0	1043	0
Grp Sat Flow(s),veh/h/ln				1781	0	1596	0	1702	1585	0	1702	1585
Q Serve(g_s), s				12.5	0.0	15.7	0.0	10.5	0.0	0.0	7.1	0.0
Cycle Q Clear(g_c), s				12.5	0.0	15.7	0.0	10.5	0.0	0.0	7.1	0.0
Prop In Lane				1.00		0.88	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				727	0	652	0	1848		0	1848	
V/C Ratio(X)				0.81	0.00	0.93	0.00	0.76		0.00	0.56	
Avail Cap(c_a), veh/h				727	0	652	0	2666		0	2749	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				11.2	0.0	12.2	0.0	12.1	0.0	0.0	11.0	0.0
Incr Delay (d2), s/veh				6.2	0.0	20.5	0.0	0.4	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.9	0.0	7.8	0.0	2.7	0.0	0.0	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.5	0.0	32.7	0.0	12.6	0.0	0.0	11.1	0.0
LnGrp LOS				B	A	C	A	B		A	B	
Approach Vol, veh/h					1196			1413	A		1043	A
Approach Delay, s/veh					25.2			12.6			11.1	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	20.6		20.6		22.5			
Change Period (Y+Rc), s	* 5		5.0		4.9			
Max Green Setting (Gmax), s	* 23		22.5		17.6			
Max Q Clear Time (g_c+I1), s	9.1		12.5		17.7			
Green Ext Time (p_c), s	2.3		3.0		0.0			

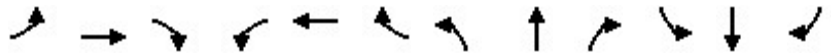
Intersection Summary	
HCM 6th Ctrl Delay	16.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	0	820	0	0	0	0	2320	890	0	1050	300
Future Volume (veh/h)	580	0	820	0	0	0	0	2320	890	0	1050	300
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	948	0	550				0	2522	0	0	1141	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	1255	0	557				0	2810		0	2810	
Arrive On Green	0.35	0.00	0.35				0.00	0.55	0.00	0.00	0.55	0.00
Sat Flow, veh/h	3563	0	1581				0	5443	0	0	5274	1585
Grp Volume(v), veh/h	948	0	550				0	2522	0	0	1141	0
Grp Sat Flow(s),veh/h/ln	1781	0	1581				0	1702	0	0	1702	1585
Q Serve(g_s), s	25.1	0.0	36.9				0.0	46.8	0.0	0.0	13.8	0.0
Cycle Q Clear(g_c), s	25.1	0.0	36.9				0.0	46.8	0.0	0.0	13.8	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	1255	0	557				0	2810		0	2810	
V/C Ratio(X)	0.76	0.00	0.99				0.00	0.90		0.00	0.41	
Avail Cap(c_a), veh/h	1255	0	557				0	3922		0	3946	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	30.5	0.0	34.3				0.0	21.3	0.0	0.0	13.9	0.0
Incr Delay (d2), s/veh	2.4	0.0	34.8				0.0	1.9	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	19.1				0.0	16.7	0.0	0.0	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	69.1				0.0	23.2	0.0	0.0	13.9	0.0
LnGrp LOS	C	A	E				A	C		A	B	
Approach Vol, veh/h		1498						2522	A		1141	A
Approach Delay, s/veh		46.2						23.2			13.9	
Approach LOS		D						C			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	63.7	43.0	63.7
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 83	* 38	82.0
Max Q Clear Time (g_c+I1), s	15.8	38.9	48.8
Green Ext Time (p_c), s	2.9	0.0	9.9

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1840	250	210	2410	690	290
Future Volume (veh/h)	1840	250	210	2410	690	290
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2000	0	228	2620	750	315
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2382		261	3413	826	379
Arrive On Green	0.47	0.00	0.15	0.67	0.24	0.24
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	2000	0	228	2620	750	315
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	31.6	0.0	11.5	32.1	19.4	17.4
Cycle Q Clear(g_c), s	31.6	0.0	11.5	32.1	19.4	17.4
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2382		261	3413	826	379
V/C Ratio(X)	0.84		0.87	0.77	0.91	0.83
Avail Cap(c_a), veh/h	2420		265	3463	1093	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	38.4	10.4	34.0	33.2
Incr Delay (d2), s/veh	3.1	0.0	24.6	1.3	7.6	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	6.6	9.2	8.5	7.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	0.0	63.0	11.6	41.7	40.0
LnGrp LOS	C		E	B	D	D
Approach Vol, veh/h	2000	A		2848	1065	
Approach Delay, s/veh	24.6			15.7	41.2	
Approach LOS	C			B	D	

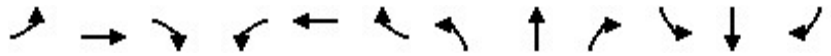
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	66.5			18.6	47.9	25.5
Change Period (Y+Rc), s	5.0			* 5.1	5.0	3.5
Max Green Setting (Gmax), s	62.4			* 14	43.6	29.1
Max Q Clear Time (g_c+I1), s	34.1			13.5	33.6	21.4
Green Ext Time (p_c), s	27.1			0.0	9.3	0.6

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	790	0	450	0	1860	1750	0	1130	620
Future Volume (veh/h)	0	0	0	790	0	450	0	1860	1750	0	1130	620
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				859	0	489	0	2022	0	0	1228	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1200	0	550	0	2275		0	2275	
Arrive On Green				0.35	0.00	0.35	0.00	0.45	0.00	0.00	0.45	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	5274	1585
Grp Volume(v), veh/h				859	0	489	0	2022	0	0	1228	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1702	1585
Q Serve(g_s), s				9.5	0.0	12.8	0.0	16.0	0.0	0.0	7.7	0.0
Cycle Q Clear(g_c), s				9.5	0.0	12.8	0.0	16.0	0.0	0.0	7.7	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1200	0	550	0	2275		0	2275	
V/C Ratio(X)				0.72	0.00	0.89	0.00	0.89		0.00	0.54	
Avail Cap(c_a), veh/h				1221	0	560	0	2374		0	2374	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				12.4	0.0	13.5	0.0	11.2	0.0	0.0	8.9	0.0
Incr Delay (d2), s/veh				2.0	0.0	15.9	0.0	4.2	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.2	0.0	6.0	0.0	4.5	0.0	0.0	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				14.4	0.0	29.4	0.0	15.4	0.0	0.0	9.0	0.0
LnGrp LOS				B	A	C	A	B		A	A	
Approach Vol, veh/h					1348			2022	A		1228	A
Approach Delay, s/veh					19.9			15.4			9.0	
Approach LOS					B			B			A	

Timer - Assigned Phs	2	6	8
Phs Duration (G+Y+Rc), s	24.1	24.1	19.7
Change Period (Y+Rc), s	4.6	4.6	4.5
Max Green Setting (Gmax), s	20.4	20.4	15.5
Max Q Clear Time (g_c+I1), s	18.0	9.7	14.8
Green Ext Time (p_c), s	1.6	2.6	0.5

Intersection Summary	
HCM 6th Ctrl Delay	15.0
HCM 6th LOS	B

Notes

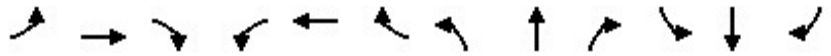
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	900	10	160	960	740	130	2020	460	10	1350	140
Future Volume (vph)	900	10	160	960	740	130	2020	460	10	1350	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.5		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.91	1.00
Frpb, ped/bikes		1.00	0.98	0.98	1.00		1.00			1.00	0.97
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.89	0.85	0.85		0.97			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1610	2799	1409	2787		6201			5085	1540
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1610	2799	1409	2787		6201			5085	1540
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	978	11	174	1043	804	141	2196	500	11	1467	152
RTOR Reduction (vph)	0	0	26	38	59	0	1	0	0	0	0
Lane Group Flow (vph)	0	979	680	483	886	0	2706	0	0	1467	152
Confl. Peds. (#/hr)	11			11	3				3		11
Confl. Bikes (#/hr)									8		5
Turn Type	Split	Split	NA	Perm	Prot		NA			NA	Free
Protected Phases	4	4	4		5		6			2	
Permitted Phases				4							Free
Actuated Green, G (s)		37.2	37.2	37.2	26.5		40.4			71.4	120.0
Effective Green, g (s)		37.2	37.2	37.2	26.5		40.4			71.4	120.0
Actuated g/C Ratio		0.31	0.31	0.31	0.22		0.34			0.60	1.00
Clearance Time (s)		6.8	6.8	6.8	4.5		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	3.0		1.0			1.0	
Lane Grp Cap (vph)		499	867	436	615		2087			3025	1540
v/s Ratio Prot		c0.61	0.24		c0.32		c0.44			0.29	
v/s Ratio Perm				0.34							0.10
v/c Ratio		1.96	1.12dr	1.11	1.44		1.30			0.48	0.10
Uniform Delay, d1		41.4	37.8	41.4	46.8		39.8			13.8	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2		440.1	4.3	75.7	207.3		137.2			0.0	0.1
Delay (s)		481.5	42.1	117.1	254.0		177.0			13.9	0.1
Level of Service		F	D	F	F		F			B	A
Approach Delay (s)			254.8				177.0			12.6	
Approach LOS			F				F			B	

Intersection Summary			
HCM 2000 Control Delay	174.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	113.4%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	690	300	40	170	190	700	70	1270	20	510	1660	310
Future Volume (veh/h)	690	300	40	170	190	700	70	1270	20	510	1660	310
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	750	326	43	185	207	761	76	1380	22	554	1804	337
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	538	1399	180	235	405	1215	118	1501	24	600	2192	675
Arrive On Green	0.16	0.31	0.31	0.07	0.22	0.22	0.03	0.29	0.29	0.17	0.43	0.43
Sat Flow, veh/h	3456	4573	588	3563	1870	3071	3456	5175	83	3456	5106	1572
Grp Volume(v), veh/h	750	241	128	185	207	761	76	908	494	554	1804	337
Grp Sat Flow(s),veh/h/ln	1728	1702	1756	1781	1870	1535	1728	1702	1854	1728	1702	1572
Q Serve(g_s), s	21.5	7.3	7.6	7.1	13.5	27.8	3.0	35.7	35.7	21.8	43.1	21.5
Cycle Q Clear(g_c), s	21.5	7.3	7.6	7.1	13.5	27.8	3.0	35.7	35.7	21.8	43.1	21.5
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	538	1042	537	235	405	1215	118	987	538	600	2192	675
V/C Ratio(X)	1.39	0.23	0.24	0.79	0.51	0.63	0.64	0.92	0.92	0.92	0.82	0.50
Avail Cap(c_a), veh/h	538	1042	537	436	406	1217	130	1119	609	663	2444	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	35.8	35.9	63.5	47.7	34.2	65.9	47.5	47.5	56.2	34.8	28.6
Incr Delay (d2), s/veh	188.5	0.0	0.1	2.2	0.5	0.8	6.2	10.5	17.0	17.0	1.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.3	3.0	3.2	3.2	6.2	10.2	1.4	16.2	18.6	10.7	17.4	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	246.8	35.8	36.0	65.7	48.1	34.9	72.0	58.0	64.4	73.2	36.7	28.8
LnGrp LOS	F	D	D	E	D	C	E	E	E	E	D	C
Approach Vol, veh/h		1119			1153			1478			2695	
Approach Delay, s/veh		177.3			42.2			60.8			43.2	
Approach LOS		F			D			E			D	

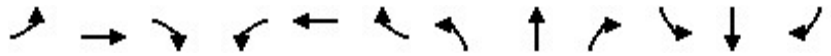
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	65.0	27.0	35.9	29.5	45.8	14.6	48.3
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	5.3	* 66	21.5	* 30	26.5	* 45	16.9	* 34
Max Q Clear Time (g_c+I1), s	15.6	45.1	23.5	29.8	23.8	37.7	9.1	9.6
Green Ext Time (p_c), s	0.0	5.3	0.0	0.1	0.2	2.4	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	70.4
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



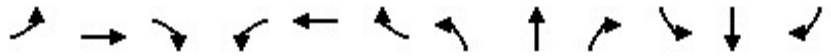
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	590	1430	760	970	970	210	1220	950	440	180	1520	420
Future Volume (veh/h)	590	1430	760	970	970	210	1220	950	440	180	1520	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	641	1554	826	1054	1054	228	1326	1033	478	196	1652	457
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	541	920	416	369	1127	336	679	2034	616	241	1078	292
Arrive On Green	0.16	0.27	0.27	0.11	0.22	0.22	0.20	0.40	0.40	0.07	0.27	0.27
Sat Flow, veh/h	3456	3404	1539	3456	5106	1522	3456	5106	1547	3456	3966	1074
Grp Volume(v), veh/h	641	1554	826	1054	1054	228	1326	1033	478	196	1413	696
Grp Sat Flow(s),veh/h/ln	1728	1702	1539	1728	1702	1522	1728	1702	1547	1728	1702	1636
Q Serve(g_s), s	22.7	39.2	39.2	15.5	29.4	19.9	28.5	22.1	39.0	8.1	39.4	39.4
Cycle Q Clear(g_c), s	22.7	39.2	39.2	15.5	29.4	19.9	28.5	22.1	39.0	8.1	39.4	39.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	541	920	416	369	1127	336	679	2034	616	241	925	445
V/C Ratio(X)	1.18	1.69	1.99	2.85	0.94	0.68	1.95	0.51	0.78	0.81	1.53	1.57
Avail Cap(c_a), veh/h	541	920	416	369	1127	336	679	2034	616	274	925	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	52.9	52.9	64.8	55.5	51.8	58.3	32.9	38.0	66.5	52.8	52.8
Incr Delay (d2), s/veh	100.8	314.6	452.0	841.4	13.8	4.5	433.9	0.1	5.6	13.3	242.8	265.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.3	56.5	67.0	49.9	13.7	7.9	53.1	8.9	15.3	4.0	47.6	48.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	161.9	367.5	504.9	906.1	69.3	56.3	492.1	33.0	43.6	79.8	295.6	318.3
LnGrp LOS	F	F	F	F	E	E	F	C	D	E	F	F
Approach Vol, veh/h		3021			2336			2837			2305	
Approach Delay, s/veh		361.5			445.6			249.4			284.1	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.0	45.0	28.2	37.8	15.6	63.4	21.0	45.0
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	28.5	* 39	22.7	32.0	11.5	* 56	15.5	39.2
Max Q Clear Time (g_c+I1), s	30.5	41.4	24.7	31.4	10.1	41.0	17.5	41.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	332.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	30	180	60	20	60	360	3220	20	70	2860	120
Future Volume (veh/h)	190	30	180	60	20	60	360	3220	20	70	2860	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	207	33	196	65	22	65	391	3500	22	76	3109	130
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	41	258	173	39	116	280	2630	16	84	2380	732
Arrive On Green	0.16	0.16	0.16	0.10	0.10	0.10	0.08	0.50	0.50	0.05	0.47	0.47
Sat Flow, veh/h	1546	247	1568	1781	404	1195	3456	5235	33	1781	5106	1571
Grp Volume(v), veh/h	240	0	196	65	0	87	391	2273	1249	76	3109	130
Grp Sat Flow(s),veh/h/ln	1793	0	1568	1781	0	1599	1728	1702	1864	1781	1702	1571
Q Serve(g_s), s	14.2	0.0	13.1	3.8	0.0	5.7	8.9	55.2	55.2	4.7	51.2	5.3
Cycle Q Clear(g_c), s	14.2	0.0	13.1	3.8	0.0	5.7	8.9	55.2	55.2	4.7	51.2	5.3
Prop In Lane	0.86		1.00	1.00		0.75	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	295	0	258	173	0	155	280	1710	937	84	2380	732
V/C Ratio(X)	0.81	0.00	0.76	0.38	0.00	0.56	1.40	1.33	1.33	0.90	1.31	0.18
Avail Cap(c_a), veh/h	522	0	457	519	0	466	280	1710	937	84	2380	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	0.0	43.8	46.5	0.0	47.4	50.5	27.3	27.3	52.1	29.3	17.1
Incr Delay (d2), s/veh	2.1	0.0	1.7	0.5	0.0	1.2	198.8	152.2	157.4	64.9	141.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	5.2	1.7	0.0	2.3	11.5	56.1	62.8	3.5	50.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	0.0	45.5	47.0	0.0	48.5	249.3	179.5	184.8	116.9	170.4	17.1
LnGrp LOS	D	A	D	D	A	D	F	F	F	F	F	B
Approach Vol, veh/h		436			152			3913			3315	
Approach Delay, s/veh		45.9			47.9			188.1			163.1	
Approach LOS		D			D			F			F	

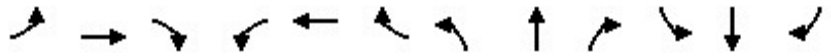
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	56.1		23.6	10.0	60.1		16.2
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 8.9	* 51		32.0	* 5.2	* 55		32.0
Max Q Clear Time (g_c+I1), s	10.9	53.2		16.2	6.7	57.2		7.7
Green Ext Time (p_c), s	0.0	0.0		0.6	0.0	0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	166.9
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	320	0	450	0	2990	530	0	1800	1270
Future Volume (veh/h)	0	0	0	320	0	450	0	2990	530	0	1800	1270
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				348	0	489	0	3250	0	0	1957	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				782	0	631	0	3592		0	3269	
Arrive On Green				0.23	0.00	0.23	0.00	0.64	0.00	0.00	0.64	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				348	0	489	0	3250	0	0	1957	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				6.2	0.0	11.7	0.0	35.2	0.0	0.0	15.9	0.0
Cycle Q Clear(g_c), s				6.2	0.0	11.7	0.0	35.2	0.0	0.0	15.9	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				782	0	631	0	3592		0	3269	
V/C Ratio(X)				0.45	0.00	0.77	0.00	0.90		0.00	0.60	
Avail Cap(c_a), veh/h				1093	0	882	0	3810		0	3445	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				23.7	0.0	25.8	0.0	10.9	0.0	0.0	7.5	0.0
Incr Delay (d2), s/veh				0.4	0.0	2.9	0.0	3.2	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	0.0	3.9	0.0	10.2	0.0	0.0	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				24.1	0.0	28.7	0.0	14.2	0.0	0.0	7.6	0.0
LnGrp LOS				C	A	C	A	B		A	A	
Approach Vol, veh/h					837			3250	A		1957	A
Approach Delay, s/veh					26.8			14.2			7.6	
Approach LOS					C			B			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	50.5		50.5		20.6			
Change Period (Y+Rc), s	* 5		5.0		4.5			
Max Green Setting (Gmax), s	* 48		48.0		22.5			
Max Q Clear Time (g_c+I1), s	37.2		17.9		13.7			
Green Ext Time (p_c), s	8.3		6.1		2.4			

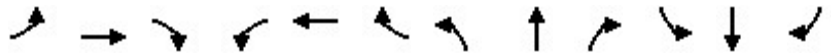
Intersection Summary		
HCM 6th Ctrl Delay		13.8
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1160	0	330	0	0	0	0	2860	520	0	1260	380
Future Volume (veh/h)	1160	0	330	0	0	0	0	2860	520	0	1260	380
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1261	0	359				0	3109	0	0	1370	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1698	0	943				0	3614		0	2711	
Arrive On Green	0.34	0.00	0.34				0.00	0.48	0.00	0.00	0.48	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1261	0	359				0	3109	0	0	1370	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	11.4	0.0	5.0				0.0	18.9	0.0	0.0	8.6	0.0
Cycle Q Clear(g_c), s	11.4	0.0	5.0				0.0	18.9	0.0	0.0	8.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1698	0	943				0	3614		0	2711	
V/C Ratio(X)	0.74	0.00	0.38				0.00	0.86		0.00	0.51	
Avail Cap(c_a), veh/h	2001	0	1112				0	3737		0	2759	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.0	0.0	12.9				0.0	11.8	0.0	0.0	9.1	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.3				0.0	2.0	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.4				0.0	5.6	0.0	0.0	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	0.0	13.2				0.0	13.8	0.0	0.0	9.1	0.0
LnGrp LOS	B	A	B				A	B		A	A	
Approach Vol, veh/h		1620						3109	A		1370	A
Approach Delay, s/veh		15.6						13.8			9.1	
Approach LOS		B						B			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	29.6	21.9	29.6
Change Period (Y+Rc), s	* 4.7	4.5	4.7
Max Green Setting (Gmax), s	* 26	20.5	25.3
Max Q Clear Time (g_c+I1), s	20.9	13.4	10.6
Green Ext Time (p_c), s	3.9	4.0	3.3

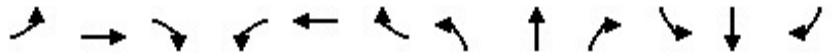
Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	540	130	210	380	250	140	1820	270	250	1360	250
Future Volume (veh/h)	550	540	130	210	380	250	140	1820	270	250	1360	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	598	587	141	228	478	228	152	1978	293	272	1478	272
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	925	405	300	871	361	162	2017	490	342	1867	577
Arrive On Green	0.11	0.26	0.26	0.08	0.23	0.23	0.05	0.31	0.31	0.10	0.37	0.37
Sat Flow, veh/h	3456	3554	1556	3563	3741	1552	3456	6434	1563	3456	5106	1579
Grp Volume(v), veh/h	598	587	141	228	478	228	152	1978	293	272	1478	272
Grp Sat Flow(s),veh/h/ln	1728	1777	1556	1781	1870	1552	1728	1609	1563	1728	1702	1579
Q Serve(g_s), s	10.5	13.7	6.9	5.9	10.6	12.4	4.1	28.6	14.9	7.2	24.3	12.4
Cycle Q Clear(g_c), s	10.5	13.7	6.9	5.9	10.6	12.4	4.1	28.6	14.9	7.2	24.3	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	386	925	405	300	871	361	162	2017	490	342	1867	577
V/C Ratio(X)	1.55	0.63	0.35	0.76	0.55	0.63	0.94	0.98	0.60	0.79	0.79	0.47
Avail Cap(c_a), veh/h	386	1215	532	398	1275	529	162	2017	490	497	1930	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	30.8	28.2	42.1	31.7	32.4	44.6	32.0	27.2	41.4	26.6	22.8
Incr Delay (d2), s/veh	259.0	1.1	0.8	3.9	0.9	3.1	52.5	15.6	1.6	3.3	2.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	5.9	2.6	2.7	4.8	4.9	2.9	12.4	5.6	3.1	9.4	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	300.7	31.8	29.0	46.0	32.6	35.5	97.1	47.6	28.9	44.6	29.2	24.0
LnGrp LOS	F	C	C	D	C	D	F	D	C	D	C	C
Approach Vol, veh/h		1326			934			2423			2022	
Approach Delay, s/veh		152.8			36.6			48.4			30.6	
Approach LOS		F			D			D			C	

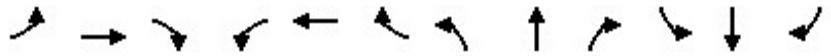
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	40.1	16.0	27.9	14.8	35.2	13.4	30.5
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	4.4	* 36	10.5	32.0	13.5	* 26	10.5	* 32
Max Q Clear Time (g_c+I1), s	6.1	26.3	12.5	14.4	9.2	30.6	7.9	15.7
Green Ext Time (p_c), s	0.0	8.1	0.0	6.0	0.1	0.0	0.1	5.7

Intersection Summary	
HCM 6th Ctrl Delay	62.0
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



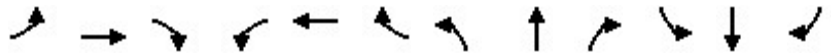
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	1270	300	500	670	490	300	1000	200	460	1540	130
Future Volume (veh/h)	410	1270	300	500	670	490	300	1000	200	460	1540	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	446	1380	326	543	728	533	326	1087	217	500	1674	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	474	1081	480	375	1407	436	247	1242	383	354	1401	432
Arrive On Green	0.15	0.34	0.34	0.12	0.31	0.31	0.08	0.27	0.27	0.11	0.30	0.30
Sat Flow, veh/h	3110	3198	1419	3110	4595	1424	3110	4595	1417	3110	4595	1418
Grp Volume(v), veh/h	446	1380	326	543	728	533	326	1087	217	500	1674	141
Grp Sat Flow(s),veh/h/ln	1555	1599	1419	1555	1532	1424	1555	1532	1417	1555	1532	1418
Q Serve(g_s), s	20.6	49.0	28.6	17.5	18.9	44.4	11.5	32.8	19.1	16.5	44.2	11.1
Cycle Q Clear(g_c), s	20.6	49.0	28.6	17.5	18.9	44.4	11.5	32.8	19.1	16.5	44.2	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	474	1081	480	375	1407	436	247	1242	383	354	1401	432
V/C Ratio(X)	0.94	1.28	0.68	1.45	0.52	1.22	1.32	0.87	0.57	1.41	1.20	0.33
Avail Cap(c_a), veh/h	474	1081	480	375	1407	436	247	1249	385	354	1401	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.8	48.0	41.3	63.8	41.5	50.3	66.7	50.6	45.6	64.3	50.4	38.9
Incr Delay (d2), s/veh	26.8	131.8	4.9	215.5	1.0	119.2	170.2	7.6	3.1	201.8	95.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	38.6	10.4	18.0	7.2	29.8	10.3	13.1	6.9	16.3	28.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.6	179.8	46.2	279.2	42.5	169.5	237.0	58.2	48.7	266.0	145.4	39.8
LnGrp LOS	F	F	D	F	D	F	F	E	D	F	F	D
Approach Vol, veh/h		2152			1804			1630			2315	
Approach Delay, s/veh		140.5			151.3			92.7			165.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	50.0	27.6	50.4	22.0	45.0	23.0	55.0
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	11.5	* 44	22.1	44.4	16.5	* 39	17.5	49.0
Max Q Clear Time (g_c+I1), s	13.5	46.2	22.6	46.4	18.5	34.8	19.5	51.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	140.3
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



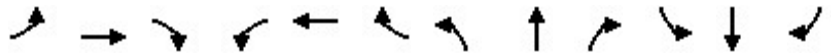
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	520	30	150	550	590	20	270	250	1430	730	610
Future Volume (veh/h)	130	520	30	150	550	590	20	270	250	1430	730	610
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	565	33	163	598	641	22	293	272	1554	793	663
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	859	50	188	1229	382	27	233	216	1022	1923	858
Arrive On Green	0.06	0.25	0.25	0.05	0.24	0.24	0.02	0.26	0.26	0.30	0.54	0.54
Sat Flow, veh/h	1781	3407	199	3456	5106	1585	1781	893	829	3456	3554	1585
Grp Volume(v), veh/h	141	294	304	163	598	641	22	0	565	1554	793	663
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	1728	1702	1585	1781	0	1721	1728	1777	1585
Q Serve(g_s), s	9.5	22.3	22.4	7.0	15.1	36.2	1.9	0.0	39.2	44.5	19.8	49.6
Cycle Q Clear(g_c), s	9.5	22.3	22.4	7.0	15.1	36.2	1.9	0.0	39.2	44.5	19.8	49.6
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	113	448	461	188	1229	382	27	0	449	1022	1923	858
V/C Ratio(X)	1.25	0.66	0.66	0.87	0.49	1.68	0.80	0.00	1.26	1.52	0.41	0.77
Avail Cap(c_a), veh/h	113	448	461	188	1229	382	72	0	449	1022	1923	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.5	50.4	50.5	70.6	49.1	57.1	73.8	0.0	55.6	53.0	20.4	27.2
Incr Delay (d2), s/veh	167.7	2.8	2.8	30.6	0.1	317.3	17.7	0.0	133.7	239.0	0.1	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	10.0	10.3	3.8	6.3	47.8	1.0	0.0	33.3	52.7	8.0	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	238.2	53.2	53.2	101.2	49.2	374.4	91.6	0.0	189.3	291.9	20.4	31.2
LnGrp LOS	F	D	D	F	D	F	F	A	F	F	C	C
Approach Vol, veh/h		739			1402			587			3010	
Approach Delay, s/veh		88.5			203.9			185.7			163.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	41.1	7.8	86.5	13.3	42.8	50.0	44.3
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	9.5	* 36	6.1	* 77	* 8.2	* 38	44.5	* 39
Max Q Clear Time (g_c+I1), s	11.5	38.2	3.9	51.6	9.0	24.4	46.5	41.2
Green Ext Time (p_c), s	0.0	0.0	0.0	2.0	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	165.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



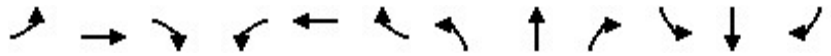
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	1270	630	190	550	320	450	1030	80	370	2680	220
Future Volume (veh/h)	610	1270	630	190	550	320	450	1030	80	370	2680	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	663	1380	685	207	598	348	489	1120	87	402	2913	239
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	1517	471	155	1165	357	298	1813	556	448	2034	631
Arrive On Green	0.11	0.30	0.30	0.04	0.23	0.23	0.09	0.35	0.35	0.13	0.40	0.40
Sat Flow, veh/h	3456	5106	1585	3456	5106	1564	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	663	1380	685	207	598	348	489	1120	87	402	2913	239
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1564	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	16.5	37.8	43.1	6.5	14.9	32.0	12.5	26.3	5.5	16.6	57.8	15.5
Cycle Q Clear(g_c), s	16.5	37.8	43.1	6.5	14.9	32.0	12.5	26.3	5.5	16.6	57.8	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	1517	471	155	1165	357	298	1813	556	448	2034	631
V/C Ratio(X)	1.69	0.91	1.45	1.34	0.51	0.98	1.64	0.62	0.16	0.90	1.43	0.38
Avail Cap(c_a), veh/h	393	1517	471	155	1165	357	298	1813	556	588	2034	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	49.1	51.0	69.3	49.0	55.6	66.3	38.7	32.0	62.2	43.6	30.9
Incr Delay (d2), s/veh	320.1	8.3	216.3	188.8	0.2	40.7	303.9	0.5	0.0	11.8	197.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.5	16.5	44.6	6.9	6.1	16.2	17.9	10.6	2.0	7.8	60.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	384.4	57.4	267.3	258.1	49.1	96.3	370.2	39.1	32.0	74.0	241.0	31.1
LnGrp LOS	F	E	F	F	D	F	F	D	C	E	F	C
Approach Vol, veh/h		2728			1153			1696			3554	
Approach Delay, s/veh		189.6			100.9			134.2			208.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.3	58.9	12.0	49.9	18.0	65.2	22.0	39.9
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	24.7	* 46	6.5	* 43	12.5	* 58	16.5	33.0
Max Q Clear Time (g_c+I1), s	18.6	28.3	8.5	45.1	14.5	59.8	18.5	34.0
Green Ext Time (p_c), s	0.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	175.3
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



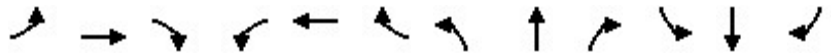
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	660	100	70	420	30	50	100	80	140	310	220
Future Volume (veh/h)	280	660	100	70	420	30	50	100	80	140	310	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	304	717	109	76	457	33	54	109	87	152	337	239
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	352	1140	509	105	597	266	111	302	256	207	406	344
Arrive On Green	0.20	0.32	0.32	0.06	0.17	0.17	0.06	0.16	0.16	0.12	0.22	0.22
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	304	717	109	76	457	33	54	109	87	152	337	239
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	10.1	10.5	3.1	2.6	7.5	1.1	1.8	3.2	3.0	5.1	10.5	8.5
Cycle Q Clear(g_c), s	10.1	10.5	3.1	2.6	7.5	1.1	1.8	3.2	3.0	5.1	10.5	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	352	1140	509	105	597	266	111	302	256	207	406	344
V/C Ratio(X)	0.86	0.63	0.21	0.72	0.77	0.12	0.49	0.36	0.34	0.74	0.83	0.70
Avail Cap(c_a), veh/h	453	1896	846	215	1374	613	668	702	595	756	793	672
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	17.7	15.2	28.3	24.4	21.7	27.8	22.9	22.8	26.2	22.9	22.1
Incr Delay (d2), s/veh	10.9	0.2	0.1	8.9	0.8	0.1	1.2	0.3	0.3	1.9	1.7	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	3.4	1.0	1.2	2.7	0.4	0.8	1.3	1.1	2.1	4.5	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	17.9	15.3	37.2	25.1	21.7	29.0	23.2	23.1	28.1	24.6	23.1
LnGrp LOS	C	B	B	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1130			566			250			728	
Approach Delay, s/veh		22.2			26.6			24.4			24.8	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	15.8	9.2	18.8	8.1	25.2	12.6	15.4
Change Period (Y+Rc), s	* 5.4	* 5.5	5.4	* 5.5	4.5	* 5.5	5.5	* 5.5
Max Green Setting (Gmax), s	16	* 24	23.0	* 26	7.4	* 33	26.0	* 23
Max Q Clear Time (g_c+I1), s	12.1	9.5	3.8	12.5	4.6	12.5	7.1	5.2
Green Ext Time (p_c), s	0.0	0.8	0.0	0.7	0.0	1.4	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



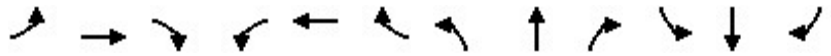
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	500	830	20	180	380	200	10	960	170	300	1680	290
Future Volume (veh/h)	500	830	20	180	380	200	10	960	170	300	1680	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	543	902	22	196	413	217	11	1043	185	326	1826	315
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	632	536	113	458	388	36	997	445	303	1530	931
Arrive On Green	0.16	0.34	0.34	0.06	0.24	0.24	0.02	0.28	0.28	0.17	0.43	0.43
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	543	902	22	196	413	217	11	1043	185	326	1826	315
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	23.5	50.7	1.4	9.5	32.1	18.0	0.9	42.1	14.3	25.5	64.6	15.4
Cycle Q Clear(g_c), s	23.5	50.7	1.4	9.5	32.1	18.0	0.9	42.1	14.3	25.5	64.6	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	279	632	536	113	458	388	36	997	445	303	1530	931
V/C Ratio(X)	1.95	1.43	0.04	1.74	0.90	0.56	0.31	1.05	0.42	1.08	1.19	0.34
Avail Cap(c_a), veh/h	279	632	536	113	458	388	226	997	445	303	1530	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	49.7	33.3	70.3	54.9	49.6	72.5	53.9	43.9	62.2	42.7	15.9
Incr Delay (d2), s/veh	438.5	201.2	0.0	365.9	20.4	1.1	1.8	41.2	0.2	73.6	93.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	44.3	57.8	0.5	15.7	17.1	7.0	0.4	23.7	5.5	17.3	46.4	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	501.7	250.8	33.3	436.1	75.3	50.7	74.3	95.1	44.2	135.8	136.3	16.0
LnGrp LOS	F	F	C	F	E	D	E	F	D	F	F	B
Approach Vol, veh/h		1467			826			1239			2467	
Approach Delay, s/veh		340.4			154.5			87.3			120.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	43.5	7.5	71.0	14.0	57.5	30.0	48.5
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	23.5	36.7	19.0	* 49	9.5	50.7	25.5	42.1
Max Q Clear Time (g_c+I1), s	25.5	34.1	2.9	66.6	11.5	52.7	27.5	44.1
Green Ext Time (p_c), s	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	172.3
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



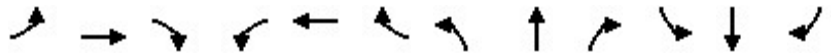
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	970	10	100	420	140	10	740	100	240	890	240
Future Volume (veh/h)	310	970	10	100	420	140	10	740	100	240	890	240
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	337	1054	11	109	457	152	11	804	109	261	967	261
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	880	9	89	469	156	13	669	91	195	872	235
Arrive On Green	0.18	0.48	0.48	0.05	0.35	0.35	0.01	0.21	0.21	0.11	0.32	0.32
Sat Flow, veh/h	1781	1848	19	1781	1338	445	1781	3144	426	1781	2768	745
Grp Volume(v), veh/h	337	0	1065	109	0	609	11	454	459	261	620	608
Grp Sat Flow(s),veh/h/ln	1781	0	1867	1781	0	1784	1781	1777	1794	1781	1777	1736
Q Serve(g_s), s	26.4	0.0	71.6	7.5	0.0	50.7	0.9	32.0	32.0	16.5	47.4	47.4
Cycle Q Clear(g_c), s	26.4	0.0	71.6	7.5	0.0	50.7	0.9	32.0	32.0	16.5	47.4	47.4
Prop In Lane	1.00		0.01	1.00		0.25	1.00		0.24	1.00		0.43
Lane Grp Cap(c), veh/h	313	0	889	89	0	625	13	378	382	195	560	547
V/C Ratio(X)	1.08	0.00	1.20	1.23	0.00	0.97	0.84	1.20	1.20	1.34	1.11	1.11
Avail Cap(c_a), veh/h	313	0	889	89	0	625	59	378	382	195	560	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.0	0.0	39.4	71.4	0.0	48.2	74.6	59.2	59.2	66.9	51.5	51.5
Incr Delay (d2), s/veh	73.2	0.0	100.1	168.6	0.0	29.4	37.9	113.5	113.4	181.5	70.6	73.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.9	0.0	55.0	7.5	0.0	26.5	0.6	25.8	26.0	17.1	31.1	30.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	135.2	0.0	139.5	240.0	0.0	77.6	112.5	172.7	172.6	248.5	122.1	124.5
LnGrp LOS	F	A	F	F	A	E	F	F	F	F	F	F
Approach Vol, veh/h		1402			718			924			1489	
Approach Delay, s/veh		138.5			102.3			171.9			145.2	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.9	59.5	5.6	54.4	12.0	78.4	21.0	39.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 7	4.5	* 6.8	4.5	7.0
Max Green Setting (Gmax), s	26.4	52.3	5.0	* 44	7.5	* 72	16.5	32.0
Max Q Clear Time (g_c+I1), s	28.4	52.7	2.9	49.4	9.5	73.6	18.5	34.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	141.8
HCM 6th LOS	F

Notes

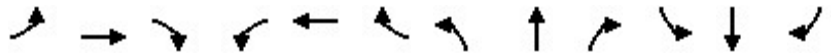
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	10	190	20	10	30	180	920	10	280	980	200
Future Volume (veh/h)	130	10	190	20	10	30	180	920	10	280	980	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	11	207	22	11	33	196	1000	11	304	1065	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	302	256	44	221	187	252	1250	558	355	1699	758
Arrive On Green	0.07	0.16	0.16	0.02	0.12	0.12	0.07	0.35	0.35	0.20	0.48	0.48
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	141	11	207	22	11	33	196	1000	11	304	1065	217
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.7	0.3	8.6	0.8	0.4	1.3	3.8	17.4	0.3	11.3	15.3	5.7
Cycle Q Clear(g_c), s	2.7	0.3	8.6	0.8	0.4	1.3	3.8	17.4	0.3	11.3	15.3	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	302	256	44	221	187	252	1250	558	355	1699	758
V/C Ratio(X)	0.60	0.04	0.81	0.49	0.05	0.18	0.78	0.80	0.02	0.86	0.63	0.29
Avail Cap(c_a), veh/h	252	491	416	130	491	416	252	1607	717	468	2282	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	24.3	27.7	33.0	26.8	27.2	31.2	20.0	14.5	26.5	13.3	10.8
Incr Delay (d2), s/veh	3.5	0.0	6.1	8.3	0.1	0.4	14.2	2.3	0.0	11.5	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.2	3.4	0.4	0.2	0.5	1.9	6.2	0.1	5.2	4.6	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.5	24.3	33.8	41.2	26.9	27.7	45.4	22.3	14.5	38.0	13.7	11.0
LnGrp LOS	C	C	C	D	C	C	D	C	B	D	B	B
Approach Vol, veh/h		359			66			1207			1586	
Approach Delay, s/veh		33.8			32.1			26.0			18.0	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	37.3	6.2	15.5	18.2	28.6	9.2	12.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	44.0	5.0	18.0	18.0	31.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	5.8	17.3	2.8	10.6	13.3	19.4	4.7	3.3
Green Ext Time (p_c), s	0.0	8.2	0.0	0.4	0.4	4.7	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	23.1
HCM 6th LOS	C



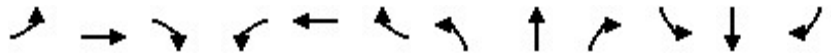
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	240	250	80	130	30	70	1060	60	50	1340	360
Future Volume (veh/h)	480	240	250	80	130	30	70	1060	60	50	1340	360
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	522	261	272	87	141	33	76	1152	65	54	1457	391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	591	263	275	108	299	70	122	1520	678	70	1531	683
Arrive On Green	0.17	0.31	0.31	0.06	0.20	0.20	0.04	0.43	0.43	0.04	0.43	0.43
Sat Flow, veh/h	3456	839	874	1781	1466	343	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	522	0	533	87	0	174	76	1152	65	54	1457	391
Grp Sat Flow(s),veh/h/ln	1728	0	1713	1781	0	1809	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	18.5	0.0	38.8	6.0	0.0	10.6	2.7	34.3	3.1	3.8	49.5	23.3
Cycle Q Clear(g_c), s	18.5	0.0	38.8	6.0	0.0	10.6	2.7	34.3	3.1	3.8	49.5	23.3
Prop In Lane	1.00		0.51	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	591	0	538	108	0	369	122	1520	678	70	1531	683
V/C Ratio(X)	0.88	0.00	0.99	0.80	0.00	0.47	0.62	0.76	0.10	0.77	0.95	0.57
Avail Cap(c_a), veh/h	715	0	538	108	0	369	552	1948	869	142	1653	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	0.0	42.7	58.0	0.0	43.9	59.5	30.3	21.4	59.6	34.3	26.9
Incr Delay (d2), s/veh	11.0	0.0	36.2	34.1	0.0	0.9	1.9	0.9	0.0	16.5	11.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	20.8	3.7	0.0	4.9	1.2	13.7	1.1	2.0	22.0	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	0.0	78.9	92.1	0.0	44.8	61.5	31.2	21.4	76.0	46.1	27.4
LnGrp LOS	E	A	E	F	A	D	E	C	C	E	D	C
Approach Vol, veh/h		1055			261			1293			1902	
Approach Delay, s/veh		70.4			60.6			32.5			43.1	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	60.0	25.9	30.2	9.4	59.6	12.1	44.0
Change Period (Y+Rc), s	* 4.6	* 6.1	4.5	* 4.7	4.5	* 6.1	4.5	* 4.7
Max Green Setting (Gmax), s	* 28	* 58	25.9	* 21	10.0	* 69	7.6	* 39
Max Q Clear Time (g_c+I1), s	14.7	51.5	20.5	12.6	5.8	36.3	8.0	40.8
Green Ext Time (p_c), s	0.0	2.4	0.9	0.5	0.0	2.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.4
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	30	130	100	30	260	140	1270	80	300	1790	330
Future Volume (veh/h)	190	30	130	100	30	260	140	1270	80	300	1790	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	207	33	141	109	33	283	152	1380	87	326	1946	359
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	27	116	171	52	195	137	1419	633	310	1765	787
Arrive On Green	0.18	0.18	0.18	0.12	0.12	0.12	0.08	0.40	0.40	0.17	0.50	0.50
Sat Flow, veh/h	929	148	633	1383	419	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	381	0	0	142	0	283	152	1380	87	326	1946	359
Grp Sat Flow(s),veh/h/ln	1710	0	0	1801	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	27.5	0.0	0.0	11.3	0.0	18.5	11.5	57.2	5.2	26.1	74.5	22.1
Cycle Q Clear(g_c), s	27.5	0.0	0.0	11.3	0.0	18.5	11.5	57.2	5.2	26.1	74.5	22.1
Prop In Lane	0.54		0.37	0.77		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	0	0	222	0	195	137	1419	633	310	1765	787
V/C Ratio(X)	1.22	0.00	0.00	0.64	0.00	1.45	1.11	0.97	0.14	1.05	1.10	0.46
Avail Cap(c_a), veh/h	313	0	0	222	0	195	137	1419	633	310	1765	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.3	0.0	0.0	62.6	0.0	65.8	69.2	44.2	28.6	62.0	37.8	24.6
Incr Delay (d2), s/veh	122.5	0.0	0.0	6.0	0.0	227.8	110.6	17.7	0.1	65.4	55.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.6	0.0	0.0	5.6	0.0	19.9	9.3	27.2	1.9	17.0	43.3	8.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	183.8	0.0	0.0	68.6	0.0	293.5	179.8	61.9	28.7	127.3	93.0	25.0
LnGrp LOS	F	A	A	E	A	F	F	E	C	F	F	C
Approach Vol, veh/h		381			425			1619			2631	
Approach Delay, s/veh		183.8			218.4			71.2			88.0	
Approach LOS		F			F			E			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.6	64.4		32.0	16.0	79.0		23.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	26.1	59.9		27.5	11.5	74.5		18.5
Max Q Clear Time (g_c+I1), s	28.1	59.2		29.5	13.5	76.5		20.5
Green Ext Time (p_c), s	0.0	0.5		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	100.8
HCM 6th LOS	F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1480	380	250	1480	2030	560
Future Volume (veh/h)	1480	380	250	1480	2030	560
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1609	413	272	1609	2207	609
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1163	687	172	2064	1590	709
Arrive On Green	0.34	0.34	0.10	0.58	0.45	0.45
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	1609	413	272	1609	2207	609
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	50.5	30.0	14.5	52.0	67.1	51.7
Cycle Q Clear(g_c), s	50.5	30.0	14.5	52.0	67.1	51.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1163	687	172	2064	1590	709
V/C Ratio(X)	1.38	0.60	1.58	0.78	1.39	0.86
Avail Cap(c_a), veh/h	1163	687	172	2071	1590	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	32.6	67.8	24.1	41.5	37.2
Incr Delay (d2), s/veh	177.8	1.0	286.7	1.8	178.7	9.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	50.4	27.1	20.1	20.3	66.8	20.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	227.5	33.6	354.5	25.9	220.2	47.1
LnGrp LOS	F	C	F	C	F	D
Approach Vol, veh/h	2022			1881	2816	
Approach Delay, s/veh	187.9			73.4	182.7	
Approach LOS	F			E	F	

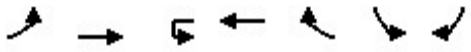
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.0	74.0		56.0		94.0
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9
Max Green Setting (Gmax), s	14.5	* 67		50.5		* 87
Max Q Clear Time (g_c+I1), s	16.5	69.1		52.5		54.0
Green Ext Time (p_c), s	0.0	0.0		0.0		4.0

Intersection Summary	
HCM 6th Ctrl Delay	153.7
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	1300	2110	0	1590	450	230	990
Future Volume (veh/h)	1300	2110	0	1590	450	230	990
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	1413	2293		1728	489	250	1076
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	1055	2424		1215	542	422	375
Arrive On Green	0.31	0.68		0.34	0.34	0.24	0.24
Sat Flow, veh/h	3456	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	1413	2293		1728	489	250	1076
Grp Sat Flow(s),veh/h/ln	1728	1777		1777	1585	1781	1585
Q Serve(g_s), s	45.8	86.8		51.3	44.0	18.7	35.5
Cycle Q Clear(g_c), s	45.8	86.8		51.3	44.0	18.7	35.5
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1055	2424		1215	542	422	375
V/C Ratio(X)	1.34	0.95		1.42	0.90	0.59	2.87
Avail Cap(c_a), veh/h	1055	2424		1215	542	422	375
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	21.4		49.3	47.0	50.8	57.3
Incr Delay (d2), s/veh	159.1	8.7		194.7	17.8	1.5	848.1
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	42.2	32.8		54.5	19.2	8.3	102.0
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	211.2	30.0		244.0	64.8	52.4	905.3
LnGrp LOS	F	C		F	E	D	F
Approach Vol, veh/h		3706		2217		1326	
Approach Delay, s/veh		99.1		204.5		744.5	
Approach LOS		F		F		F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	51.0	58.0			109.0	41.0
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 46	* 51			* 93	35.5
Max Q Clear Time (g_c+I1), s	47.8	53.3			88.8	37.5
Green Ext Time (p_c), s	0.0	0.0			2.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	249.4
HCM 6th LOS	F

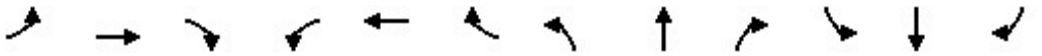
Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix E

Analysis Worksheets for
Cumulative (2035) plus Proposed Project Conditions



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1120	0	300	0	1230	1080	0	1460	650
Future Volume (veh/h)	0	0	0	1120	0	300	0	1230	1080	0	1460	650
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				772	624	326	0	1337	0	0	1587	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				979	634	331	0	1531		0	1531	
Arrive On Green				0.55	0.55	0.55	0.00	0.30	0.00	0.00	0.30	0.00
Sat Flow, veh/h				1781	1154	603	0	5274	1585	0	5274	1585
Grp Volume(v), veh/h				772	0	950	0	1337	0	0	1587	0
Grp Sat Flow(s),veh/h/ln				1781	0	1757	0	1702	1585	0	1702	1585
Q Serve(g_s), s				22.6	0.0	34.9	0.0	16.3	0.0	0.0	19.7	0.0
Cycle Q Clear(g_c), s				22.6	0.0	34.9	0.0	16.3	0.0	0.0	19.7	0.0
Prop In Lane				1.00		0.34	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				979	0	965	0	1531		0	1531	
V/C Ratio(X)				0.79	0.00	0.98	0.00	0.87		0.00	1.04	
Avail Cap(c_a), veh/h				979	0	965	0	1531		0	1531	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				11.8	0.0	14.5	0.0	21.8	0.0	0.0	23.0	0.0
Incr Delay (d2), s/veh				4.0	0.0	25.0	0.0	5.7	0.0	0.0	33.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.3	0.0	17.7	0.0	6.4	0.0	0.0	11.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.8	0.0	39.5	0.0	27.5	0.0	0.0	56.0	0.0
LnGrp LOS				B	A	D	A	C		A	F	
Approach Vol, veh/h					1722			1337	A		1587	A
Approach Delay, s/veh					28.9			27.5			56.0	
Approach LOS					C			C			E	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	24.7		24.7		41.0			
Change Period (Y+Rc), s	* 5		5.0		4.9			
Max Green Setting (Gmax), s	* 20		19.0		36.1			
Max Q Clear Time (g_c+I1), s	21.7		18.3		36.9			
Green Ext Time (p_c), s	0.0		0.3		0.0			

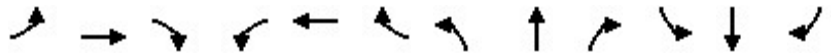
Intersection Summary		
HCM 6th Ctrl Delay	37.7	
HCM 6th LOS	D	

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	0	1170	0	0	0	0	1670	420	0	2010	480
Future Volume (veh/h)	310	0	1170	0	0	0	0	1670	420	0	2010	480
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	225	0	1392				0	1815	0	0	2185	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	784	0	1394				0	2322		0	2322	
Arrive On Green	0.44	0.00	0.44				0.00	0.45	0.00	0.00	0.45	0.00
Sat Flow, veh/h	1781	0	3166				0	5443	0	0	5274	1585
Grp Volume(v), veh/h	225	0	1392				0	1815	0	0	2185	0
Grp Sat Flow(s),veh/h/ln	1781	0	1583				0	1702	0	0	1702	1585
Q Serve(g_s), s	8.0	0.0	43.5				0.0	29.8	0.0	0.0	40.4	0.0
Cycle Q Clear(g_c), s	8.0	0.0	43.5				0.0	29.8	0.0	0.0	40.4	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	784	0	1394				0	2322		0	2322	
V/C Ratio(X)	0.29	0.00	1.00				0.00	0.78		0.00	0.94	
Avail Cap(c_a), veh/h	784	0	1394				0	2372		0	2398	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	17.8	0.0	27.7				0.0	22.8	0.0	0.0	25.7	0.0
Incr Delay (d2), s/veh	0.1	0.0	23.7				0.0	1.6	0.0	0.0	8.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	20.1				0.0	11.1	0.0	0.0	16.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	0.0	51.4				0.0	24.4	0.0	0.0	33.7	0.0
LnGrp LOS	B	A	D				A	C		A	C	
Approach Vol, veh/h		1617						1815	A		2185	A
Approach Delay, s/veh		46.8						24.4			33.7	
Approach LOS		D						C			C	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	50.0	49.0	50.0
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 47	* 44	46.0
Max Q Clear Time (g_c+I1), s	42.4	45.5	31.8
Green Ext Time (p_c), s	2.6	0.0	4.6

Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2110	1220	420	1910	450	70
Future Volume (veh/h)	2110	1220	420	1910	450	70
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2293	0	457	2076	489	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2809		353	4005	537	246
Arrive On Green	0.55	0.00	0.20	0.78	0.16	0.16
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	2293	0	457	2076	489	76
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	51.7	0.0	27.9	20.8	19.6	6.0
Cycle Q Clear(g_c), s	51.7	0.0	27.9	20.8	19.6	6.0
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2809		353	4005	537	246
V/C Ratio(X)	0.82		1.30	0.52	0.91	0.31
Avail Cap(c_a), veh/h	2879		353	4075	711	326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.9	0.0	56.5	5.5	58.6	52.8
Incr Delay (d2), s/veh	2.1	0.0	152.8	0.2	11.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.1	0.0	27.2	5.8	9.3	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.0	0.0	209.4	5.7	69.9	53.1
LnGrp LOS	C		F	A	E	D
Approach Vol, veh/h	2293	A		2533	565	
Approach Delay, s/veh	28.0			42.5	67.6	
Approach LOS	C			D	E	

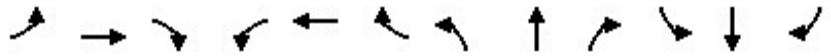
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	115.6			33.0	82.6	25.4
Change Period (Y+Rc), s	5.0			* 5.1	5.0	3.5
Max Green Setting (Gmax), s	112.5			* 28	79.5	29.0
Max Q Clear Time (g_c+I1), s	22.8			29.9	53.7	21.6
Green Ext Time (p_c), s	62.7			0.0	23.9	0.3

Intersection Summary	
HCM 6th Ctrl Delay	39.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	1570	0	370	0	1302	859	0	951	360
Future Volume (veh/h)	0	0	0	1570	0	370	0	1302	859	0	951	360
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				1707	0	402	0	1415	0	0	1034	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1732	0	794	0	1668		0	1668	
Arrive On Green				0.50	0.00	0.50	0.00	0.33	0.00	0.00	0.33	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	5274	1585
Grp Volume(v), veh/h				1707	0	402	0	1415	0	0	1034	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1702	1585
Q Serve(g_s), s				25.7	0.0	9.0	0.0	13.6	0.0	0.0	9.0	0.0
Cycle Q Clear(g_c), s				25.7	0.0	9.0	0.0	13.6	0.0	0.0	9.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1732	0	794	0	1668		0	1668	
V/C Ratio(X)				0.99	0.00	0.51	0.00	0.85		0.00	0.62	
Avail Cap(c_a), veh/h				1732	0	794	0	1873		0	1873	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				13.0	0.0	8.8	0.0	16.6	0.0	0.0	15.0	0.0
Incr Delay (d2), s/veh				18.2	0.0	0.5	0.0	3.2	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				11.9	0.0	2.5	0.0	4.6	0.0	0.0	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				31.2	0.0	9.3	0.0	19.7	0.0	0.0	15.3	0.0
LnGrp LOS				C	A	A	A	B		A	B	
Approach Vol, veh/h					2109			1415	A		1034	A
Approach Delay, s/veh					27.1			19.7			15.3	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		6		8	
Phs Duration (G+Y+Rc), s	21.9		21.9		31.0	
Change Period (Y+Rc), s	4.6		4.6		4.5	
Max Green Setting (Gmax), s	19.4		19.4		26.5	
Max Q Clear Time (g_c+I1), s	15.6		11.0		27.7	
Green Ext Time (p_c), s	1.6		1.9		0.0	

Intersection Summary		
HCM 6th Ctrl Delay		22.1
HCM 6th LOS		C

Notes

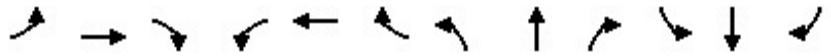
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	500	10	950	1276	100	30	1531	530	80	1771	230
Future Volume (vph)	500	10	950	1276	100	30	1531	530	80	1771	230
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.5		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.91	1.00
Frpb, ped/bikes		1.00	0.99	0.98	1.00		0.99			1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.94	0.85	0.85		0.96			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1610	3002	1418	2787		6103			5085	1545
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1610	3002	1418	2787		6103			5085	1545
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	543	11	1033	1387	109	33	1664	576	87	1925	250
RTOR Reduction (vph)	0	0	1	30	72	0	5	0	0	0	0
Lane Group Flow (vph)	0	553	1671	719	70	0	2322	0	0	1925	250
Confl. Peds. (#/hr)	6			6	3				3		6
Confl. Bikes (#/hr)									2		3
Turn Type	Split	Split	NA	Perm	Prot		NA			NA	Free
Protected Phases	4	4	4		5		6			2	
Permitted Phases				4							Free
Actuated Green, G (s)		55.2	55.2	55.2	6.3		42.4			53.2	119.8
Effective Green, g (s)		55.2	55.2	55.2	6.3		42.4			53.2	119.8
Actuated g/C Ratio		0.46	0.46	0.46	0.05		0.35			0.44	1.00
Clearance Time (s)		6.8	6.8	6.8	4.5		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	3.0		1.0			1.0	
Lane Grp Cap (vph)		741	1383	653	146		2159			2258	1545
v/s Ratio Prot		0.34	c0.56		0.03		c0.38			c0.38	
v/s Ratio Perm				0.51							0.16
v/c Ratio		0.75	1.21	1.10	0.48		1.16dr			0.85	0.16
Uniform Delay, d1		26.5	32.3	32.3	55.2		38.7			29.8	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2		3.6	100.7	66.3	2.5		43.4			3.2	0.2
Delay (s)		30.1	133.0	98.6	57.6		82.1			33.0	0.2
Level of Service		C	F	F	E		F			C	A
Approach Delay (s)			105.2				82.1			29.2	
Approach LOS			F				F			C	

Intersection Summary			
HCM 2000 Control Delay	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	15.9
Intersection Capacity Utilization	97.0%	ICU Level of Service	F
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	170	30	50	250	451	40	1420	80	917	1950	740
Future Volume (veh/h)	230	170	30	50	250	451	40	1420	80	917	1950	740
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	250	185	33	54	272	490	43	1543	87	997	2120	804
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	863	147	93	341	1382	76	1692	95	894	2958	903
Arrive On Green	0.04	0.20	0.20	0.03	0.18	0.18	0.02	0.34	0.34	0.26	0.58	0.58
Sat Flow, veh/h	3456	4373	743	3563	1870	3077	3456	4943	279	3456	5106	1558
Grp Volume(v), veh/h	250	142	76	54	272	490	43	1063	567	997	2120	804
Grp Sat Flow(s),veh/h/ln	1728	1702	1711	1781	1870	1539	1728	1702	1817	1728	1702	1558
Q Serve(g_s), s	5.3	4.5	4.8	1.9	18.0	13.7	1.6	38.6	38.6	33.5	38.7	58.1
Cycle Q Clear(g_c), s	5.3	4.5	4.8	1.9	18.0	13.7	1.6	38.6	38.6	33.5	38.7	58.1
Prop In Lane	1.00		0.43	1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	142	672	338	93	341	1382	76	1165	622	894	2958	903
V/C Ratio(X)	1.77	0.21	0.23	0.58	0.80	0.35	0.57	0.91	0.91	1.11	0.72	0.89
Avail Cap(c_a), veh/h	142	736	370	204	442	1548	131	1420	758	894	3235	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.1	43.5	43.6	62.3	50.6	24.0	62.7	40.7	40.7	48.0	19.6	23.7
Incr Delay (d2), s/veh	372.2	0.1	0.1	2.1	5.7	0.1	2.5	7.2	12.3	66.8	0.6	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	1.9	2.0	0.9	8.8	4.8	0.7	16.9	18.9	22.2	14.1	21.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	434.3	43.6	43.8	64.4	56.3	24.1	65.2	47.9	53.0	114.7	20.1	32.7
LnGrp LOS	F	D	D	E	E	C	E	D	D	F	C	C
Approach Vol, veh/h		468			816			1673			3921	
Approach Delay, s/veh		252.3			37.5			50.1			46.8	
Approach LOS		F			D			D			D	

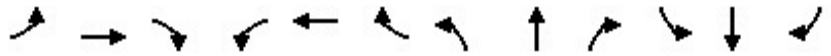
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	80.7	10.8	29.6	39.0	50.0	8.9	31.5
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	4.3	* 82	5.3	* 31	33.5	* 54	7.4	* 28
Max Q Clear Time (g_c+I1), s	3.6	60.1	7.3	20.0	35.5	40.6	3.9	6.8
Green Ext Time (p_c), s	0.0	7.4	0.0	0.8	0.0	3.7	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	60.5
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



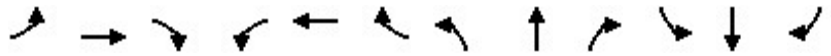
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	960	540	790	1430	130	1270	1500	480	180	1040	620
Future Volume (veh/h)	260	960	540	790	1430	130	1270	1500	480	180	1040	620
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	283	1043	587	859	1554	141	1380	1630	522	196	1130	674
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	179	779	357	393	1486	454	798	2211	685	241	925	425
Arrive On Green	0.05	0.23	0.23	0.11	0.29	0.29	0.23	0.43	0.43	0.07	0.27	0.27
Sat Flow, veh/h	3456	3404	1560	3456	5106	1560	3456	5106	1582	3456	3404	1563
Grp Volume(v), veh/h	283	1043	587	859	1554	141	1380	1630	522	196	1130	674
Grp Sat Flow(s),veh/h/ln	1728	1702	1560	1728	1702	1560	1728	1702	1582	1728	1702	1563
Q Serve(g_s), s	7.5	33.2	33.2	16.5	42.2	10.2	33.5	38.6	40.5	8.1	39.4	39.4
Cycle Q Clear(g_c), s	7.5	33.2	33.2	16.5	42.2	10.2	33.5	38.6	40.5	8.1	39.4	39.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	179	779	357	393	1486	454	798	2211	685	241	925	425
V/C Ratio(X)	1.58	1.34	1.64	2.18	1.05	0.31	1.73	0.74	0.76	0.81	1.22	1.59
Avail Cap(c_a), veh/h	179	779	357	393	1486	454	798	2211	685	265	925	425
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.8	55.9	55.9	64.3	51.4	40.1	55.8	34.2	34.8	66.5	52.8	52.8
Incr Delay (d2), s/veh	287.4	160.8	301.7	541.3	36.3	0.1	333.1	1.2	4.5	14.4	109.5	275.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	31.3	42.7	36.7	22.4	3.9	51.2	15.6	15.9	4.0	30.4	47.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	356.2	216.7	357.6	605.6	87.7	40.2	388.8	35.4	39.3	81.0	162.3	327.9
LnGrp LOS	F	F	F	F	F	D	F	D	D	F	F	F
Approach Vol, veh/h		1913			2554			3532			2000	
Approach Delay, s/veh		280.6			259.2			174.1			210.2	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	39.0	45.0	13.0	48.0	15.6	68.4	22.0	39.0
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	33.5	* 39	7.5	42.2	11.1	* 62	16.5	33.2
Max Q Clear Time (g_c+I1), s	35.5	41.4	9.5	44.2	10.1	42.5	18.5	35.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	223.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	320	40	20	30	350	2789	10	150	3803	80
Future Volume (veh/h)	110	10	320	40	20	30	350	2789	10	150	3803	80
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	120	174	240	43	22	33	380	3032	11	163	4134	87
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	140	203	295	94	35	53	256	2618	9	120	2498	756
Arrive On Green	0.19	0.19	0.19	0.05	0.05	0.05	0.07	0.50	0.50	0.07	0.49	0.49
Sat Flow, veh/h	748	1085	1575	1781	673	1009	3456	5252	19	1781	5106	1545
Grp Volume(v), veh/h	294	0	240	43	0	55	380	1964	1079	163	4134	87
Grp Sat Flow(s),veh/h/ln	1833	0	1575	1781	0	1682	1728	1702	1867	1781	1702	1545
Q Serve(g_s), s	16.6	0.0	15.6	2.5	0.0	3.4	7.9	53.2	53.2	7.2	52.2	3.3
Cycle Q Clear(g_c), s	16.6	0.0	15.6	2.5	0.0	3.4	7.9	53.2	53.2	7.2	52.2	3.3
Prop In Lane	0.41		1.00	1.00		0.60	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	343	0	295	94	0	89	256	1697	931	120	2498	756
V/C Ratio(X)	0.86	0.00	0.81	0.46	0.00	0.62	1.49	1.16	1.16	1.36	1.66	0.12
Avail Cap(c_a), veh/h	550	0	472	534	0	504	256	1697	931	120	2498	756
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.0	0.0	41.6	49.1	0.0	49.5	49.4	26.8	26.8	49.8	27.3	14.8
Incr Delay (d2), s/veh	4.2	0.0	2.5	1.3	0.0	2.6	238.2	77.9	83.8	204.9	296.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	0.0	6.2	1.1	0.0	1.5	11.8	37.5	42.7	9.9	87.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.2	0.0	44.0	50.4	0.0	52.1	287.6	104.6	110.5	254.7	323.9	14.8
LnGrp LOS	D	A	D	D	A	D	F	F	F	F	F	B
Approach Vol, veh/h		534			98			3423			4384	
Approach Delay, s/veh		45.2			51.3			126.8			315.2	
Approach LOS		D			D			F			F	

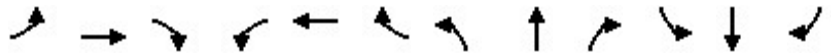
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	57.1		25.5	12.0	58.1		11.1
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 7.9	* 52		32.0	* 7.2	* 53		32.0
Max Q Clear Time (g_c+I1), s	9.9	54.2		18.6	9.2	55.2		5.4
Green Ext Time (p_c), s	0.0	0.0		0.7	0.0	0.0		0.1

Intersection Summary		
HCM 6th Ctrl Delay		218.6
HCM 6th LOS		F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	500	0	450	0	2499	350	0	2523	1720
Future Volume (veh/h)	0	0	0	500	0	450	0	2499	350	0	2523	1720
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				543	0	489	0	2716	0	0	2742	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				774	0	624	0	3551		0	3231	
Arrive On Green				0.22	0.00	0.22	0.00	0.63	0.00	0.00	0.63	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				543	0	489	0	2716	0	0	2742	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				9.6	0.0	10.9	0.0	22.8	0.0	0.0	28.2	0.0
Cycle Q Clear(g_c), s				9.6	0.0	10.9	0.0	22.8	0.0	0.0	28.2	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				774	0	624	0	3551		0	3231	
V/C Ratio(X)				0.70	0.00	0.78	0.00	0.76		0.00	0.85	
Avail Cap(c_a), veh/h				912	0	737	0	5359		0	4853	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				23.7	0.0	24.2	0.0	8.7	0.0	0.0	9.6	0.0
Incr Delay (d2), s/veh				2.0	0.0	4.7	0.0	0.2	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.9	0.0	3.8	0.0	5.7	0.0	0.0	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				25.7	0.0	28.9	0.0	8.8	0.0	0.0	10.3	0.0
LnGrp LOS				C	A	C	A	A		A	B	
Approach Vol, veh/h					1032			2716	A		2742	A
Approach Delay, s/veh					27.2			8.8			10.3	
Approach LOS					C			A			B	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	46.9		46.9		19.3			
Change Period (Y+Rc), s	* 5		5.0		4.5			
Max Green Setting (Gmax), s	* 63		63.0		17.5			
Max Q Clear Time (g_c+I1), s	24.8		30.2		12.9			
Green Ext Time (p_c), s	11.9		11.7		1.9			

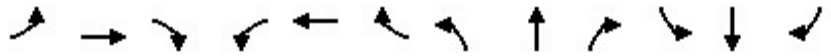
Intersection Summary		
HCM 6th Ctrl Delay		12.4
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1200	0	600	0	0	0	0	2279	560	0	2143	450
Future Volume (veh/h)	1200	0	600	0	0	0	0	2279	560	0	2143	450
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1304	0	652				0	2477	0	0	2329	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1687	0	937				0	3621		0	2716	
Arrive On Green	0.34	0.00	0.34				0.00	0.48	0.00	0.00	0.48	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1304	0	652				0	2477	0	0	2329	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	11.9	0.0	10.3				0.0	13.0	0.0	0.0	18.7	0.0
Cycle Q Clear(g_c), s	11.9	0.0	10.3				0.0	13.0	0.0	0.0	18.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1687	0	937				0	3621		0	2716	
V/C Ratio(X)	0.77	0.00	0.70				0.00	0.68		0.00	0.86	
Avail Cap(c_a), veh/h	1819	0	1010				0	4056		0	2998	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.2	0.0	14.7				0.0	10.2	0.0	0.0	11.6	0.0
Incr Delay (d2), s/veh	2.0	0.0	1.9				0.0	0.3	0.0	0.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	3.0				0.0	3.6	0.0	0.0	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.2	0.0	16.6				0.0	10.5	0.0	0.0	13.9	0.0
LnGrp LOS	B	A	B				A	B		A	B	
Approach Vol, veh/h		1956						2477	A		2329	A
Approach Delay, s/veh		17.0						10.5			13.9	
Approach LOS		B						B			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	29.4	21.7	29.4
Change Period (Y+Rc), s	* 4.7	4.5	4.7
Max Green Setting (Gmax), s	* 28	18.5	27.3
Max Q Clear Time (g_c+I1), s	15.0	13.9	20.7
Green Ext Time (p_c), s	6.6	3.3	4.0

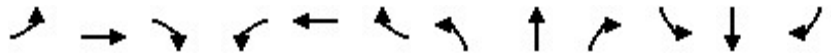
Intersection Summary	
HCM 6th Ctrl Delay	13.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	310	130	370	330	140	100	1719	110	230	2173	320
Future Volume (veh/h)	250	310	130	370	330	140	100	1719	110	230	2173	320
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	272	337	141	402	359	152	109	1868	120	250	2362	348
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	328	688	301	327	712	291	115	2807	690	305	2507	771
Arrive On Green	0.10	0.19	0.19	0.09	0.19	0.19	0.03	0.44	0.44	0.09	0.49	0.49
Sat Flow, veh/h	3456	3554	1553	3563	3741	1528	3456	6434	1581	3456	5106	1571
Grp Volume(v), veh/h	272	337	141	402	359	152	109	1868	120	250	2362	348
Grp Sat Flow(s),veh/h/ln	1728	1777	1553	1781	1870	1528	1728	1609	1581	1728	1702	1571
Q Serve(g_s), s	9.3	10.1	9.7	11.0	10.3	10.7	3.8	27.6	5.5	8.5	52.5	17.4
Cycle Q Clear(g_c), s	9.3	10.1	9.7	11.0	10.3	10.7	3.8	27.6	5.5	8.5	52.5	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	688	301	327	712	291	115	2807	690	305	2507	771
V/C Ratio(X)	0.83	0.49	0.47	1.23	0.50	0.52	0.94	0.67	0.17	0.82	0.94	0.45
Avail Cap(c_a), veh/h	505	1145	500	327	999	408	115	2807	690	363	2510	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	43.1	42.9	54.4	43.5	43.6	57.8	26.8	20.6	53.7	28.9	19.9
Incr Delay (d2), s/veh	3.8	0.8	1.7	127.1	0.9	2.5	66.1	0.5	0.1	10.2	8.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.5	3.9	10.7	4.9	4.3	2.7	10.1	2.1	4.0	21.5	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.1	43.9	44.5	181.5	44.4	46.1	123.9	27.4	20.7	63.9	37.2	20.8
LnGrp LOS	E	D	D	F	D	D	F	C	C	E	D	C
Approach Vol, veh/h		750			913			2097			2960	
Approach Delay, s/veh		48.8			105.1			32.0			37.5	
Approach LOS		D			F			C			D	

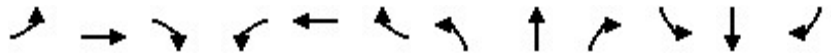
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	64.6	16.9	28.8	16.1	58.1	16.5	29.2
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	4.0	* 59	17.5	32.0	12.6	* 50	11.0	* 39
Max Q Clear Time (g_c+I1), s	5.8	54.5	11.3	12.7	10.5	29.6	13.0	12.1
Green Ext Time (p_c), s	0.0	4.3	0.1	4.5	0.0	10.9	0.0	4.1

Intersection Summary	
HCM 6th Ctrl Delay	46.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



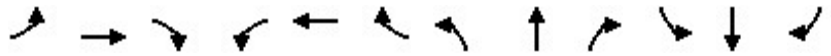
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	498	80	600	964	259	530	1380	100	263	970	260
Future Volume (veh/h)	170	498	80	600	964	259	530	1380	100	263	970	260
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	185	541	87	652	1048	282	576	1500	109	286	1054	283
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	227	623	273	663	1541	477	580	1551	474	296	1130	345
Arrive On Green	0.07	0.19	0.19	0.21	0.34	0.34	0.19	0.34	0.34	0.10	0.25	0.25
Sat Flow, veh/h	3110	3198	1400	3110	4595	1423	3110	4595	1406	3110	4595	1401
Grp Volume(v), veh/h	185	541	87	652	1048	282	576	1500	109	286	1054	283
Grp Sat Flow(s),veh/h/ln	1555	1599	1400	1555	1532	1423	1555	1532	1406	1555	1532	1401
Q Serve(g_s), s	8.4	23.4	7.6	29.9	28.1	23.5	26.4	45.9	8.0	13.1	32.1	27.3
Cycle Q Clear(g_c), s	8.4	23.4	7.6	29.9	28.1	23.5	26.4	45.9	8.0	13.1	32.1	27.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	623	273	663	1541	477	580	1551	474	296	1130	345
V/C Ratio(X)	0.82	0.87	0.32	0.98	0.68	0.59	0.99	0.97	0.23	0.97	0.93	0.82
Avail Cap(c_a), veh/h	315	671	294	663	1541	477	580	1552	475	296	1130	345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.4	55.8	49.4	56.0	41.0	39.4	58.1	46.6	34.0	64.5	52.8	51.0
Incr Delay (d2), s/veh	7.7	12.3	1.4	30.6	2.0	4.2	35.3	15.9	0.5	43.1	14.0	16.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	10.3	2.7	14.2	10.6	8.6	13.0	19.2	2.8	6.9	13.5	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	68.1	50.8	86.6	43.0	43.6	93.3	62.5	34.5	107.6	66.8	67.0
LnGrp LOS	E	E	D	F	D	D	F	E	C	F	E	E
Approach Vol, veh/h		813			1982			2185			1623	
Approach Delay, s/veh		67.4			57.4			69.2			74.0	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.2	41.0	15.9	54.0	19.1	54.1	36.0	33.9
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	26.7	* 35	14.5	46.0	13.6	* 48	30.5	30.0
Max Q Clear Time (g_c+I1), s	28.4	34.1	10.4	30.1	15.1	47.9	31.9	25.4
Green Ext Time (p_c), s	0.0	0.8	0.0	12.3	0.0	0.3	0.0	2.2

Intersection Summary	
HCM 6th Ctrl Delay	66.6
HCM 6th LOS	E

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



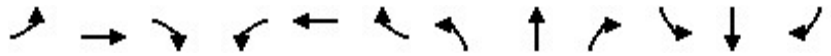
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	521	30	252	592	1290	10	790	91	470	230	120
Future Volume (veh/h)	580	521	30	252	592	1290	10	790	91	470	230	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	630	566	33	274	643	1402	11	859	99	511	250	130
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	207	1390	81	318	1942	595	13	495	57	218	1266	565
Arrive On Green	0.12	0.41	0.41	0.09	0.38	0.38	0.01	0.30	0.30	0.06	0.36	0.36
Sat Flow, veh/h	1781	3413	199	3456	5106	1564	1781	1646	190	3456	3554	1585
Grp Volume(v), veh/h	630	294	305	274	643	1402	11	0	958	511	250	130
Grp Sat Flow(s),veh/h/ln	1781	1777	1835	1728	1702	1564	1781	0	1836	1728	1777	1585
Q Serve(g_s), s	17.5	17.7	17.8	11.8	13.4	57.2	0.9	0.0	45.2	9.5	7.3	8.6
Cycle Q Clear(g_c), s	17.5	17.7	17.8	11.8	13.4	57.2	0.9	0.0	45.2	9.5	7.3	8.6
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.10	1.00		1.00
Lane Grp Cap(c), veh/h	207	724	747	318	1942	595	13	0	552	218	1266	565
V/C Ratio(X)	3.04	0.41	0.41	0.86	0.33	2.36	0.84	0.00	1.74	2.34	0.20	0.23
Avail Cap(c_a), veh/h	207	724	747	423	1942	595	83	0	552	218	1266	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.5	31.7	31.7	67.3	33.0	46.6	74.6	0.0	52.6	70.5	33.5	33.9
Incr Delay (d2), s/veh	930.6	0.1	0.1	10.6	0.0	615.7	37.9	0.0	338.7	617.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	61.3	7.4	7.6	5.5	5.4	123.2	0.6	0.0	72.2	22.9	3.1	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	997.0	31.8	31.8	77.9	33.1	662.3	112.5	0.0	391.3	688.0	33.5	34.0
LnGrp LOS	F	C	C	E	C	F	F	A	F	F	C	C
Approach Vol, veh/h		1229			2319			969			891	
Approach Delay, s/veh		526.6			418.8			388.2			408.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	62.1	6.6	58.7	18.9	66.2	15.0	50.3
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	17.5	* 57	7.0	* 47	* 18	* 57	9.5	* 45
Max Q Clear Time (g_c+I1), s	19.5	59.2	2.9	10.6	13.8	19.8	11.5	47.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.5	0.1	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	436.2
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	470	493	240	90	1189	460	970	2170	130	200	1060	310
Future Volume (veh/h)	470	493	240	90	1189	460	970	2170	130	200	1060	310
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	511	536	261	98	1292	500	1054	2359	141	217	1152	337
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	1539	478	142	1168	363	798	2206	676	179	1291	401
Arrive On Green	0.11	0.30	0.30	0.04	0.23	0.23	0.23	0.43	0.43	0.05	0.25	0.25
Sat Flow, veh/h	3456	5106	1585	3456	5106	1585	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	511	536	261	98	1292	500	1054	2359	141	217	1152	337
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1585	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	16.5	11.9	20.0	4.1	33.2	33.2	33.5	62.7	8.2	7.5	31.6	29.3
Cycle Q Clear(g_c), s	16.5	11.9	20.0	4.1	33.2	33.2	33.5	62.7	8.2	7.5	31.6	29.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	1539	478	142	1168	363	798	2206	676	179	1291	401
V/C Ratio(X)	1.30	0.35	0.55	0.69	1.11	1.38	1.32	1.07	0.21	1.21	0.89	0.84
Avail Cap(c_a), veh/h	393	1539	478	202	1168	363	798	2206	676	179	1291	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	39.6	42.4	68.7	56.0	56.0	55.8	41.2	25.7	68.8	52.3	51.4
Incr Delay (d2), s/veh	152.7	0.0	0.7	2.2	60.3	186.9	153.2	40.8	0.1	136.9	7.9	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.4	4.8	7.6	1.8	20.2	31.6	31.0	32.8	2.9	6.6	13.9	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	217.0	39.6	43.1	70.9	116.3	242.8	209.0	82.0	25.8	205.7	60.2	65.4
LnGrp LOS	F	D	D	E	F	F	F	F	C	F	E	E
Approach Vol, veh/h		1308			1890			3554			1706	
Approach Delay, s/veh		109.6			147.4			117.4			79.8	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	70.1	11.5	50.5	39.0	44.1	22.0	40.0
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	7.5	* 63	8.5	* 41	33.5	* 37	16.5	33.2
Max Q Clear Time (g_c+I1), s	9.5	64.7	6.1	22.0	35.5	33.6	18.5	35.2
Green Ext Time (p_c), s	0.0	0.0	0.0	1.1	0.0	1.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	115.3
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



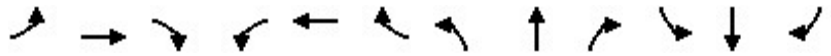
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	430	50	70	420	140	110	310	80	40	80	180
Future Volume (veh/h)	143	430	50	70	420	140	110	310	80	40	80	180
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	155	467	54	76	457	152	120	337	87	43	87	196
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	165	795	355	117	634	283	188	419	355	114	344	291
Arrive On Green	0.09	0.22	0.22	0.07	0.18	0.18	0.11	0.22	0.22	0.06	0.18	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	155	467	54	76	457	152	120	337	87	43	87	196
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	4.3	5.8	1.4	2.1	6.0	4.3	3.2	8.5	2.2	1.1	2.0	5.7
Cycle Q Clear(g_c), s	4.3	5.8	1.4	2.1	6.0	4.3	3.2	8.5	2.2	1.1	2.0	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	795	355	117	634	283	188	419	355	114	344	291
V/C Ratio(X)	0.94	0.59	0.15	0.65	0.72	0.54	0.64	0.81	0.25	0.38	0.25	0.67
Avail Cap(c_a), veh/h	165	1798	802	180	1769	789	826	867	735	934	980	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	17.2	15.5	22.6	19.2	18.5	21.3	18.2	15.8	22.3	17.3	18.9
Incr Delay (d2), s/veh	51.5	0.3	0.1	6.0	0.6	0.6	1.3	1.4	0.1	0.8	0.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	1.8	0.4	0.9	2.0	1.5	1.3	3.4	0.7	0.5	0.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.9	17.5	15.5	28.7	19.8	19.1	22.6	19.6	15.9	23.1	17.5	19.9
LnGrp LOS	E	B	B	C	B	B	C	B	B	C	B	B
Approach Vol, veh/h		676			685			544			326	
Approach Delay, s/veh		30.2			20.6			19.7			19.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	14.3	10.6	14.6	7.7	16.6	8.7	16.6
Change Period (Y+Rc), s	* 5.4	* 5.5	5.4	* 5.5	4.5	* 5.5	5.5	* 5.5
Max Green Setting (Gmax), s	* 4.6	* 25	23.0	* 26	5.0	* 25	26.0	* 23
Max Q Clear Time (g_c+I1), s	6.3	8.0	5.2	7.7	4.1	7.8	3.1	10.5
Green Ext Time (p_c), s	0.0	0.8	0.0	0.3	0.0	0.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	23.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



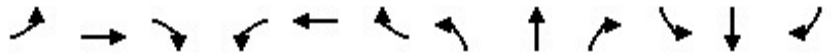
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	321	20	145	765	330	10	1620	212	100	1180	520
Future Volume (veh/h)	240	321	20	145	765	330	10	1620	212	100	1180	520
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	261	349	22	158	832	359	11	1761	230	109	1283	565
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	591	501	182	609	516	39	1220	544	134	1409	774
Arrive On Green	0.09	0.32	0.32	0.10	0.33	0.33	0.02	0.34	0.34	0.08	0.40	0.40
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	261	349	22	158	832	359	11	1761	230	109	1283	565
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	12.5	21.3	1.3	11.9	44.2	26.8	0.8	46.6	15.1	8.2	46.3	38.4
Cycle Q Clear(g_c), s	12.5	21.3	1.3	11.9	44.2	26.8	0.8	46.6	15.1	8.2	46.3	38.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	591	501	182	609	516	39	1220	544	134	1409	774
V/C Ratio(X)	1.59	0.59	0.04	0.87	1.37	0.70	0.28	1.44	0.42	0.81	0.91	0.73
Avail Cap(c_a), veh/h	164	591	501	221	609	516	249	1220	544	322	1409	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.6	39.0	32.2	60.0	45.8	39.9	65.3	44.6	34.2	61.8	38.7	27.6
Incr Delay (d2), s/veh	292.7	1.1	0.0	22.8	175.0	3.4	1.4	204.1	0.2	4.5	8.9	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	9.5	0.5	6.3	49.0	10.4	0.4	53.9	5.6	3.7	20.5	14.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	354.3	40.1	32.2	82.8	220.7	43.3	66.7	248.6	34.4	66.3	47.6	30.6
LnGrp LOS	F	D	C	F	F	D	E	F	C	E	D	C
Approach Vol, veh/h		632			1349			2002			1957	
Approach Delay, s/veh		169.6			157.4			223.0			43.7	
Approach LOS		F			F			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	51.0	7.5	60.2	18.3	49.7	14.7	53.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	12.5	44.2	19.0	* 53	16.8	39.9	24.5	46.6
Max Q Clear Time (g_c+I1), s	14.5	46.2	2.8	48.3	13.9	23.3	10.2	48.6
Green Ext Time (p_c), s	0.0	0.0	0.0	2.6	0.0	1.0	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay	143.4	
HCM 6th LOS	F	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



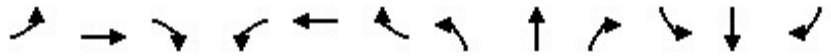
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	283	370	10	80	920	221	10	943	50	132	729	350
Future Volume (veh/h)	283	370	10	80	920	221	10	943	50	132	729	350
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	308	402	11	87	1000	240	11	1025	54	143	792	380
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	184	914	25	107	672	161	13	778	41	101	643	308
Arrive On Green	0.10	0.50	0.50	0.06	0.46	0.46	0.01	0.23	0.23	0.06	0.28	0.28
Sat Flow, veh/h	1781	1812	50	1781	1458	350	1781	3434	181	1781	2332	1115
Grp Volume(v), veh/h	308	0	413	87	0	1240	11	530	549	143	603	569
Grp Sat Flow(s),veh/h/ln	1781	0	1861	1781	0	1807	1781	1777	1838	1781	1777	1670
Q Serve(g_s), s	15.5	0.0	21.2	7.2	0.0	69.2	0.9	34.0	34.0	8.5	41.4	41.4
Cycle Q Clear(g_c), s	15.5	0.0	21.2	7.2	0.0	69.2	0.9	34.0	34.0	8.5	41.4	41.4
Prop In Lane	1.00		0.03	1.00		0.19	1.00		0.10	1.00		0.67
Lane Grp Cap(c), veh/h	184	0	939	107	0	834	13	403	417	101	490	461
V/C Ratio(X)	1.67	0.00	0.44	0.81	0.00	1.49	0.84	1.32	1.32	1.42	1.23	1.24
Avail Cap(c_a), veh/h	184	0	939	177	0	834	59	403	417	101	490	461
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.3	0.0	23.7	69.7	0.0	40.4	74.4	58.0	58.0	70.7	54.3	54.3
Incr Delay (d2), s/veh	325.6	0.0	0.1	5.5	0.0	225.6	37.8	159.2	158.8	235.7	120.2	123.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.5	0.0	8.9	3.4	0.0	80.8	0.6	32.5	33.6	10.4	34.1	32.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	392.9	0.0	23.8	75.2	0.0	266.0	112.2	217.2	216.8	306.5	174.5	177.7
LnGrp LOS	F	A	C	E	A	F	F	F	F	F	F	F
Approach Vol, veh/h		721			1327			1090			1315	
Approach Delay, s/veh		181.4			253.5			215.9			190.2	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	76.0	5.6	48.4	13.5	82.5	13.0	41.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 7	4.5	* 6.8	4.5	7.0
Max Green Setting (Gmax), s	15.5	69.2	5.0	* 38	14.9	* 70	8.5	34.0
Max Q Clear Time (g_c+I1), s	17.5	71.2	2.9	43.4	9.2	23.2	10.5	36.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		214.0
HCM 6th LOS		F

Notes

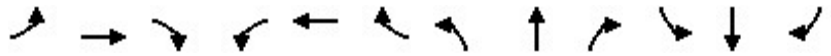
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	10	190	20	20	170	180	1057	20	50	921	125
Future Volume (veh/h)	192	10	190	20	20	170	180	1057	20	50	921	125
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	209	11	207	22	22	185	196	1149	22	54	1001	136
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	384	325	45	282	239	276	1430	638	142	1430	638
Arrive On Green	0.08	0.21	0.21	0.03	0.15	0.15	0.08	0.40	0.40	0.08	0.40	0.40
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	209	11	207	22	22	185	196	1149	22	54	1001	136
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.7	0.3	7.5	0.8	0.6	7.0	3.5	17.9	0.5	1.8	14.7	3.5
Cycle Q Clear(g_c), s	3.7	0.3	7.5	0.8	0.6	7.0	3.5	17.9	0.5	1.8	14.7	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	384	325	45	282	239	276	1430	638	142	1430	638
V/C Ratio(X)	0.76	0.03	0.64	0.49	0.08	0.77	0.71	0.80	0.03	0.38	0.70	0.21
Avail Cap(c_a), veh/h	276	537	455	142	537	455	276	1758	784	512	2495	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	19.9	22.8	30.1	22.9	25.6	28.1	16.5	11.3	27.4	15.6	12.2
Incr Delay (d2), s/veh	11.5	0.0	2.1	7.9	0.1	5.3	8.3	2.3	0.0	1.7	0.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.1	2.6	0.4	0.3	2.7	1.6	5.9	0.2	0.7	4.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.7	19.9	24.8	38.0	23.0	30.9	36.4	18.8	11.4	29.0	16.2	12.4
LnGrp LOS	D	B	C	D	C	C	D	B	B	C	B	B
Approach Vol, veh/h		427			229			1367			1191	
Approach Delay, s/veh		32.0			30.8			21.2			16.4	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	29.7	6.1	17.4	9.5	29.7	9.5	14.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	44.0	5.0	18.0	18.0	31.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	5.5	16.7	2.8	9.5	3.8	19.9	5.7	9.0
Green Ext Time (p_c), s	0.0	7.3	0.0	0.5	0.1	5.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C



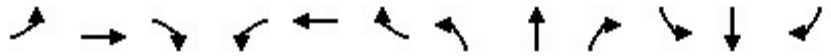
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	120	110	60	250	58	240	1412	80	56	1055	200
Future Volume (veh/h)	400	120	110	60	250	58	240	1412	80	56	1055	200
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	435	130	120	65	272	63	261	1535	87	61	1147	217
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	456	237	219	84	264	61	327	1607	717	78	1424	635
Arrive On Green	0.13	0.26	0.26	0.05	0.18	0.18	0.09	0.45	0.45	0.04	0.40	0.40
Sat Flow, veh/h	3456	895	826	1781	1469	340	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	435	0	250	65	0	335	261	1535	87	61	1147	217
Grp Sat Flow(s),veh/h/ln	1728	0	1722	1781	0	1809	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	12.9	0.0	12.9	3.7	0.0	18.5	7.6	42.9	3.3	3.5	29.4	9.8
Cycle Q Clear(g_c), s	12.9	0.0	12.9	3.7	0.0	18.5	7.6	42.9	3.3	3.5	29.4	9.8
Prop In Lane	1.00		0.48	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	456	0	456	84	0	325	327	1607	717	78	1424	635
V/C Ratio(X)	0.95	0.00	0.55	0.78	0.00	1.03	0.80	0.96	0.12	0.78	0.81	0.34
Avail Cap(c_a), veh/h	456	0	456	116	0	325	671	1677	748	86	1424	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	0.0	32.6	48.5	0.0	42.2	45.7	27.2	16.4	48.7	27.3	21.4
Incr Delay (d2), s/veh	30.5	0.0	0.8	19.6	0.0	58.1	1.7	12.5	0.0	32.7	3.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	5.1	2.1	0.0	13.4	3.2	18.6	1.1	2.2	11.8	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.8	0.0	33.4	68.1	0.0	100.4	47.4	39.7	16.4	81.4	30.6	21.6
LnGrp LOS	E	A	C	E	A	F	D	D	B	F	C	C
Approach Vol, veh/h		685			400			1883			1425	
Approach Delay, s/veh		59.7			95.1			39.7			31.4	
Approach LOS		E			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	47.4	18.1	23.2	9.0	52.7	9.3	32.0
Change Period (Y+Rc), s	* 4.6	* 6.1	4.5	* 4.7	4.5	* 6.1	4.5	* 4.7
Max Green Setting (Gmax), s	* 28	* 33	13.6	* 19	5.0	* 49	6.7	* 25
Max Q Clear Time (g_c+I1), s	9.6	31.4	14.9	20.5	5.5	44.9	5.7	14.9
Green Ext Time (p_c), s	0.1	0.7	0.0	0.0	0.0	1.7	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	45.2
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	494	30	201	80	20	290	140	1840	90	240	1090	215
Future Volume (veh/h)	494	30	201	80	20	290	140	1840	90	240	1090	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	537	33	218	87	22	315	152	2000	98	261	1185	234
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	18	116	172	44	190	174	1469	655	184	1490	664
Arrive On Green	0.24	0.24	0.24	0.12	0.12	0.12	0.10	0.41	0.41	0.10	0.42	0.42
Sat Flow, veh/h	1176	72	477	1436	363	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	788	0	0	109	0	315	152	2000	98	261	1185	234
Grp Sat Flow(s),veh/h/ln	1726	0	0	1799	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	36.5	0.0	0.0	8.5	0.0	18.0	12.6	62.0	5.8	15.5	43.6	15.1
Cycle Q Clear(g_c), s	36.5	0.0	0.0	8.5	0.0	18.0	12.6	62.0	5.8	15.5	43.6	15.1
Prop In Lane	0.68		0.28	0.80		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	420	0	0	216	0	190	174	1469	655	184	1490	664
V/C Ratio(X)	1.88	0.00	0.00	0.51	0.00	1.66	0.88	1.36	0.15	1.42	0.80	0.35
Avail Cap(c_a), veh/h	420	0	0	216	0	190	178	1469	655	184	1490	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	0.0	0.0	61.8	0.0	66.0	66.8	44.0	27.5	67.3	38.0	29.7
Incr Delay (d2), s/veh	403.5	0.0	0.0	1.9	0.0	317.5	34.7	167.2	0.1	216.9	3.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	62.9	0.0	0.0	4.0	0.0	24.1	7.3	59.7	2.2	17.9	18.6	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	460.2	0.0	0.0	63.7	0.0	383.5	101.5	211.2	27.6	284.1	41.0	30.0
LnGrp LOS	F	A	A	E	A	F	F	F	C	F	D	C
Approach Vol, veh/h		788			424			2250			1680	
Approach Delay, s/veh		460.2			301.3			195.8			77.3	
Approach LOS		F			F			F			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.0	66.5		41.0	19.1	67.4		22.5
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	15.5	62.0		36.5	15.0	62.5		18.0
Max Q Clear Time (g_c+I1), s	17.5	64.0		38.5	14.6	45.6		20.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	7.7		0.0

Intersection Summary	
HCM 6th Ctrl Delay	206.3
HCM 6th LOS	F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	480	277	510	2184	1278	1280
Future Volume (veh/h)	480	277	510	2184	1278	1280
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	522	301	554	2374	1389	1391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	593	655	430	2526	1484	934
Arrive On Green	0.17	0.17	0.24	0.71	0.42	0.42
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	522	301	554	2374	1389	1391
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	15.6	14.5	25.5	61.4	39.5	44.1
Cycle Q Clear(g_c), s	15.6	14.5	25.5	61.4	39.5	44.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	593	655	430	2526	1484	934
V/C Ratio(X)	0.88	0.46	1.29	0.94	0.94	1.49
Avail Cap(c_a), veh/h	1390	1020	430	2537	1484	934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	22.5	40.1	13.3	29.4	18.0
Incr Delay (d2), s/veh	1.7	0.2	146.4	7.6	11.3	226.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	27.8	18.7	17.2	82.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.4	22.6	186.4	20.9	40.7	244.0
LnGrp LOS	D	C	F	C	D	F
Approach Vol, veh/h	823			2928	2780	
Approach Delay, s/veh	36.5			52.2	142.4	
Approach LOS	D			D	F	

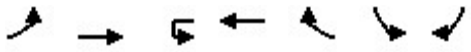
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	31.0	51.0		23.6		82.0
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9
Max Green Setting (Gmax), s	25.5	* 44		42.5		* 75
Max Q Clear Time (g_c+I1), s	27.5	46.1		17.6		63.4
Green Ext Time (p_c), s	0.0	0.0		0.6		5.8

Intersection Summary	
HCM 6th Ctrl Delay	88.6
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	1021	1633	0	1871	360	80	637
Future Volume (veh/h)	1021	1633	0	1871	360	80	637
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	1110	1775		2034	391	87	692
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	917	2684		1618	722	291	259
Arrive On Green	0.27	0.76		0.46	0.46	0.16	0.16
Sat Flow, veh/h	3456	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	1110	1775		2034	391	87	692
Grp Sat Flow(s),veh/h/ln	1728	1777		1777	1585	1781	1585
Q Serve(g_s), s	39.8	36.6		68.3	26.8	6.4	24.5
Cycle Q Clear(g_c), s	39.8	36.6		68.3	26.8	6.4	24.5
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	917	2684		1618	722	291	259
V/C Ratio(X)	1.21	0.66		1.26	0.54	0.30	2.67
Avail Cap(c_a), veh/h	917	2684		1618	722	291	259
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	9.0		40.9	29.5	55.2	62.8
Incr Delay (d2), s/veh	105.0	0.5		120.9	0.5	0.2	763.8
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.0	11.2		54.9	9.8	2.8	64.5
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	160.1	9.5		161.7	30.0	55.4	826.5
LnGrp LOS	F	A		F	C	E	F
Approach Vol, veh/h		2885		2425		779	
Approach Delay, s/veh		67.4		140.5		740.4	
Approach LOS		E		F		F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	45.0	75.0			120.0	30.0
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 40	* 68			* 1E2	24.5
Max Q Clear Time (g_c+I1), s	41.8	70.3			38.6	26.5
Green Ext Time (p_c), s	0.0	0.0			4.8	0.0

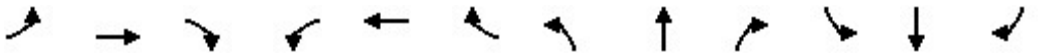
Intersection Summary	
HCM 6th Ctrl Delay	182.6
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

The Preserve
Cumulative plus Project Conditions
1: Mather Field Rd & US-50 WB Ramps
PM Peak



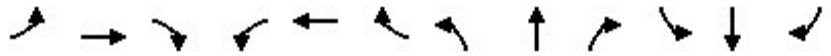
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	590	0	490	0	1300	1670	0	960	620
Future Volume (veh/h)	0	0	0	590	0	490	0	1300	1670	0	960	620
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				587	76	533	0	1413	0	0	1043	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	2	2	0	2	2	0	2	2
Cap, veh/h				727	81	570	0	1848		0	1848	
Arrive On Green				0.41	0.41	0.41	0.00	0.36	0.00	0.00	0.36	0.00
Sat Flow, veh/h				1781	199	1397	0	5274	1585	0	5274	1585
Grp Volume(v), veh/h				587	0	609	0	1413	0	0	1043	0
Grp Sat Flow(s),veh/h/ln				1781	0	1596	0	1702	1585	0	1702	1585
Q Serve(g_s), s				12.5	0.0	15.7	0.0	10.5	0.0	0.0	7.1	0.0
Cycle Q Clear(g_c), s				12.5	0.0	15.7	0.0	10.5	0.0	0.0	7.1	0.0
Prop In Lane				1.00		0.88	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				727	0	652	0	1848		0	1848	
V/C Ratio(X)				0.81	0.00	0.93	0.00	0.76		0.00	0.56	
Avail Cap(c_a), veh/h				727	0	652	0	2666		0	2749	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				11.2	0.0	12.2	0.0	12.1	0.0	0.0	11.0	0.0
Incr Delay (d2), s/veh				6.2	0.0	20.5	0.0	0.4	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.9	0.0	7.8	0.0	2.7	0.0	0.0	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.5	0.0	32.7	0.0	12.6	0.0	0.0	11.1	0.0
LnGrp LOS				B	A	C	A	B		A	B	
Approach Vol, veh/h					1196			1413	A		1043	A
Approach Delay, s/veh					25.2			12.6			11.1	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		6		8							
Phs Duration (G+Y+Rc), s	20.6		20.6		22.5							
Change Period (Y+Rc), s	* 5		5.0		4.9							
Max Green Setting (Gmax), s	* 23		22.5		17.6							
Max Q Clear Time (g_c+I1), s	9.1		12.5		17.7							
Green Ext Time (p_c), s	2.3		3.0		0.0							

Intersection Summary		
HCM 6th Ctrl Delay	16.3	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	0	820	0	0	0	0	2320	890	0	1050	300
Future Volume (veh/h)	580	0	820	0	0	0	0	2320	890	0	1050	300
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	948	0	550				0	2522	0	0	1141	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2				0	2	2	0	2	2
Cap, veh/h	1255	0	557				0	2810		0	2810	
Arrive On Green	0.35	0.00	0.35				0.00	0.55	0.00	0.00	0.55	0.00
Sat Flow, veh/h	3563	0	1581				0	5443	0	0	5274	1585
Grp Volume(v), veh/h	948	0	550				0	2522	0	0	1141	0
Grp Sat Flow(s),veh/h/ln	1781	0	1581				0	1702	0	0	1702	1585
Q Serve(g_s), s	25.1	0.0	36.9				0.0	46.8	0.0	0.0	13.8	0.0
Cycle Q Clear(g_c), s	25.1	0.0	36.9				0.0	46.8	0.0	0.0	13.8	0.0
Prop In Lane	1.00		1.00				0.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	1255	0	557				0	2810		0	2810	
V/C Ratio(X)	0.76	0.00	0.99				0.00	0.90		0.00	0.41	
Avail Cap(c_a), veh/h	1255	0	557				0	3922		0	3946	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	30.5	0.0	34.3				0.0	21.3	0.0	0.0	13.9	0.0
Incr Delay (d2), s/veh	2.4	0.0	34.8				0.0	1.9	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	19.1				0.0	16.7	0.0	0.0	4.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.9	0.0	69.1				0.0	23.2	0.0	0.0	13.9	0.0
LnGrp LOS	C	A	E				A	C		A	B	
Approach Vol, veh/h		1498						2522	A		1141	A
Approach Delay, s/veh		46.2						23.2			13.9	
Approach LOS		D						C			B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	63.7	43.0	63.7
Change Period (Y+Rc), s	* 5	* 5.4	5.0
Max Green Setting (Gmax), s	* 83	* 38	82.0
Max Q Clear Time (g_c+I1), s	15.8	38.9	48.8
Green Ext Time (p_c), s	2.9	0.0	9.9

Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1840	250	210	2410	690	290
Future Volume (veh/h)	1840	250	210	2410	690	290
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	2000	0	228	2620	750	315
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	2382		261	3413	826	379
Arrive On Green	0.47	0.00	0.15	0.67	0.24	0.24
Sat Flow, veh/h	5443	0	1781	5274	3456	1585
Grp Volume(v), veh/h	2000	0	228	2620	750	315
Grp Sat Flow(s),veh/h/ln	1702	0	1781	1702	1728	1585
Q Serve(g_s), s	31.6	0.0	11.5	32.1	19.4	17.4
Cycle Q Clear(g_c), s	31.6	0.0	11.5	32.1	19.4	17.4
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2382		261	3413	826	379
V/C Ratio(X)	0.84		0.87	0.77	0.91	0.83
Avail Cap(c_a), veh/h	2420		265	3463	1093	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	38.4	10.4	34.0	33.2
Incr Delay (d2), s/veh	3.1	0.0	24.6	1.3	7.6	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	6.6	9.2	8.5	7.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.6	0.0	63.0	11.6	41.7	40.0
LnGrp LOS	C		E	B	D	D
Approach Vol, veh/h	2000	A		2848	1065	
Approach Delay, s/veh	24.6			15.7	41.2	
Approach LOS	C			B	D	

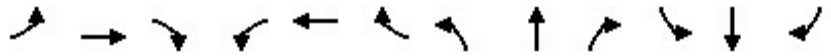
Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	66.5			18.6	47.9	25.5
Change Period (Y+Rc), s	5.0			* 5.1	5.0	3.5
Max Green Setting (Gmax), s	62.4			* 14	43.6	29.1
Max Q Clear Time (g_c+I1), s	34.1			13.5	33.6	21.4
Green Ext Time (p_c), s	27.1			0.0	9.3	0.6

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	790	0	450	0	1862	1762	0	1133	620
Future Volume (veh/h)	0	0	0	790	0	450	0	1862	1762	0	1133	620
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				859	0	489	0	2024	0	0	1232	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				1200	0	550	0	2275		0	2275	
Arrive On Green				0.35	0.00	0.35	0.00	0.45	0.00	0.00	0.45	0.00
Sat Flow, veh/h				3456	0	1585	0	5274	2790	0	5274	1585
Grp Volume(v), veh/h				859	0	489	0	2024	0	0	1232	0
Grp Sat Flow(s),veh/h/ln				1728	0	1585	0	1702	1395	0	1702	1585
Q Serve(g_s), s				9.5	0.0	12.8	0.0	16.0	0.0	0.0	7.7	0.0
Cycle Q Clear(g_c), s				9.5	0.0	12.8	0.0	16.0	0.0	0.0	7.7	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				1200	0	550	0	2275		0	2275	
V/C Ratio(X)				0.72	0.00	0.89	0.00	0.89		0.00	0.54	
Avail Cap(c_a), veh/h				1220	0	560	0	2373		0	2373	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				12.5	0.0	13.5	0.0	11.2	0.0	0.0	8.9	0.0
Incr Delay (d2), s/veh				2.0	0.0	15.9	0.0	4.3	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.2	0.0	6.0	0.0	4.5	0.0	0.0	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				14.4	0.0	29.4	0.0	15.5	0.0	0.0	9.0	0.0
LnGrp LOS				B	A	C	A	B		A	A	
Approach Vol, veh/h					1348			2024	A		1232	A
Approach Delay, s/veh					19.9			15.5			9.0	
Approach LOS					B			B			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	24.2		24.2		19.7			
Change Period (Y+Rc), s	4.6		4.6		4.5			
Max Green Setting (Gmax), s	20.4		20.4		15.5			
Max Q Clear Time (g_c+I1), s	18.0		9.7		14.8			
Green Ext Time (p_c), s	1.6		2.6		0.5			

Intersection Summary		
HCM 6th Ctrl Delay		15.0
HCM 6th LOS		B

Notes

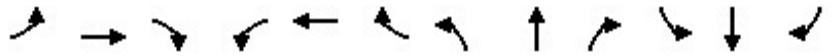
Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL2	EBL	EBT	EBR	WBR	WBR2	NBT	NBR	NBR2	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	900	10	160	981	740	130	2034	460	10	1353	140
Future Volume (vph)	900	10	160	981	740	130	2034	460	10	1353	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.8	6.8	6.8	4.5		4.6			4.6	4.0
Lane Util. Factor		0.91	0.86	0.91	0.88		0.86			0.91	1.00
Frpb, ped/bikes		1.00	0.98	0.98	1.00		1.00			1.00	0.97
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.89	0.85	0.85		0.97			1.00	0.85
Flt Protected		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1610	2797	1409	2787		6202			5085	1540
Flt Permitted		0.95	1.00	1.00	1.00		1.00			1.00	1.00
Satd. Flow (perm)		1610	2797	1409	2787		6202			5085	1540
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	978	11	174	1066	804	141	2211	500	11	1471	152
RTOR Reduction (vph)	0	0	26	38	59	0	1	0	0	0	0
Lane Group Flow (vph)	0	979	691	495	886	0	2721	0	0	1471	152
Confl. Peds. (#/hr)	11			11	3				3		11
Confl. Bikes (#/hr)									8		5
Turn Type	Split	Split	NA	Perm	Prot		NA			NA	Free
Protected Phases	4	4	4		5		6			2	
Permitted Phases				4							Free
Actuated Green, G (s)		37.2	37.2	37.2	26.5		40.4			71.4	120.0
Effective Green, g (s)		37.2	37.2	37.2	26.5		40.4			71.4	120.0
Actuated g/C Ratio		0.31	0.31	0.31	0.22		0.34			0.60	1.00
Clearance Time (s)		6.8	6.8	6.8	4.5		4.6			4.6	
Vehicle Extension (s)		1.0	1.0	1.0	3.0		1.0			1.0	
Lane Grp Cap (vph)		499	867	436	615		2088			3025	1540
v/s Ratio Prot		c0.61	0.25		c0.32		c0.44			0.29	
v/s Ratio Perm				0.35							0.10
v/c Ratio		1.96	1.15dr	1.14	1.44		1.30			0.49	0.10
Uniform Delay, d1		41.4	37.9	41.4	46.8		39.8			13.8	0.0
Progression Factor		1.00	1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2		440.1	4.8	85.6	207.3		140.1			0.0	0.1
Delay (s)		481.5	42.8	127.0	254.0		179.9			13.9	0.1
Level of Service		F	D	F	F		F			B	A
Approach Delay (s)			255.6				179.9			12.6	
Approach LOS			F				F			B	

Intersection Summary			
HCM 2000 Control Delay	175.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.9
Intersection Capacity Utilization	113.8%	ICU Level of Service	H
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	690	300	40	170	190	714	70	1270	20	534	1660	310
Future Volume (veh/h)	690	300	40	170	190	714	70	1270	20	534	1660	310
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	750	326	43	185	207	776	76	1380	22	580	1804	337
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	531	1382	178	235	401	1230	118	1497	24	623	2224	685
Arrive On Green	0.15	0.30	0.30	0.07	0.21	0.21	0.03	0.29	0.29	0.18	0.44	0.44
Sat Flow, veh/h	3456	4572	588	3563	1870	3070	3456	5175	83	3456	5106	1572
Grp Volume(v), veh/h	750	241	128	185	207	776	76	908	494	580	1804	337
Grp Sat Flow(s),veh/h/ln	1728	1702	1756	1781	1870	1535	1728	1702	1854	1728	1702	1572
Q Serve(g_s), s	21.5	7.4	7.7	7.2	13.7	28.6	3.0	36.2	36.2	23.1	43.1	21.6
Cycle Q Clear(g_c), s	21.5	7.4	7.7	7.2	13.7	28.6	3.0	36.2	36.2	23.1	43.1	21.6
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	531	1029	531	235	401	1230	118	985	536	623	2224	685
V/C Ratio(X)	1.41	0.23	0.24	0.79	0.52	0.63	0.64	0.92	0.92	0.93	0.81	0.49
Avail Cap(c_a), veh/h	531	1029	531	430	401	1230	128	1105	601	654	2412	743
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.2	36.7	36.8	64.4	48.5	34.3	66.7	48.2	48.2	56.5	34.5	28.4
Incr Delay (d2), s/veh	196.6	0.0	0.1	2.2	0.5	0.8	6.6	11.0	17.7	19.0	1.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.7	3.1	3.3	3.3	6.3	10.5	1.4	16.5	19.0	11.5	17.4	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	255.8	36.7	36.8	66.6	49.1	35.1	73.3	59.2	65.8	75.5	36.3	28.6
LnGrp LOS	F	D	D	E	D	D	E	E	E	E	D	C
Approach Vol, veh/h		1119			1168			1478			2721	
Approach Delay, s/veh		183.5			42.6			62.1			43.7	
Approach LOS		F			D			E			D	

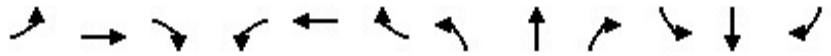
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	66.6	27.0	36.0	30.7	46.2	14.7	48.3
Change Period (Y+Rc), s	5.5	* 5.7	5.5	* 6	5.5	* 5.7	5.5	* 6
Max Green Setting (Gmax), s	5.3	* 66	21.5	* 30	26.5	* 45	16.9	* 34
Max Q Clear Time (g_c+I1), s	15.6	45.1	23.5	30.6	25.1	38.2	9.2	9.7
Green Ext Time (p_c), s	0.0	5.3	0.0	0.0	0.1	2.3	0.1	0.7

Intersection Summary	
HCM 6th Ctrl Delay	71.8
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



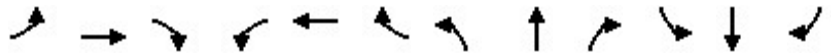
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	590	1430	760	970	970	210	1220	950	440	180	1520	420
Future Volume (veh/h)	590	1430	760	970	970	210	1220	950	440	180	1520	420
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	641	1554	826	1054	1054	228	1326	1033	478	196	1652	457
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	541	920	416	369	1127	336	679	2034	616	241	1078	292
Arrive On Green	0.16	0.27	0.27	0.11	0.22	0.22	0.20	0.40	0.40	0.07	0.27	0.27
Sat Flow, veh/h	3456	3404	1539	3456	5106	1522	3456	5106	1547	3456	3966	1074
Grp Volume(v), veh/h	641	1554	826	1054	1054	228	1326	1033	478	196	1413	696
Grp Sat Flow(s),veh/h/ln	1728	1702	1539	1728	1702	1522	1728	1702	1547	1728	1702	1636
Q Serve(g_s), s	22.7	39.2	39.2	15.5	29.4	19.9	28.5	22.1	39.0	8.1	39.4	39.4
Cycle Q Clear(g_c), s	22.7	39.2	39.2	15.5	29.4	19.9	28.5	22.1	39.0	8.1	39.4	39.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.66
Lane Grp Cap(c), veh/h	541	920	416	369	1127	336	679	2034	616	241	925	445
V/C Ratio(X)	1.18	1.69	1.99	2.85	0.94	0.68	1.95	0.51	0.78	0.81	1.53	1.57
Avail Cap(c_a), veh/h	541	920	416	369	1127	336	679	2034	616	274	925	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.2	52.9	52.9	64.8	55.5	51.8	58.3	32.9	38.0	66.5	52.8	52.8
Incr Delay (d2), s/veh	100.8	314.6	452.0	841.4	13.8	4.5	433.9	0.1	5.6	13.3	242.8	265.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.3	56.5	67.0	49.9	13.7	7.9	53.1	8.9	15.3	4.0	47.6	48.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	161.9	367.5	504.9	906.1	69.3	56.3	492.1	33.0	43.6	79.8	295.6	318.3
LnGrp LOS	F	F	F	F	E	E	F	C	D	E	F	F
Approach Vol, veh/h		3021			2336			2837			2305	
Approach Delay, s/veh		361.5			445.6			249.4			284.1	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.0	45.0	28.2	37.8	15.6	63.4	21.0	45.0
Change Period (Y+Rc), s	5.5	* 5.6	5.5	5.8	5.5	* 5.6	5.5	5.8
Max Green Setting (Gmax), s	28.5	* 39	22.7	32.0	11.5	* 56	15.5	39.2
Max Q Clear Time (g_c+I1), s	30.5	41.4	24.7	31.4	10.1	41.0	17.5	41.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	332.9
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	30	180	60	20	60	360	3226	20	70	2870	120
Future Volume (veh/h)	190	30	180	60	20	60	360	3226	20	70	2870	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	207	33	196	65	22	65	391	3507	22	76	3120	130
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	41	258	173	39	116	280	2631	16	84	2380	732
Arrive On Green	0.16	0.16	0.16	0.10	0.10	0.10	0.08	0.50	0.50	0.05	0.47	0.47
Sat Flow, veh/h	1546	247	1568	1781	404	1195	3456	5235	33	1781	5106	1571
Grp Volume(v), veh/h	240	0	196	65	0	87	391	2278	1251	76	3120	130
Grp Sat Flow(s),veh/h/ln	1793	0	1568	1781	0	1599	1728	1702	1864	1781	1702	1571
Q Serve(g_s), s	14.2	0.0	13.1	3.8	0.0	5.7	8.9	55.2	55.2	4.7	51.2	5.3
Cycle Q Clear(g_c), s	14.2	0.0	13.1	3.8	0.0	5.7	8.9	55.2	55.2	4.7	51.2	5.3
Prop In Lane	0.86		1.00	1.00		0.75	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	295	0	258	173	0	155	280	1710	937	84	2380	732
V/C Ratio(X)	0.81	0.00	0.76	0.38	0.00	0.56	1.40	1.33	1.34	0.90	1.31	0.18
Avail Cap(c_a), veh/h	522	0	457	519	0	466	280	1710	937	84	2380	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	0.0	43.8	46.5	0.0	47.4	50.5	27.3	27.3	52.1	29.3	17.1
Incr Delay (d2), s/veh	2.1	0.0	1.7	0.5	0.0	1.2	198.8	153.3	158.6	64.9	143.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	5.2	1.7	0.0	2.3	11.5	56.4	63.1	3.5	50.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.3	0.0	45.5	47.0	0.0	48.5	249.3	180.6	185.9	116.9	172.4	17.1
LnGrp LOS	D	A	D	D	A	D	F	F	F	F	F	B
Approach Vol, veh/h		436			152			3920			3326	
Approach Delay, s/veh		45.9			47.9			189.2			165.1	
Approach LOS		D			D			F			F	

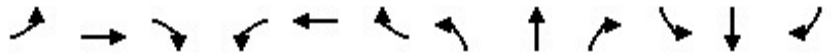
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	56.1		23.6	10.0	60.1		16.2
Change Period (Y+Rc), s	* 5.1	* 4.9		5.5	* 4.8	* 4.9		5.5
Max Green Setting (Gmax), s	* 8.9	* 51		32.0	* 5.2	* 55		32.0
Max Q Clear Time (g_c+I1), s	10.9	53.2		16.2	6.7	57.2		7.7
Green Ext Time (p_c), s	0.0	0.0		0.6	0.0	0.0		0.2

Intersection Summary	
HCM 6th Ctrl Delay	168.2
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	320	0	450	0	2996	530	0	1810	1270
Future Volume (veh/h)	0	0	0	320	0	450	0	2996	530	0	1810	1270
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	0	1870	0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h				348	0	489	0	3257	0	0	1967	0
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				2	0	2	0	2	2	0	2	2
Cap, veh/h				781	0	631	0	3594		0	3271	
Arrive On Green				0.23	0.00	0.23	0.00	0.64	0.00	0.00	0.64	0.00
Sat Flow, veh/h				3456	0	2790	0	5611	1585	0	5274	2790
Grp Volume(v), veh/h				348	0	489	0	3257	0	0	1967	0
Grp Sat Flow(s),veh/h/ln				1728	0	1395	0	1870	1585	0	1702	1395
Q Serve(g_s), s				6.2	0.0	11.7	0.0	35.4	0.0	0.0	16.0	0.0
Cycle Q Clear(g_c), s				6.2	0.0	11.7	0.0	35.4	0.0	0.0	16.0	0.0
Prop In Lane				1.00		1.00	0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h				781	0	631	0	3594		0	3271	
V/C Ratio(X)				0.45	0.00	0.78	0.00	0.91		0.00	0.60	
Avail Cap(c_a), veh/h				1091	0	881	0	3803		0	3440	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				23.7	0.0	25.9	0.0	11.0	0.0	0.0	7.5	0.0
Incr Delay (d2), s/veh				0.4	0.0	2.9	0.0	3.3	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.5	0.0	3.9	0.0	10.3	0.0	0.0	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				24.1	0.0	28.8	0.0	14.3	0.0	0.0	7.7	0.0
LnGrp LOS				C	A	C	A	B		A	A	
Approach Vol, veh/h					837			3257	A		1967	A
Approach Delay, s/veh					26.8			14.3			7.7	
Approach LOS					C			B			A	

Timer - Assigned Phs	2		6		8			
Phs Duration (G+Y+Rc), s	50.6		50.6		20.6			
Change Period (Y+Rc), s	* 5		5.0		4.5			
Max Green Setting (Gmax), s	* 48		48.0		22.5			
Max Q Clear Time (g_c+I1), s	37.4		18.0		13.7			
Green Ext Time (p_c), s	8.2		6.2		2.4			

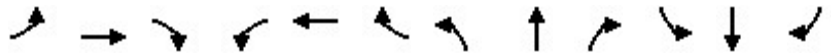
Intersection Summary		
HCM 6th Ctrl Delay		13.9
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1160	0	330	0	0	0	0	2866	520	0	1270	380
Future Volume (veh/h)	1160	0	330	0	0	0	0	2866	520	0	1270	380
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	0	1870				0	1870	1870	0	1870	1870
Adj Flow Rate, veh/h	1261	0	359				0	3115	0	0	1380	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2				0	2	2	0	2	2
Cap, veh/h	1698	0	943				0	3616		0	2712	
Arrive On Green	0.34	0.00	0.34				0.00	0.48	0.00	0.00	0.48	0.00
Sat Flow, veh/h	5023	0	2790				0	7481	1585	0	5611	1585
Grp Volume(v), veh/h	1261	0	359				0	3115	0	0	1380	0
Grp Sat Flow(s),veh/h/ln	1674	0	1395				0	1870	1585	0	1870	1585
Q Serve(g_s), s	11.4	0.0	5.0				0.0	19.0	0.0	0.0	8.7	0.0
Cycle Q Clear(g_c), s	11.4	0.0	5.0				0.0	19.0	0.0	0.0	8.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	1698	0	943				0	3616		0	2712	
V/C Ratio(X)	0.74	0.00	0.38				0.00	0.86		0.00	0.51	
Avail Cap(c_a), veh/h	2000	0	1111				0	3735		0	2758	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	15.1	0.0	12.9				0.0	11.8	0.0	0.0	9.1	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.3				0.0	2.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.4				0.0	5.6	0.0	0.0	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	0.0	13.2				0.0	13.9	0.0	0.0	9.2	0.0
LnGrp LOS	B	A	B				A	B		A	A	
Approach Vol, veh/h		1620						3115	A		1380	A
Approach Delay, s/veh		15.6						13.9			9.2	
Approach LOS		B						B			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	29.6	21.9	29.6
Change Period (Y+Rc), s	* 4.7	4.5	4.7
Max Green Setting (Gmax), s	* 26	20.5	25.3
Max Q Clear Time (g_c+I1), s	21.0	13.4	10.7
Green Ext Time (p_c), s	3.9	4.0	3.3

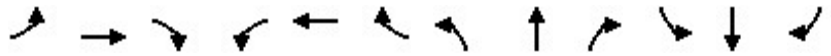
Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [NBR, SBR] is excluded from calculations of the approach delay and intersection delay.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	540	130	210	380	250	140	1826	270	250	1370	250
Future Volume (veh/h)	550	540	130	210	380	250	140	1826	270	250	1370	250
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	598	587	141	228	478	228	152	1985	293	272	1489	272
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	386	925	405	300	871	361	162	2020	491	342	1870	578
Arrive On Green	0.11	0.26	0.26	0.08	0.23	0.23	0.05	0.31	0.31	0.10	0.37	0.37
Sat Flow, veh/h	3456	3554	1556	3563	3741	1552	3456	6434	1563	3456	5106	1579
Grp Volume(v), veh/h	598	587	141	228	478	228	152	1985	293	272	1489	272
Grp Sat Flow(s),veh/h/ln	1728	1777	1556	1781	1870	1552	1728	1609	1563	1728	1702	1579
Q Serve(g_s), s	10.5	13.8	6.9	5.9	10.6	12.4	4.1	28.8	14.9	7.2	24.5	12.4
Cycle Q Clear(g_c), s	10.5	13.8	6.9	5.9	10.6	12.4	4.1	28.8	14.9	7.2	24.5	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	386	925	405	300	871	361	162	2020	491	342	1870	578
V/C Ratio(X)	1.55	0.63	0.35	0.76	0.55	0.63	0.94	0.98	0.60	0.79	0.80	0.47
Avail Cap(c_a), veh/h	386	1214	531	398	1274	528	162	2020	491	496	1929	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	30.8	28.3	42.1	31.7	32.4	44.7	32.0	27.2	41.4	26.7	22.8
Incr Delay (d2), s/veh	259.6	1.1	0.8	3.9	0.9	3.1	52.7	16.1	1.6	3.3	2.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	5.9	2.6	2.7	4.8	4.9	2.9	12.6	5.6	3.1	9.6	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	301.3	31.9	29.0	46.0	32.6	35.5	97.4	48.1	28.8	44.7	29.4	24.0
LnGrp LOS	F	C	C	D	C	D	F	D	C	D	C	C
Approach Vol, veh/h		1326			934			2430			2033	
Approach Delay, s/veh		153.1			36.6			48.8			30.7	
Approach LOS		F			D			D			C	

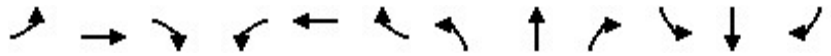
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	40.2	16.0	27.9	14.8	35.3	13.4	30.5
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	* 6
Max Green Setting (Gmax), s	4.4	* 36	10.5	32.0	13.5	* 26	10.5	* 32
Max Q Clear Time (g_c+I1), s	6.1	26.5	12.5	14.4	9.2	30.8	7.9	15.8
Green Ext Time (p_c), s	0.0	7.9	0.0	6.0	0.1	0.0	0.1	5.7

Intersection Summary	
HCM 6th Ctrl Delay	62.2
HCM 6th LOS	E

Notes

User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



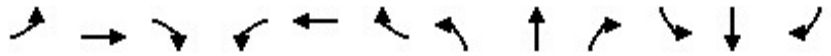
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	1296	300	500	685	496	300	1000	200	470	1540	130
Future Volume (veh/h)	410	1296	300	500	685	496	300	1000	200	470	1540	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683	1683
Adj Flow Rate, veh/h	446	1409	326	543	745	539	326	1087	217	511	1674	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	474	1081	480	375	1407	436	247	1242	383	354	1401	432
Arrive On Green	0.15	0.34	0.34	0.12	0.31	0.31	0.08	0.27	0.27	0.11	0.30	0.30
Sat Flow, veh/h	3110	3198	1419	3110	4595	1424	3110	4595	1417	3110	4595	1418
Grp Volume(v), veh/h	446	1409	326	543	745	539	326	1087	217	511	1674	141
Grp Sat Flow(s),veh/h/ln	1555	1599	1419	1555	1532	1424	1555	1532	1417	1555	1532	1418
Q Serve(g_s), s	20.6	49.0	28.6	17.5	19.5	44.4	11.5	32.8	19.1	16.5	44.2	11.1
Cycle Q Clear(g_c), s	20.6	49.0	28.6	17.5	19.5	44.4	11.5	32.8	19.1	16.5	44.2	11.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	474	1081	480	375	1407	436	247	1242	383	354	1401	432
V/C Ratio(X)	0.94	1.30	0.68	1.45	0.53	1.24	1.32	0.87	0.57	1.44	1.20	0.33
Avail Cap(c_a), veh/h	474	1081	480	375	1407	436	247	1249	385	354	1401	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.8	48.0	41.3	63.8	41.6	50.3	66.7	50.6	45.6	64.3	50.4	38.9
Incr Delay (d2), s/veh	26.8	143.5	4.9	215.5	1.1	124.8	170.2	7.6	3.1	215.1	95.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	40.4	10.4	18.0	7.4	30.4	10.3	13.1	6.9	17.0	28.7	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	87.6	191.5	46.2	279.2	42.7	175.1	237.0	58.2	48.7	279.4	145.4	39.8
LnGrp LOS	F	F	D	F	D	F	F	E	D	F	F	D
Approach Vol, veh/h		2181			1827			1630			2326	
Approach Delay, s/veh		148.5			152.1			92.7			168.4	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	50.0	27.6	50.4	22.0	45.0	23.0	55.0
Change Period (Y+Rc), s	5.5	* 5.8	5.5	6.0	5.5	* 5.8	5.5	6.0
Max Green Setting (Gmax), s	11.5	* 44	22.1	44.4	16.5	* 39	17.5	49.0
Max Q Clear Time (g_c+I1), s	13.5	46.2	22.6	46.4	18.5	34.8	19.5	51.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	143.7
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



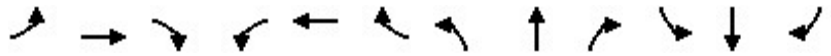
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	523	30	151	552	590	20	270	253	1430	730	610
Future Volume (veh/h)	130	523	30	151	552	590	20	270	253	1430	730	610
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	141	568	33	164	600	641	22	293	275	1554	793	663
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	113	859	50	188	1229	382	27	231	217	1022	1923	858
Arrive On Green	0.06	0.25	0.25	0.05	0.24	0.24	0.02	0.26	0.26	0.30	0.54	0.54
Sat Flow, veh/h	1781	3408	198	3456	5106	1585	1781	887	833	3456	3554	1585
Grp Volume(v), veh/h	141	296	305	164	600	641	22	0	568	1554	793	663
Grp Sat Flow(s),veh/h/ln	1781	1777	1829	1728	1702	1585	1781	0	1720	1728	1777	1585
Q Serve(g_s), s	9.5	22.5	22.5	7.1	15.2	36.2	1.9	0.0	39.2	44.5	19.8	49.6
Cycle Q Clear(g_c), s	9.5	22.5	22.5	7.1	15.2	36.2	1.9	0.0	39.2	44.5	19.8	49.6
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	113	448	461	188	1229	382	27	0	448	1022	1923	858
V/C Ratio(X)	1.25	0.66	0.66	0.87	0.49	1.68	0.80	0.00	1.27	1.52	0.41	0.77
Avail Cap(c_a), veh/h	113	448	461	188	1229	382	72	0	448	1022	1923	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	70.5	50.5	50.5	70.6	49.1	57.1	73.8	0.0	55.6	53.0	20.4	27.2
Incr Delay (d2), s/veh	167.7	2.9	2.8	31.7	0.1	317.3	17.7	0.0	136.7	239.0	0.1	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	10.0	10.3	3.9	6.3	47.8	1.0	0.0	33.6	52.7	8.0	18.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	238.2	53.3	53.4	102.2	49.2	374.4	91.6	0.0	192.3	291.9	20.4	31.2
LnGrp LOS	F	D	D	F	D	F	F	A	F	F	C	C
Approach Vol, veh/h		742			1405			590			3010	
Approach Delay, s/veh		88.5			203.8			188.6			163.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	41.1	7.8	86.5	13.3	42.8	50.0	44.3
Change Period (Y+Rc), s	5.5	* 4.9	5.5	* 5.1	* 5.1	* 4.9	5.5	* 5.1
Max Green Setting (Gmax), s	9.5	* 36	6.1	* 77	* 8.2	* 38	44.5	* 39
Max Q Clear Time (g_c+I1), s	11.5	38.2	3.9	51.6	9.1	24.5	46.5	41.2
Green Ext Time (p_c), s	0.0	0.0	0.0	2.0	0.0	0.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	166.0
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



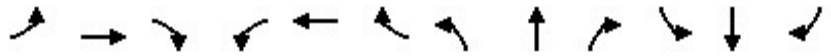
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	1281	630	190	556	320	450	1030	80	370	2680	220
Future Volume (veh/h)	610	1281	630	190	556	320	450	1030	80	370	2680	220
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	663	1392	685	207	604	348	489	1120	87	402	2913	239
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	1517	471	155	1165	357	298	1813	556	448	2034	631
Arrive On Green	0.11	0.30	0.30	0.04	0.23	0.23	0.09	0.35	0.35	0.13	0.40	0.40
Sat Flow, veh/h	3456	5106	1585	3456	5106	1564	3456	5106	1565	3456	5106	1585
Grp Volume(v), veh/h	663	1392	685	207	604	348	489	1120	87	402	2913	239
Grp Sat Flow(s),veh/h/ln	1728	1702	1585	1728	1702	1564	1728	1702	1565	1728	1702	1585
Q Serve(g_s), s	16.5	38.2	43.1	6.5	15.0	32.0	12.5	26.3	5.5	16.6	57.8	15.5
Cycle Q Clear(g_c), s	16.5	38.2	43.1	6.5	15.0	32.0	12.5	26.3	5.5	16.6	57.8	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	1517	471	155	1165	357	298	1813	556	448	2034	631
V/C Ratio(X)	1.69	0.92	1.45	1.34	0.52	0.98	1.64	0.62	0.16	0.90	1.43	0.38
Avail Cap(c_a), veh/h	393	1517	471	155	1165	357	298	1813	556	588	2034	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	49.3	51.0	69.3	49.0	55.6	66.3	38.7	32.0	62.2	43.6	30.9
Incr Delay (d2), s/veh	320.1	9.0	216.3	188.8	0.2	40.7	303.9	0.5	0.0	11.8	197.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.5	16.8	44.6	6.9	6.2	16.2	17.9	10.6	2.0	7.8	60.0	5.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	384.4	58.3	267.3	258.1	49.2	96.3	370.2	39.1	32.0	74.0	241.0	31.1
LnGrp LOS	F	E	F	F	D	F	F	D	C	E	F	C
Approach Vol, veh/h		2740			1159			1696			3554	
Approach Delay, s/veh		189.5			100.7			134.2			208.0	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.3	58.9	12.0	49.9	18.0	65.2	22.0	39.9
Change Period (Y+Rc), s	5.5	* 7.4	5.5	* 6.8	5.5	* 7.4	5.5	6.8
Max Green Setting (Gmax), s	24.7	* 46	6.5	* 43	12.5	* 58	16.5	33.0
Max Q Clear Time (g_c+I1), s	18.6	28.3	8.5	45.1	14.5	59.8	18.5	34.0
Green Ext Time (p_c), s	0.2	2.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	175.2
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



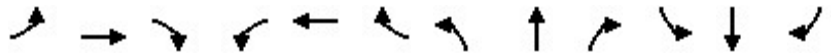
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	325	660	100	70	420	30	50	100	80	140	310	246
Future Volume (veh/h)	325	660	100	70	420	30	50	100	80	140	310	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	353	717	109	76	457	33	54	109	87	152	337	267
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	397	1226	547	102	589	263	108	298	253	204	402	341
Arrive On Green	0.22	0.34	0.34	0.06	0.17	0.17	0.06	0.16	0.16	0.11	0.21	0.21
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	1781	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	353	717	109	76	457	33	54	109	87	152	337	267
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1781	1870	1585	1781	1870	1585
Q Serve(g_s), s	12.5	10.7	3.1	2.7	8.0	1.2	1.9	3.4	3.2	5.4	11.2	10.3
Cycle Q Clear(g_c), s	12.5	10.7	3.1	2.7	8.0	1.2	1.9	3.4	3.2	5.4	11.2	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	397	1226	547	102	589	263	108	298	253	204	402	341
V/C Ratio(X)	0.89	0.58	0.20	0.74	0.78	0.13	0.50	0.37	0.34	0.75	0.84	0.78
Avail Cap(c_a), veh/h	428	1791	799	203	1298	579	632	663	562	714	750	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	17.4	14.9	30.1	25.9	23.1	29.5	24.3	24.2	27.8	24.4	24.0
Incr Delay (d2), s/veh	18.0	0.2	0.1	10.1	0.8	0.1	1.3	0.3	0.3	2.0	1.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	3.5	1.1	1.3	3.0	0.4	0.8	1.4	1.1	2.3	4.8	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.5	17.6	15.0	40.2	26.8	23.1	30.9	24.6	24.5	29.9	26.2	25.5
LnGrp LOS	D	B	B	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1179			566			250			756	
Approach Delay, s/veh		24.8			28.3			25.9			26.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	16.2	9.3	19.4	8.2	27.9	12.9	15.8
Change Period (Y+Rc), s	* 5.4	* 5.5	5.4	* 5.5	4.5	* 5.5	5.5	* 5.5
Max Green Setting (Gmax), s	4.6	* 24	23.0	* 26	7.4	* 33	26.0	* 23
Max Q Clear Time (g_c+I1), s	14.5	10.0	3.9	13.2	4.7	12.7	7.4	5.4
Green Ext Time (p_c), s	0.0	0.8	0.0	0.8	0.0	1.4	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



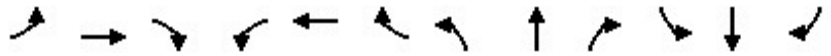
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	500	835	20	183	383	200	10	960	175	300	1680	290
Future Volume (veh/h)	500	835	20	183	383	200	10	960	175	300	1680	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	543	908	22	199	416	217	11	1043	190	326	1826	315
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	632	536	113	458	388	36	997	445	303	1530	931
Arrive On Green	0.16	0.34	0.34	0.06	0.24	0.24	0.02	0.28	0.28	0.17	0.43	0.43
Sat Flow, veh/h	1781	1870	1585	1781	1870	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	543	908	22	199	416	217	11	1043	190	326	1826	315
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1870	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	23.5	50.7	1.4	9.5	32.4	18.0	0.9	42.1	14.7	25.5	64.6	15.4
Cycle Q Clear(g_c), s	23.5	50.7	1.4	9.5	32.4	18.0	0.9	42.1	14.7	25.5	64.6	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	279	632	536	113	458	388	36	997	445	303	1530	931
V/C Ratio(X)	1.95	1.44	0.04	1.76	0.91	0.56	0.31	1.05	0.43	1.08	1.19	0.34
Avail Cap(c_a), veh/h	279	632	536	113	458	388	226	997	445	303	1530	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	49.7	33.3	70.3	55.0	49.6	72.5	53.9	44.1	62.2	42.7	15.9
Incr Delay (d2), s/veh	438.5	205.3	0.0	377.3	21.5	1.1	1.8	41.2	0.2	73.6	93.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	44.3	58.6	0.5	16.0	17.4	7.0	0.4	23.7	5.6	17.3	46.4	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	501.7	254.9	33.3	447.6	76.5	50.7	74.3	95.1	44.3	135.8	136.3	16.0
LnGrp LOS	F	F	C	F	E	D	E	F	D	F	F	B
Approach Vol, veh/h		1473			832			1244			2467	
Approach Delay, s/veh		342.6			158.5			87.2			120.9	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.0	43.5	7.5	71.0	14.0	57.5	30.0	48.5
Change Period (Y+Rc), s	4.5	6.8	4.5	* 6.4	4.5	6.8	4.5	6.4
Max Green Setting (Gmax), s	33.5	36.7	19.0	* 49	9.5	50.7	25.5	42.1
Max Q Clear Time (g_c+I1), s	25.5	34.4	2.9	66.6	11.5	52.7	27.5	44.1
Green Ext Time (p_c), s	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	173.4
HCM 6th LOS	F

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



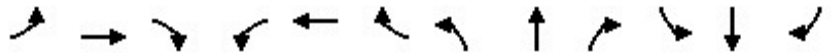
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	970	10	100	420	143	10	751	100	242	896	246
Future Volume (veh/h)	320	970	10	100	420	143	10	751	100	242	896	246
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	348	1054	11	109	457	155	11	816	109	263	974	267
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	880	9	89	466	158	13	670	90	195	869	237
Arrive On Green	0.18	0.48	0.48	0.05	0.35	0.35	0.01	0.21	0.21	0.11	0.32	0.32
Sat Flow, veh/h	1781	1848	19	1781	1331	451	1781	3151	421	1781	2758	753
Grp Volume(v), veh/h	348	0	1065	109	0	612	11	460	465	263	626	615
Grp Sat Flow(s),veh/h/ln	1781	0	1867	1781	0	1782	1781	1777	1795	1781	1777	1735
Q Serve(g_s), s	26.4	0.0	71.6	7.5	0.0	51.1	0.9	32.0	32.0	16.5	47.4	47.4
Cycle Q Clear(g_c), s	26.4	0.0	71.6	7.5	0.0	51.1	0.9	32.0	32.0	16.5	47.4	47.4
Prop In Lane	1.00		0.01	1.00		0.25	1.00		0.23	1.00		0.43
Lane Grp Cap(c), veh/h	313	0	889	89	0	625	13	378	382	195	560	547
V/C Ratio(X)	1.11	0.00	1.20	1.23	0.00	0.98	0.84	1.22	1.22	1.35	1.12	1.12
Avail Cap(c_a), veh/h	313	0	889	89	0	625	59	378	382	195	560	547
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.0	0.0	39.4	71.4	0.0	48.3	74.6	59.2	59.2	66.9	51.5	51.5
Incr Delay (d2), s/veh	84.8	0.0	100.1	168.6	0.0	30.8	37.9	119.6	119.4	185.7	74.9	77.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.9	0.0	55.0	7.5	0.0	26.9	0.6	26.4	26.7	17.4	31.8	31.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	146.8	0.0	139.5	240.0	0.0	79.1	112.5	178.8	178.6	252.6	126.4	129.1
LnGrp LOS	F	A	F	F	A	E	F	F	F	F	F	F
Approach Vol, veh/h		1413			721			936			1504	
Approach Delay, s/veh		141.3			103.4			177.9			149.6	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.9	59.5	5.6	54.4	12.0	78.4	21.0	39.0
Change Period (Y+Rc), s	4.5	6.8	4.5	* 7	4.5	* 6.8	4.5	7.0
Max Green Setting (Gmax), s	26.4	52.3	5.0	* 44	7.5	* 72	16.5	32.0
Max Q Clear Time (g_c+I1), s	28.4	53.1	2.9	49.4	9.5	73.6	18.5	34.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	145.5
HCM 6th LOS	F

Notes

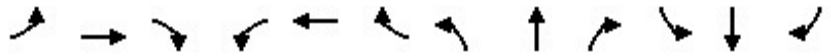
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	10	190	20	10	30	180	944	10	280	994	203
Future Volume (veh/h)	135	10	190	20	10	30	180	944	10	280	994	203
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	147	11	207	22	11	33	196	1026	11	304	1080	221
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	301	255	44	221	187	248	1268	565	354	1719	767
Arrive On Green	0.07	0.16	0.16	0.02	0.12	0.12	0.07	0.36	0.36	0.20	0.48	0.48
Sat Flow, veh/h	3456	1870	1585	1781	1870	1585	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	147	11	207	22	11	33	196	1026	11	304	1080	221
Grp Sat Flow(s),veh/h/ln	1728	1870	1585	1781	1870	1585	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.9	0.3	8.8	0.8	0.4	1.3	3.9	18.2	0.3	11.5	15.7	5.8
Cycle Q Clear(g_c), s	2.9	0.3	8.8	0.8	0.4	1.3	3.9	18.2	0.3	11.5	15.7	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	301	255	44	221	187	248	1268	565	354	1719	767
V/C Ratio(X)	0.63	0.04	0.81	0.50	0.05	0.18	0.79	0.81	0.02	0.86	0.63	0.29
Avail Cap(c_a), veh/h	248	484	410	128	484	410	248	1584	707	461	2248	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	24.6	28.2	33.5	27.2	27.6	31.8	20.2	14.5	26.9	13.3	10.8
Incr Delay (d2), s/veh	4.6	0.0	6.4	8.3	0.1	0.4	15.6	2.6	0.0	12.1	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	3.5	0.4	0.2	0.5	2.0	6.5	0.1	5.4	4.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	24.7	34.5	41.8	27.3	28.1	47.3	22.9	14.5	39.0	13.7	11.0
LnGrp LOS	D	C	C	D	C	C	D	C	B	D	B	B
Approach Vol, veh/h		365			66			1233			1605	
Approach Delay, s/veh		34.9			32.5			26.7			18.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	38.1	6.2	15.7	18.3	29.3	9.2	12.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.0	44.0	5.0	18.0	18.0	31.0	5.0	18.0
Max Q Clear Time (g_c+I1), s	5.9	17.7	2.8	10.8	13.5	20.2	4.9	3.3
Green Ext Time (p_c), s	0.0	8.3	0.0	0.4	0.4	4.6	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C



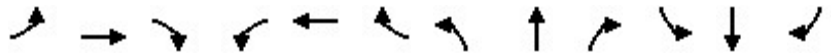
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	240	250	80	130	59	70	1099	60	67	1363	360
Future Volume (veh/h)	480	240	250	80	130	59	70	1099	60	67	1363	360
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	522	261	272	87	141	64	76	1195	65	73	1482	391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	590	261	272	107	244	111	121	1492	665	93	1550	691
Arrive On Green	0.17	0.31	0.31	0.06	0.20	0.20	0.04	0.42	0.42	0.05	0.44	0.44
Sat Flow, veh/h	3456	839	874	1781	1218	553	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	522	0	533	87	0	205	76	1195	65	73	1482	391
Grp Sat Flow(s),veh/h/ln	1728	0	1713	1781	0	1771	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	18.6	0.0	39.3	6.1	0.0	13.2	2.7	37.1	3.1	5.1	51.0	23.3
Cycle Q Clear(g_c), s	18.6	0.0	39.3	6.1	0.0	13.2	2.7	37.1	3.1	5.1	51.0	23.3
Prop In Lane	1.00		0.51	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	590	0	533	107	0	355	121	1492	665	93	1550	691
V/C Ratio(X)	0.88	0.00	1.00	0.81	0.00	0.58	0.63	0.80	0.10	0.79	0.96	0.57
Avail Cap(c_a), veh/h	708	0	533	107	0	355	547	1930	861	141	1637	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	0.0	43.5	58.7	0.0	45.7	60.1	32.0	22.2	59.2	34.5	26.7
Incr Delay (d2), s/veh	11.3	0.0	39.1	35.9	0.0	2.3	2.0	1.4	0.0	14.9	12.7	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	21.4	3.8	0.0	6.1	1.2	15.0	1.1	2.6	22.8	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.5	0.0	82.6	94.6	0.0	48.0	62.1	33.5	22.2	74.1	47.2	27.2
LnGrp LOS	E	A	F	F	A	D	E	C	C	E	D	C
Approach Vol, veh/h		1055			292			1336			1946	
Approach Delay, s/veh		72.6			61.9			34.5			44.2	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	61.2	26.1	30.0	11.1	59.1	12.1	44.0
Change Period (Y+Rc), s	* 4.6	* 6.1	4.5	* 4.7	4.5	* 6.1	4.5	* 4.7
Max Green Setting (Gmax), s	* 4.4	* 58	25.9	* 21	10.0	* 69	7.6	* 39
Max Q Clear Time (g_c+I1), s	4.7	53.0	20.6	15.2	7.1	39.1	8.1	41.3
Green Ext Time (p_c), s	0.0	2.1	0.9	0.5	0.0	2.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.0
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	30	170	100	30	260	208	1270	80	300	1790	479
Future Volume (veh/h)	278	30	170	100	30	260	208	1270	80	300	1790	479
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	302	33	185	109	33	283	226	1380	87	326	1946	521
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	20	112	171	52	195	137	1419	633	310	1765	787
Arrive On Green	0.18	0.18	0.18	0.12	0.12	0.12	0.08	0.40	0.40	0.17	0.50	0.50
Sat Flow, veh/h	994	109	609	1383	419	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	520	0	0	142	0	283	226	1380	87	326	1946	521
Grp Sat Flow(s),veh/h/ln	1711	0	0	1801	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	27.5	0.0	0.0	11.3	0.0	18.5	11.5	57.2	5.2	26.1	74.5	37.0
Cycle Q Clear(g_c), s	27.5	0.0	0.0	11.3	0.0	18.5	11.5	57.2	5.2	26.1	74.5	37.0
Prop In Lane	0.58		0.36	0.77		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	314	0	0	222	0	195	137	1419	633	310	1765	787
V/C Ratio(X)	1.66	0.00	0.00	0.64	0.00	1.45	1.65	0.97	0.14	1.05	1.10	0.66
Avail Cap(c_a), veh/h	314	0	0	222	0	195	137	1419	633	310	1765	787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.3	0.0	0.0	62.6	0.0	65.8	69.2	44.2	28.6	62.0	37.8	28.3
Incr Delay (d2), s/veh	309.8	0.0	0.0	6.0	0.0	227.8	324.9	17.7	0.1	65.4	55.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	38.9	0.0	0.0	5.6	0.0	19.9	17.4	27.2	1.9	17.0	43.3	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	371.0	0.0	0.0	68.6	0.0	293.5	394.2	61.9	28.7	127.3	93.0	30.4
LnGrp LOS	F	A	A	E	A	F	F	E	C	F	F	C
Approach Vol, veh/h		520			425			1693			2793	
Approach Delay, s/veh		371.0			218.4			104.6			85.4	
Approach LOS		F			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.6	64.4		32.0	16.0	79.0		23.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	26.1	59.9		27.5	11.5	74.5		18.5
Max Q Clear Time (g_c+I1), s	28.1	59.2		29.5	13.5	76.5		20.5
Green Ext Time (p_c), s	0.0	0.5		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	129.1
HCM 6th LOS	F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1480	469	302	1516	2090	560
Future Volume (veh/h)	1480	469	302	1516	2090	560
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1609	510	328	1648	2272	609
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1163	687	172	2064	1590	709
Arrive On Green	0.34	0.34	0.10	0.58	0.45	0.45
Sat Flow, veh/h	3456	1585	1781	3647	3647	1585
Grp Volume(v), veh/h	1609	510	328	1648	2272	609
Grp Sat Flow(s),veh/h/ln	1728	1585	1781	1777	1777	1585
Q Serve(g_s), s	50.5	40.3	14.5	54.4	67.1	51.7
Cycle Q Clear(g_c), s	50.5	40.3	14.5	54.4	67.1	51.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1163	687	172	2064	1590	709
V/C Ratio(X)	1.38	0.74	1.90	0.80	1.43	0.86
Avail Cap(c_a), veh/h	1163	687	172	2071	1590	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	35.5	67.8	24.6	41.5	37.2
Incr Delay (d2), s/veh	177.8	3.8	428.1	2.1	196.8	9.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	50.4	34.0	26.9	21.3	70.8	20.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	227.5	39.4	495.9	26.7	238.3	47.1
LnGrp LOS	F	D	F	C	F	D
Approach Vol, veh/h	2119			1976	2881	
Approach Delay, s/veh	182.2			104.6	197.9	
Approach LOS	F			F	F	

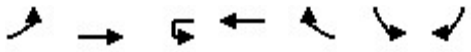
Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	30.0	74.0		56.0		94.0
Change Period (Y+Rc), s	5.5	* 6.9		5.5		* 6.9
Max Green Setting (Gmax), s	24.5	* 67		50.5		* 87
Max Q Clear Time (g_c+I1), s	16.5	69.1		52.5		56.4
Green Ext Time (p_c), s	0.0	0.0		0.0		4.2

Intersection Summary	
HCM 6th Ctrl Delay	166.7
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	WBU	WBT	WBR	SBL	SBR
Lane Configurations							
Traffic Volume (veh/h)	1314	2132	0	1627	450	230	1013
Future Volume (veh/h)	1314	2132	0	1627	450	230	1013
Initial Q (Qb), veh	0	0		0	0	0	0
Ped-Bike Adj(A_pbT)	1.00				1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00		1.00	1.00	1.00	1.00
Work Zone On Approach		No		No		No	
Adj Sat Flow, veh/h/ln	1870	1870		1870	1870	1870	1870
Adj Flow Rate, veh/h	1428	2317		1768	489	250	1101
Peak Hour Factor	0.92	0.92		0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2		2	2	2	2
Cap, veh/h	1055	2424		1215	542	422	375
Arrive On Green	0.31	0.68		0.34	0.34	0.24	0.24
Sat Flow, veh/h	3456	3647		3647	1585	1781	1585
Grp Volume(v), veh/h	1428	2317		1768	489	250	1101
Grp Sat Flow(s),veh/h/ln	1728	1777		1777	1585	1781	1585
Q Serve(g_s), s	45.8	89.4		51.3	44.0	18.7	35.5
Cycle Q Clear(g_c), s	45.8	89.4		51.3	44.0	18.7	35.5
Prop In Lane	1.00				1.00	1.00	1.00
Lane Grp Cap(c), veh/h	1055	2424		1215	542	422	375
V/C Ratio(X)	1.35	0.96		1.45	0.90	0.59	2.93
Avail Cap(c_a), veh/h	1055	2424		1215	542	422	375
HCM Platoon Ratio	1.00	1.00		1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00		1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	21.8		49.3	47.0	50.8	57.3
Incr Delay (d2), s/veh	165.3	9.9		209.3	17.8	1.5	878.0
Initial Q Delay(d3),s/veh	0.0	0.0		0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	43.1	34.1		56.9	19.2	8.3	105.1
Unsig. Movement Delay, s/veh							
LnGrp Delay(d),s/veh	217.4	31.7		258.6	64.8	52.4	935.2
LnGrp LOS	F	C		F	E	D	F
Approach Vol, veh/h		3745		2257		1351	
Approach Delay, s/veh		102.5		216.6		771.8	
Approach LOS		F		F		F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	51.0	58.0			109.0	41.0
Change Period (Y+Rc), s	* 5.2	* 6.7			* 6.7	5.5
Max Green Setting (Gmax), s	* 46	* 51			* 93	35.5
Max Q Clear Time (g_c+I1), s	47.8	53.3			91.4	37.5
Green Ext Time (p_c), s	0.0	0.0			1.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	260.5
HCM 6th LOS	F

Notes

User approved ignoring U-Turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Appendix F

Analysis Worksheets for Mitigated Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	259	0	36	640	34	3	324	16	23	245	76
Future Volume (veh/h)	87	259	0	36	640	34	3	324	16	23	245	76
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	94	278	0	40	711	38	3	360	18	26	275	85
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.90	0.90	0.90	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	114	810	0	50	698	37	4	408	20	31	337	104
Arrive On Green	0.06	0.43	0.00	0.03	0.40	0.40	0.00	0.23	0.23	0.02	0.25	0.25
Sat Flow, veh/h	1781	1870	0	1781	1759	94	1781	1766	88	1781	1371	424
Grp Volume(v), veh/h	94	278	0	40	0	749	3	0	378	26	0	360
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1853	1781	0	1854	1781	0	1794
Q Serve(g_s), s	4.1	7.8	0.0	1.7	0.0	31.1	0.1	0.0	15.4	1.1	0.0	14.8
Cycle Q Clear(g_c), s	4.1	7.8	0.0	1.7	0.0	31.1	0.1	0.0	15.4	1.1	0.0	14.8
Prop In Lane	1.00		0.00	1.00		0.05	1.00		0.05	1.00		0.24
Lane Grp Cap(c), veh/h	114	810	0	50	0	736	4	0	428	31	0	441
V/C Ratio(X)	0.83	0.34	0.00	0.81	0.00	1.02	0.70	0.00	0.88	0.84	0.00	0.82
Avail Cap(c_a), veh/h	114	810	0	114	0	736	114	0	570	114	0	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	36.3	14.8	0.0	37.9	0.0	23.6	39.1	0.0	29.1	38.4	0.0	27.9
Incr Delay (d2), s/veh	35.5	0.1	0.0	10.8	0.0	37.8	54.6	0.0	10.1	19.6	0.0	10.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.7	0.0	0.8	0.0	18.8	0.1	0.0	7.2	0.6	0.0	6.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	71.7	14.9	0.0	48.7	0.0	61.5	93.7	0.0	39.2	58.0	0.0	38.5
LnGrp LOS	E	B	A	D	A	F	F	A	D	E	A	D
Approach Vol, veh/h		372			789			381			386	
Approach Delay, s/veh		29.3			60.8			39.6			39.8	
Approach LOS		C			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	37.9	4.7	26.3	6.7	40.7	5.9	25.1
Change Period (Y+Rc), s	4.5	6.8	4.5	* 7	4.5	* 6.8	4.5	7.0
Max Green Setting (Gmax), s	5.0	31.1	5.0	* 16	5.0	* 32	5.0	24.1
Max Q Clear Time (g_c+I1), s	6.1	33.1	2.1	16.8	3.7	9.8	3.1	17.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



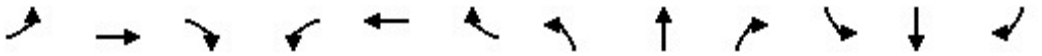
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	215	51	19	699	400	73
Future Volume (veh/h)	215	51	19	699	400	73
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	347	82	22	813	435	79
Peak Hour Factor	0.62	0.62	0.86	0.86	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	405	96	47	984	627	114
Arrive On Green	0.29	0.29	0.03	0.53	0.41	0.41
Sat Flow, veh/h	1404	332	1781	1870	1540	280
Grp Volume(v), veh/h	430	0	22	813	0	514
Grp Sat Flow(s),veh/h/ln	1740	0	1781	1870	0	1820
Q Serve(g_s), s	11.3	0.0	0.6	17.7	0.0	11.3
Cycle Q Clear(g_c), s	11.3	0.0	0.6	17.7	0.0	11.3
Prop In Lane	0.81	0.19	1.00			0.15
Lane Grp Cap(c), veh/h	502	0	47	984	0	740
V/C Ratio(X)	0.86	0.00	0.47	0.83	0.00	0.69
Avail Cap(c_a), veh/h	657	0	195	2419	0	1986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.3	0.0	23.3	9.6	0.0	11.9
Incr Delay (d2), s/veh	8.7	0.0	7.0	1.8	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	0.3	3.9	0.0	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.0	0.0	30.3	11.5	0.0	13.1
LnGrp LOS	C	A	C	B	A	B
Approach Vol, veh/h	430			835	514	
Approach Delay, s/veh	25.0			12.0	13.1	
Approach LOS	C			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		30.0		18.5	5.8	24.2
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		62.7		18.3	5.3	52.9
Max Q Clear Time (g_c+I1), s		19.7		13.3	2.6	13.3
Green Ext Time (p_c), s		5.8		0.7	0.0	3.0

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	684	0	57	334	40	3	302	58	37	340	59
Future Volume (veh/h)	72	684	0	57	334	40	3	302	58	37	340	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	78	743	0	67	393	47	4	364	70	42	382	66
Peak Hour Factor	0.92	0.92	0.92	0.85	0.85	0.85	0.83	0.83	0.83	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	100	790	0	86	678	81	6	398	76	53	447	77
Arrive On Green	0.06	0.42	0.00	0.05	0.41	0.41	0.00	0.26	0.26	0.03	0.29	0.29
Sat Flow, veh/h	1781	1870	0	1781	1635	196	1781	1524	293	1781	1554	268
Grp Volume(v), veh/h	78	743	0	67	0	440	4	0	434	42	0	448
Grp Sat Flow(s),veh/h/ln	1781	1870	0	1781	0	1830	1781	0	1818	1781	0	1822
Q Serve(g_s), s	4.1	36.4	0.0	3.6	0.0	17.7	0.2	0.0	22.1	2.2	0.0	22.2
Cycle Q Clear(g_c), s	4.1	36.4	0.0	3.6	0.0	17.7	0.2	0.0	22.1	2.2	0.0	22.2
Prop In Lane	1.00		0.00	1.00		0.11	1.00		0.16	1.00		0.15
Lane Grp Cap(c), veh/h	100	790	0	86	0	759	6	0	474	53	0	524
V/C Ratio(X)	0.78	0.94	0.00	0.78	0.00	0.58	0.71	0.00	0.92	0.79	0.00	0.86
Avail Cap(c_a), veh/h	242	932	0	196	0	857	196	0	571	196	0	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.5	26.4	0.0	44.9	0.0	21.6	47.6	0.0	34.3	46.0	0.0	32.1
Incr Delay (d2), s/veh	4.9	14.6	0.0	5.5	0.0	0.3	46.2	0.0	16.2	9.3	0.0	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	17.1	0.0	1.6	0.0	6.7	0.2	0.0	11.0	1.1	0.0	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.3	41.1	0.0	50.5	0.0	21.9	93.8	0.0	50.4	55.3	0.0	41.1
LnGrp LOS	D	D	A	D	A	C	F	A	D	E	A	D
Approach Vol, veh/h		821			507			438			490	
Approach Delay, s/veh		41.9			25.7			50.8			42.3	
Approach LOS		D			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	46.4	4.8	34.5	9.1	47.1	7.3	31.9
Change Period (Y+Rc), s	4.5	6.8	4.5	* 7	4.5	* 6.8	4.5	7.0
Max Green Setting (Gmax), s	13.0	44.7	10.5	* 32	10.5	* 48	10.5	30.0
Max Q Clear Time (g_c+I1), s	6.1	19.7	2.2	24.2	5.6	38.4	4.2	24.1
Green Ext Time (p_c), s	0.0	1.4	0.0	1.0	0.0	2.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	40.1
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



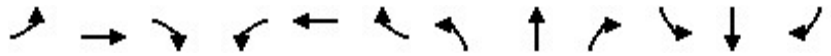
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	126	34	58	542	670	215
Future Volume (veh/h)	126	34	58	542	670	215
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1870	1870	1870	1870
Adj Flow Rate, veh/h	225	61	59	553	728	234
Peak Hour Factor	0.56	0.56	0.98	0.98	0.92	0.92
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	260	70	84	1291	792	255
Arrive On Green	0.19	0.19	0.05	0.69	0.58	0.58
Sat Flow, veh/h	1361	369	1781	1870	1356	436
Grp Volume(v), veh/h	287	0	59	553	0	962
Grp Sat Flow(s),veh/h/ln	1736	0	1781	1870	0	1792
Q Serve(g_s), s	12.1	0.0	2.5	9.8	0.0	36.5
Cycle Q Clear(g_c), s	12.1	0.0	2.5	9.8	0.0	36.5
Prop In Lane	0.78	0.21	1.00			0.24
Lane Grp Cap(c), veh/h	331	0	84	1291	0	1047
V/C Ratio(X)	0.87	0.00	0.71	0.43	0.00	0.92
Avail Cap(c_a), veh/h	419	0	125	1548	0	1251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	35.6	5.2	0.0	14.2
Incr Delay (d2), s/veh	14.4	0.0	10.4	0.2	0.0	9.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	0.0	1.2	2.0	0.0	12.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.1	0.0	45.9	5.4	0.0	24.0
LnGrp LOS	D	A	D	A	A	C
Approach Vol, veh/h	287			612	962	
Approach Delay, s/veh	44.1			9.3	24.0	
Approach LOS	D			A	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		56.8		19.0	8.1	48.8
Change Period (Y+Rc), s		4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		62.7		18.3	5.3	52.9
Max Q Clear Time (g_c+I1), s		11.8		14.1	4.5	38.5
Green Ext Time (p_c), s		3.3		0.4	0.0	5.7

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Notes

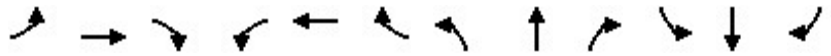
User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	494	30	201	80	20	290	140	1840	90	240	1090	215
Future Volume (veh/h)	494	30	201	80	20	290	140	1840	90	240	1090	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	537	33	218	87	22	315	152	2000	98	261	1185	234
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	581	34	226	111	104	344	185	2117	657	287	1677	1014
Arrive On Green	0.17	0.16	0.16	0.06	0.06	0.06	0.10	0.41	0.41	0.16	0.47	0.47
Sat Flow, veh/h	3456	213	1405	1781	1870	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	537	0	251	87	22	315	152	2000	98	261	1185	234
Grp Sat Flow(s),veh/h/ln	1728	0	1617	1781	1870	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	13.8	0.0	13.8	4.3	1.0	5.0	7.5	33.9	3.5	12.9	23.7	5.6
Cycle Q Clear(g_c), s	13.8	0.0	13.8	4.3	1.0	5.0	7.5	33.9	3.5	12.9	23.7	5.6
Prop In Lane	1.00		0.87	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	581	0	261	111	104	344	185	2117	657	287	1677	1014
V/C Ratio(X)	0.92	0.00	0.96	0.78	0.21	0.92	0.82	0.94	0.15	0.91	0.71	0.23
Avail Cap(c_a), veh/h	581	0	261	143	104	344	222	2126	660	287	1677	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	37.4	41.5	40.5	34.4	39.4	25.3	16.4	37.0	18.8	6.8
Incr Delay (d2), s/veh	20.8	0.0	45.3	18.8	1.0	28.2	18.2	9.6	0.1	30.4	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	8.6	2.5	0.5	9.2	4.0	13.5	1.2	7.6	8.5	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.6	0.0	82.7	60.3	41.5	62.6	57.7	34.9	16.5	67.5	20.2	6.9
LnGrp LOS	E	A	F	E	D	E	E	C	B	E	C	A
Approach Vol, veh/h		788			424			2250			1680	
Approach Delay, s/veh		65.6			61.1			35.6			25.7	
Approach LOS		E			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	41.7	10.1	19.0	13.9	46.9	19.6	9.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	4.5	37.4	7.2	12.9	11.2	40.7	15.1	5.0
Max Q Clear Time (g_c+I1), s	4.3	35.9	6.3	15.8	9.5	25.7	15.8	7.0
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.1	7.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	39.1
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	30	170	100	30	260	208	1270	80	300	1790	479
Future Volume (veh/h)	278	30	170	100	30	260	208	1270	80	300	1790	479
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	302	33	185	109	33	283	226	1380	87	326	1946	521
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	18	101	125	87	395	235	2501	776	361	1992	1043
Arrive On Green	0.10	0.07	0.07	0.07	0.05	0.05	0.13	0.49	0.49	0.20	0.56	0.56
Sat Flow, veh/h	3456	246	1377	1781	1870	1585	1781	5106	1585	1781	3554	1585
Grp Volume(v), veh/h	302	0	218	109	33	283	226	1380	87	326	1946	521
Grp Sat Flow(s),veh/h/ln	1728	0	1623	1781	1870	1585	1781	1702	1585	1781	1777	1585
Q Serve(g_s), s	9.5	0.0	8.1	6.7	1.9	5.1	13.9	20.8	3.3	19.6	58.5	18.4
Cycle Q Clear(g_c), s	9.5	0.0	8.1	6.7	1.9	5.1	13.9	20.8	3.3	19.6	58.5	18.4
Prop In Lane	1.00		0.85	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	336	0	120	125	87	395	235	2501	776	361	1992	1043
V/C Ratio(X)	0.90	0.00	1.82	0.87	0.38	0.72	0.96	0.55	0.11	0.90	0.98	0.50
Avail Cap(c_a), veh/h	336	0	120	125	87	395	235	2501	776	507	1995	1044
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	0.0	50.9	50.6	50.9	37.7	47.4	19.6	15.1	42.8	23.5	9.6
Incr Delay (d2), s/veh	25.4	0.0	401.3	44.7	2.7	6.1	47.9	0.3	0.1	15.1	15.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	16.6	4.5	0.9	7.6	8.9	7.3	1.2	9.6	24.4	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	0.0	452.2	95.4	53.6	43.8	95.3	19.9	15.2	57.9	38.5	10.0
LnGrp LOS	E	A	F	F	D	D	F	B	B	E	D	A
Approach Vol, veh/h		520			425			1693			2793	
Approach Delay, s/veh		232.8			57.8			29.7			35.4	
Approach LOS		F			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.8	58.3	12.2	12.6	19.0	66.1	15.2	9.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	21.3	44.9	7.7	8.1	14.5	61.7	10.7	5.1
Max Q Clear Time (g_c+I1), s	21.6	22.8	8.7	10.1	15.9	60.5	11.5	7.1
Green Ext Time (p_c), s	0.7	9.5	0.0	0.0	0.0	1.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.3
HCM 6th LOS	D

Appendix G

Analysis Worksheets for Signal Warrants

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing Conditions AM
Intersection: Grant Line Rd AND Kiefer Blvd
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

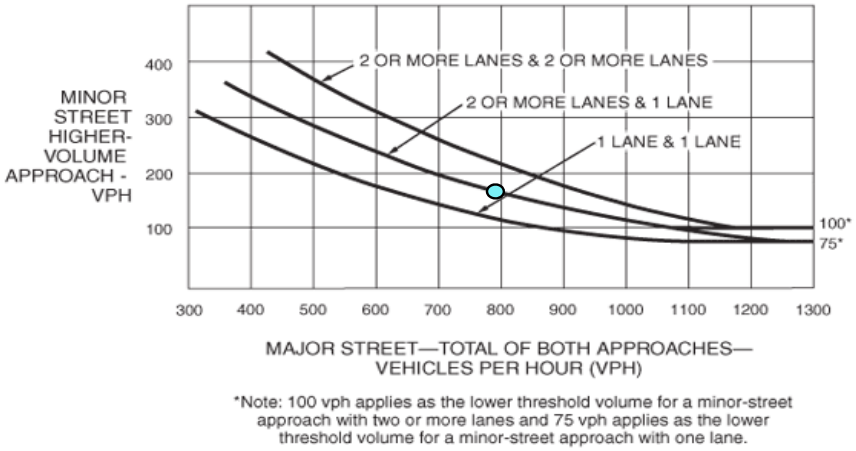
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 75 vph for one moving lane of traffic or 100 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **YES**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	793	
Highest Approache - Minor Street	179	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-4.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

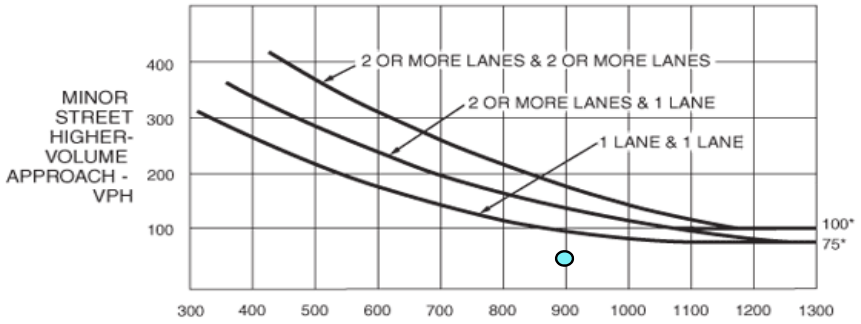
Scenario: Existing Conditions PM
Intersection: Grant Line Rd AND Kiefer Blvd
Comments:

	PART A or PART B	SATISFIED	**NO**
PART A (All parts 1, 2, and 3 below must be satisfied)		SATISFIED	**NO**
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND			No
2. The volume on the same minor street approach equals or exceeds 75 vph for one moving lane of traffic or 100 vph for two moving lanes; AND			No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.			Yes
PART B		SATISFIED	**NO**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	900	
Highest Approache - Minor Street	56	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing plus Proposed Project Conditions AM
Intersection: Grant Line Rd AND Kiefer Blvd
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

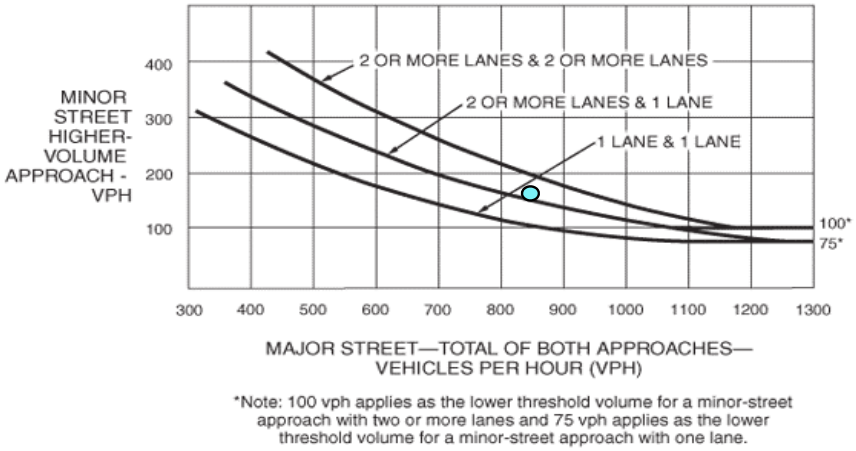
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 75 vph for one moving lane of traffic or 100 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **YES**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	854	
Highest Approach - Minor Street	183	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-4.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing plus Proposed Project Conditions PM
Intersection: Grant Line Rd AND Kiefer Blvd
Comments:

	PART A or PART B	SATISFIED	NO

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

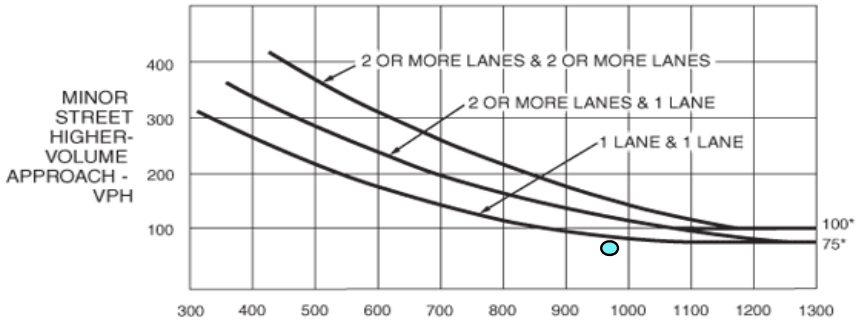
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND — No
2. The volume on the same minor street approach equals or exceeds 75 vph for one moving lane of traffic or 100 vph for two moving lanes; AND — No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — Yes

PART B SATISFIED **NO**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	974	
Highest Approach - Minor Street	69	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

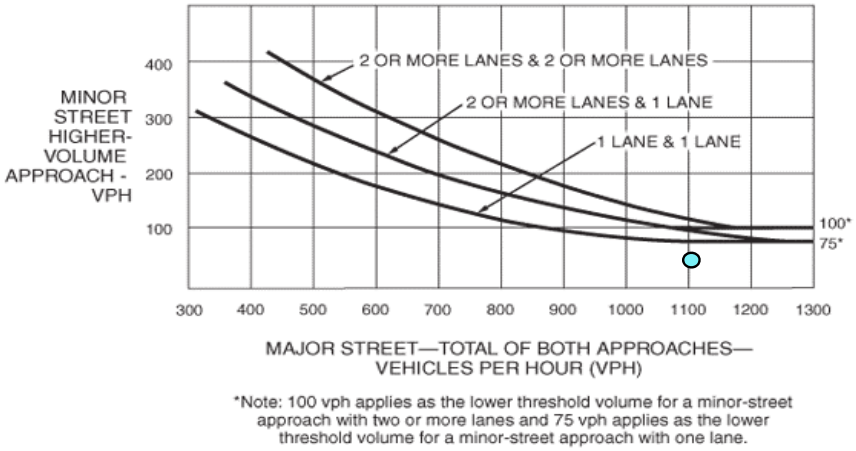
Scenario: Existing Conditions AM
Intersection: Grant Line Rd AND Raymer Way
Comments:

	PART A or PART B	SATISFIED	NO
PART A (All parts 1, 2, and 3 below must be satisfied)		SATISFIED	**NO**
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND			No
2. The volume on the same minor street approach equals or exceeds 75 vph for one moving lane of traffic or 100 vph for two moving lanes; AND			No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.			Yes
PART B		SATISFIED	**NO**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	1119	
Highest Approache - Minor Street	50	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-4.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

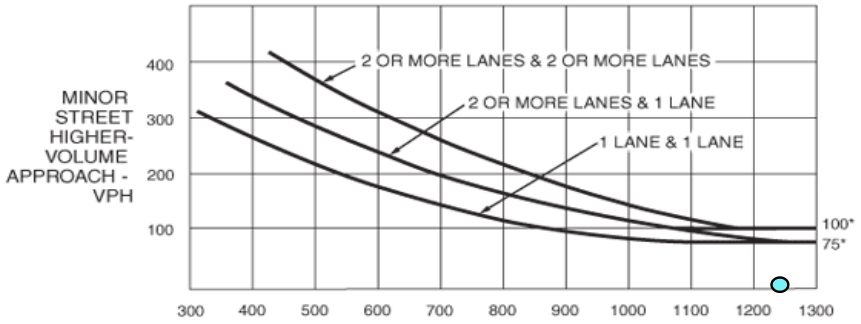
Scenario: Existing Conditions PM
Intersection: Grant Line Rd AND Raymer Way
Comments:

	PART A or PART B	SATISFIED	**NO**
PART A (All parts 1, 2, and 3 below must be satisfied)		SATISFIED	**NO**
1. The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND			No
2. The volume on the same minor street approach equals or exceeds 75 vph for one moving lane of traffic or 100 vph for two moving lanes; AND			No
3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.			Yes
PART B		SATISFIED	**NO**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	1244	
Highest Approache - Minor Street	18	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing plus Proposed Project Conditions AM
Intersection: Grant Line Rd AND Kiefer Blvd
Comments:

	PART A or PART B	SATISFIED	**YES**

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

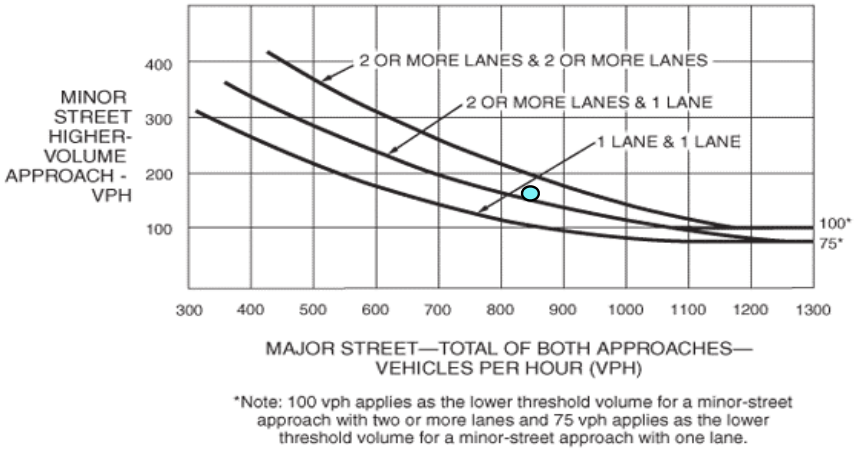
1.	The total delay experienced for traffic on one minor street approach controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach and five vehicle hours for a two-lane approach; AND	No
2.	The volume on the same minor street approach equals or exceeds 75 vph for one moving lane of traffic or 100 vph for two moving lanes; AND	Yes
3.	The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches.	Yes

PART B SATISFIED **YES**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	854	
Highest Approach - Minor Street	183	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-4.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Traffic Signal Warrants Worksheet
Warrant 3: Peak Hour
Source: MUTCD 2014 California Supplement

Scenario: Existing plus Proposed Project Conditions PM
Intersection: Grant Line Rd AND Kiefer Blvd
Comments:

	PART A or PART B	SATISFIED	NO

PART A
(All parts 1, 2, and 3 below must be satisfied) SATISFIED **NO**

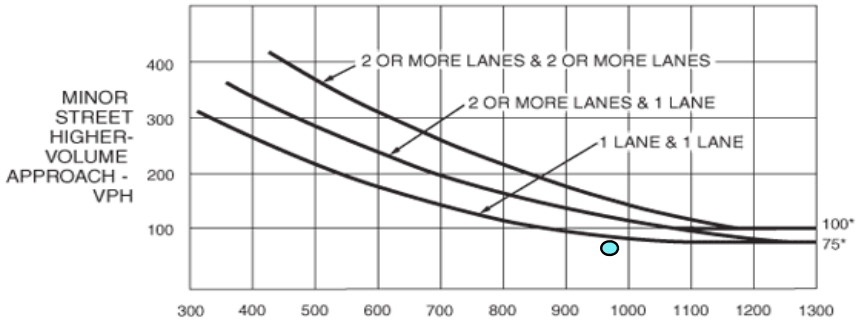
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3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersection with four or more approaches or 650 vph for intersection with less than four approaches. — Yes

PART B SATISFIED **NO**

APPROACH LANES	One	2 or More
Both Approaches - Major Street	974	
Highest Approach - Minor Street	69	

The plotted points for vehicles per hour on major streets (both approaches) and the corresponding per hour higher volume minor street approach (one direction only) for one hour (any consecutive 15 minute period) fall above applicable curves in MUTCD Figure 4C-3.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Kimley»Horn

Memorandum

To: George Carpenter
Grantline Road, LLC
c/o Winn Communities

From: Chris Gregerson, P.E., T.E., PTOE, PTP
Matt Weir, P.E., T.E., PTOE, RSP$_1$

Re: The Preserve
Vehicle Miles Traveled (VMT) Evaluation

Date: August 16, 2021

As requested, we have prepared this memorandum to document our evaluation of Vehicle Miles Traveled (VMT) for your residential development project located just west of the Raymer Way intersection with Grant Line Road in Rancho Cordova.

Overview

The primary purpose of this evaluation was to document the Vehicle Miles Traveled (VMT) per capita for The Preserve residential development and compare it to the VMT per capita value calculated for the City of Rancho Cordova, Sacramento County, and the SACOG region. Kimley-Horn understands that the proposed Project consists of 436 single-family detached units on the vacant parcels. A VMT analysis is required to determine if the addition of the proposed project results in a significant impact for CEQA purposes.

VMT Analysis Methodology

A CEQA VMT analysis was completed using the City's version of SACOG's SACSIM19 travel demand model for consistency of evaluation with the calculated values for the SACOG region. In addition, the analysis was tour-based, meaning that the analysis fully accounts for the entire trip length, including the length outside of the model area. While generally tour-based approaches include trips that are linked to trips that start or end at the project, for consistency with direction provided by City staff, the VMT analysis documented in this memorandum only estimates VMT based on all trips that have one end in a project location. This clarification means that intermediate trips, such as those occurring after someone has left the project area, such as a trip to pick-up lunch while at work, are not included in this analysis. Furthermore, consistent with the California Governor's Office of Planning and Research (OPR) guidelines[1] only automobile trips are considered as a part of this analysis. Heavy vehicle trips and alternative mode trips are not included in VMT analyses.

Kimley-Horn used the City's recently developed travel demand model with a base year of 2016 to perform the VMT analysis. A Traffic Analysis Zone (TAZ) representing the project area with no other land use was used to isolate the proposed project from all surrounding land uses. The 436 residential units were added to the project's TAZ to represent the project. Using the socioeconomic characteristics of developments in the immediate vicinity of the project to develop a profile of the households and persons expected to live in the proposed project, a population of 1,333 was estimated for the proposed project. Using the output trip table from the travel demand model, automobile trips either starting or ending in the proposed project were selected. These trips were factored based on the auto occupancy; single occupancy trips were multiplied by one, two-person vehicle trips were multiplied by 0.5, and three or more person trips

[1] *Technical Advisory on Evaluating Transportation Impacts in CEQA*.

were multiplied by 0.3, in a manner consistent with the methodology outlined by SACOG in its recent VMT analysis guidelines[2]. Each trip was multiplied by the model-determined distance based on the model's skim matrix determining the distance between each TAZ during the peak periods to determine that trip's VMT. Each trip's VMT was totaled to determine the total internal-internal VMT related to the proposed project.

External-internal and internal-external VMT was also calculated based on the methodologies outlined in SACOG's guidelines. A script file provided by SACOG and included in their model for VMT post-processing was run, which determined the VMT for trips that either start or end outside of the model area by TAZ. As the project was separated into its own TAZ, the VMT for the project's TAZ was added to the internal-internal total VMT to determine the total VMT associated with the proposed project. This VMT was then divided by the population of the project to determine a VMT per capita associated with the proposed project. This value was then compared to the Regional VMT Threshold for Residential land use types (15-percent below the Regional Average) to determine whether the project results in a significant impact.

VMT Analysis Results

Using the methodology described above, the VMT per Capita for the proposed Project was calculated. As shown Table 1 below, the proposed Project results in a VMT per capita value of 23.3.

Table 1 – Existing VMT Analysis Results Summary for the Proposed Project

Trip Type	Internal VMT	External VMT	Total VMT
Origin	15,157	610	15,767
Destination	14,677	604	15,281
Total	29,834	1,214	31,048
		Total Population	1,333
		VMT per Capita	**23.3**

In order to place the Project's VMT per Capita value in context, the average VMT per Capita was calculated for the entire SACOG region. The VMT per capita average for the SACOG region was calculated using the same methodology that was used to calculate the Project's average VMT per capita.

As shown Table 2 below, the average VMT per capita in the SACOG region is 23.2. Using the state's guidance, absent other substantial evidence, thresholds should be set 15-percent below the average VMT per capita. Thus, based on the analysis summarized in the tables below, the threshold for the SACOG region would be 19.7 VMT per capita, respectively.

Table 2 – Existing VMT Analysis Results Summary for the SACOG Region

Trip Type	Internal VMT	External VMT	Total VMT
Origin	18,765,997	8,788,214	27,554,210
Destination	18,765,997	8,788,214	27,554,210
Total	37,531,994	17,576,427	55,108,421
		Total Population	2,376,311
		VMT per Capita	**23.2**

Based on the analysis provided above, the project is expected to result in a finding of a significant impact based on the SACOG regional threshold as the project exceeds the threshold by approximately 15-percent.

[2] *VMT computation Procedures (DRAFT)*. Sacramento Area Council of Governments (SACOG). September 30, 2020.

Kimley»Horn

VMT Mitigation Strategies

In an attempt to mitigate the Project's significant impact to less than significant, SACOG's SB 743 guidance document[3] was used to help determine what mitigation strategies would be appropriate for the Project and how much those strategies would reduce the Project's VMT per Capita. SACOG's guidance relies heavily on the information provided by the California Air Pollution Control Officers Association (CAPCOA) guidance document for quantifying VMT reduction measures[4] and both documents were used to determine the strategies that could be implemented to reduce the Project's VMT per Capita.

Based on the CAPCOA guidance, the maximum VMT reduction that can be reasonably be obtained for Projects in a suburban setting is 15-percent, but this includes reductions related to commute trips. After a review of the mitigation strategies, many of the proposed strategies were found to not be applicable for the project as they are based on projects in urban locations or are applicable only to non-residential projects. The mitigation strategies that were considered include those related to parking, reducing work commute trips, or are related to transit. As the Project is located in a developing area with only vacant land and other residential communities surrounding it, there are limited alternatives to driving for work or shopping needs and no restrictions are placed on parking. In addition, the limited access to transit and the inability to implement strategies related to employment and commuting further restricts the Project's ability to reduce its VMT per Capita.

The two feasible mitigation strategies the Project is implementing include constructing a portion of the regional trail system that is planned in the vicinity of the Project and providing monetary support for transit related services through the City of Rancho Cordova's Transit Related Services Special Tax.

The Transit Related Services Special Tax will fund transportation services as determined appropriate by the City Council. Supplemental transportation services may include, but are not limited to, the following:

- Transit Shuttle – shuttle for residents and/or employees between residential areas, employment centers, shopping and service centers and light rail stations and/or other public transit options.
- Guaranteed Ride Home – free taxi rides and rental cars for ride sharers in case of an emergency.
- Transit Subsidies – financial assistance to encourage residents and employees to use transit or other alternative transportation measures.
- Transportation Plans for employers and/or resident groups – plans which guide employers and resident groups on the implementation of trip reduction programs, such as ride share matching or other similar programs.
- Education Programs – various programs such as education of transit options, home office set up, alternative commute opportunities.
- Infrastructure Support – additional bike racks and lockers, transportation alternative and ride share informational boards/kiosks, and transit facilities.
- Transportation Coordinator Training and Support – instruction in mobility (transportation alternatives) for residential groups and work site coordinators.
- Bicycle and Alternative Fuel Vehicle Incentives – incentives for purchasing new bicycles or alternative fuel vehicles.

Based on the CAPCOA guidance, these two measures combined would provide a maximum VMT reduction of 4.5-percent, but the reduction realized would likely be lower. Even with the maximum reduction applied, the VMT per Capita for the project would continue to exceed the regional threshold and therefore the impact would remain significant and unavoidable.

[3] *Senate Bill 743 Implementation Tools*. Sacramento Area Council of Governments (SACOG). June 2020.
[4] *Quantifying Greenhouse Gas Mitigation Measures*. California Air Pollution Control Officers Association. August 2010.

Kimley»Horn

Memorandum

To: George Carpenter
Grantline Road, LLC
c/o Winn Communities

From: Chris Gregerson, P.E., T.E., PTOE, PTP
Matt Weir, P.E., T.E., PTOE, RSP_1

Re: The Preserve
Supplemental Analysis for Six Additional Units

Date: February 8, 2021

As requested, we have prepared this memorandum to document the effect of adding six (6) additional units to the Proposed Project. These findings are compared against the Level of Service (LOS) and Vehicle Miles Traveled (VMT) analyses completed previously for your residential development project located west of the Raymer Way intersection with Grant Line Road in Rancho Cordova.

Overview

The primary purpose of this evaluation is to document the effect of adding six (6) additional units to the Proposed Project. Kimley-Horn understands that the Proposed Project previously consisted of 434 single-family detached units on three vacant parcels. The six (6) additional units results in a revised total of 440 single-family detached units.

Trip Generation

To determine the number of additional trips that result from the addition of the Proposed Project (six additional units), a trip generation comparison was completed. The number of trips anticipated to be generated by the Proposed Project was approximated using data included in the *Trip Generation Manual, 10th Edition* published by the Institute of Transportation Engineers (ITE). As shown in **Table 1**, the six additional units are estimated to generate 50 additional new daily trips, with four additional trips occurring during the AM peak-hour and five additional trips occurring during the PM peak-hour.

Table 1 – Trip Generation Summary

Land Use (ITE Code)	Size (Dwelling Units)	Daily Trips	AM Peak-Hour					PM Peak-Hour				
			Total Trips	In		Out		Total Trips	In		Out	
				%	Trips	%	Trips		%	Trips	%	Trips
Single-Family Detached Housing (210)[1]	434	4,014	313	25%	78	75%	235	416	63%	262	37%	154
Single-Family Detached Housing (210)[1]	440	4,064	317	25%	79	75%	238	421	63%	265	37%	156
New Project Trips		**50**	**4**		**1**		**3**	**5**		**3**		**2**

[1] *Trip generation based on Institute of Transporation Engineers (ITE), Trip Generation Manual, (10th Edition) equations for Single-Family Detached Housing (Land Use Code 210)*
Daily: Ln(T) = 0.92Ln(X) + 2.71
AM Peak Hour: T = 0.71(X) + 4.80
PM Peak Hour: Ln(T) = 0.96Ln(X) + 0.2
Where: T = trips generated, X = dwelling units

Kimley»Horn

Level of Service (LOS) Analysis Comparison

The following guidelines were used when evaluating whether the Proposed Project results in a LOS deficiency:

Roadways/Signalized Intersections: A project is considered to have a significant effect if it would:

- result in a roadway or a signalized intersection operating at an acceptable LOS to deteriorate to an unacceptable LOS; or
- increase the V/C ratio by more than 0.05 at a roadway or at a signalized intersection that is operating at an unacceptable LOS without the project.

Unsignalized Intersections: A project is considered to have a significant effect if it would:

- result in an unsignalized intersection movement/approach operating at an acceptable LOS to deteriorate to an unacceptable LOS, and also cause the intersection to meet a traffic signal warrant; or
- for an unsignalized intersection that meets a signal warrant, increase the delay by more than 5 seconds at a movement/approach that is operating at an unacceptable LOS without the project.

Previously, the addition of the Proposed Project to the Existing (2019) Conditions resulted in a deficiency at two (2) study intersections. The addition of the Proposed Project to Cumulative (2035) Conditions resulted in a deficiency at three (3) study intersections. The addition of the Proposed Project did not result in a deficiency at any of the study roadway segments for Existing (2019) or Cumulative (2035) Conditions.

A review was undertaken to determine whether the six (6) project units would result in additional deficiencies. Only intersections and roadway segments that were identified as being close to becoming deficient or were already deficient without the addition of the project, were included in this supplemental review. Specifically, if an intersection was within five (5) seconds of delay to becoming deficient or if a roadway segment had a volume to capacity ratio (V/C ratio) within 0.05 of capacity or was already over capacity it was included in the review.

The additional 50 daily trips, with four new trips occurring during the AM peak-hour, and five new trips occurring during the PM peak-hour, were distributed to the selected study intersections and roadway segments based on the previously developed Existing (2019) and Cumulative (2035) trip distributions. It was determined that the additional trips did not result in any intersections or roadway segments currently operating acceptably to become deficient, nor did the additional trips result in any intersections or roadway segments currently operating at deficient levels to exceed the guidelines described above.

VMT Analysis Conclusions Comparison

As shown in Table 2 below, the proposed Project resulted in a VMT per capita value of 23.3.

Table 2 – Existing VMT Analysis Results Summary for the Proposed Project

Trip Type	Internal VMT	External VMT	Total VMT
Origin	15,157	610	15,767
Destination	14,677	604	15,281
Total	29,834	1,214	31,048
		Total Population	1,333
		VMT per Capita	**23.3**

In order to place the Project's VMT per Capita value in context, the average VMT per Capita was calculated for the City of Rancho Cordova, Sacramento County, and the entire SACOG region.

Kimley»Horn

Based on the previously completed analysis, the project is expected to result in a finding of a significant impact only if the City's threshold were to be based on Sacramento County or SACOG regional data as the project would exceed the threshold based on these data sources. However, the project would be expected to result in a finding of less than significant impact if the City's threshold were to be based on only City of Rancho Cordova data.

As the character of the additional six units would be consistent in terms of size and socioeconomic distribution of the residents of the other 434 units in the Proposed Project, it is reasonable to assume that the distribution and length of trips resulting from the additional units would be consistent with the rest of the units comprising the Proposed Project because the City's travel demand model is used to complete the VMT analysis. The trips generated, distributed, and assigned to the model roadway network would only increase in magnitude with the additional units and the pattern of the trips would remain consistent. While the additional six units would increase the total daily VMT generated by the Proposed Project, there would be a commensurate increase in the Proposed Project's population leading to a VMT per capita value that is consistent with the analysis performed previously.

Conclusions

As noted above, the six units are estimated to generate 50 additional new daily trips, with four additional new trips occurring during the AM peak-hour, and five additional new trips occurring during the PM peak-hour. It was determined that the additional trips do not result in any intersections or roadway segments currently operating acceptably to become deficient, nor did the additional trips result in any intersections or roadway segments currently operating at deficient levels to exceed the guidelines described above. In addition, while the additional six units would increase the total daily VMT generated by the Proposed Project, there would be a commensurate increase in the Proposed Project's population leading to a VMT per capita value that is consistent with the analysis performed previously.

Kimley»Horn

Memorandum

To: Albert Stricker, P.E.
Public Works Director, City of Rancho Cordova

From: Chris Gregerson, P.E., T.E., PTOE, PTP
Matt Weir, P.E., T.E., PTOE, RSP_1

Re: The Preserve
Centennial Drive Considerations

Date: August 16, 2021

Project Understanding

We understand that the City is currently assessing the potential of removing the extension of Centennial Drive to Grant Line Road/Capital SouthEast Connector (thereby removing the link between Rio Del Oro and Grant Line Road/the Capital SouthEast Connector). This memorandum summarizes the efforts that have been undertaken to date to analyze the removal of the extension of Centennial Drive.

Travel Demand Modeling

The initial effort occurred in April 2019 and was documented in a memorandum completed by Kimley-Horn[1]. At that time, the City provided their currently adopted Travel Demand Model (TDM) for the Forecast Year (2035) and provided two roadway network modifications to be assumed as a part of this effort[2]. The two network modifications were as follows:

1) Douglas Road – reduced from 6 lanes to 4 lanes between Rancho Cordova Parkway and Grant Line Road
2) Rancho Cordova Parkway – reduced from 6 lanes to 4 lanes between Chrysanthy Boulevard and Villagio Drive

Two versions of the model were run once these roadway network modifications were completed. The first version of the model did not have any modifications to Centennial Drive and it was assumed to connect between Americanos Boulevard and Grant Line Road. A second version of the model was run with Centennial Drive between Americanos Boulevard and Grant Line Road removed and the centroid connector that previously connected to this portion of Centennial Drive was moved to connect directly to Grant Line Road. The resulting volumes from the two model runs were compared and a difference was taken between the model run without the Centennial Drive connection and the model run with the Centennial Drive connection. The volume difference is displayed graphically in **Exhibit 1**. As shown in **Exhibit 1**, the largest daily volume increase is along White Rock Road immediately west of Grant Line Road while the largest daily volume decrease is along Centennial Drive immediately west of Americanos Boulevard. Minimal daily volume differences occur along Sunrise Boulevard and Rancho Cordova Parkway.

Roadway Segment Volumes and Levels of Service (LOS)

In addition to the volume comparison, a Level of Service (LOS) analysis was completed for select roadways in the vicinity of Centennial Drive, both with and without the Centennial Drive connection between Americanos Boulevard and Grant Line Road. The results of the LOS analysis are shown in **Table**

[1] *The Preserve DRAFT Centennial Drive Assessment*. Kimley-Horn. April 9, 2019.
[2] Email from Mark Thomas, City of Rancho Cordova, March 25, 2019.

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1, below. As shown in Table 1, no roadway is expected to operate unacceptably (LOS E or worse) either with or without the Centennial Drive connection between Americanos Boulevard and Grant Line Road.

Table 1 – Roadway Segment Analysis Results

ID	Roadway	Segment		2035 with Centennial Drive					2035 without Centennial Drive				
		From	To	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type	Daily Volume	Volume / Capacity Ratio	Level of Service
1	Douglas Rd	Mather Blvd	Sunrise Blvd	6	Arterial M	36,880	0.68	B	6	Arterial M	36,840	0.68	B
2	Douglas Rd	Rancho Cordova Pkwy	Americanos Blvd	4	Arterial M	17,550	0.49	A	4	Arterial M	18,230	0.51	A
3	Douglas Rd	Americanos Blvd	Grant Line Rd	4	Arterial M	15,770	0.44	A	4	Arterial M	17,250	0.48	A
4	White Rock Rd	Sunrise Blvd	Rancho Cordova Pkwy	6	Arterial M	31,510	0.58	A	6	Arterial M	32,080	0.59	A
5	White Rock Rd	Americanos Blvd	Grant Line Rd	6	Arterial M	22,940	0.42	A	6	Arterial M	27,500	0.51	A
6	White Rock Rd	Grant Line Rd	Prairie City Rd	4	Expressway	59,900	0.83	D	4	Expressway	52,540	0.73	C
7	Sunrise Blvd	White Rock Rd	Douglas Rd	6	Arterial M	47,780	0.88	C	6	Arterial M	47,760	0.88	C
8	Grant Line Rd	White Rock Rd	Douglas Rd	4	Expressway	48,230	0.67	B	4	Expressway	51,600	0.72	C
9	Rancho Cordova Pkwy	White Rock Rd	Rio Del Oro Pkwy	6	Arterial M	33,170	0.61	B	6	Arterial M	33,170	0.61	B
10	Rancho Cordova Pkwy	Rio Del Oro Pkwy	Douglas Rd	4	Arterial M	17,680	0.49	A	4	Arterial M	17,790	0.49	A
11	Americanos Blvd	International Rd	Centennial Dr	2	Arterial M	11,170	0.62	B	2	Arterial M	8,330	0.46	A
12	Americanos Blvd	Centennial Dr	Douglas Rd	2	Arterial M	10,070	0.56	A	2	Arterial M	10,240	0.57	A

Note: **Bold** represents unacceptable operations.

The number of lanes assumed for each roadway segment were taken directly from the City's TDM with the exception of Segment #6 and Segment #8 (White Rock Road between Grant Line Road and Prairie City Road, and Grant Line Road between White Rock Road and Douglas Road). While these roadway segments are assumed to be six (6) lanes in the model, they were analyzed as four-lane expressways, consistent with guidelines for the Capital SouthEast Connector.

Roadway Segment Volumes and Levels of Service (LOS) Follow Up

On July 22, 2019, Kimley-Horn met with City Staff where they requested a follow up roadway segment analysis for Baseline and Cumulative conditions based on the Rio del Oro traffic study. The No Project and Plus Project scenarios for Baseline and Cumulative Conditions from the traffic study, as well as the volumes and LOS when the rerouted volumes are taken into account based on the removal of Centennial Drive, are summarized in Exhibit 2 and Exhibit 3, respectively. As shown in Exhibit 2 and Exhibit 3, no additional impacts that haven't been previously identified were shown as a result of the removal of the Centennial Drive extension. In addition, one impact was removed in the Cumulative scenario as a result of the removal of the Centennial Drive extension.

Vehicle Miles Traveled (VMT) Assessment

In addition to the roadway segment analysis, a Vehicle Miles Traveled assessment was also completed. The regional (SACOG) VMT totaled for the two model runs, with and without the Centennial Drive extension. The assessment indicated that VMT was reduced by 6,820 without the Centennial, however it should be noted that the difference reflects a 0.008-percent difference in regional VMT. As the model used to perform this analysis includes an iterative process for assigning traffic to the model network there is inherent randomness introduced and thus this difference should be considered as indication that the removal of Centennial Drive results in a negligible difference to regional VMT.

Physical Constraints

The adopted South Sacramento Habitat Conservation Plan (SSHCP) has created conflicts with both the previously planned development of Heritage Falls and the potential construction of Centennial Drive. A review was completed in June 2019 that looked at alternative alignments for Centennial Drive that would run south of the current Centennial Drive alignment, cross the Rio Del Oro preserve and extend through the proposed Project to Grant Line Road. This was documented in a memorandum that was submitted to

the City[3]. The following reasons were cited as to why these alternative alignments were deemed infeasible:

1. The needed road crossing of the Rio Del Oro preserve is not allowed under the project's Biological Opinion and would require an amendment. The environmental consultant to the Rio Del Oro developers indicates that the developers have made it clear on several occasions that they are not interested in amending or revisiting the Biological Opinion, which was controversial and took many years to obtain.

2. Agency approval of an additional crossing through the Rio Del Oro preserve is speculative at best. This stretch of the Rio Del Oro preserve is full of resources and is a linkage preserve intended as a wildlife corridor. It seems unlikely that the USFWS would support an additional crossing.
3. The City's threshold for a collector road with frontage is fewer than 8,000 daily vehicles. The travel demand model states that the estimated traffic volume in the future along Centennial Drive would be 10,250 daily vehicles which would disallow front on driveway access. The high volume of thru-traffic would create a crossing hazard separating the existing neighborhoods of North Douglas and the future The Preserve neighborhood south of the Centennial extension from the planned park and open space amenities in conflict with the design concept for the project. The mere possibility of the future connection to Rio Del Oro would interfere with project design whether or not the connection was ever completed.

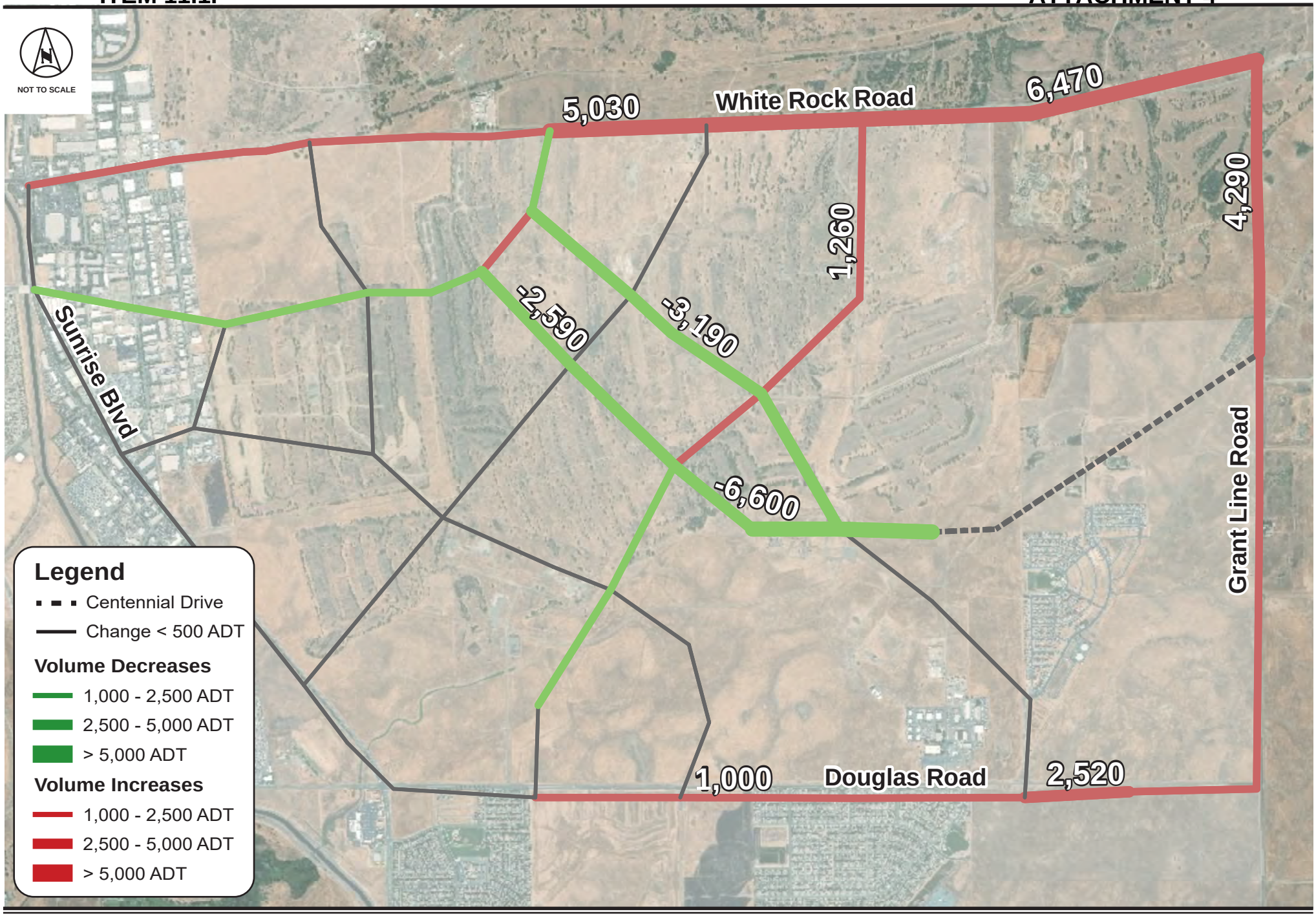
Conclusions

As shown in Exhibit 1 and Table 1, the removal of the Centennial Drive connection between Americanos Boulevard and Grant Line Road is not expected to significantly impact the surrounding roadway network. While volumes are expected to fluctuate between increasing by almost 6,500 daily vehicles to decreasing by 6,600 daily vehicles, the change in daily volumes does not impact any roadway segment. When applying these fluctuating volumes to the Rio del Oro roadway segment analysis, no impacts were created that weren't previously identified and one impact for Cumulative (2030) Conditions was removed, as shown in Exhibit 2 and Exhibit 3. In addition, the removal of the Centennial Drive extension has a negligible effect on regional VMT. Finally, when considering alternative alignments for the Centennial Drive extension, three alignments were reviewed and all were deemed infeasible.

Attachments:

Exhibit 1 – 2035 Daily Volume Change without Centennial Drive
Exhibit 2 – Baseline Roadway Segment Analysis and Volume Shift
Exhibit 3 – Cumulative (2030) Roadway Segment Analysis and Volume Shift

[3] *Centennial Drive Alternatives*. Bob Shattuck, Shattuck Community Planning. June 10, 2019.



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Exhibit 1
2035 Daily Volume Change without Centennial Drive

Baseline Roadway Segment Analysis and Volume Shift

ID	Roadway	Segment		Existing						Baseline (No Project)						LOS Threshold
		From	To	Travel Lanes	Facility Type	Daily Volume	LOS Threshold	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type	Daily Volume	LOS Threshold	Volume / Capacity Ratio	Level of Service	
1	SR 16	Excelsior Rd	Eagles Nest Road	2	Arterial Moderate	11,400	18,000	0.63	B	2	Arterial Moderate	12,100	18,000	0.67	B	D
2	SR 16	Sunrise Blvd	Grant Line Road	2	Arterial Moderate	15,400	18,000	0.86	D	2	Arterial Moderate	16,000	18,000	0.89	D	E
3	Kiefer Blvd	Grant Line Rd	SR 16	2	Rural Two-Lane	1,800	17,000	0.11	B	2	Rural Two-Lane	1,900	17,000	0.11	B	E
4	Mather Blvd	Femoyer St	Douglas Road	2	Arterial Moderate	6,000	18,000	0.33	A	2	Arterial Moderate	17,400	18,000	**0.97**	**E**	D
5	Douglas Rd	Mather Blvd	Sunrise Blvd	2	Arterial Moderate	5,000	18,000	0.28	A	2	Arterial Moderate	18,200	18,000	**1.01**	**F**	D
6	Douglas Rd	Sunrise Blvd	Grant Line Road	2	Arterial Moderate	2,300	18,000	0.13	A	See Segments #22 and #23						D
7	International Dr	South White Rock Rd	Zinfandel Dr	4	Arterial Moderate	12,000	36,000	0.33	A	4	Arterial Moderate	13,700	36,000	0.38	A	D
8	International Dr	Zinfandel Dr	Kilgore Road	4	Arterial Moderate	6,800	36,000	0.19	A	4	Arterial Moderate	8,900	36,000	0.25	A	D
9	White Rock Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial Moderate	17,900	54,000	0.33	A	6	Arterial Moderate	23,200	54,000	0.43	A	D
10	White Rock Rd	Sunrise Blvd	Grant Line Road	2	Arterial Moderate	4,400	18,000	0.24	A	2	Arterial Moderate	8,200	18,000	0.46	A	D
11	Zinfandel Dr	White Rock Rd	International Dr	6	Arterial Moderate	19,700	54,000	0.36	A	6	Arterial Moderate	23,000	54,000	0.43	A	D
12	Sunrise Blvd	Gold Country Blvd	Coloma Rd	6	Arterial Moderate	75,800	54,000	**1.40**	**F**	6	Arterial Moderate	77,600	54,000	**1.44**	**F**	D
13	Sunrise Blvd	Coloma Rd	US 50	6	Arterial Moderate	82,400	54,000	**1.53**	**F**	6	Arterial Moderate	85,000	54,000	**1.57**	**F**	D
14	Sunrise Blvd	US 50	Folsom Blvd	6	Arterial Moderate	52,100	54,000	**0.96**	**E**	6	Arterial Moderate	58,600	54,000	**1.09**	**F**	D
15	Sunrise Blvd	Folsom Blvd	White Rock Rd	6	Arterial Moderate	37,200	54,000	0.69	B	6	Arterial Moderate	49,500	54,000	**0.92**	**E**	D
16	Sunrise Blvd	White Rock Rd	Douglas Road	4	Arterial Moderate	24,600	36,000	0.68	B	4	Arterial Moderate	36,700	36,000	1.02	B	D
17	Sunrise Blvd	Douglas Rd	SR 16	2	Arterial High	20,000	20,000	**1.00**	**E**	See Segments #24 and #25						D
18	Sunrise Blvd	SR 16	Grant Line Road	2	Arterial Moderate	13,600	18,000	0.76	C	2	Arterial Moderate	15,000	18,000	0.83	D	E
19	Grant Line Road	White Rock Rd	Douglas Road	2	Arterial Moderate	6,000	18,000	0.33	A	2	Arterial Moderate	8,900	18,000	0.49	A	D
20	Grant Line Road	Douglas Rd	SR 16	2	Arterial Moderate	6,700	18,000	0.37	A	2	Arterial Moderate	7,100	18,000	0.39	A	D
21	Grant Line Road	SR 16	Sunrise Blvd	2	Arterial Moderate	5,600	18,000	0.31	A	2	Arterial Moderate	6,100	18,000	0.34	A	E
22	Douglas Rd	Sunrise Blvd	Jaeger Rd	See Segment #6						4	Arterial Moderate	21,400	36,000	0.59	A	D
23	Douglas Rd	Americanos Blvd	Grant Line Road							2	Arterial Moderate	5,700	18,000	0.32	A	D
24	Sunrise Blvd	Douglas Rd	Keifer Blvd	See Segment #17						4	Arterial Moderate	25,000	36,000	0.69	B	D
25	Sunrise Blvd	Keifer Blvd	SR 16							4	Arterial Moderate	23,100	36,000	0.64	B	D

Note: **Bold** represents unacceptable operations. Shaded indicates significant impact

ID	Roadway	Segment		Baseline plus Proposed Project						Baseline plus Proposed Project - REROUTED							LOS Threshold	Comments
		From	To	Travel Lanes	Facility Type	Daily Volume	LOS Threshold	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type	Daily Volume	Volume Difference	LOS Threshold	Volume / Capacity Ratio	Level of Service		
1	SR 16	Excelsior Rd	Eagles Nest Road	2	Arterial Moderate	12,900	18,000	0.72	C	2	Arterial Moderate	12,950	50	18,000	0.72	C	D	
2	SR 16	Sunrise Blvd	Grant Line Road	2	Arterial Moderate	17,500	18,000	0.97	E	2	Arterial Moderate	17,550	50	18,000	0.98	E	E	
3	Kiefer Blvd	Grant Line Rd	SR 16	2	Rural Two-Lane	2,100	17,000	0.12	B	2	Rural Two-Lane Rd (NS)	2,100	0	17,000	0.12	B	E	
4	Mather Blvd	Femoyer St	Douglas Road	2	Arterial Moderate	20,500	18,000	**1.14**	**F**	2	Arterial Moderate	20,590	90	18,000	**1.14**	**F**	D	
5	Douglas Rd	Mather Blvd	Sunrise Blvd	2	Arterial Moderate	25,400	18,000	**1.41**	**F**	2	Arterial Moderate	25,350	-50	18,000	**1.41**	**F**	D	
7	International Dr	South White Rock Rd	Zinfandel Dr	4	Arterial Moderate	17,800	36,000	0.49	A	4	Arterial Moderate	14,800	-3,000	36,000	0.41	A	D	
8	International Dr	Zinfandel Dr	Kilgore Road	4	Arterial Moderate	14,200	36,000	0.39	A	4	Arterial Moderate	13,700	-500	36,000	0.38	A	D	
9	White Rock Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial Moderate	45,100	54,000	0.84	D	6	Arterial Moderate	45,500	400	54,000	0.84	D	D	
10	White Rock Rd	Sunrise Blvd	Grant Line Road	2	Arterial Moderate	20,900	18,000	**1.16**	**F**	2	Arterial Moderate	27,370	6,470	18,000	**1.52**	**F**	D	**LOS C with identified mitigation**
11	Zinfandel Dr	White Rock Rd	International Dr	6	Arterial Moderate	23,200	54,000	0.43	A	6	Arterial Moderate	22,700	-500	54,000	0.42	A	D	
12	Sunrise Blvd	Gold Country Blvd	Coloma Rd	6	Arterial Moderate	92,500	54,000	**1.71**	**F**	6	Arterial Moderate	92,440	-60	54,000	**1.71**	**F**	D	
13	Sunrise Blvd	Coloma Rd	US 50	6	Arterial Moderate	102,500	54,000	**1.90**	**F**	6	Arterial Moderate	102,470	-30	54,000	**1.90**	**F**	D	
14	Sunrise Blvd	US 50	Folsom Blvd	6	Arterial Moderate	82,900	54,000	**1.54**	**F**	6	Arterial Moderate	82,960	60	54,000	**1.54**	**F**	D	
15	Sunrise Blvd	Folsom Blvd	White Rock Rd	6	Arterial Moderate	77,300	54,000	**1.43**	**F**	6	Arterial Moderate	77,450	150	54,000	**1.43**	**F**	D	
16	Sunrise Blvd	White Rock Rd	Douglas Road	4	Arterial Moderate	65,600	36,000	**1.82**	**F**	4	Arterial Moderate	65,540	-60	36,000	**1.82**	**F**	D	
18	Sunrise Blvd	SR 16	Grant Line Road	2	Arterial Moderate	22,400	18,000	**1.24**	**F**	2	Arterial Moderate	22,450	50	18,000	**1.25**	**F**	E	
19	Grant Line Road	White Rock Rd	Douglas Road	2	Arterial Moderate	10,500	18,000	0.58	A	2	Arterial Moderate	15,290	4,790	18,000	0.85	D	D	**LOS Increase, but not impacted**
20	Grant Line Road	Douglas Rd	SR 16	2	Arterial Moderate	7,800	18,000	0.43	A	2	Arterial Moderate	8,100	300	18,000	0.45	A	D	
21	Grant Line Road	SR 16	Sunrise Blvd	2	Arterial Moderate	6,200	18,000	0.34	A	2	Arterial Moderate	6,210	10	18,000	0.35	A	E	
22	Douglas Rd	Sunrise Blvd	Jaeger Rd	4	Arterial Moderate	29,700	36,000	0.83	D	4	Arterial Moderate	30,500	800	36,000	0.85	D	D	
23	Douglas Rd	Americanos Blvd	Grant Line Road	2	Arterial Moderate	6,500	18,000	0.36	A	2	Arterial Moderate	9,020	2,520	18,000	0.50	A	D	
24	Sunrise Blvd	Douglas Rd	Keifer Blvd	4	Arterial Moderate	39,900	36,000	**1.11**	**F**	4	Arterial Moderate	40,020	120	36,000	**1.11**	**F**	D	
25	Sunrise Blvd	Keifer Blvd	SR 16	4	Arterial Moderate	33,800	36,000	**0.94**	**E**	4	Arterial Moderate	33,870	70	36,000	**0.94**	**E**	D	

Note: **Bold** represents unacceptable operations. Shaded indicates significant impact

Cumulative (2030) Roadway Segment Analysis and Volume Shift

ID	Roadway	Segment		Cumulative (2030) No Project						Cumulative (2030) plus Proposed Project						Cumulative (2030) plus Proposed Project - REROUTED							LOS Threshold	Comments
		From	To	Travel Lanes	Facility Type	Daily Volume	LOS Threshold	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type	Daily Volume	LOS Threshold	Volume / Capacity Ratio	Level of Service	Travel Lanes	Facility Type	Daily Volume	Difference	LOS Threshold	Volume / Capacity Ratio	Level of Service		
1	SR 16	Excelsior Rd	Eagles Nest Road	4	Arterial Moderate	19,200	36,000	0.53	A	4	Arterial Moderate	19,200	36,000	0.53	A	4	Arterial Moderate	19,250	50	36,000	0.53	A	E	
2	SR 16	Sunrise Blvd	Grant Line Road	4	Arterial Moderate	19,700	36,000	0.55	A	4	Arterial Moderate	19,900	36,000	0.55	A	4	Arterial Moderate	19,950	50	36,000	0.55	A	D	
3	Kiefer Blvd	Grant Line Rd	SR 16	2	Rural Two-Lane	13,300	17,000	0.78	E	2	Rural Two-Lane	15,300	17,000	0.90	E	2	Rural Two-Lane	15,300	0	17,000	0.90	E	E	
4	Mather Blvd	Femoyer St	Douglas Road	4	Arterial Moderate	19,600	36,000	0.54	A	4	Arterial Moderate	20,800	36,000	0.58	A	4	Arterial Moderate	20,890	90	36,000	0.58	A	E	
5	Douglas Rd	Mather Blvd	Sunrise Blvd	6	Arterial Moderate	18,100	54,000	0.34	A	6	Arterial Moderate	23,300	54,000	0.43	A	6	Arterial Moderate	23,250	-50	54,000	0.43	B	D	**LOS increase, but no impact**
6	International Dr	South White Rock Rd	Zinfandel Dr	6	Expressway	53,900	81,000	0.67	C	6	Expressway	73,500	81,000	**0.91**	**E**	6	Expressway	70,500	-3,000	81,000	0.87	D	D	**LOS decrease, removal of impact**
7	International Dr	Zinfandel Dr	Kilgore Road	6	Expressway	38,300	81,000	0.47	B	6	Expressway	68,400	81,000	0.84	D	6	Expressway	67,900	-500	81,000	0.84	D	D	
8	White Rock Rd	Zinfandel Dr	Sunrise Blvd	6	Arterial Moderate	19,700	54,000	0.36	A	6	Arterial Moderate	30,300	54,000	0.56	A	6	Arterial Moderate	30,700	400	54,000	0.57	A	D	
9	White Rock Rd	Sunrise Blvd	Grant Line Road	6	Arterial High	20,900	60,000	0.35	A	6	Arterial High	36,100	60,000	0.60	B	6	Arterial High	42,570	6,470	60,000	0.71	C	D	**LOS increase, but no impact**
16	Zinfandel Dr	White Rock Rd	International Dr	6	Arterial Moderate	42,400	54,000	0.79	C	6	Arterial Moderate	46,100	54,000	0.85	D	6	Arterial Moderate	45,600	-500	54,000	0.84	D	D	
17	Sunrise Blvd	Gold Country Blvd	Coloma Rd	6	Arterial High	84,400	60,000	**1.41**	**F**	6	Arterial High	95,300	60,000	**1.59**	**F**	6	Arterial High	95,240	-60	60,000	**1.59**	**F**	D	
18	Sunrise Blvd	Coloma Rd	US 50	6	Arterial High	95,500	60,000	**1.59**	**F**	6	Arterial High	108,700	60,000	**1.81**	**F**	6	Arterial High	108,670	-30	60,000	**1.81**	**F**	D	
19	Sunrise Blvd	US 50	Folsom Blvd	6	Arterial High	49,600	60,000	0.83	D	6	Arterial High	63,000	60,000	**1.05**	**F**	6	Arterial High	63,060	60	60,000	**1.05**	**F**	D	
20	Sunrise Blvd	Folsom Blvd	White Rock Rd	6	Arterial High	40,000	60,000	0.67	B	6	Arterial High	55,800	60,000	**0.93**	**E**	6	Arterial High	55,950	150	60,000	**0.93**	**E**	D	
21	Sunrise Blvd	White Rock Rd	Douglas Road	6	Arterial Moderate	33,700	54,000	0.62	B	6	Arterial Moderate	44,900	54,000	0.83	D	6	Arterial Moderate	44,840	-60	54,000	0.83	D	D	
22	Sunrise Blvd	SR 16	Grant Line Road	6	Arterial Moderate	28,100	54,000	0.52	A	6	Arterial Moderate	32,200	54,000	0.60	A	6	Arterial Moderate	32,250	50	54,000	0.60	A	E	
24	Grant Line Road	White Rock Rd	Douglas Road	6	Expressway	26,700	81,000	0.33	B	6	Expressway	27,500	81,000	0.34	B	6	Expressway	32,290	4,790	81,000	0.40	B	D	
25	Grant Line Road	Douglas Rd	SR 16	6	Expressway	21,200	81,000	0.26	A	6	Expressway	21,600	81,000	0.27	A	6	Expressway	21,900	300	81,000	0.27	A	D	
26	Grant Line Road	SR 16	Sunrise Blvd	6	Arterial High	15,100	60,000	0.25	A	6	Arterial High	16,500	60,000	0.28	A	6	Arterial High	16,510	10	60,000	0.28	A	E	
32	Douglas Rd	Sunrise Blvd	Jaeger Rd	6	Arterial Moderate	22,500	54,000	0.42	A	6	Arterial Moderate	27,300	54,000	0.51	A	6	Arterial Moderate	28,100	800	54,000	0.52	A	D	
33	Douglas Rd	Americanos Blvd	Grant Line Road	4	Arterial Moderate	11,700	36,000	0.33	A	4	Arterial Moderate	14,600	36,000	0.41	A	4	Arterial Moderate	17,120	2,520	36,000	0.48	A	D	
34	Douglas Rd	Jaeger Rd	Americanos Blvd	6	Arterial Moderate	11,500	54,000	0.21	A	6	Arterial Moderate	14,600	54,000	0.27	A	6	Arterial Moderate	15,600	1,000	54,000	0.29	A	D	
35	Chrysanthy Blvd	Sunrise Blvd	Jaeger Rd	4	Arterial Moderate	8,400	36,000	0.23	A	4	Arterial Moderate	9,600	36,000	0.27	A	4	Arterial Moderate	9,550	-50	36,000	0.27	A	D	
36	Chrysanthy Blvd	Jaeger Rd	Americanos Blvd	4	Arterial Moderate	13,100	36,000	0.36	A	4	Arterial Moderate	16,200	36,000	0.45	A	4	Arterial Moderate	16,130	-70	36,000	0.45	A	D	
37	Keifer Blvd	Eagles Nest Rd	Sunrise Blvd	2	Arterial Moderate	17,000	18,000	**0.94**	**E**	2	Arterial Moderate	17,100	18,000	**0.95**	**E**	2	Arterial Moderate	17,150	50	18,000	**0.95**	**E**	D	
38	Keifer Blvd	Sunrise Blvd	Jaeger Rd	4	Arterial Moderate	9,100	36,000	0.25	A	4	Arterial Moderate	9,300	36,000	0.26	A	4	Arterial Moderate	9,470	170	36,000	0.26	A	D	
39	Eagles Nest Road	Mather Blvd	Douglas Road	6	Arterial Moderate	34,800	54,000	0.64	B	6	Arterial Moderate	36,100	54,000	0.67	B	6	Arterial Moderate	36,190	90	54,000	0.67	B	E	
40	Eagles Nest Road	Douglas Rd	Keifer Blvd	4	Arterial Moderate	14,000	36,000	0.39	A	4	Arterial Moderate	14,400	36,000	0.40	A	4	Arterial Moderate	14,400	0	36,000	0.40	A	E	
41	Eagles Nest Road	Keifer Blvd	SR 16	4	Arterial Moderate	9,400	36,000	0.26	A	4	Arterial Moderate	9,700	36,000	0.27	A	4	Arterial Moderate	9,690	-10	36,000	0.27	A	E	
42	Sunrise Blvd	Douglas Rd	Chrysanthy Blvd	6	Arterial Moderate	47,000	54,000	0.87	D	6	Arterial Moderate	59,400	54,000	**1.10**	**F**	6	Arterial Moderate	59,450	50	54,000	**1.10**	**F**	D	
43	Sunrise Blvd	Chrysanthy Blvd	Keifer Blvd	6	Arterial Moderate	35,000	54,000	0.65	B	6	Arterial Moderate	43,700	54,000	0.81	D	6	Arterial Moderate	43,820	120	54,000	0.81	D	D	
44	Sunrise Blvd	Keifer Blvd	SR 16	6	Arterial Moderate	40,700	54,000	0.75	C	6	Arterial Moderate	47,200	54,000	0.87	D	6	Arterial Moderate	47,270	70	54,000	0.88	D	D	
45	Rancho Cordova Pkwy	US 50	Easton Valley Pkwy	6	Expressway	49,600	81,000	0.61	C	6	Expressway	67,800	81,000	0.84	D	6	Expressway	67,960	160	81,000	0.84	D	D	
46	Rancho Cordova Pkwy	Easton Valley Pkwy	White Rock Rd	6	Arterial Moderate	40,600	60,000	0.68	B	6	Arterial Moderate	63,900	60,000	**1.07**	**F**	6	Arterial Moderate	64,050	150	60,000	**1.07**	**F**	D	
47	Rancho Cordova Pkwy	White Rock Rd	Douglas Road	6	Arterial Moderate	23,000	54,000	0.43	A	6	Arterial Moderate	47,300	54,000	0.88	D	6	Arterial Moderate	47,380	80	54,000	0.88	D	D	
48	Jaeger Rd	Douglas Rd	Chrysanthy Blvd	6	Arterial Moderate	19,800	54,000	0.37	A	6	Arterial Moderate	35,100	54,000	0.65	B	6	Arterial Moderate	35,130	30	54,000	0.65	B	D	
49	Jaeger Rd	Chrysanthy Blvd	Keifer Blvd	4	Arterial Moderate	9,900	36,000	0.28	A	4	Arterial Moderate	15,400	36,000	0.43	A	4	Arterial Moderate	15,470	70	36,000	0.43	A	D	
50	Americanos Blvd	White Rock Rd	Douglas Road	4	Arterial Moderate	18,100	36,000	0.50	A	4	Arterial Moderate	30,400	36,000	0.84	D	4	Arterial Moderate	27,560	-2,840	36,000	0.77	C	D	**LOS decrease**
51	Americanos Blvd	Douglas Rd	Chrysanthy Blvd	4	Arterial Moderate	15,600	36,000	0.43	A	4	Arterial Moderate	21,800	36,000	0.61	B	4	Arterial Moderate	21,500	-300	36,000	0.60	A	D	**LOS decrease**
52	Excelsior Rd	north of SR 16		2	Arterial Moderate	7,800	18,000	0.43	A	2	Arterial Moderate	10,400	18,000	0.58	A	2	Arterial Moderate	10,420	20	18,000	0.58	A	E	
53	SR 16	west of Excelsior Rd		6	Arterial High	18,800	60,000	0.31	A	6	Arterial High	19,000	60,000	0.32	A	6	Arterial High	18,710	-290	60,000	0.31	A	E	

Note: **Bold** represents unacceptable operations. Shaded indicates significanta impact.

The Preserve Project

SCH# 2019100515

Final Environmental Impact Report

Prepared for

City of Rancho Cordova

March 2022

Prepared by

RANEY PLANNING & MANAGEMENT, INC. 20 years

1501 Sports Drive, Suite A, Sacramento, CA 95834

The Preserve Project
Final Environmental Impact Report

SCH# 2019100515

Lead Agency

City of Rancho Cordova
Community Development Department
2729 Prospect Park Drive
Rancho Cordova, CA 95760

Darcy Goulart
Principal Planner
(916) 851-8784

Prepared By

Raney Planning and Management, Inc.
1501 Sports Drive, Suite A
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(916) 372-6100

Contact:
Rod Stinson
Vice President

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1. Introduction and List of Commenters

1. INTRODUCTION AND LIST OF COMMENTERS

1.1 INTRODUCTION

This Final Environmental Impact Report (EIR) contains comments received during the public review period of The Preserve Project (proposed project) Draft EIR. This document has been prepared by the City of Rancho Cordova, as Lead Agency, in accordance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines, Section 15132. The Introduction and List of Commenters chapter of the Final EIR discusses the background of the Draft EIR and purpose of the Final EIR, and provides an overview of the organization of the Final EIR.

1.2 BACKGROUND

The Draft EIR identified the proposed project's potential impacts and the mitigation measures that would be required to be implemented. The proposed project Draft EIR includes the following environmental analysis chapters: Air Quality, Greenhouse Gas Emissions, and Energy; Biological Resources; Cultural and Tribal Resources; Geology and Soils/Mineral Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Land Use and Planning/Population and Housing; Noise; Public Services and Utilities; and Transportation. The remaining environmental issue areas identified by Appendix G of the CEQA Guidelines are addressed in the Initial Study prepared for the proposed project and included in Appendix A of The Preserve Project Draft EIR, as an attachment to the Notice of Preparation (NOP).

In accordance with CEQA, the City of Rancho Cordova used the following methods to solicit public input on the Draft EIR:

- A NOP for the Draft EIR was released for a 30-day public review period from October 25, 2019 to November 25, 2019. The NOP comment letters are included as Appendix B to the Draft EIR.
- A public scoping meeting was held in Rancho Cordova City Hall, American River South Room on November 13, 2019 to solicit comments regarding the scope of the Draft EIR.
- On November 9, 2021, the Draft EIR was submitted to the State Clearinghouse for distribution to State and local agencies, resulting in a 45-day public review period from November 9, 2021 to December 27, 2021.
- On November 9, 2021, a Notice of Availability (NOA) of the Draft EIR was posted to the City's website, and mailed to local agencies and interested members of the public.
- The Draft EIR was made available for review on the CEQA website at https://ceqanet.opr.ca.gov/2019100515/3

All public comments received on the Draft EIR are listed in this chapter, and written responses to comments are included in Chapter 2, Response to Comments, as discussed in more detail in Section 1.4 of this chapter.

1.3 PURPOSE OF THE FINAL EIR

Pursuant to CEQA Guidelines Section 15132, this Final EIR consists of the following:

1. Comments received on the Draft EIR (Chapter 2 of this Final EIR);
2. Revisions to the Draft EIR (Chapter 3 of this Final EIR); A list of persons, organizations, and public agencies commenting on the Draft EIR (included as Section 1.4 of this chapter); and
3. Any other information added by the Lead Agency.

1.4 LIST OF COMMENTERS

The City of Rancho Cordova received eight comment letters during the public comment period on the Draft EIR for the proposed project. The comment letters were authored by the following agencies, groups, and individual residents.

Agencies

Letter 1 ..... Sacramento County Department of Transportation – Gary Gasperi
Letter 2 ..... California Department of Parks and Recreation – Barry Smith
Letter 3 .....California Department of Transportation – Alex Padilla
Letter 4 ..... Sacramento Regional Transit District – Kevin Schroder
Letter 5 .....Sacramento Metropolitan Air Quality Management District – Joseph J. Hurley
Letter 6 .....Central Valley Regional Water Quality Board – Peter G. Minkel

Groups

Letter 7 ..... Civic Thread – Kathryn Canepa

Residents

Letter 8 .....Don Ross

1.5 CERTIFICATION OF THE FINAL EIR

State law requires that the City make several types of CEQA "findings" at the time of final action on the project. Findings describe the conclusions reached regarding particular issues, including specific evidence in support of those conclusions. The Final EIR typically provides much of the substantial evidence to support these findings. The required findings for the project are as follows:

- Certification of the Final EIR (CEQA Guidelines Section 15090) – These findings support the adequacy of the Final EIR for decision-making purposes. The Lead Agency must make the following three determinations in certifying a Final EIR:

    1. The Final EIR has been completed in compliance with CEQA.
    2. The Final EIR was presented to the decision-making body of the Lead Agency, and the decision-making body reviewed and considered the information in the Final EIR prior to approving the project.
    3. The Final EIR reflects the Lead Agency's independent judgment and analysis.

- Findings Regarding Significant Impacts and Project Alternatives (CEQA Guidelines Section 15091) – These findings explain how the City chose to address each identified significant impact, including the mitigation measures adopted or an explanation of why

such measures are infeasible. A discussion of the feasibility of project alternatives is also required by this section (see also CEQA Guidelines Section 15126.6[f]).

Pursuant to CEQA Guidelines, Section 15093(b), when a Lead Agency approves a project that would result in significant unavoidable impacts, the agency must state in writing the reasons supporting the action (Statement of Overriding Considerations). The Statement of Overriding Considerations shall be supported by substantial evidence. The proposed project would result in significant and unavoidable impacts related to greenhouse gas (GHG) emissions and transportation; thus, a Statement of Overriding Considerations must be adopted if the project is approved. The required Findings of Fact and Statement of Overriding Considerations will be included as part of the resolution considered by the City of Rancho Cordova.

1.6 ORGANIZATION OF THE FINAL EIR

The Final EIR is organized into the following four chapters.

1. Introduction and List of Commenters

Chapter 1 provides an introduction and overview of the document, describes the background of the Draft EIR and the purposes of the Final EIR, provides a list of commenters, and describes the organization of the Final EIR.

2. Responses to Comments

Chapter 2 presents the comment letters received, and responses to each comment. Each comment letter received has been numbered at the top and bracketed to indicate how the letter has been divided into individual comments. Each comment is given a number with the letter number appearing first, followed by the comment number. For example, the first comment in Letter 1 would have the following format: 1-1. The response to each comment will reference the comment number.

3. Revisions to the Draft EIR Text

Chapter 3 summarizes changes made to the Draft EIR text including clarifications, modifications, and amplifications of the analysis. Section 15088.5 of the State CEQA Guidelines states that a lead agency is required to recirculate a Draft EIR when “significant new information” is added to the document after public notice is given of the availability of the Draft EIR for public review under Section 15087 but before certification. Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The modifications to the Draft EIR identified in Chapter 3 have been examined with these requirements and obligations in mind. The City has determined that the provisions of Section 15088.5 of the CEQA Guidelines are not triggered and recirculation of this EIR is not required. A more detailed description of this determination will be included in the CEQA Findings of Fact described above.

4. Mitigation Monitoring and Reporting Program

CEQA Guidelines, Section 15097, requires lead agencies to adopt a program for monitoring the mitigation measures required to avoid the significant environmental impacts of a project. The intent of the Mitigation Monitoring and Reporting Program (MMRP) is to ensure implementation of the mitigation measures identified within the EIR for the proposed project.

2. Responses to Comments

2. RESPONSES TO COMMENTS

2.1 INTRODUCTION

The Responses to Comments chapter contains responses to each of the comment letters submitted regarding The Preserve Project (proposed project) Draft EIR during the public review period.

2.2 RESPONSES TO COMMENTS

Each bracketed comment letter is followed by numbered responses to each bracketed comment. The responses amplify or clarify information provided in the Draft EIR and/or refer the reader to the appropriate place in the document where the requested information can be found. Comments that are not directly related to environmental issues (e.g., opinions on the merits of the project that are unrelated to its environmental impacts) are either discussed or noted for the record. Where revisions to the Draft EIR text are required in response to the comments, such revisions are noted in the response to the comment, and are also listed in Chapter 3 of this Final EIR. All new text is shown as double underlined and deleted text is shown as ~~struck through~~.

Letter 1

Department of Transportation
Ron E. Vicari, Director

Divisions
Administration
Maintenance & Operations
Engineering & Planning

County of Sacramento

November 16, 2021

Darcy Goulart
Planning Department
City of Rancho Cordova
2729 Prospect Park Dr.
Rancho Cordova, CA 95670

SUBJECT: COMMENTS ON NOTICE OF AVAILABILITY OF THE PRESERVE PROJECT DRAFT EIR.

Darcy Goulart:

1-1 The County of Sacramento, Department of Transportation (SacDOT) has reviewed the Traffic Impact Analysis in Appendix K of The Preserve's Draft EIR. We appreciate the opportunity to review these documents, and have the following comments:

1-2
- Intersection 17 – Grant Line Road at Jackson Road/SR-16
  - The recommended E+P scenario mitigation is to install left turn pockets on the northbound and southbound Grant Line Road approaches. SacDOT concurs with this improvement and notes that signal modifications to implement protected left turn signal phasing should also be assumed. The study states that the impact is significant and unavoidable since a portion of the intersection is outside the City's jurisdiction. However, Sacramento County is prepared to work cooperatively with the applicant and Caltrans to improve this shared intersection.

1-3
- Intersection 20 – Grant Line Road at Raymer Way
  - SacDOT recommends coordinating this E+P improvement and C+P fair share with the Capital Southeast Connector JPA, as well as the quarry access on the east side of this intersection.

1-4
- Intersection 21 – Grant Line Road at White Rock Road
  - SacDOT recommends coordinating this C+P fair share with the Capital Southeast Connector JPA.

1-5
- Intersection 21 – Grant Line Road at White Rock Road
  - SacDOT recommends coordinating this C+P fair share with the Capital Southeast Connector JPA.

4111 Branch Center Road • Sacramento, California 95827 • phone (916) 874-6291 • fax (916) 874-7831 • www.saccounty.net

Letter 1 Cont'd

1-6 Should you have any questions, please feel free to contact me at (916) 874-6291.

Sincerely,

Gary Gasperi

Digitally signed by Gary Gasperi
Date: 2021.11.16 11:00:15-08'00'

Gary Gasperi, PE
Associate Civil Engineer
Department of Transportation

GG

CC: Matthew Darrow, DOT
Cameron Shew, DOT
Matthew Lampa, Capital Southeast Connector JPA
Derek Minnema, Capital Southeast Connector JPA

827 7th Street, Suite 304 • Sacramento, California 95814 • phone (916) 874-6291 • fax (916) 874-7831 • www.saccounty.net

LETTER 1: GARY GASPERI, SACRAMENTO COUNTY DEPARTMENT OF TRANSPORTATION

Response to Comment 1-1
The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 1-2
The Sacramento County Department of Transportation's willingness to coordinate on the improvements at the SR 16/Grant Line Road intersection is noted for the record, and the City commits to do so.

Response to Comment 1-3
The comment does not address the adequacy of the Draft EIR.

Nonetheless, as detailed on page 4.10-17 of the Draft EIR, the proposed project would be conditioned to build a signal with turn pockets at Intersection 20. Consistent with the commenter's recommendation, the City of Rancho Cordova would be required to coordinate with the Capital Southeast Connector JPA on the Intersection 20 improvement. As part of that discussion, the City would consider the future east access needs to the Teichert Aggregates quarry sites.

Response to Comment 1-4
The comment does not address the adequacy of the Draft EIR.

However, consistent with the commenter's recommendation, the City of Rancho Cordova would be required to coordinate with the Capital Southeast Connector JPA on the Intersection 21 improvement as well as future construction projects along Grant Line Road. It is noted that the Intersection 21 improvement cited by the commenter is not included as a project condition of approval. As detailed on page 4.10-17 of the Draft EIR, the project conditions of approval include improvements to Intersections 17 and 20.

Response to Comment 1-5
Please see Response to Comment 1-4.

Response to Comment 1-6
Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

Letter 2

State of California • Natural Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Gold Fields District • 7806 Folsom Auburn Road • Folsom, CA 95630

Gavin Newsom, *Governor*
Armando Quintero, *Director*

December 13, 2021

City of Rancho Cordova
Community Planning Department
Attn: Darcy Goulart, Principal Planner
2729 Prospect Park Drive
Rancho Cordova, CA 95760

Dear Ms. Goulart,

2-1 Thank you for the opportunity to provide comments on the Preserve Project draft Environmental Impact Report. The Gold Fields District of the California Department of Parks and Recreation (the "Department") manages Prairie City State Vehicular Recreation Area (SVRA), which is located to the east of Rancho Cordova and northeast of the Preserve Project.

The Department has operated Prairie City SVRA since 1988, however the park has been used for off highway vehicle (OHV) recreation since 1972. First as the privately owned McGills Cycle Park and then by Sacramento County when they purchased and operated the OHV park in 1975. The State took over operation in 1988.

2-2 Prairie City SVRA provides a valuable regional resource for OHV outdoor recreation. In addition to many miles of trails, tracks, and obstacle courses for all types of OHVs the park unit also hosts many special events including the nationally recognized Hangtown Classic Motocross Race. In addition to OHV special events, the park unit has long hosted a highly popular spring mountain bike race series on Wednesday evenings. Many Rancho Cordova residents likely participate and enjoy these recreation opportunities. The park unit also includes buffer areas that are closed to OHV use and managed for vernal pools and other resource values. While Prairie City SVRA operates within all environmental laws and requirements, as with any OHV activity, sound and some dust are part of the experience. This letter is just a reminder to the City and future residents of the Preserve Project subdivision that this long-standing OHV recreation area is in close proximity and they may occasionally see dust and/or hear OHV use, which are part of the existing condition of the area. Prairie City SVRA strives to be good neighbors with all nearby property owners and we look forward to further collaboration with the City of Rancho Cordova.

2-3

2-4 If you have any questions regarding this letter, please contact Prairie City Sector Manager, Peter Jones, at (916) 985-1097. Thank you.

Sincerely,

Barry Smith, Acting District Superintendent

LETTER 2: BARRY SMITH, CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Response to Comment 2-1
The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 2-2
The comment provides background on Prairie City State Vehicle Recreation Area and does not address the adequacy of the Draft EIR.

Response to Comment 2-3
While the comment does not address the adequacy of the Draft EIR, the comment is noted for the record and will be considered by City staff in developing the staff recommendation, and by the Planning Commission and City Council in their deliberations and decision-making regarding certification of the EIR and the proposed project.

Response to Comment 2-4
Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

Letter 3

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 3
703 B STREET | MARYSVILLE, CA 95901-5556
(530) 741-4233 | FAX (530) 741-4245 TTY 711
www.dot.ca.gov

December 23, 2021

Ms. Darcy Goulart
Planning Manager
City of Rancho Cordova
Planning Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670

GTS# 03-SAC-2018-01013
SCH#2019100515

The Preserve

Dear Ms. Goulart:

3-1 Thank you for including the California Department of Transportation (Caltrans) in the review process for the project referenced above. Caltrans' new mission, vision, and goals signal a modernization of our approach to California's transportation system. We reviewed this local development for impacts to the State Highway System (SHS) in keeping with our mission, vision, and goals for sustainability/livability/economy, and safety/health. We provide these comments consistent with the State's smart mobility goals that support a vibrant economy, and build communities, not sprawl.

3-2 The Preserve (Project) proposes the subdivision and development of 440 single family residences, open space areas, and infrastructure to support the community. The proposed project would require the following discretionary actions by the City of Rancho Cordova: Certification of the EIR; Adoption of the Mitigation Monitoring and Reporting Program; General Plan Amendment (GPA) from Grant Line West Planning Area to Low-Density Residential; GPA to remove the portion of Centennial Drive through the project site, as depicted in the Circulation Element; Rezone from AG-80 (approximately 68.42 acres) and IR (approximately 30.48 acres) to Residential District (RD-5); Tentative Subdivision Map; and Development Agreement. The Project is located northwest of Raymer Way and Grant Line Road, north of the Sunridge Specific Plan area, and east of the Rio Del Oro Specific Plan area in Rancho Cordova. The Project is approximately 4.6 miles from the US 50/Sunrise Blvd interchange, approximately 5 miles from the US 50/Prairie City Road interchange, and approximately 5.2 miles from the SR 16/Grant Line Road intersection. Caltrans submitted a comment letter on November 25, 2019 in response to the Notice to Proceed for the Project. Based on the information received, Caltrans provides the following comments.

Letter 3 Cont'd

Traffic Forecasting & Modeling

- Caltrans requests providing more detail explaining why the VMT per capita estimate of 23.2 shown in Table 4.10-1 is lower than the HPMS and SACSIM19 model estimates. Chapter 4.10 of the Draft Environmental Impact Report (DEIR) within Table 4.10-1 Existing Vehicle Miles Travelled (VMT) per Capita in the SACOG Region identifies the average VMT per capita 23.2. The SACOG User Guide and Model Documentation for SACSIM19 (attached) identifies Highway Performance Monitoring System (HPMS) and SACSIM VMT per Capita estimates within Table 12-19. VMT per Capita estimates for HPMS are 25.1 and estimates for SACSIM are 24.6, both of which are higher than the 23.2 estimate shown in the Table 4.10-1. **3-3**
- Caltrans recommends adjusting the regional VMT per capita which will also adjust the current threshold of significance of 19.7. Please update the threshold and project impact conclusions as appropriate. **3-4**

Freeway Operations

- Caltrans submitted a comment letter on November 25, 2019 in response to the Notice to Proceed that included, among other comments, a request for analysis at four interchanges: **3-5**
  - US 50/Mather Field Road
  - US 50/Zinfandel Drive
  - US 50/Sunrise Blvd
  - US 50/Prairie City Road
- Section 4.10 of the DEIR includes a list of intersections and roadway segments. Of the previously requested interchanges for analysis, this study area includes the ramps at US 50/Mather Field Road, US 50/Zinfandel Drive, and US 50/Sunrise Blvd, but does not include US 50/Prairie City Road. In addition, trips don't appear to be distributed to the on and off ramps at these three interchanges within the study. Please revise the Traffic Impact Analysis to include this information for all locations and update findings if necessary.
- The State Route (SR) 16 analysis methodology, inputs, and fair share mitigation look reasonable for the impacts to the SR 16/Grant Line Road intersection. **3-6**

Letter 3 Cont'd

3-7 Please provide our office with copies of any further actions regarding the Project. We would appreciate the opportunity to review and comment on any changes related to this development.

If you have any questions regarding these comments or require additional information, please contact David Smith, Intergovernmental Review Coordinator, at (530) 682-3791 or by email at David.J.Smith@dot.ca.gov.

3-8 Sincerely,

Alex Padilla

Alex Padilla
Branch Chief, Transportation Planning – South
Planning, Local Assistance, and Sustainability

LETTER 3: ALEX PADILLA, CALIFORNIA DEPARTMENT OF TRANSPORTATION

Response to Comment 3-1
The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 3-2
The comment summarizes the project components and does not address the adequacy of the Draft EIR.

Response to Comment 3-3
The City of Rancho Cordova's Travel Demand Model was used to complete the subject vehicle miles traveled (VMT) analysis. The model is based on the Sacramento Area Council of Governments (SACOG) SACSIM19 model, but is refined within the City Limits for land use, roadway network, and Traffic Analysis Zone (TAZ) structure. The process outlined by SACOG in their VMT methodology document was used to calculate the project's VMT per capita.[1] It is acknowledged that the results may differ from the standard SACSIM19 model, due to the aforementioned modifications made by the City for their City-specific model. It is also reasonable to anticipate that the results may differ from the Highway Performance Modeling System (HPMS), due to their respective data sources and methodology procedures. Additionally, the methodology and findings of the VMT analysis within the Draft EIR were reviewed by the City prior to publication of the Draft EIR and were determined to be adequate.

Response to Comment 3-4
Please refer to Response to Comment 3-3 for a summary of the methodology that was used to estimate the project VMT per capita. The same methodology was applied to estimate the VMT per capita for the entire SACOG region. Consistent with State guidance, the VMT threshold was determined to be 15 percent below the regional VMT per capita. The methodology and findings from this analysis were reviewed and approved by the City prior to publication and were determined to be adequate.

It is noted that the VMT analysis in the Draft EIR is conservative. If the VMT threshold of significance were based on the SACOG or HPMS values, consistent with the commenter's request, then the VMT threshold of significance would be 20.91 or 21.34, respectively. Thus, the project specific VMT per capita of 23.3 would be closer to the threshold, and the threshold would be easier to achieve. Regardless, the conclusion would remain the same as what was presented in the Draft EIR even if the SACOG or HPMS regional VMT values were used to calculate the VMT threshold of significance.

Response to Comment 3-5
The Traffic Impact Analysis includes evaluations of the Mather Field Road, Zinfandel Drive, and Sunrise Boulevard interchanges with U.S. Route 50. As detailed in the Draft EIR on page 4.10-17, the additional traffic generated by the proposed project would not result in inconsistency with the City's acceptable level of service (LOS) standard at the aforementioned locations. Therefore, the Traffic Impact Analysis did not identify improvement requirements at the foregoing interchanges. In addition, Figures 5 and 10 of the Traffic Impact Analysis show the trip distribution

[1] Sacramento Area Council of Governments. *VMT Computation Procedures*. September 30, 2020.

under Existing Plus Project and Cumulative Plus Project conditions, respectively. As indicated therein, the distribution percentages and roadway segment volumes were accounted for in the modeling completed as part of the Traffic Impact Analysis for the Mather Field Road, Zinfandel Drive, and Sunrise Boulevard interchanges with U.S. Route 50.

The Traffic Impact Analysis additionally evaluated the potential effects from project-generated traffic north of the project site along Grant Line Road and White Rock Road to the Prairie City Road/White Rock Road intersection. Based on the locations' proximity to the project site, project-generated traffic would pass through the aforementioned locations before reaching the Prairie City Road interchange with U.S. Route 50. The Traffic Impact Analysis determined that LOS-related improvements were not warranted at the White Rock Road/Grant Line Road and White Rock Road/Prairie City Road intersections. Nor were improvements necessary along the White Rock Road segment from Grant Line Road to Prairie City Road. Accordingly, because the aforementioned locations, which are closer to the project site, do not require improvements to sufficiently accommodate project-generated traffic, the Traffic Impact Analysis also found that an evaluation of the Prairie City Road interchange with U.S. Route 50, located further north of the project site, was not needed.

As part of development of the proposed project, the City has committed to coordinating with the California Department of Transportation (Caltrans), the County, the Capital Southeast Connector JPA, and the developer to make improvements at the two locations identified in the Traffic Impact Analysis requiring LOS-related improvements.

Response to Comment 3-6

The comment concurs with the methodology, inputs, and fair share project contribution used in the Traffic Impact Analysis to assess the project's effects on LOS under Existing Plus Project conditions at the SR 16/Grant Line Road intersection. The Draft EIR analyzes the proposed project's consistency with the City's applicable General Plan LOS standard at the SR 16/Grant Line Road intersection on page 4.10-17 and requires a project condition of approval to address the project's LOS inconsistency. The condition of approval requires the project applicant to pay a fair-share contribution for the required improvements to the SR 16/Grant Line Road intersection through payment of the City's transportation fees.

Response to Comment 3-7

Caltrans is included on the distribution list for the proposed project. Accordingly, consistent with the commenter's request, subsequent project documents will be submitted to Caltrans.

Response to Comment 3-8

Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

Letter 4

Regional Transit

Sacramento Regional Transit District
A Public Transit Agency
and Equal Opportunity Employer

Administrative Offices
1400 29th Street
Sacramento, CA 95816
916-321-2800

Mailing Address
P.O. Box 2110
Sacramento, CA 95812-2110

Human Resources
2810 O Street
Sacramento, CA 95816
916-556-0299

Customer Service & Sales Center
1225 R Street
Sacramento, CA 95811

Route, Schedule & Fa Information
916-321-BUSS (2877)
TDD 916-483-HEAR (4327)
sacrt.com

Public Transit Since 1973

December 27, 2021

Darcy Goulart, Planning Manager
Community Development Department
City of Rancho Cordova
2729 Prospect Park Drive Rancho Cordova, CA 95760

NAME OF DEVELOPMENT: The Preserve Project
TYPE OF DOCUMENT: Draft Environmental Impact Report

The Sacramento Regional Transit District (SacRT) has reviewed the Draft Environmental Impact Report (Draft EIR) for the Preserve Project (project). The proposed project site consists of 279.3 acres located northwest of Raymer Way and Grant Line Road, north of the Sunridge Specific Plan area and east of the Rio Del Oro Specific Plan area, within the City of Rancho Cordova. The proposed project would include subdivision of the project site to develop 440 single-family residences and associated parks, open space areas, and infrastructure to support the community. Of the 279.3 acres within the project site, 185.3 acres of currently undeveloped land on the northern parcels would remain as open space following development of the proposed project. A total of 8.65 acres are planned for two park areas located at the northern end of the development area, and an additional 9.77 acres of land would be designated Community Space. Finally, 0.45 acre of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to the surrounding parks. Off-site improvements could be required, including utility connection or road development to the east of the site boundary and along the existing Raymer Way to the intersection with Grant Line Road, which could include expansion of the roadway or modifications to Morrison Creek.

SacRT has the following comments regarding the Draft EIR:

4-1 Mitigation Measure 4.1-7 declared "Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 MTCO2e per year". SacRT would appreciate the opportunity in the future to discuss with the city and future developers' options beyond the purchasing of credits to offset the GHG emissions.

4-2 As stated on page 436, "Transit services would not be available within the project site; however, from the proposed project's extension of the Edington Drive stub street, the nearest SRT bus stop would be only 1.5 miles to the southeast, near the Borderlands Drive/Canyonlands Drive intersection, providing residents of the proposed project access to SRT Route 175". SacRT appreciates the acknowledgement of limited transit services near and none within the project site. We suggest the city contact SacRT when transit needs increase and consider the collection of fees as transit is expected to expand as increased community demand is established.

4-3 Please provide clarification on mitigation measure 4.10-2(b) located on page 438 and Policy C.1.9 located on page 343 regarding the funding of the CordoVan. The text from mitigation measure 4.10-2(b) provides a general list of options for transit support, compared to the Project Consistency section for Policy C.1.9 that states "the project applicant…will pay a fair share contribution to provide monetary support for the City's CordoVan regional shuttle service".

4-4 Staff appreciated the opportunity to comment, and we look forward to reviewing the additional information and working together to address our requests. If you have further questions regarding these recommendations, please contact me at (279) 234-8374 or kschroder@sacrt.com.

4-5

Sincerely,

Kevin Schroder
Senior Planner

CC:
James Boyle, Director of Planning, SacRT
Sarah Poe, Planner, SacRT

LETTER 4: KEVIN SCHRODER, SACRAMENTO REGIONAL TRANSIT DISTRICT

Response to Comment 4-1
The comment is an introductory statement summarizing the project components, but does not address the adequacy of the Draft EIR.

Response to Comment 4-2
The comment is noted for the record and will be considered by City staff in developing the staff recommendation, and by the Planning Commission and City Council in their deliberations and decision-making regarding certification of the EIR and the proposed project.

Response to Comment 4-3
Please see Response to Comment 4-2.

Response to Comment 4-4
As part of its approval, the proposed project would be annexed into the City's Transit Related Services Tax district, which is a primary source of funding for the CordoVan shuttle service. The City anticipates expanding CordoVan services to the project site, as residents move into the proposed residences.

CEQA requires a VMT analysis as part of evaluating transportation impacts. As detailed under Impact 4.10-2 of the Draft EIR, starting on page 4.10-25, the proposed project would have a significant and unavoidable impact under Existing Plus Project conditions related to VMT. Nonetheless, as set forth by Mitigation Measure 4.10-2(b), the project would be required to "provide monetary support for the City's transportation services…" to address the identified VMT impact. Such services may include Transit Shuttle, Guaranteed Ride Home, Transit Subsidies, Education Programs, etc.

Response to Comment 4-5
The Sacramento Regional Transit District (SacRT) is included on the distribution list for the proposed project. Subsequent project documents will be submitted to SacRT. Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Letter 5

December 27, 2021

Darcy Goulart, Planning Manager
City of Rancho Cordova Planning Division
2729 Prospect Park Dr.
Rancho Cordova, CA 95670
dgoulart@cityofranchocordova.org

Subject: **Notice of Availability of The Preserve Project Draft EIR**
SCH #2019100515H / Sac Metro Air District Project # SAC202102838

Dear Darcy Goulart:

Thank you for providing the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) with the Draft Environmental Impact Report (Draft EIR) for The Preserve Project (Proposed Project). The City of Rancho Cordova is the California Environmental Quality Act (CEQA) Lead Agency for the Proposed Project.

5-1 The Proposed Project would include subdivision of the site to develop a total of 440 single-family lots and various associated improvements including, but not limited to, parks, a preserve area, landscaping, circulation improvements, and utility installation. Improvements would only occur on the parcels located south of Morrison Creek. The proposed project would include 8.65 acres of public parks north of the proposed residences, 9.77 acres of community space that would include bioretention and hydromodification areas, and 0.45-acre of the project site would be designated green infrastructure that would include enhanced landscaped areas and trails with connection to surrounding parks. Of the 279.3 acres within the project site, 185.3 acres of undeveloped land on the northern parcels would remain as open space/preserve, which would include Morrison Creek and an associated 100-foot setback from the creek.

Sac Metro Air District Staff comments on the Proposed Project follow.

California Environmental Quality Act Review:

Construction

5-2 Table 4.1-6 on page 4.1-35 has an incomplete description of the Sac Metro Air District Thresholds of significance. The Threshold of Significance for PM10 is Zero (0). If all feasible BACT/BMPs are applied, then 80 pounds/day and 14.6 tons/year. The Threshold of Significance for PM2.5 is Zero (0). If all feasible BACT/BMPs are applied, then 82 pounds/day and 15 tons/year. These thresholds apply during both the construction and operational phases. The table in the final EIR should include the complete threshold of significance.

777 12th Street, Ste. 300 • Sacramento, CA 95814
Tel: 916-874-4800 • Toll Free: 800-880-9025
AirQuality.org

Letter 5 Cont'd

5-3 Table 4.1-8 on page 4.1-40, uses a Non-zero construction threshold; to use the non-zero threshold, the project must implement the Sac Metro Air Districts Basic Construction Emissions Control Practices. The Project Specific Impacts and Mitigation measures described in section 4.1-1 on page 4.1-40 should include a commitment to implement the Sac Metro Air District Basic Construction Emissions Control Practices. See the Sac Metro Air District CEQA Guide, Chapter 3-Construction-Generated Criteria Air Pollutant and Precursor Emissions for further information.

5-4 *Greenhouse Gases*

The discussion of Operational GHG Emissions includes inconsistent statements with other sections of the Draft EIR. Specifically, the project notes in the last paragraph on page 4.1-54 that "because the project is located within the jurisdiction of SMAQMD, the project is required to implement BMPs 1 and 2." However, the project includes natural gas service and does not require "EV ready" charging in the residential units. Consequently, it is not complying with BMPs 1 and 2 from the Sac Metro Air District Tier 1 Best Management Practices.

BMP 1 requires that the project be designed and constructed without natural gas infrastructure. As noted in the summary of project modeling on page 4.9-33, the project's natural gas consumption is anticipated to total approximately 10,654,300 kBTU/yr, or 106,568 therms.

BMP 2 requires the project to exceed CalGreen Tier 2 Standards by providing "EV-Ready parking spaces." The project does not include a requirement to install "EV Ready" Parking spaces in the proposed units.

5-5 The Sac Metro Air District recommends that the final EIR include a commitment to implement the Sac Metro Air District Tier 1 best practice. This would require eliminating the natural gas appliances in all units, eliminating the Natural Gas service lines, and requiring the installation of EV Ready parking equipment in every residential unit.

5-6 Mitigation Measure 4.1-7, described on pages 4.1-56 of the Draft EIR, anticipates that Off-site credits shall be purchased to reduce annual greenhouse gas (GHG) emissions by 617.30 MTCO2e per year. This calculation presumes the implementation of the Sac Metro Air District Tier 1 best practices, which is contradicted by other portions of the Draft EIR. The final analysis should be corrected to reflect the project's actual anticipated emissions. The Sac Metro Air District recommends that the project achieve any required reductions on-site to the extent feasible.

Design Comments:

5-7 *Urban Heat Island (UHI) Effects*

According to the Capital Region Transportation Sector Urban Heat Island Mitigation Project (UHI Project), the urban heat island effect already presents a severe challenge to our region, with urbanized areas in Sacramento some 3 to 9 degrees Fahrenheit warmer than their surrounding areas. Higher ambient temperatures increase the formation of ozone, a respiratory system irritant. These higher temperatures can lead to heat stress, heat stroke, and even heat mortality during extreme heat and extended heat waves, especially for the elderly, the young, and those with pre-existing health conditions. The urban heat island results from converting undeveloped land to urbanized land.

Letter 5 Cont'd

The Pr

5-8 For construction, we recommend (1) all new pavements, including sidewalks, roads, bike lanes, pedestrian paths, and parking lots, having an albedo of at least 0.25-0.5, and (2) all new structures utilize certified cool roofs. The California Energy Commission's Title 24, Part 6, suggests an aged solar reflectance of at least 0.63 for low-sloped roofs and at least 0.20 for steep-sloped roofs, with a minimum thermal emittance of 0.75. The Cool Roof Rating Council provides a product directory of roofs.

5-9 We recommend that the landscaping plan incorporate new trees to shade new pavements and structures to the extent feasible. The Sacramento Tree Foundation's Shady Eighty guide is a directory of air-quality supportive trees, a more extensive tree list is available on page 153 of the UHI Technical Analysis Report.

Rules statement

5-10 All projects undergoing CEQA review must implement Sac Metro Air District Basic Construction Emission Control Practices, also available on our website, to use the non-zero particulate matter CEQA thresholds of significance. Additionally, all projects are subject to Sac Metro Air District rules and regulations in effect at the time of construction. Please visit our website to find a list of the most common rules that apply at the construction phase of projects.

5-11 We thank the City of Rancho Cordova for the opportunity to collaborate on this document. You may contact me at jhurley@airquality.org or (279) 207-1130 if you have questions regarding these comments.

Respectfully,

-JJ Hurley

Joseph J. Hurley
Associate Air Quality Planner/Analyst
CEQA and Land Use Section

cc: Paul Philley, AICP, Program Supervisor, CEQA and Land Use Section

LETTER 5: JOSEPH J. HURLEY, SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

Response to Comment 5-1

The comment is an introductory statement, summarizes the project components, and does not address the adequacy of the Draft EIR.

Response to Comment 5-2

Although noted at other points in Chapter 4, the commenter is correct that Table 4.1-6 did not explicitly specify that the presented thresholds are only applicable when all feasible BACT/BMPs are applied. To improve clarity and in response to the commenter's concern, Table 4.1-6, on page 4.1-35 is hereby revised as follows:

Table 4.1-1
SMAQMD Thresholds of Significance

Pollutant	Construction Threshold	Operational Threshold
NO_X	85 lbs/day	65 lbs/day
ROG	-	65 lbs/day
PM_{10}	80 lbs/day and 14.6 tons/yr*	80 lbs/day and 14.6 tons/yr*
$PM_{2.5}$	82 lbs/day and 15 tons/yr*	82 lbs/day and 15 tons/yr*

* The above thresholds for PM only apply when all feasible BACT/BMPs are applied. If all feasible BACT/BMPs are not applied, then the applicable threshold of significance for PM is 0.

Source: SMAQMD Thresholds of Significance Table, April 2020.

The above revisions are included for clarification purposes, and do not change the analysis or conclusions presented in the Draft EIR.

Response to Comment 5-3

The discussion following Table 4.1-8, on page 4.1-41, lists the SMAQMD's Basic Construction Emissions Control Practices, and includes the following excerpt:

> Compliance with the foregoing measures is required per Rule 403, and the City would enforce compliance with Rule 403 as a condition of approval of the proposed project. Thus, project construction is assumed to include compliance with the foregoing BMPs.

Based on the above, the proposed project would be required to comply with the SMAQMD's Basic Construction Emissions Control Practices, and the non-zero construction thresholds are appropriate for comparison in Table 4.1-8.

Nonetheless, to improve clarity and in response to the commenter's concern, page 4.1-40 is hereby revised as follows:

> "Table 4.1-2 below presents the estimated construction-related emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed project in comparison with the SMAQMD thresholds of significance as described above. The construction modeling assumptions are described in the Method of Analysis section above. As discussed in further detail below, project construction would comply with the SMAQMD's Basic Construction Emissions Control Practices.

As shown in Table 4.1-2, construction activities would result in emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ below the applicable SMAQMD thresholds of significance. Therefore, construction activities associated with development of the proposed project would not substantially contribute to the SVAB's non-attainment status for ozone or PM. Accordingly, construction of the proposed project would not violate an air quality standard or contribute to an existing or projected air quality violation, and a less-than-significant impact would occur associated with construction.

Table 4.1-2
Maximum Unmitigated Construction-Related Emissions

Pollutant	Project Emissions	Construction Threshold	Exceeds Threshold?
NO_X	54.00 lbs/day	85 lbs/day	**NO**
ROG	28.63 lbs/day	-	**NO**
PM_{10}	20.32 lbs/day and 0.53 tons/yr	80 lbs/day and 14.6 tons/yr*	**NO**
$PM_{2.5}$	11.87 lbs/day and 0.28 tons/yr	82 lbs/day and 15 tons/yr*	**NO**

* The above thresholds for PM only apply when all feasible BACT/BMPs are applied. If all feasible BACT/BMPs are not applied, then the applicable threshold of significance for PM is 0.

Source: CalEEMod, May 2021.

It should be noted that construction activity related to implementation of the proposed project is required to comply with all SMAQMD rules and regulations. […]"

In addition, page 4.1-41 is hereby revised as follows:

"In addition, the control of fugitive dust during construction is required by SMAQMD Rule 403, and enforced by SMAQMD staff. The SMAQMD's Basic Construction Emissions Control Practices (BMPs) for dust control include the following:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads;
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;[…]"

The foregoing revisions are for clarification purposes, and do not affect the analysis or conclusions presented in the Draft EIR.

Response to Comment 5-4

The commenter is correct that the project description does not commit to the prohibition of natural gas. As the project site is located within the jurisdiction of SMAQMD, the analysis generally assumed compliance with SMAQMD requirements. However, to ensure that the project will comply with BMPs 1 and 2, page 4.1-56 is hereby revised to include the following mitigation measures:

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

4.1-7 *To achieve Tier 1, BMP 1, the project applicant shall commit to one of the following options:*

A. All structures proposed as part of the project shall be construction without natural gas infrastructure; or

B. Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 571.93 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:

1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:

(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;

(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or

(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);

(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.

2. The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.

Should the applicant select Option B, it is noted that the provisions of Mitigation Measure 4.1-9 still apply in full.

Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.

4.1-8 *To achieve Tier 2, BMP 2, all single-family residences included as part of the proposed project shall include EV ready infrastructure. Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.*

4.1-~~7~~9 *To achieve Tier 2, BMP 3, off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:*

1. *Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:*

    (i) *A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;*
    (ii) *Any registry approved by CARB to act as a registry under the California Cap and Trade program; or*
    (iii) *Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);*
    (iv) *In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.*

2. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*

The foregoing revisions ensure what was implied in the discussion and, therefore, do not identify a new or more significant environmental impact. As such, the conclusions presented in the Draft

EIR remain the same and, pursuant to the CEQA Guidelines, recirculation of the Draft EIR is not warranted.

Response to Comment 5-5
See Response to Comment 5-4.

Response to Comment 5-6
See Response to Comment 5-4.

Response to Comment 5-7
The comment provides background information regarding the Urban Heat Island effect, and does not address the adequacy of the Draft EIR.

Response to Comment 5-8
The comment includes suggestions related to the albedo of paving materials. Such features are planning considerations, and are outside the purview of CEQA. Additionally, the comment does not address the adequacy of the Draft EIR. Nonetheless, the suggestions are noted for the record and have been forwarded to the decision-makers for their consideration.

Response to Comment 5-9
The comment includes suggestions related to project landscaping. Such features are planning considerations, and are outside the purview of CEQA. Additionally, the comment does not address the adequacy of the Draft EIR. Nonetheless, the suggestions are noted for the record and have been forwarded to the decision-makers for their consideration.

Response to Comment 5-10
The comment references SMAQMD's rules, and does not address the adequacy of the Draft EIR.

Response to Comment 5-11
The comment is a conclusion statement and does not address the adequacy of the Draft EIR. Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

Letter 6

Water Boards

Gavin Newsom
Governor

Jared Blumenfeld
Secretary for Environmental Protection

Central Valley Regional Water Quality Control Board

27 December 2021

Darcy Goulart
City of Ranch Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95760
dgoulart@cityofranchocordova.org

COMMENTS TO REQUEST FOR REVIEW FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, PRESERVE PROJECT, SCH#2019100515, SACRAMENTO COUNTY

6-1 Pursuant to the State Clearinghouse's 9 November 2021 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Draft Environmental Impact Report* for the Preserve Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

6-2 The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of

Letter 6
Cont'd

6-2 cont'd

Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Letter 6
Cont'd

6-2 cont'd

Phase I and II Municipal Separate Storm Sewer System (MS4) Permits[1]
The Phase I and II MS4 permits require the Permittees reduce pollutants and runoff flows from new development and redevelopment using Best Management Practices (BMPs) to the maximum extent practicable (MEP). MS4 Permittees have their own development standards, also known as Low Impact Development (LID)/post-construction standards that include a hydromodification component. The MS4 permits also require specific design concepts for LID/post-construction BMPs in the early stages of a project during the entitlement and CEQA process and the development plan review process.

For more information on which Phase I MS4 Permit this project applies to, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/municipal_permits/

For more information on the Phase II MS4 permit and who it applies to, visit the State Water Resources Control Board at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/phase_ii_municipal.shtml

Industrial Storm Water General Permit
Storm water discharges associated with industrial sites must comply with the regulations contained in the Industrial Storm Water General Permit Order No. 2014-0057-DWQ. For more information on the Industrial Storm Water General Permit, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/storm_water/industrial_general_permits/index.shtml

Clean Water Act Section 404 Permit
If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification
If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic

[1] Municipal Permits = The Phase I Municipal Separate Storm Water System (MS4) Permit covers medium sized Municipalities (serving between 100,000 and 250,000 people) and large sized municipalities (serving over 250,000 people). The Phase II MS4 provides coverage for small municipalities, including non-traditional Small MS4s, which include military bases, public campuses, prisons and hospitals.

Letter 6
Cont'd

6-2 cont'd

General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

Letter 6
Cont'd

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

6-2 cont'd

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

If you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

6-3

Peter G. Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

LETTER 6: PETER G. MINKEL, CENTRAL VALLEY REGIONAL WATER QUALITY BOARD

Response to Comment 6-1
The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 6-2
The comment provides background information regarding applicable regulations and required permits. The comment does not address the adequacy of the Draft EIR and has been noted for the record.

Response to Comment 6-3
Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

Letter 7

CIVIC THREAD

December 27, 2021 VIA EMAIL

Darcy Goulart, Planning Manager
City of Rancho Cordova, Community Development Department
2729 Prospect Park Drive
Rancho Cordova, CA 95760

RE: The Preserve Draft Environmental Impact Report (SCH #2019100515)

Dear Darcy Goulart:

7-1 Civic Thread has reviewed the Draft Environmental Impact Report for The Preserve (SCH #2019100515) and we offer the following comments.

7-2 While the development will be sited in an area that is currently mostly undeveloped and does not offer many connection opportunities, we commend the applicant for including the Morrison Creek Trail in the project, which will provide important recreational opportunities for residents and provide connection to other sites as this area of Rancho Cordova gets developed. We are also glad to see that green infrastructure elements have been included in the project, which will contribute to a pleasant walking and biking environment.

Ensuring that high connectivity for pedestrians and bicyclists is built into a development from the beginning is critical to fostering a built environment that is conducive to active transportation, netting benefits for air quality and public health. While multiple areas on the development tentative map are in close proximity to the Morrison Creek Trail, it is unclear whether there are accessible connection points to the trail. As a general best practice, making connection points to the trail as frequent as possible will be more effective in increasing convenient access to open space. To that end, we recommend the following:

7-3 1. **CRPD Neighborhood Park 2 on Parcel F: include a connector path through the park from Street 'H' to the Morrison Creek Trail. The Morrison Creek Trail follows the north edge of the park, but would have greater connective value if a**

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dedicated path was put in for bicyclists to access the trail from the street (see Figure 1).

2. Parcel L: It is unclear whether this parcel has a path that connects the Street 'C' cul-de-sac to the Morrison Creek Trail through Parcel L. Without bicycle/pedestrian connection points, cul-de-sacs reduce internal connectivity within neighborhoods. The distance to the trail from the Street 'C' cul-de-sac is short and will provide connective benefit if a path is installed (see Figure 2).
3. Parcel M: We are glad to see that a sidewalk goes through Parcel M to the street. We recommend including a path on the other side of the street that connects to the Morrison Creek Trail and a marked pedestrian crossing that connects the two pathways. Bike ramps should be included at each curb (see Figure 3).
4. Parcel D: Include a pedestrian/bicycle connector path to the Morrison Creek Trail at CRPD Neighborhood Park 1 at the closest point at the intersection of Street 'K' and Street 'L' with a bike ramp at the curb (see Figure 4).
5. Parcel J: Per our letter submitted in July 2019, if Parcel J at the west end of Street 'D' is part of a neighborhood bicycle travel way, widen the parcel to at least 25' and construct a 10'-wide sidewalk that's bifurcated at the eastern terminus and includes bike ramps at the curb. Parcel J is a logical entry point to access the Morrison Creek Trail but needs to be widened to allow for a sidewalk and landscaping on both sides (see Figure 5).



Figure 1. Parcel F proposed connector path through neighborhood park. Connector path could also connect at the left corner of the park to reduce amount of construction necessary.

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Cont'd

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Figure 2. Parcel L proposed connector path.



Figure 3. Parcel M connector path.

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Figure 4. Parcel D proposed connector path.



Figure 5. Parcel J proposed connector path.

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7-4 The Preserve DEIR also proposes a zoning change from Agricultural 80 to low-density residential (RD-5), which allows 4.1—5 units per acre. While this is in keeping with the project objective "Develop a residential mixed-density community that is consistent with the General Plan conceptual land use designation for the Grant Line West Planning Area", **consider rezoning a portion of the project area to RD-6 or RD-7, which would allow for higher-density single family homes and duplexes and increase the density to 5.1—6.0 or 6.1—7.0 dwelling units per acre, respectively**. Benefits of this include the potential for a more diverse set of housing options and potentially greater affordability for residents, as well as making it more likely that the development achieves the goal of a mixed-density community.

7-5 An important component supporting a mixed-density community will be transit access. The DEIR notes that the nearest bus stop is 1.5 miles away from the site at Borderlands Drive and Canyonlands Drive, providing hourly service from Sacramento Regional Transit Route 175. To access the bus stop on foot, residents will need to walk 30-45 minutes, which is unlikely to be appealing if they have access to a car. While it is more likely that residents may choose to access this bus stop via bicycle, the bicycle infrastructure on the most direct routes is lacking. The most direct bicycle routes are through the Camden at Somerset Ranch development, following either Raymer Way and Rockdale Drive to Americanos Boulevard, or Edington Drive to Americanos Boulevard. Raymer Way, Rockdale Drive, and Edington Drive do not have bicycle infrastructure. Americanos Boulevard then connects to Douglas Road, which provides access to Borderlands Drive and the bus stop. While Americanos Boulevard and Douglas Road both have Class II bike lanes, on Douglas Road the lanes run parallel to a road with two travel lanes on either side. We recommend the following to improve connectivity and cyclist and pedestrian safety:

7-6
1. **The developer should work with the City of Rancho Cordova on offsite improvements to upgrade the bike lanes on the stretch of Douglas Road in between Americanos Boulevard and Borderlands Drive to Class II-B buffered bike lanes to increase bicyclist safety and comfort. At a minimum, high visibility markings such as green paint should be applied to the lanes along Americanos Boulevard and Douglas Road (see Figure 6).**
2. **A portion of the Americanos Boulevard bike lane going southward has a painted buffer that separates the main travel lane from the bike lane and right-hand turn lane onto Douglas Road. Because this is an important connection from the Plan Area to surrounding areas, we recommend including as an offsite**

Letter 7
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7-6 cont'd

improvement the addition of conflict striping as the bike lane transitions from the side of the road to the center to accommodate the right-hand turn lane.

3. We also recommend working with Sacramento Regional Transit to scope the inclusion of a bus stop within the development itself in later stages of the project.
4. Please consider the comfort and safety of cyclists and pedestrians when implementing measures to improve Level of Service, as slower traffic (lower LOS grades) tends to be safer for those using active transportation. Improving conditions for pedestrians and cyclists will help the project meet its VMT goals.
5. Consider the inclusion of a mobility hub at a central location on site to provide car sharing options for residents that may wish to forgo vehicle ownership.



Figure 6. Suggested area to upgrade bike lane on Douglas Road between Americanos Boulevard and Borderlands Drive to provide safer cyclist access to nearby bus stop.

Finally, to facilitate placemaking efforts, **please consider the inclusion of an additional small-scale neighborhood park/playground in the center of the Plan Area** to improve access to open space and offer urban cooling benefits.

Development projects that lead to more walking and active travel are critical to our community's future. Civic Thread is working to support increased physical activity such as walking and bicycling in local neighborhoods as well as helping to create community environments that support walking and bicycling. The benefits include improved public

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7-6 cont'd

health and physical fitness, better air quality, a stronger sense of cohesion and safety in neighborhoods, and more sustainable communities and local economies.

7-7

Please notify Civic Thread of future routings or notices for this project. Thank you for your consideration of these comments and recommendations, and please don't hesitate to contact us if you have any questions.

Sincerely,

Kathryn Canepa
Project Manager, Civic Thread

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LETTER 7: KATHRYN CANEPA, CIVIC THREAD

Response to Comment 7-1
The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 7-2
The comment does not address the adequacy of the Draft EIR, but instead, introduces requests subsequently made in Comment 7-3 that relate to connection points to the Morrison Creek Trail. Please see Response to Comment 7-3.

Response to Comment 7-3
The requests included as part of Comment 7-3 do not address the adequacy of the Draft EIR. Nor are the requested project modifications necessary to prevent potential environmental impacts, as required under CEQA. Nevertheless, the following discussions address the five requests made in the comment and are based on iterative collaboration between the project applicant and the City. It should be noted that most of the requested connections are proposed as part of the project, and one is being considered, depending on topographical feasibility.

1. CRPD Neighborhood Park 2 on Parcel F: A connector path as part of the proposed project is planned at the commenter's suggested location.
2. Parcel L: The requested connector path is under review.
3. Parcel M: A connector path is planned at this general location and is designed to safely accommodate the slope.
4. Parcel D: A connection from CRPD Neighborhood Park 1 to the Morrison Creek Trail would be proposed as part of the design of the park and is included in the project applicant's conceptual plan.
5. Parcel J: The parcel is a utility corridor and is not part of a neighborhood bicycle travel way.

Response to Comment 7-4
The comment does not address the adequacy of the Draft EIR. The comment requesting increased density is noted for the record and will be considered by City staff in developing the staff recommendation, and by the Planning Commission and City Council in their deliberations and decision-making regarding certification of the EIR and the proposed project.

Response to Comment 7-5
The comment does not address the adequacy of the Draft EIR, but instead, introduces requests subsequently made in Comment 7-6 that relate to connection to transit and bicycle facilities. Please see Response to Comment 7-6.

Response to Comment 7-6
The requests included as part of Comment 7-6 do not address the adequacy of the Draft EIR, nor are necessary to prevent potential environmental impacts, as required under CEQA. However, the following discussions address the six requests made in the comment.

1. The request to upgrade the bike lanes on Douglas Road and Americanos Boulevard is not proposed as part of the project. The applicant and City do not currently have plans to

include such upgrades; nonetheless, the request will be forwarded to the decision makers for their consideration.

2. The requested addition of conflict striping to the Americanos Boulevard bike lane is not proposed as part of the project. The applicant and City do not currently have plans to include such striping; nonetheless, the request will be forwarded to the decision makers for their consideration.
3. The requested consultation with SacRT about the possibility of including a bus stop within the project site is under discussion by the project applicant.
4. As discussed under Impact 4.10-3 of the Draft EIR on page 4.10-27, the proposed project's street frontage, roadways, and access points would be designed in accordance with all applicable standards established in the City's Municipal Code, including those set forth in Chapter 22.110 pertaining to safety of primary and minor residential streets. Additionally, although not a requirement under CEQA, the project would be conditioned, if approved, to construct the intersection improvements set forth on page 4.10-17 of the Draft EIR.
5. The requested mobility hub is not proposed as part of the project. The applicant and City do not currently have plans to include a mobility hub; nonetheless, the request will be forwarded to the decision makers for their consideration.
6. The design concept of the proposed project concentrates connected park and open space amenities along the citywide trail system, to provide access to open space areas based on the close proximity of future residents and direct pedestrian connection points provided as part of the project. Neighborhood residents would have access to three parks in the immediate project vicinity, including two within the project site as well as the existing Hillside Park located in the Camden at Somerset Ranch subdivision to the south of the project site. In addition, open space areas that provide areas for rest and relaxation have been strategically placed along the Morrison Creek Trail. Altogether, the inclusion of the proposed amenities allows for open space recreation and urban cooling benefits.

Response to Comment 7-7

Civic Thread is included on the distribution list for the proposed project. Subsequent project documents will be submitted to Civic Thread. Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

Letter 8

From: Don Ross <hvpower@sbcglobal.net>
Sent: Thursday, November 18, 2021 10:06 AM
To: Darcy Goulart
Cc: president@sacramentoaudubon.org; customerservice@audubon.org; r2info@wildlife.ca.gov; hcpb@wildlife.ca.gov; bera.district@mail.house.gov
Subject: The Preserve Project SCH# 2019100515

8-1 To the Attention of Darcy Goulart, Planning Manager, City of Rancho Cordova, Community Development Department.

I wish to Provide information as to the home and migration of numerous varieties of birds, that this development would severely impact.

8-2 I have lived in the Kensington Estates since my home was built in 2018. I have been a witness with videos of at least 20 varieties of birds not including multiple varieties of Water Fowl, that make the area their home or move through the area on their annual Migration. I believe my home development was built on a natural Bird estuary, and a resting area for migrating Birds of several varieties. I am no bird expert, but there are many varieties and colors I had never seen before. I believe the housing development I live in has drastically affected the natural habitat and flight path. I strongly believe this, because I have witnessed the birds seasonal habitation of the Land being considered for The Preserve Project.

8-3 This will harm the varieties that make the area their seasonal home, and those that use this land to feed and rest as they migrate. I would like to request a thorough study be conducted on the seasonal and migratory species that make the area their home for breeding, and those that feed, rest and move through the area each year between January and December. I request the results be shared with all those that received this notice on The Preserve Project SCH# 2019100515, and that the California and U.S. Fish and Wild Life services look into my witnessed observations. I am willing to share videos that are just from my backyard, of the different varieties I have seen from Humming birds to hawks, with many additional varieties I have never seen before. This Project should be delayed until a full seasonal impact study can be performed, If the study is properly conducted, the area would allow nothing more than the current Zoning. I believe the word should get out that this is a natural habitat that should remain "NATURAL".

Thank you for your part in saving the remaining areas for those who are here first, "The Birds", Don

8-4 CC List
National Audubon Society
Sacramento Audubon Society
California Fish and Wild Life (North Central Region)
U.S. Fish and Wild Life services
Congressman Ami Bera

Please forward to any and all concerned about existing natural bird habitats and their proposed elimination. Thank You for your support.

Donald Ross
3601 Manzanola Way
Rancho Cordova, Ca. 95742
(916) 837-5372

LETTER 8: DONALD ROSS, RESIDENT

Response to Comment 8-1
The comment is an introductory statement and does not address the adequacy of the Draft EIR.

Response to Comment 8-2
The comment does not address the adequacy of the Draft EIR.

Nonetheless, it is noted that the Draft EIR evaluates potential project impacts to bird species on pages 4.2-45 through 4.2-55. As discussed therein, the inclusion of the mitigation measures required as part of the project would ensure that all potential impacts to birds are reduced to less-than-significant levels.

The comment is noted for the record and will be considered by City staff in developing the staff recommendation, and by the Planning Commission and City Council in their deliberations and decision-making regarding certification of the EIR and the proposed project.

Response to Comment 8-3
As detailed throughout Chapter 4.2, Biological Resources, of the Draft EIR, a Biological Resources Assessment (BRA) was prepared for the proposed project by ECORP Consulting, Inc. (see Appendix D to the Draft EIR). The BRA included findings from a field reconnaissance of the project site, which surveyed for wildlife species covered under the South Sacramento Habitat Conservation Plan (SSHCP), as well as findings from multiple field surveys of the project site for other special-status species protected under CEQA. In addition, the BRA included a literature review, which consisted of a query of the California Natural Diversity Database (CNDDB) for the U.S. Geological Survey (USGS) Buffalo Creek quadrangle and the eight surrounding USGS quadrangles for special-status species that have occurred in the foregoing study area, as well as a query of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC). As such, the BRA serves as a thorough study on the seasonal and migratory bird species that make the project area home for the purposes of nesting, foraging, and migration.

The 108.25-acre study area for the proposed project is depicted in Figure 4.2-1 of the Draft EIR on page 4.2-3 and includes the 98.9-acre proposed development area for The Preserve Project, as well as a total of 7.85 acres in which potential off-site improvements are proposed. The identified special-status wildlife species that have potential to occur within the study area are detailed in Table 4.2-2 of the Draft EIR, which starts on page 4.2-11.

Potential project impacts to special-status bird species protected under CEQA and migratory birds and raptors protected under the federal Migratory Bird Treaty Act are detailed under Impacts 4.2-4 through 4.2-7, which starts on page 4.2-45 of the Draft EIR. Applicable mitigation measures are set forth therein, the implementation of which would ensure that all identified potential project impacts to the foregoing species are reduced to less-than-significant levels.

With respect to the commenter's views regarding the merits of the proposed project, such views are noted for the record. All comments, whether substantiated by facts or simply reflecting the position of the commenter, will be considered by City staff in developing the staff recommendation, and by the Planning Commission and City Council in their deliberations and decision-making regarding certification of the EIR and the proposed project.

Response to Comment 8-4

Thank you for participating in the public review process of the Draft EIR. Your comments and concerns are noted for the record.

3. Revisions to the Draft EIR Text

3. REVISIONS TO THE DRAFT EIR TEXT

3.1 INTRODUCTION

The Revisions to the Draft EIR Text chapter provides all corrections, additions, and revisions made to the Draft EIR. Section 15088.5 of the State CEQA Guidelines states that a lead agency is required to recirculate a Draft EIR when “significant new information” is added to the document after public notice is given of the availability of the Draft EIR for public review under Section 15087 but before certification. Pursuant to this section, the term "information" can include changes in the project or environmental setting, as well as additional data or other information. New information added to an EIR is not considered "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the City has decided not to implement.

"Significant new information" requiring recirculation includes any of the following:

1. A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
2. A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.
3. A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
4. The Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The changes presented herein offer minor clarifications and amplifications of the analysis contained in the Draft EIR and do not constitute significant new information that, in accordance with CEQA Guidelines Section 15088.5, would trigger the need to recirculate portions or all of the Draft EIR. In other words, recirculation of the Draft EIR is not required.

It should be noted that in addition to the text revisions presented in Chapter 3 of this Final EIR in response to public comments, this chapter provides other text revisions to the Draft EIR initiated by the City of Rancho Cordova based upon further review of the document since publication.

3.2 DESCRIPTION OF CHANGES

New text is <u>double underlined</u> and deleted text is ~~struck through~~. Text changes are presented in the page order in which they appear in the Draft EIR.

2 Executive Summary

For clarification purposes, Table 2-1 beginning on page 2-6 in Chapter 2, Executive Summary, of the Draft EIR is hereby revised to reflect revisions made to mitigation measures as part of this

Final EIR in the relevant chapters, as presented throughout this chapter. Rather than include the entirety of Table 2-1 with revisions shown where appropriate, only the impacts for which mitigation has been revised or added are presented below. The revisions to the Executive Summary table are for clarification purposes only and do not change the conclusions of the Draft EIR. Please refer to the end of this chapter for Table 2-1.

4.1 Air Quality, Greenhouse Gas Emissions, and Energy

Table 4.1-6, on page 4.1-35 of the Draft EIR, is hereby revised as follows:

Table 4.1-1
SMAQMD Thresholds of Significance

Pollutant	Construction Threshold	Operational Threshold
NO_X	85 lbs/day	65 lbs/day
ROG	-	65 lbs/day
PM_{10}	80 lbs/day and 14.6 tons/yr*	80 lbs/day and 14.6 tons/yr*
$PM_{2.5}$	82 lbs/day and 15 tons/yr*	82 lbs/day and 15 tons/yr*

* The above thresholds for PM only apply when all feasible BACT/BMPs are applied. If all feasible BACT/BMPs are not applied, then the applicable threshold of significance for PM is 0.

Source: SMAQMD Thresholds of Significance Table, April 2020.

The above revisions are included for clarification purposes, and do not change the analysis or conclusions presented in the Draft EIR.

Page 4.1-40 of the Draft EIR is hereby revised as follows:

"Table 4.1-2 below presents the estimated construction-related emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with the proposed project in comparison with the SMAQMD thresholds of significance as described above. The construction modeling assumptions are described in the Method of Analysis section above. As discussed in further detail below, project construction would comply with the SMAQMD's Basic Construction Emissions Control Practices.

As shown in Table 4.1-2, construction activities would result in emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ below the applicable SMAQMD thresholds of significance. Therefore, construction activities associated with development of the proposed project would not substantially contribute to the SVAB's non-attainment status for ozone or PM. Accordingly, construction of the proposed project would not violate an air quality standard or contribute to an existing or projected air quality violation, and a less-than-significant impact would occur associated with construction.

Table 4.1-2
Maximum Unmitigated Construction-Related Emissions

Pollutant	Project Emissions	Construction Threshold	Exceeds Threshold?
NO_X	54.00 lbs/day	85 lbs/day	**NO**
ROG	28.63 lbs/day	-	**NO**
PM_{10}	20.32 lbs/day and 0.53 tons/yr	80 lbs/day and 14.6 tons/yr*	**NO**

$PM_{2.5}$	11.87 lbs/day and 0.28 tons/yr	82 lbs/day and 15 tons/yr*	**NO**
* The above thresholds for PM only apply when all feasible BACT/BMPs are applied. If all feasible BACT/BMPs are not applied, then the applicable threshold of significance for PM is 0.			
Source: CalEEMod, May 2021.			

It should be noted that construction activity related to implementation of the proposed project is required to comply with all SMAQMD rules and regulations. […]"

In addition, page 4.1-41 is hereby revised as follows:

"In addition, the control of fugitive dust during construction is required by SMAQMD Rule 403, and enforced by SMAQMD staff. The SMAQMD's Basic Construction Emissions Control Practices (BMPs) for dust control include the following:

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads;
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered;
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited;[…]"

The foregoing revisions are for clarification purposes, and do not affect the analysis or conclusions presented in the Draft EIR.

Page 4.1-56 of the Draft EIR is hereby revised to include the following mitigation measures:

Implementation of the following mitigation measures would reduce the above potential impact to a *less-than-significant* level.

4.1-7 To achieve Tier 1, BMP 1, the project applicant shall commit to one of the following options:

A. All structures proposed as part of the project shall be construction without natural gas infrastructure; or

B. Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 571.93 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:

1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:

(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;

(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or

(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);

(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.

2. The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.

Should the applicant select Option B, it is noted that the provisions of Mitigation Measure 4.1-9 still apply in full.

Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.

4.1-8 *To achieve Tier 2, BMP 2, all single-family residences included as part of the proposed project shall include EV ready infrastructure. Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.*

4.1-~~7~~9 *To achieve Tier 2, BMP 3, off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:*

1. *Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section*

95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:

(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;
(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or
(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);
(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.

2. The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.

The foregoing revisions do not identify a new or more significant environmental impact and the conclusions presented in the Draft EIR remain the same.

4.6 Biological Resources

The following staff-initiated change to Mitigation Measure 4.2-3(a) has been included to incorporate a mitigation measure from the South Sacramento Habitat Conservation Plan that was inadvertently omitted from the Draft EIR. Page 4.2-42 of Chapter 4.2, Biological Resources, is hereby revised as follows:

- ***WS-5 (Erosion Control Materials in Western Spadefoot Habitat):*** *If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.*

- ***WS-6 (Western Spadefoot Encounter Protocol)****: If Covered Activities must be implemented in modeled habitat (Figure 3-17) during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be*

suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist.

The foregoing revision includes the full measures required by the South Sacramento Habitat Conservation Plan, and does not affect the analysis or conclusions presented within the Draft EIR.

4.6 Hydrology and Water Quality

The following staff-initiated change has been included to eliminate an outdated reference to Mitigation Measure 4.4-2. Page 4.6-14 of the Draft EIR is hereby revised as follows:

As discussed in further depth in Chapter 4.4, Geology and Soils/Mineral Resources, of this EIR, development of the SWPPP would include plans to treat stormwater runoff in accordance with the standards of the California Stormwater Management Practice New Development and Redevelopment Handbook and the MS4 Permit standards. The plan would include drainage design from all paved surfaces, including streets, parking lots, driveways, and roofs, as well as landscaping. In addition, the project would be subject to Chapter 16.44 of the City's Municipal Code and Section 11 of the City's Improvement Standards. ~~Implementation of BMPs to control erosion, and, thus, sediment related pollution, is further mandated by Mitigation Measure 4.4-2 within Chapter 4.4 of this EIR.~~ Chapter 16.44 of the City's Municipal Code regulates grading and erosion by requiring all projects that grade more than one acre of land submit an application for review by the City prior to approval of a grading permit. The application must include a grading and erosion plan which would be reviewed for safety of grading and potential for erosion. The project would be subject to compliance with Chapter 16.44 of the City's Municipal Code and the project applicant would be required to prepare a grading and erosion plan. The grading and erosion plan would include erosion control measures and sediment control measures to ensure the stability of the ground surface and soil within the project site during construction activities.

The following staff-initiated change has been included for consistency. Pages 4.6-15 through 4.6-16 of the Draft EIR are hereby revised as follows:

Compliance with the State's Construction General Permit, Chapter 11 of the Improvement Standards, and Chapter 16.44 of the Rancho Cordova Municipal Code, as described above ~~and required by Mitigation Measure 4.4-2 within this EIR~~, would minimize the potential degradation of stormwater quality and downstream surface water associated with construction of the proposed project. In addition, BMPs would be required to be designed in accordance with the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction and for New Development/Redevelopment and Chapter 11 of the Improvement Standards (or other similar source as approved by the City). In order to further minimize the potential for, and effects from, accidental spills of hazardous, toxic, or petroleum substances during construction activities, Mitigation Measure 4.6-1~~(b)~~ below requires

the project to prepare and implement a Spill Prevention Countermeasure and Control Plan (SPCC). Without implementation of the aforementioned measures, the proposed project could result in a ***significant*** impact related to short-term construction-related water quality.

In addition, Mitigation Measure 4.6-1 of Chapter 4.6 of the Draft EIR, Hydrology and Water Quality, is hereby revised as follows:

~~*4.6-1(a) Implement Mitigation Measure 4.4-2*~~

4.6-1~~(b)~~ Prior to the commencement of ground-disturbing activities, the project applicant shall submit, and obtain approval of, a Spill Prevention Countermeasure and Control Plan (SPCC) to the Sacramento County Environmental Management Department. The SPCC shall specify measures and procedures to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112.

The forgoing staff-initiated revisions are for consistency and clarification purposes, and do not affect the analysis or conclusions in the Draft EIR.

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
4.1 Air Quality, Greenhouse Gas Emissions, and Energy			
4.1-7 Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.	S	*4.1-7 To achieve Tier 1, BMP 1, the project applicant shall commit to one of the following options:* *A. All structures proposed as part of the project shall be construction without natural gas infrastructure; or* *B. Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 571.93 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:* *1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:* *(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;* *(ii) Any registry approved by CARB to act as a registry under the*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		California Cap and Trade program; or *(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);* *(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute.* *2. The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department. *Should the applicant select Option B, it is noted that the provisions of Mitigation Measure 4.1-9 still apply in full.* *Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.* *4.1-8 To achieve Tier 2, BMP 2, all single-family residences included as part of the proposed project shall include EV ready infrastructure. Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.* *4.1-~~7~~9 To achieve Tier 2, BMP 3, off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:* *1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following: *(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard;* *(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or* *(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);* *(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute. *2. The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*	
4.2 Biological Resources			
4.2-3 Have a substantial adverse effect, either directly or through habitat modifications, on special-status amphibian species.	S	*4.2-3(a) The project applicant shall comply with SSHCP AMMs WS-1 through WS-6.* • ***WS-1 (Western Spadefoot Work Window):*** *Ground-disturbing Covered Activities within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.*	LS

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		• ***WS-2 (Western Spadefoot Exclusion Fencing):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high- visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below.* • ***WS-3 (Western Spadefoot Monitoring):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17 [of the SSHCP]) in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction- related activities are taking*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below. • ***WS-4 (Avoid Western Spadefoot Entrapment):*** *If a Covered Activity occurs in western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		western spadefoot is encountered, refer to WS-6 below. • ***WS-5 (Erosion Control Materials in Western Spadefoot Habitat):*** *If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.* • ***WS-6 (Western Spadefoot Encounter Protocol):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s),*	

Table 2-1
Summary of Impacts and Mitigation Measures

Impact	Level of Significance Prior to Mitigation	Mitigation Measures	Level of Significance After Mitigation
		habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist.	
4.6 Hydrology and Water Quality			
4.6-1 Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.	S	~~*4.6-1(a) Implement Mitigation Measure 4.4-2.*~~ *4.6-1~~(b)~~ Prior to the commencement of ground-disturbing activities, the project applicant shall submit, and obtain approval of, a Spill Prevention Countermeasure and Control Plan (SPCC) to the Sacramento County Environmental Management Department. The SPCC shall specify measures and procedures to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112.*	LS

4. Mitigation Monitoring and Reporting Program

4. MITIGATION MONITORING AND REPORTING PROGRAM

4.1 INTRODUCTION

Section 15097 of the California Environmental Quality Act (CEQA) requires all State and local agencies to establish monitoring or reporting programs for projects approved by a public agency whenever approval involves the adoption of either a "mitigated negative declaration" or specified environmental findings related to an Environmental Impact Report (EIR).

The following is the Mitigation Monitoring and Reporting Program (MMRP) for The Preserve Project (proposed project). Unless otherwise noted, the cost of implementing the mitigation measures as prescribed by this MMRP shall be funded by the project applicant.

4.2 COMPLIANCE CHECKLIST

The MMRP contained herein is intended to satisfy the requirements of CEQA as they relate to the EIR for the proposed project prepared by the City of Rancho Cordova. This MMRP is intended to be used by City staff and mitigation monitoring personnel to ensure compliance with mitigation measures during project implementation. Mitigation measures identified in this MMRP were developed in the EIR that was prepared for the proposed project.

The Preserve Project EIR presents a detailed set of mitigation measures that will be implemented throughout the lifetime of the project. Mitigation is defined by CEQA Guidelines, Section 15370, as a measure that:

- Avoids the impact altogether by not taking a certain action or parts of an action;
- Minimizes impacts by limiting the degree or magnitude of the action and its implementation;
- Rectifies the impact by repairing, rehabilitating, or restoring the impacted environment;
- Reduces or eliminates the impact over time by preservation and maintenance operations during the life of the project; or
- Compensates for the impact by replacing or providing substitute resources or environments.

The MMRP will provide for monitoring of construction activities as necessary and in-the-field identification and resolution of environmental concerns.

Monitoring and documenting the implementation of mitigation measures will be coordinated by the City of Rancho Cordova. The table in Section 4.3 of this chapter identifies the mitigation measure, the monitoring action for the mitigation measure, the responsible party for the monitoring action, and timing of the monitoring action. The applicant will be responsible for fully understanding and effectively implementing the mitigation measures contained within the MMRP. The City will be responsible for monitoring compliance.

4.3 MITIGATION MONITORING AND REPORTING PROGRAM

The following table indicates the mitigation measure number, the impact the measure is designed to address, the measure text, the monitoring agency, implementation schedule, and an area for sign-off indicating compliance.

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
4.1 Air Quality, Greenhouse Gas Emissions, and Energy					
4.1-3	Expose sensitive receptors to substantial pollutant concentrations.	*4.1-3* *Prior to the initiation of any ground-disturbing activities, the project applicant shall ensure that all heavy-duty off-road diesel-powered equipment to be used during the grading phase of construction of the proposed project (including owned, leased, and subcontractor equipment) shall be CARB Tier 4 or cleaner.* *In addition, all off-road equipment working at the construction site must be maintained in proper working condition according to manufacturer's specifications. Idling shall be limited to five minutes or less in accordance with the In-Use Off-Road Diesel Vehicle Regulation as required by CARB. Portable equipment over 50 horsepower must have either a valid SMAQMD Permit to Operate (PTO) or a valid statewide Portable Equipment Registration Program (PERP) placard and sticker issued by CARB.* *The aforementioned requirements shall be noted on improvement plans and submitted for review and approval by the City of Rancho Cordova Community Development Department.*	City of Rancho Cordova Community Development Department	Prior to the initiation of any ground-disturbing activities	
4.1-7	Generation of GHG emissions that may have a significant impact on the environment or conflict with an applicable	*4.1-7* *To achieve Tier 1, BMP 1, the project applicant shall commit to one of the following options:*	City of Rancho Cordova Community Development Department	Prior to approval of final improvement plans	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
	plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of GHGs.	*A. All structures proposed as part of the project shall be construction without natural gas infrastructure; or* *B. Off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 571.93 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following:* *1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:* *(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the*			

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		American Carbon Registry, and the Verified Carbon Standard; *(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or* *(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);* *(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted*			

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government Code Section 12894 or its successor statute. 2. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.* *Should the applicant select Option B, it is noted that the provisions of Mitigation Measure 4.1-9 still apply in full.* *Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development*			

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		Department prior to approval of final improvement plans.			
		4.1-8 To achieve Tier 2, BMP 2, all single-family residences included as part of the proposed project shall include EV ready infrastructure. Proof of compliance shall be submitted for review and approval by the City of Rancho Cordova Community Development Department prior to approval of final improvement plans.	City of Rancho Cordova Community Development Department	Prior to approval of final improvement plans	
		4.1-9 To achieve Tier 2, BMP 3, off-site credits shall be purchased in order to reduce annual greenhouse gas (GHG) emissions by 617.30 $MTCO_2e$ per year. Credit purchases shall adhere to all of the following: *1. Off-site credits shall be real, quantifiable, permanent, verifiable, enforceable, and additional, consistent with the standards set forth in California Health and Safety Code Section 38562, subdivisions (d)(1) and (d)(2). Such credits shall be based on protocols that are consistent with the criteria set forth in subdivision (a) of Section 95972 of Title 17 of the California Code of Regulations. Such credits must be purchased through one of the following:*	City of Rancho Cordova Community Development Department	Prior to approval of final improvement plans	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		(i) A California Air Resources Board (CARB)-approved registry, such as the Climate Action Reserve, the American Carbon Registry, and the Verified Carbon Standard; *(ii) Any registry approved by CARB to act as a registry under the California Cap and Trade program; or* *(iii) Through the California Air Pollution Control Officers Association (CAPCOA) GHG Rx and the Sacramento Metropolitan Air Quality Management District (SMAQMD);* *(iv) In the event that no credits meeting these criteria are available within California, the applicant may purchase credits elsewhere so long as: (a) the Governor or the Governor's designee has made the findings set forth in Government Code Section 12894; (b) and these findings have been submitted to the Legislature; and (c) California has accepted the credits as meeting the linkage standards contained in Government*			

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		Code Section 12894 or its successor statute. *The applicant must show that the emission reductions from identified projects are real, permanent through the duration of the project (if it is a one-time purchase), enforceable, and are equal to the pollutant type and amount of the project impact being offset. In addition, any off-site purchase shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*			
4.2 Biological Resources					
4.2-1	Have a substantial adverse effect, either directly or through habitat modifications, on special-status plant species.	*4.2-1(a) Prior to initiation of ground-disturbing activities within the Raymer Way Offsite, the project applicant shall comply with SSHCP AMM Plant-1 (Rare Plant Surveys). Though stinkbells is not considered an SSHCP Covered Species, the special-status plant surveys conducted per PLANT-1 shall identify whether the species is present in the survey area. If any special-status plant species are found to be present during the focused survey(s), Mitigation Measure 4.2-1(b) shall be implemented. If special-status plant species are not found to be present during the focused survey(s), then no further action is required. A written summary of the survey results shall be submitted to the City of Rancho Cordova Community Development Department.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground disturbing activities within the Raymer Way Offsite	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		• ***PLANT-1 (Rare Plant Surveys):*** *If a Covered Activity project site contains modeled habitat for Ahart's dwarf rush (Juncus leiospermus var. ahartii), Bogg's Lake hedge-hyssop (Gratiola heterosepala), dwarf downingia (Downingia pusilla), Legenere (Legenere limosa), pincushion navarretia (Navarretia myersii), or Sanford's arrowhead (Sagittaria sanfordii), the Covered Activity project site will be surveyed for the rare plant by an approved biologist and following the California Department of Fish and Wildlife (CDFW) rare plant survey protocols (CDFG 2009) or the most recent CDFW rare plant survey protocols. An approved biologist will conduct the field surveys and will identify and map plant species occurrences according to the protocols. See Chapter 10 (of the SSHCP) for the process to submit survey information to the Plan Permittee and the Permitting Agencies.*			
		4.2-1(b) If any SSHCP-covered plants are determined to be present within the Raymer Way Offsite, SSHCP PLANT-2 (Rare Plant Protection) shall be implemented. If any special-status plant species are determined to be present, a mitigation plan shall be prepared for review	City of Rancho Cordova Community Development Department	Prior to commencement of ground-disturbing activities, if special-status plants are identified on-site	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		and approval by the City of Rancho Cordova; mitigation may include harvesting and transplanting of impacted bulbs into a preserved area with suitable habitat. Avoided areas containing species shall be fenced with orange construction fencing. • ***PLANT-2 (Rare Plant Protection):*** *If a rare plant listed in AMM PLANT-1 is detected within an area proposed to be disturbed by a Covered Activity or is detected within 250 feet of the area proposed to be disturbed by a Covered Activity, the Implementing Entity will assure one unprotected occurrence of the species is protected within a SSHCP Preserve before any ground disturbance occurs at the project site.*			
4.2-2	Have a substantial adverse effect, either directly or through habitat modifications, on special-status invertebrates.	*4.2-2(a) Prior to initiation of ground-disturbing activities, the project applicant shall submit a South Sacramento Habitat Conservation Plan (SSHCP) permit application package to the City of Rancho Cordova to request that the incidental take coverage provided by City's SSHCP Incidental Take Permit (ITP) be extended to the proposed activities. The City of Rancho Cordova shall review the SSHCP permit application for consistency with all of the SSHCP requirements and provide the South Sacramento Conservation Agency with a copy of the SSHCP requirements for tracking purposes. The project applicant shall be*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		responsible for paying all SSHCP development fees associated with obtaining coverage from the City of Rancho Cordova. Any proposal to provide land in fee title, or provide a conservation easement in lieu of paying all or part of the required SSHCP development fees, shall include a consistency analysis in the application that sufficiently shows that the proposal is consistent with the SSHCP Conservation Strategy.			
		4.2-2(b) The project applicant shall comply with SSHCP requirements and all relevant AMMs set forth in the SSHCP Permit obtained for the proposed project.	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities, and throughout construction period	
		4.2-2(c) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, or timed as required by the applicable permits if the proposed project is constructed in phases, the project applicant shall ensure that mitigation for impacts to aquatic features and other habitat for special-status species has been implemented through the SSHCP In-Lieu Fee Program or by other methods agreeable to the USACE, RWQCB, USFWS, CDFW, City, and South Sacramento Conservation Agency as appropriate, depending on agency jurisdiction.	City of Rancho Cordova Community Development Department	Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activities, or timed as required by the applicable permits if the proposed project is constructed in phases	

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4.2-3	Have a substantial adverse effect, either directly or through habitat modifications, on special-status amphibian species.	*Western Spadefoot* *4.2-3(a) The project applicant shall comply with SSHCP AMMs WS-1 through WS-6.* • ***WS-1 (Western Spadefoot Work Window):*** *Ground-disturbing Covered Activities within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]) will occur outside the breeding and dispersal season (after May 15 and before October 15), to the maximum extent practicable.* • ***WS-2 (Western Spadefoot Exclusion Fencing):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) after October 15 and before May 15, exclusion fencing will be installed around the project footprint before October 15, and the project site must be monitored by an approved biologist following rain events. Temporary high-visibility construction fencing will be installed along the edge of work areas, and silt fencing will be installed immediately behind the temporary high-visibility construction fencing to exclude western spadefoot from entering the construction area. Fencing will remain in place until all construction activities within the construction area are completed. No*	City of Rancho Cordova Community Development Department	Throughout the duration of the construction period	

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		project activities will occur outside the delineated project footprint. If a western spadefoot is encountered, refer to WS-6, below. • ***WS-3 (Western Spadefoot Monitoring):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17 [of the SSHCP]) in the breeding and dispersal season (after October 15 and before May 15), an approved biologist experienced with western spadefoot identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction- related activities are taking place, and will inspect the project site daily for western spadefoot prior to construction activities. The approved biologist will also train construction personnel on the required avoidance procedures, exclusion fencing, and protocols in the event that a western spadefoot enters an active construction zone (i.e., outside the buffer zone). If a western spadefoot is encountered, refer to WS-6, below.* • ***WS-4 (Avoid Western Spadefoot Entrapment):*** *If a Covered Activity occurs in western spadefoot modeled*			

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		habitat (Figure 3-17 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western spadefoot modeled habitat will be inspected for western spadefoot by the approved biologist prior to being moved. If a western spadefoot is encountered, refer to WS-6 below. • ***WS-5 (Erosion Control Materials in Western Spadefoot Habitat):*** *If erosion control (BMP-2) is implemented within western spadefoot modeled habitat (Figure 3-17 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material*			

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		will be used to ensure that western spadefoots are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials. • ***WS-6 (Western Spadefoot Encounter Protocol):*** *If Covered Activities must be implemented in modeled habitat (Figure 3-17) during the breeding and dispersal season (after October 15 and before May 15), and a western spadefoot is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the western spadefoot within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service and*			

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		California Department of Fish and Wildlife immediately. Any worker who inadvertently injures or kills a western spadefoot or who finds dead, injured, or entrapped western spadefoot(s) must immediately report the incident to the approved biologist. *Western Pond Turtle* *4.2-3(b) Prior to initiation of ground-disturbing activities, pre-construction surveys shall be conducted per SSHCP AMM WPT-1. If western pond turtles are detected, WPT-2 through WPT-9 shall be implemented.* • ***WPT-1 (Western Pond Turtle Surveys):*** *If the SSHCP western pond turtle modeled habitat maps (Figure 3-19 [of the SSHCP]) show that modeled habitat for western pond turtle is present within a Covered Activity's project footprint or within 300 feet of a project footprint, then an approved biologist will conduct a field investigation to delineate western pond turtle aquatic habitat within the project footprint and within 300 feet of the project footprint. In addition to the SSHCP land cover types shown in Figure 3-19 (of the SSHCP), western pond turtle aquatic habitat includes, but is not limited to, low-gradient streams and creeks, open water,*	City of Rancho Cordova Community Development Department	Prior to the initiation of ground-disturbing activities	

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		freshwater marsh, and rice fields. Adjacent parcels under different land ownership will be surveyed only if access is granted or if the parcels are visible from authorized areas. The Third-Party Project Proponent will map all existing or potential sites and provide those maps to the Local Land Use Permittees and the Implementing Entity. Locations of delineated western pond turtle habitat must also be noted on plans that are submitted to a Local Land Use Permittee. The applicant will use this information to finalize project design. Covered Activities may occur throughout the year as long as western pond turtle habitat is identified and fully avoided. Otherwise, Covered Activities must comply with WPT-2 through WPT-9. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information. • ***WPT-2 (Western Pond Turtle Work Window):*** *Maintenance and improvements to existing structures may occur throughout the year as long as western pond turtle habitat is identified and avoided, and movement of equipment is confined to existing roads. Otherwise, construction and ground-disturbing Covered Activities must be conducted outside of western*			

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		pond turtle's active season. Construction and ground-disturbing activities will be initiated after May 1 and will commence prior to September 15. If it appears that construction activities may go beyond September 15, the appropriate Plan Permittee will contact the Local Land Use Permittee and the Implementing Entity as soon as possible, but not later than September 1, to determine if additional measures are necessary to minimize take. • ***WPT-3 (Western Pond Turtle Monitoring):*** *If a Covered Activity is occurring in western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), an approved biologist experienced with western pond turtle identification and behavior will monitor the project site, including the integrity of any exclusion fencing. The approved biologist will be on site daily while construction-related activities are taking place in aquatic habitat or within 300 feet of aquatic habitat, and will inspect the project site daily for western pond turtle prior to construction activities. The approved biologist will also training construction personnel on the required avoidance procedures, exclusion fencing, and*			

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		protocols in the event that a western pond turtle enters an active construction zone (i.e., outside the buffer zone). • ***WPT-4 (Western Pond Turtle Habitat Dewatering and Exclusion):*** *If construction activities will occur in western pond turtle aquatic habitat, aquatic habitat for the turtle will be dewatered and then remain dry and absent of aquatic prey (e.g., crustaceans and other aquatic invertebrates) for 15 days prior to the initiation of construction activities. If complete dewatering is not possible, the Implementing Entity will be contacted to determine what additional measures may be necessary to minimize effects to western pond turtle. After aquatic habitat has been dewatered 15 days prior to construction activities, exclusion fencing will be installed extending a minimum of 300 feet into adjacent uplands to isolate both the aquatic and adjacent upland habitat. Exclusionary fencing will be erected 36 inches above ground and buried at least 6 inches below the ground to prevent turtles from attempting to burrow or move under the fence into the construction area. In addition,*			

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		high-visibility fencing will be erected to identify construction limits and to protect adjacent habitat from encroachment of personnel and equipment. Western pond turtle habitat outside construction fencing will be avoided by all construction personnel. The fencing and work area will be inspected by the approved biologist to ensure that the fencing is intact and that no turtles have entered the work area before the start of each work day. Fencing will be maintained by the contractor until completion of the project. If, after exclusion fencing and dewatering, western pond turtles are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will discuss the next best steps with the Implementing Entity and Wildlife Agencies. • ***WPT-5 (Avoid Western Pond Turtle Entrapment):*** *If a Covered Activity occurs within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), all excavated steep-walled holes and trenches more than 6 inches deep will be covered with plywood (or similar material) or provided with one or more escape ramps constructed of earth fill or wooden planks at the end*			

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		of each work day or 30 minutes prior to sunset, whichever occurs first. All steep-walled holes and trenches will be inspected by the approved biologist each morning to ensure that no wildlife has become entrapped. All construction pipes, culverts, similar structures, construction equipment, and construction debris left overnight within western pond turtle modeled habitat will be inspected for western pond turtle by the approved biologist prior to being moved. • ***WPT-6 (Erosion Control Materials in Western Pond Turtle Habitat):*** *If erosion control (BMP-2) is implemented within western pond turtle modeled habitat (Figure 3-19 [of the SSHCP]), non-entangling erosion control material will be used to reduce the potential for entrapment. Tightly woven fiber netting (mesh size less than 0.25 inch) or similar material will be used to ensure that turtles are not trapped (no monofilament). Coconut coir matting and fiber rolls containing burlap are examples of acceptable erosion control materials.* • ***WPT-7 (Western Pond Turtle Modeled Habitat Speed Limit):*** *Covered Activity construction and*			

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		maintenance vehicles will observe a 20-mile-per-hour speed limit within western pond turtle modeled upland habitat (Figure 3-19 [of the SSHCP]). • ***WPT-8 (Western Pond Turtle Encounter Protocol):*** *If a western pond turtle is encountered during construction activities, the approved biologist will notify the Wildlife Agencies immediately. Construction activities will be suspended in a 100-foot radius of the animal until the animal leaves the project site on its own volition. If necessary, the approved biologist will notify the Wildlife Agencies to determine the appropriate procedures related to relocation. If the animal is handled, a report will be submitted, including date(s), location(s), habitat description, and any corrective measures taken to protect the turtle, within 1 business day to the Wildlife Agencies. The biologist will report any take of listed species to the U.S. Fish and Wildlife Service immediately. Any worker who inadvertently injures or kills a western pond turtle or who finds one dead, injured, or entrapped must immediately report the incident to the approved biologist.*			

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		• ***WPT-9 (Western Pond Turtle Post-Construction Restoration):*** *After completion of ground- disturbing Covered Activities, the applicant will remove any temporary fill and construction debris and will restore temporarily disturbed areas to pre-project conditions. Restoration work includes such activities as re-vegetating the banks and active channels with a seed mix similar to pre-project conditions. Appropriate methods and plant species used to re-vegetate such areas will be determined on a site-specific basis in consultation with the Implementing Entity. Restoration work may include replanting emergent aquatic vegetation and placing appropriate artificial or natural basking areas in waterways and wetlands. A photo documentation report showing pre- and post-project conditions will be submitted to the Implementing Entity 1 month after implementation of the restoration.*			
4.2-4	Have a substantial adverse effect, either directly or through habitat modifications, on burrowing owl.	*4.2-4 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs WBO-2 through WBO-7. If western burrowing owl is found within the survey area, WBO-3 through 7 shall be implemented as required based on the results of surveys conducted per WBO-2.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		• ***WBO-1 (Western Burrowing Owl Surveys):*** *Surveys within modeled habitat are required for both the breeding and non-breeding season. If the project site falls within modeled habitat, an approved biologist will survey the project site and map all burrows, noting any burrows that may be occupied. Occupied burrows are often (but not always) indicated by tracks, feathers, egg shell fragments, pellets, prey remains, and/or excrement. Surveying and mapping will be conducted by the approved biologist while walking transects throughout the entire project site plus all accessible areas within a 250-foot radius from the project site. The centerline of these transects will be no more than 50 feet apart and will vary in width to account for changes in terrain and vegetation that can preclude complete visual coverage of the area. For example, in hilly terrain with patches of tall grass, transects will be closer together, and in open areas with little vegetation, they can be 50 feet apart. This methodology is consistent with current survey protocols for this species (California Burrowing Owl Consortium 1993). Adjacent parcels under different land ownership will be surveyed only if*			

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		access is granted or if the parcels are visible from authorized areas. If suitable habitat is identified during the initial survey, and if the project does not fully avoid the habitat, pre-construction surveys will be required. Burrowing owl habitat is fully avoided if project-related activities do not impinge on a 250- foot buffer established by the approved biologist around suitable burrows. See Chapter 10 (of the SSHCP) for the process to conduct and submit survey information. • ***WBO-2 (Western Burrowing Owl Pre-Construction Surveys):*** *Prior to any Covered Activity ground disturbance, an approved biologist will conduct pre-construction surveys in all areas that were identified as suitable habitat during the initial surveys. The purpose of the pre-construction surveys is to document the presence or absence of burrowing owls on the project site, particularly in areas within 250 feet of construction activities. To maximize the likelihood of detecting owls, the pre-construction survey will last a minimum of 3 hours. The survey will begin 1 hour before sunrise and continue until 2 hours after sunrise (3 hours total), or begin 2 hours before*			

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		sunset and continue until 1 hour after sunset. Additional time may be required for large project sites. A minimum of two pre-construction surveys will be conducted (if owls are detected on the first survey, a second survey is not needed). All owls observed will be counted and their location will be mapped. Surveys will conclude no more than 2 calendar days prior to construction. Therefore, the Third-Party Project Proponent must begin surveys no more than 4 days prior to construction (2 days of surveying plus up to 2 days between surveys and construction). To avoid last-minute changes in schedule or contracting that may occur if burrowing owls are found, the Third-Party Project Proponent may also conduct a preliminary survey up to 15 days before construction. This preliminary survey may count as the first of the two required surveys as long as the second survey concludes no more than 2 calendar days in advance of construction. • ***WBO-3 (Burrowing Owl Avoidance):*** *If western burrowing owl or evidence of western burrowing owl is observed on the project site or within 250 feet of*			

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		the project site during pre-construction surveys, then the following will occur: ***During Breeding Season:*** *If the approved biologist finds evidence of western burrowing owls within a project site during the breeding season (February 1 through August 31), all project-related activities will avoid nest sites during the remainder of the breeding season or while the nest remains occupied by adults or young (nest occupation includes individuals or family groups foraging on or near the site following fledging). Avoidance is establishment of a minimum 250-foot buffer zone around nests. Construction and other project-related activities may occur outside of the 250-foot buffer zone. Construction and other project-related activities may be allowed inside of the 250-foot non-disturbance buffer during the breeding season if the nest is not disturbed, and the Third-Party Project Proponent develops an avoidance, minimization, and monitoring plan that is approved by the Implementing Entity and Wildlife Agencies prior to project construction based on the following criteria:*			

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		○ *The Implementing Entity and Wildlife Agencies approve of the avoidance and minimization plan provided by the project applicant.* ○ *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline nesting and foraging behavior (i.e., behavior without construction).* ○ *The same approved biologist monitors the owls during construction and finds no change in owl nesting and foraging behavior in response to construction activities.* *If there is any change in owl nesting and foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer. Construction cannot resume within the 250-foot buffer until any owls present are no longer affected by nearby construction activities, and with written concurrence from the Wildlife Agencies.* *If monitoring by the approved biologist indicates that the nest is abandoned*			

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		prior to the end of nesting season and the burrow is no longer in use, the non-disturbance buffer zone may be removed if approved by the Wildlife Agencies. The approved biologist will excavate the burrow in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl to prevent reoccupation after receiving approval from the Wildlife Agencies. *The Implementing Entity and Wildlife Agencies will respond to a request from the Third-Party Project Proponent to review the proposed construction monitoring plan within 21 days.* ***During Non-Breeding Season:*** *During the non-breeding season (September 1 through January 31), the approved biologist will establish a minimum 250-foot non-disturbance buffer around occupied burrows. Construction activities outside of this 250-foot buffer will be allowed. Construction activities within the non-disturbance buffer will be allowed if the following criteria are met to prevent owls from abandoning over- wintering sites:*			

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		○ *An approved biologist monitors the owls for at least 3 days prior to construction to determine baseline foraging behavior (i.e., behavior without construction).* ○ *The same approved biologist monitors the owls during construction and finds no change in owl foraging behavior in response to construction activities.* ○ *If there is any change in owl foraging behavior as a result of construction activities, the approved biologist will have authority to shut down activities within the 250-foot buffer.* ○ *If the owls are gone for at least 1 week, the Third-Party Project Proponent may request approval from the Implementing Entity and Wildlife Agencies that an approved biologist excavate usable burrows and install one-way exclusionary devices to prevent owls from re-occupying the site. After all usable burrows are excavated, the buffer zone will*			

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		be removed and construction may continue. *Monitoring must continue as described above for the non-breeding season as long as the burrow remains active.* • ***WBO-4 (Burrowing Owl Construction Monitoring):*** *During construction of Covered Activities, 250-foot construction buffer zones will be established and maintained around any occupied burrow. An approved biologist will monitor the site to ensure that buffers are enforced and owls are not disturbed. The approved biologist will also train construction personnel on avoidance procedures, buffer zones, and protocols in the event that a burrowing owl flies into an active construction zone.* • ***WBO-5 (Burrowing Owl Passive Relocation):*** *Passive relocation is not allowed without the express written approval of the Wildlife Agencies. Passive owl relocation may be allowed on a case-by-case basis on project sites during the non-breeding season (September 1 through January 31) with the written approval of the Wildlife Agencies if the other measures*			

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		described in this condition preclude work from continuing. Passive relocation must be done in accordance with the latest California Department of Fish and Wildlife guidelines for burrowing owl. Passive relocation will only be proposed if the burrow needing to be removed or with the potential to collapse from construction activities is the result of a Covered Activity. If passive relocation is approved by the Wildlife Agencies, an approved biologist can passively exclude birds from their burrows during the non-breeding season by installing one-way doors in burrow entrances. These doors will be in place for 48 hours to ensure that owls have left the burrow, and then the biologist will excavate the burrow to prevent reoccupation. Burrows will be excavated using hand tools only. During excavation, an escape route will be maintained at all times. This may include inserting an artificial structure into the burrow to avoid having materials collapse into the burrow and trap owls inside. Other methods of passive relocation, based on best available science, may be approved by the Wildlife Agencies over the 50-year Permit Term.			

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		• ***WBO-6 (Burrowing Owl Timing of Maintenance Activities):*** *All activities adjacent to existing or planned Preserves, Preserve Setbacks, or Stream Setback areas will be seasonally timed, when safety permits, to avoid or minimize adverse effects on occupied burrows.* • ***WBO-7 (Rodent Control):*** *Rodent control will be allowed only in developed portions of a Covered Activity project site within western burrowing owl modeled habitat. Where rodent control is allowed, the method of rodent control will comply with the methods of rodent control discussed in the 4(d) Rule published in the U.S. Fish and Wildlife Service's (2004) final listing rule for tiger salamander.*			
4.2-5	Have a substantial adverse effect, either directly or through habitat modifications, on raptors and nesting birds.	*4.2-5(a) Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs RAPTOR-2 through RAPTOR-4. Raptor surveys conducted per RAPTOR-2 shall include surveying for golden eagle although it is not a SSHCP Covered Species. If raptor species (including golden eagles) are found nesting within the survey area, RAPTOR-3 and RAPTOR-4 shall be implemented as required based on the results of surveys conducted per RAPTOR-2. The following AMMs do not apply to Swainson's*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		hawk or burrowing owl, as specific AMMs have been developed for such covered raptor species and are included in separate mitigation measures. • ***RAPTOR-2 (Raptor Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present with a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites are found during initial surveys and construction activities will occur during the raptor breeding season. An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground- disturbing activities within the proposed project footprint and within 0.25 mile of the proposed project footprint to determine presence of nesting covered raptor species. Pre-construction surveys will be conducted during the raptor breeding season. If a nest is present, then RAPTOR-3 and RAPTOR-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*			

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		• ***RAPTOR-3 (Raptor Nest/Roost Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25 mile temporary nest disturbance buffer around the active nest until the young have fledged.* • ***RAPTOR-4 (Raptor Nest/Roost Buffer Monitoring):*** *If project-related Covered Activities within the temporary nest disturbance buffer are determined to be necessary during the nesting season, then an approved biologist experienced with raptor behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the disturbance buffer. Work within the temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting raptors begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the*			

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		approved biologist/monitor will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a covered raptor species flies into an active construction zone (i.e., outside the buffer zone).			
		4.2-5(b) A qualified biologist shall conduct a preconstruction nesting bird survey of all areas associated with construction activities, and a 100-foot buffer around such areas, within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31). If active nests are found for any SSHCP Covered Species, the applicable SSHCP AMM(s) TCB-3 through -5, SWHA-3 through -4, WBO-3 through-6, and RAPTOR-3 through-4 shall be implemented. If active nests are found for any other species, a no-disturbance buffer around the nest shall be established. The buffer distance shall be established by a qualified biologist in consultation with the CDFW. The buffer shall be maintained until the fledglings are capable	City of Rancho Cordova Community Development Department	Within 14 days prior to commencement of construction if construction occurs during the nesting season (February 1 through August 31)	

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		of flight and become independent of the nest, to be determined by a qualified biologist. Once the young are independent of the nest, further measures are not necessary.			
4.2-6	Have a substantial adverse effect, either directly or through habitat modifications, on Swainson's hawk.	*4.2-6 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs SWHA-2 through SWHA-4. If Swainson's hawk nesting is found within the survey area during the pre-construction survey conducted per SWHA-2, then SWHA-3 and SWHA-4 shall be implemented as required based on the results of surveys conducted per SWHA-2.* • ***SWHA-2 (Swainson's Hawk Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 0.25 mile of a project footprint if existing or potential nest sites were found during initial surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and 3 days of ground-disturbing activities to determine presence of nesting Swainson's hawk. Pre-construction surveys will be conducted during the breeding season (March 1 through September 15). If a nest is present, then SWHA-3 and*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		SWHA-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies. • ***SWHA-3 (Swainson's Hawk Nest Buffer):*** *If active nests are found within the project footprint or within 0.25 mile of any project-related Covered Activity, the Third-Party Project Proponent will establish a 0.25-mile disturbance buffer around the active nest until the young have fledged, with concurrence from the Wildlife Agencies.* • ***SWHA-4 (Swainson's Hawk Nest Buffer Monitoring):*** *If nesting Swainson's hawks are present within the project footprint or within 0.25 mile of any project-related Covered Activity, then an approved biologist experienced with Swainson's hawk behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place within the buffer. Work within the*			

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		temporary nest disturbance buffer can occur with the written permission of the Implementing Entity and Wildlife Agencies. If nesting Swainson's hawks begin to exhibit agitated behavior, such as defensive flights at intruders, getting up from a brooding position, or flying off the nest, the approved biologist will have the authority to shut down construction activities. If agitated behavior is exhibited, the biologist, Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will meet to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a Swainson's hawk flies into an active construction zone (i.e., outside the buffer zone).			
4.2-7	Have a substantial adverse effect, either directly or through habitat modifications, on tricolored blackbird.	*4.2-7 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs TCB-2 through TCB-5. If tricolored blackbirds are found within the survey area during the pre-construction survey conducted per TCB-2, then TCB-3 through TCB-5 shall be implemented as required based on the results of surveys conducted per TCB-2.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		• ***TCB-2 (Tricolored Blackbird Pre-Construction Surveys):*** *Pre-construction surveys will be required to determine if active nests are present within a project footprint or within 500 feet of a project footprint if existing or potential nest sites were found during design surveys and construction activities will occur during the breeding season (March 1 through September 15). An approved biologist will conduct pre-construction surveys within 30 days and within 3 days of ground-disturbing activities, and within the proposed project footprint and 500 feet of the proposed project footprint to determine the presence of nesting tricolored blackbird. Pre-construction surveys will be conducted during the breeding season (March 1 through August 31). Surveys conducted in February (to meet pre-construction survey requirements for work starting in March) must be conducted within 14 days and 3 days in advance of ground-disturbing activities. If a nest is present, then TCB-3 and TCB-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and the Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.*			

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		• ***TCB-3 (Tricolored Blackbird Nest Buffer):*** *If active nests are found within the project footprint or within 500 feet of any project-related Covered Activity, the Third-Party Project Proponent will establish a 500-foot temporary buffer around the active nest until the young have fledged.* • ***TCB-4 (Tricolored Blackbird Nest Buffer Monitoring):*** *If nesting tricolored blackbirds are present within the project footprint or within 500 feet of any project-related Covered Activity, then an approved biologist experienced with tricolored blackbird behavior will be retained by the Third-Party Project Proponent to monitor the nest throughout the nesting season and to determine when the young have fledged. The approved biologist will be on site daily while construction-related activities are taking place near the disturbance buffer. Work within the nest disturbance buffer will not be permitted. If the approved biologist determines that tricolored blackbirds are exhibiting agitated behavior, construction will cease until the buffer size is increased to a distance necessary to result in no harm or*			

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		harassment to the nesting tricolored blackbirds. If the biologist determines that the colonies are at risk, a meeting with the Third-Party Project Proponent, Implementing Entity, and Wildlife Agencies will be held to determine the best course of action to avoid nest abandonment or take of individuals. The approved biologist will also train construction personnel on the required avoidance procedures, buffer zones, and protocols in the event that a tricolored blackbird flies into an active construction zone (i.e., outside the buffer zone). • ***TCB-5 (Timing of Pesticide Use and Harvest Timing on Agricultural Preserves):*** *On SSHCP Agricultural Preserves, pesticides (including herbicides) will not be applied from January 1 through July 15.*			
4.2-8	Have a substantial adverse effect, either directly or through habitat modifications, on special-status bats.	*4.2-8 Prior to initiation of ground-disturbing activities, the project applicant shall comply with SSHCP AMMs BAT-2 through BAT-4. Winter hibernaculum surveys conducted per BAT-2 shall also include surveying for pallid bat although it is not an SSHCP Covered Species. If winter hibernacula of western red bat or pallid bat are found within the survey area, then BAT-3 through BAT-4 shall be implemented as required based on the results of surveys conducted per BAT-2.*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		• ***BAT-2 (Winter Hibernaculum Pre-Construction Surveys):*** *If the Third-Party Project Proponent elects not to avoid potential winter hibernaculum sites within the project footprint plus a 300-foot buffer, additional surveys are required. Prior to any ground disturbance related to Covered Activities, an approved biologist will conduct a pre- construction survey within 3 days of ground-disturbing activities within the project footprint and 300 feet of the project footprint to determine the presence of winter hibernaculum sites. Pre-construction surveys will be conducted during the winter hibernaculum season (November 1 through March 31). If a winter hibernaculum is present, then BAT-3 and BAT-4 will be implemented. The approved biologist will inform the Land Use Authority Permittee and Implementing Entity of species locations, and they in turn will notify the Wildlife Agencies.* • ***BAT-3 (Winter Hibernaculum Buffer):*** *If active winter hibernaculum sites are found within the project footprint or within 300 feet of the project footprint, the Third-Party Project Proponent will establish a 300-*			

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		foot temporary disturbance buffer around the active winter hibernaculum site until bats have vacated the hibernaculum and the Implementing Entity and Wildlife Agencies concur. • ***BAT-4 (Bat Eviction Methods):*** *An approved biologist will determine if non-maternity and non-hibernaculum day and night roosts are present on the project site. If necessary, an approved biologist will use safe eviction methods to remove bats if direct impacts to non-maternity and non-hibernaculum day and night roosts cannot be avoided. If a winter hibernaculum site is present, Covered Activities will not occur until the hibernaculum is vacated, or, if necessary, safely evicted using methods acceptable to the Wildlife Agencies.*			
4.2-9	Have a substantial adverse effect, either directly or through habitat modifications, on American badger.	*4.2-9 A qualified biologist shall conduct a preconstruction survey for American badger within 14 days prior to commencement of construction, and results of the survey shall be provided to the City's Community Development Department. If badgers or dens with signs of recent badger use are detected (i.e., fresh scat, claw marks), CDFW shall be consulted and a non-disturbance buffer shall be established around any active dens. The den(s) shall be monitored daily by the qualified*	City of Rancho Cordova Community Development Department	Within 14 days prior to commencement of construction	

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		biologist during construction. Work shall not occur within the non-disturbance buffer until the qualified biologist determines that the badger(s) have left the work area, or as determined in consultation with CDFW.			
4.2-10	Have a substantial adverse effect on riparian habitat or other sensitive natural community, or State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	*4.2-10(a) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that authorization pursuant to Clean Water Act (CWA) Section 404 from the U.S. Army Corps of Engineers (USACE) and CWA Section 401 from the Central Valley Regional Water Quality Control Board (RWQCB) is obtained. CWA Section 404 authorization is anticipated to be obtained through a Letter of Permission issued by USACE under the SSHCP ARP, and CWA Section 401 authorization is anticipated to be obtained through an individual Water Quality Certification issued by the RWQCB under the SSHCP ARP.* *The construction contractor shall adhere to all conditions outlined in the permits. The project applicant shall ensure that the proposed project replaces, restores, or enhances on a "no net loss" basis (in accordance with the USACE and the Central Valley RWQCB) the acreage of all wetlands and other waters of the U.S. that would be removed, lost, and/or degraded due to project implementation, either through the SSHCP In-Lieu Fee Program or by*	City of Rancho Cordova Community Development Department Central Valley RWQCB USACE	Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity	

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		other methods agreeable to the USACE, the Central Valley RWQCB, and the City, as appropriate, depending on agency jurisdiction, and as determined during the Section 401 and Section 404 permitting processes.			
		4.2-10(b) Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity associated with the proposed project, the project applicant shall ensure that a CDFW 1602 Streambed Alteration Agreement has been obtained. The construction contractor shall adhere to all conditions outlined in the Streambed Alteration Agreement.	City of Rancho Cordova Community Development Department	Prior to approval of grading and improvement plans and prior to initiation of any groundbreaking activity	
		4.2-10(c) The project applicant shall comply with SSHCP AMM STREAM-2 and a 100-foot setback from Morrison Creek shall be established. Only allowed compatible uses described in the SSHCP shall be sited within the setback. • ***STREAM-2 (UDA Stream Setbacks):*** *A 100-foot setback measured from the top of the bank on both sides of the stream channel will be applied to all streams listed in Table 5-1 (see Table 4.2-3 below) (see also Figure 2-4 [of the SSHCP]). If a stream reach supports woody riparian vegetation, the setback will be equal to the riparian edge plus 25 feet or will be the*	City of Rancho Cordova Community Development Department	Prior to initiation of any groundbreaking activity	

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<table>
<tr><th>Impact Number</th><th>Impact</th><th>Mitigation Measure</th><th>Monitoring Agency</th><th>Implementation Schedule</th><th>Sign-off</th></tr>
<tr><td></td><td></td><td>setback defined above, whichever is greater. If trails are located within the Stream Setback, the nearest edge of the trail will be located at least 50 feet from the top of the bank.

Table 4.2-3
Stream Setback Minimum Requirements in the Urban Development Area
<table><tr><th>Stream</th><th>Minimum Setback (from the Top of Bank Measured in Aerial Perspective) on Both Sides of the Stream</th></tr><tr><td>Elder Creek</td><td>100 feet</td></tr><tr><td>Frye Creek</td><td>100 feet or as depicted as part of the NewBridge development project hardline Preserve (see SSHCP Appendix K)</td></tr><tr><td>Gerber Creek</td><td>100 feet</td></tr><tr><td>Morrison Creek</td><td>100 feet</td></tr><tr><td>Central Paseo</td><td>100 feet or as depicted as part of the Cordova Hills development project hardline Preserve (see SSHCP Appendix K)</td></tr><tr><td>Sun Creek</td><td>100 feet or as depicted as part of the Sun Creek development project hardline Preserve (see SSHCP Appendix K)</td></tr></table>
4.2-10(d) Implement Mitigation Measure 4.2-2(c).</td><td>See Mitigation Measure 4.2-2(c)</td><td>See Mitigation Measure 4.2-2(c)</td><td></td></tr>
<tr><td>4.2-12</td><td>Conflict with any local policies or ordinances protecting biological resources, such as a tree</td><td>4.2-12 Prior to removal of any protected trees (as defined by Chapter 19.12 of the City's Municipal Code) within the project site and off-site improvement areas, a tree removal permit</td><td>City of Rancho Cordova Community</td><td>Prior to removal of any protected trees within the project site</td><td></td></tr>
</table>

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	preservation policy or ordinance.	*shall be procured from the City. In addition, tree species that are native to the Central Valley and Sierra Nevada foothills such as interior live oak (Quercus wislizeni), valley oak (Quercus lobata), blue oak (Quercus douglasii), Fremont cottonwood (Populus fremontii), black walnut (Juglans hindsii), and western redbud (Cercis occidentalis) shall be incorporated into the planned landscaping design in public spaces such as open space, parks, and parkways. Enough plantings of such native trees shall be incorporated into the landscaping such that the number of surviving native trees after five years is equal to or greater than the number of non-native trees removed. Landscaping plans detailing the tree species to be planted shall be provided to the City for approval prior to tree removal.*	Development Department	and off-site improvement areas	
4.2-14	Cumulative loss of habitat for special-status species.	*4.2-14 Implement Mitigation Measures 4.2-1 through 4.2-11.*	See Mitigation Measures 4.2-1 through 4.2-11	See Mitigation Measures 4.2-1 through 4.2-11	
4.3 Cultural and Tribal Resources					
4.3-2	Cause a substantial adverse change in the significance of a unique archeological resource pursuant to CEQA Guidelines, Section 15064.5 or disturb human remains, including those interred	*4.3-2 The following requirements shall be included through a notation on all project improvement plans prior to the issuance of grading permits, to the satisfaction of the City Engineer.* *In the event subsurface deposits believed to be cultural or human in origin are discovered during construction, all work shall halt within a 50-foot radius of the discovery. A qualified*	City Engineer	Prior to the issuance of grading permits	

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	outside of dedicated cemeteries.	*professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for precontact and historic archaeologist, shall be retained to evaluate the significance of the find, and shall have the authority to modify the no-work radius as appropriate, using professional judgment. The following notifications shall apply, depending on the nature of the find:* • *If the professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and agency notifications are not required.* • *If the professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, he or she shall immediately notify the City of Rancho Cordova and applicable landowner. The project applicant shall consult on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be a Historical Resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. Appropriate treatment measures that preserve or restore the character and integrity of a find may be, but are not limited to, processing materials for reburial, minimizing handling of historical*			

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		objects, leaving objects in place within the landscape, construction monitoring of further construction activities, and/or returning objects to a location within the project area where they will not be subject to future impacts. Work shall not resume within the no-work radius until the applicant, through consultation, as appropriate, determines that the site either: 1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or 2) that the treatment measures have been completed to the City's satisfaction. • *If the find includes human remains, or remains that are potentially human, he or she shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill [AB] 2641). The archaeologist shall notify the City of Rancho Cordova and the Sacramento County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California PRC, and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner shall notify the*			

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		NAHC, which then shall designate a Native American Most Likely Descendant (MLD) for the proposed project (Section 5097.98 of the PRC). The designated MLD shall have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the MLD, the NAHC shall mediate (Section 5097.94 of the PRC). If an agreement is not reached, the landowner shall rebury the remains where they shall not be further disturbed (Section 5097.98 of the PRC). The burial shall also include either recording the site with the NAHC or the appropriate information center, using an open space or conservation zoning designation or easement, or recording a reinternment document with Sacramento County (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to their satisfaction.			
4.3-3	Cause a substantial adverse change in the significance of a tribal cultural resource as	*4.3-3(a) Implement Mitigation Measure 4.3-2.*	See Mitigation Measure 4.3-2	See Mitigation Measure 4.3-2	

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	defined in PRC Section 21074.	*4.3-3(b) Prior to initiation of ground-disturbing activities associated with the proposed project, a consultant and construction worker tribal cultural resources awareness brochure and training program for all personnel involved in project implementation shall be developed in coordination with interested Native American Tribes. The brochure shall be distributed and the training shall be conducted in coordination with qualified cultural resources specialists and Native American Representatives and Monitors from culturally affiliated Native American Tribes before any stages of project implementation and construction activities begin on the project site. The program shall include relevant information regarding sensitive tribal cultural resources, including applicable regulations, protocols for avoidance, and consequences of violating State laws and regulations. The worker cultural resources awareness program shall also describe appropriate avoidance and minimization measures for resources that have the potential to be located on the project site and shall outline what to do and whom to contact if any potential tribal cultural resources are encountered. The program shall also underscore the requirement for confidentiality and culturally-appropriate treatment of any find of significance to Native Americans and behaviors, consistent with Native American Tribal values. Documentation of the brochure and training program (i.e., a sign-in sheet)*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		shall be submitted along with all applicable reports to the City's Community Development Department.			
		4.3-3(c) Prior to the start of ground-disturbing activities associated with the proposed project, the project applicant and construction contractor(s) shall implement the following measures to minimize the potential for destruction of or damage to existing or previously undiscovered burials, archaeological, and tribal cultural resources and to identify any such resources at the earliest possible time during project-related earthmoving activities: • *Native American monitors from culturally affiliated Native American Tribes shall be invited to monitor the vegetation grubbing, stripping, grading or other ground-disturbing activities in the project area to determine the presence or absence of any cultural resources. Native American representatives from cultural affiliated Native American Tribes act as a representative of their Tribal government and shall be consulted before any ground-disturbing activities begin.* • *Native American representatives and Native American monitors have the authority to identify sites or objects of*	City of Rancho Cordova Community Development Department	Prior to the start of ground-disturbing activities	

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		significance to Native Americans and to request that work be stopped, diverted or slowed if such sites or objects are identified within the direct impact area. Only a Native American representative shall recommend appropriate treatment of such sites or objects. *Compliance with the aforementioned measures shall be documented and submitted with applicable reports to the City's Community Development Department.*			
		4.3-3(d) Develop a standard operating procedure, points of contact, timeline and schedule for the project so all possible damages can be avoided or alternatives and cumulative impacts properly accessed. *If potential tribal cultural resources, archaeological resources, other cultural resources, articulated, or disarticulated human remains are discovered by Native American Representatives or Monitors from interested Native American Tribes, qualified cultural resources specialists or other project personnel during construction activities, work shall cease in the immediate vicinity of the find (based on the apparent distribution of cultural resources), whether or not a Native American Monitor from an interested Native American Tribe is present. A qualified cultural resources*	City of Rancho Cordova Community Development Department	Prior to initiation of ground-disturbing activities	

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		specialist and Native American Representatives and Monitors from culturally affiliated Native American Tribes shall assess the significance of the find and make recommendations for further evaluation and treatment as necessary. These recommendations shall be documented in the project record. *If adverse impacts to tribal cultural resources, unique archeology, or other cultural resources occurs, then consultation with Wilton Rancheria regarding mitigation contained in the Public Resources Code Sections 21084.3(a) and (b) and CEQA Guidelines Section 15370 shall occur, in order to coordinate for compensation for the impact by replacing or providing substitute resources or environments.*			
4.4 Geology and Soils/Mineral Resources					
4.4-3	Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse, or be located on expansive soil, as defined in Table 18-1B of	*4.4-3* *The Improvement Plan submittal shall include a final geotechnical engineering report produced by a California Registered Civil Engineer or Geotechnical Engineer for review and approval by the Rancho Cordova Community Development Department. The report shall address and make recommendations on the following:* *A. Road, pavement, and parking area design;*	Rancho Cordova Community Development Department	Prior to approval of improvement plans	

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	the Uniform Building Code.	*B. Structural foundations, including retaining wall design (if applicable);* *C. Grading practices;* *D. Erosion/winterization;* *E. Special problems discovered on-site, (i.e., open bodies of water, expansive/unstable soils, etc.); and* *F. Slope stability.* *Once approved by the Rancho Cordova Community Development Department, two copies of the final report shall be provided to the Rancho Cordova Community Development Department and one copy to the Rancho Cordova Building and Safety Division for its use. It is the responsibility of the developer to provide for engineering inspection and certification that earthwork has been performed in conformity with recommendations contained in the report.*			
4.4-5	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	*4.4-5 Should construction or grading activities result in the discovery of unique paleontological resources, all work within the vicinity of the discovery shall cease. The City of Rancho Cordova Community Development Department shall be notified, and the resources shall be examined by a qualified paleontologist at the developer's expense, for the purpose of recording, protecting, or curating the discovery as appropriate. The paleontologist shall submit to the Community Development Department for review and approval a report of the findings and method of*	City of Rancho Cordova Community Development Department	If construction or grading activities result in the discovery of unique paleontological resources	

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		curation or protection of the resources. Work may only resume in the area of discovery when the preceding work has occurred.			
4.5 Hazards and Hazardous Materials					
4.5-2	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment.	*4.5-2(a) Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall complete and submit, for both the underground storage units identified on APNs 073-0010-011 and 072-0300-008, a Consolidated Application For Authority to Remove Under Ground Storage Tanks to the Sacramento County Environmental Management Department (EMD) for review. Upon issuance of a permit (Authority Letter to Remove) from the EMD, removal of the UST shall proceed in accordance with all permit conditions, including, but not limited to, inspection, testing, and plan/report submittal requirements.*	Sacramento County Environmental Management Department	Prior to initiation of demolition or construction activities	
		4.5-2(b) Prior initiation of demolition or construction activities associated with the proposed project, the project applicant shall retain a licensed contractor to remove the existing 55-gallon drum located on APN 072-0300-008, to the northeast of the existing residence. The drum shall be disposed of in accordance with all applicable federal, State, and local regulations related to the handling, transport, and disposal of hazardous waste. Proof of safe disposal shall be provided to the Community Development Department.	City of Rancho Cordova Community Development Department	Prior to initiation of demolition or construction activities	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		4.5-2(c) Prior to issuance of a demolition permit for any on-site structures, the project applicant shall consult with certified Asbestos and/or Lead Risk Assessors to complete and submit for review to the Community Development Department an asbestos and lead survey. If asbestos-containing materials or lead-containing materials are not discovered during the survey, further mitigation related to asbestos-containing materials or lead containing materials shall not be required. If asbestos-containing materials and/or lead-containing materials are discovered by the survey, the project applicant shall prepare a work plan to demonstrate how the on-site asbestos-containing materials and/or lead-containing materials shall be removed in accordance with current California Occupational Health and Safety (Cal-OSHA) Administration regulations and disposed of in accordance with all CalEPA regulations, prior to the demolition and/or removal of the on-site structures. The plan shall include the requirement that work shall be conducted by a Cal-OSHA registered asbestos and lead abatement contractor in accordance with Title 8 CCR 1529 and Title 8 CCR 1532.1 regarding asbestos and lead training, engineering controls, and certifications. The applicant shall submit the work plan to the Community Development Department for review and approval. Materials containing more than one (1) percent asbestos that is friable are also	City of Rancho Cordova Community Development Department	Prior to issuance of a demolition permit for any on-site structures	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		subject to SMAQMD regulations. Removal of materials containing more than one (1) percent friable asbestos shall be completed in accordance with SMAQMD Rule 902.			
		4.5-2(d) Prior to issuance of a demolition permit for any on-site structures, the project applicant shall retain the services of a licensed environmental professional to prepared a Phase II Environmental Assessment (ESA) for the project site. The Phase II ESA shall evaluate, at a minimum, potential lead contamination in the soils in the vicinity of the structures located on APN 072-0300-008, as well as potential termiticide contamination in the soils in the vicinity of the wooden structures located on APN 072-0300-002 and APN 072-0300-008. In the event that the lead and/or termiticide contamination is determined to occur, the project applicant shall implement all recommended measures in the Phase II ESA necessary to address such hazards. Such measures may include, but shall not be limited to, capping contaminated soil in place and deed-restricting the subject property, excavation and off-haul of contaminated soils by a licensed contractor, or other appropriate methods deemed acceptable by the Sacramento County Environmental Management Department (EMD).	Sacramento County Environmental Management Department	Prior to issuance of a demolition permit for any on-site structures	
		4.5-2(e) Prior to Improvement Plan approval, the applicant shall hire a licensed well contractor	City of Rancho Cordova	Prior to Improvement Plan approval	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		to obtain a well abandonment permit from the Sacramento County Environmental Management Department (EMD) for all on-site wells, and properly abandon the on-site wells, pursuant to Department of Water Resources Bulletin 74-81 (Water Well Standards, Part III), for review and approval by the EMD. In addition, prior to Improvement Plan approval, the project applicant shall ensure that any on-site septic systems are abandoned in compliance with applicable EMD standards. Verification of abandonment shall be ensured by the City of Rancho Cordova Community Development Department.	Community Development Department		
		4.5-2(f) If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities at the project site, work shall stop in the area of potential contamination, and the type and extent of contamination shall be identified by a Registered Environmental Assessor (REA) or qualified professional. The REA or qualified professional shall prepare a report that includes, but is not limited to, activities performed for the assessment, summary of anticipated contaminants and contaminant concentrations, relevant environmental screening levels for identified contaminants, whether the contaminants exceed ESLs, thus warranting remediation, and recommendations for appropriate	City of Rancho Cordova Community Development Department	If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		handling and disposal. Site preparation or construction activities shall not recommence within the contaminated areas until any necessary remediation identified in the report is complete. The report and verification of proper remediation and disposal shall be submitted to the City of Rancho Cordova Community Development Department for review and approval.			
4.6 Hydrology and Water Quality					
4.6-1	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during construction.	*4.6-1 Prior to the commencement of ground-disturbing activities, the project applicant shall submit, and obtain approval of, a Spill Prevention Countermeasure and Control Plan (SPCC) to the Sacramento County Environmental Management Department. The SPCC shall specify measures and procedures to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during all construction activities, and shall meet the requirements specified in the Code of Federal Regulations, Title 40, Part 112.*	Sacramento County Environmental Management Department	Prior to the commencement of ground-disturbing activities	
4.6-2	Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality during operations.	*4.6-2 Prior to approval of final project improvement plans, the project applicant shall submit a detailed Best Management Practice (BMP) and water quality maintenance plan to the City for review and approval. The BMP and water quality maintenance plan shall meet the standards of the City's NPDES Permit (No. CAS0085324), the California Stormwater Quality Association (CASQA) Stormwater*	City of Rancho Cordova Community Development Department	Prior to approval of final project improvement plans	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project						
Impact Number	**Impact**		**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
			BMP Handbook for New Development and Redevelopment, and the Stormwater Quality Design Manual for the Sacramento region. Site design measures, source control measures, hydromodification management, and Low Impact Development (LID) standards, as necessary, shall be incorporated into the design and shown on the improvement plans.			
		4.6-3	*Prior to approval of final project improvement plans, the project applicant shall submit a maintenance covenant to the City for review and approval. The maintenance covenant shall be executed to ensure the long-term maintenance of stormwater quality measures.*	City of Rancho Cordova Community Development Department	Prior to approval of final project improvement plans	
4.8 Noise						
4.8-1	Generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.	*4.8-1*	*The following criteria shall be noted on project Improvement Plans. Improvement Plans shall be submitted to the City's Community Development Department for review and approval.* • *Consistent with Section 6.68.090 of the Rancho Cordova Municipal Code, noise-generating construction activities shall be limited to the hours of 6:00 AM to 8:00 PM on weekdays and 7:00 AM to 8:00 PM on weekends.*	City of Rancho Cordova Community Development Department	Prior to approval of Improvement Plans	
4.10 Transportation						
4.10-2	Conflict or be inconsistent with CEQA	*4.10-2(a)*	*Prior to approval of Improvement Plans, the project applicant shall include in the*	City of Rancho Cordova	Prior to approval of Improvement Plans	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
	Guidelines Section 15064.3, subdivision (b) under Existing Plus Project conditions.	*Improvement Plan submittal a Trail System Plan detailing the applicant's construction of a portion of the regional trail system in the vicinity of the project site. The Trail System Plan shall be subject to review and approval by the City of Rancho Cordova Community Development Department.*	Community Development Department		
		4.10-2(b) Prior to the recording of a Final Map, the project applicant shall pay a fair share contribution to provide monetary support for the City's transportation services, as determined by the City of Rancho Cordova Community Development Department. The charges for residential and nonresidential development will fund these transportation services as determined appropriate by the City Council. Supplemental transportation services may include, but are not limited to, the following: • *Transit Shuttle – shuttle for residents and/or employees between residential areas, employment centers, shopping and service centers and light rail stations and/or other public transit options;* • *Guaranteed Ride Home – free taxi rides and rental cars for ride sharers in case of an emergency;* • *Transit Subsidies – financial assistance to encourage residents*	City of Rancho Cordova Community Development Department	Prior to the recording of a Final Map	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project						
Impact Number	**Impact**	**Mitigation Measure**		**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		and employees to use transit or other alternative transportation measures; • *Transportation Plans for employers and/or resident groups – plans which guide employers and resident groups on the implementation of trip reduction programs, such as ride share matching or other similar programs;* • *Education Programs – various programs such as education of transit options, home office set up, alternative commute opportunities;* • *Infrastructure Support – additional bike racks and lockers, transportation alternative and ride share informational boards/kiosks, and transit facilities;* • *Transportation Coordinator Training and Support – instruction in mobility (transportation alternatives) for residential groups and work site coordinators; and* • *Bicycle and Alternative Fuel Vehicle Incentives – incentives for purchasing new bicycles or alternative fuel vehicles.*				
Initial Study						
I-d	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.	*I-1*	*Prior to the approval of Improvement Plans and issuance of Building Permits for any development on the project site, the project applicant shall submit a lighting plan for the project to the City of Rancho Cordova Planning*	City of Rancho Cordova Planning Division	Prior to the approval of Improvement Plans and issuance of Building Permits	

MITIGATION MONITORING AND REPORTING PROGRAM The Preserve Project					
Impact Number	**Impact**	**Mitigation Measure**	**Monitoring Agency**	**Implementation Schedule**	**Sign-off**
		Division for review and approval. The lighting plan shall include, but not necessarily be limited to, the following provisions: • *Shield or screen lighting fixtures to direct the light downward and prevent light spill on adjacent properties;* • *Place and shield or screen flood and area lighting needed for construction activities and/or security so as not to disturb adjacent residential areas and passing motorists;* • *For public lighting, prohibit the use of light fixtures that are of unusually high intensity or brightness (e.g., harsh mercury vapor, low-pressure sodium, or fluorescent bulbs) or that blink or flash;* • *Use appropriate building materials (such as low-glare glass, low-glare building glaze or finish, neutral, colored paint and roofing materials), shielded or screened lighting, and appropriate signage to prevent light and glare from adversely affecting motorists on nearby roadways; and* • *The proposed location, mounting height, and aiming point of all outdoor lighting used during project operations and/or construction.*		for any development on the project site	

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING A GENERAL PLAN AMENDMENT TO THE SAFETY ELEMENT FOR THE MULTI-JURISDICTIONAL LOCAL HAZARD MITIGATION PLAN AND THE LAND USE AND CIRCULATION ELEMENT FOR THE PRESERVE PROJECT NO. DD9835

WHEREAS, City of Rancho Cordova recognizes the treat natural hazards pose to people and property within our community; and

WHEREAS, undertaking hazard mitigation actions will reduce the potential for harm to people and property within our community; and

WHEREAS, the Federal Disaster Mitigation Act of 2000 emphasizes the need for pre-disaster mitigation of potential natural hazards; and

WHEREAS, the City of Rancho Cordova adopted the updated Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP) on March 7, 2022; and

WHEREAS, the Amendment includes revised language describing the Multi-Jurisdictional Local Hazard Mitigation Plan and a link to the current Local Hazard Mitigation Plan; and

WHEREAS, the property referred to as The Preserve ("Project") is proposed by Winn Communities, referred to as "Applicant"; and

WHEREAS, The Preserve project is planned as a 439 single family development, with parks/open space, natural resources, trails and associated infrastructure and roads on approximately 279-acres in the City; and

WHEREAS, the tentative subdivision map meets the requirements of the Subdivision Map Act and the Rancho Cordova Municipal Code as set forth in findings below, and the City Council has conducted a properly noticed public hearing for the approval of the Tentative Subdivision Map attached hereto in accordance with the Subdivision Map Act requirements; and

WHEREAS, on April 4, 2022, the City Council of the City of Rancho Cordova conducted a properly noticed public hearing pursuant to Government Code section 65090 and has duly considered all written and verbal testimony presented during the hearing; and

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA HEREBY RESOLVES AS FOLLOWS:

FINDINGS

CEQA

Safety Element Amendment

1. **Finding**. The proposed General Plan Amendment is exempt from CEQA under Guidelines Section 15061(b)(3), General Rule

Evidence. The proposed text amendment to add language into the plan regarding the already adopted LHMP into the Safety Element of the General Plan is exempt from the California Environmental Quality Act (CEQA), pursuant to State CEQA Guidelines Section 15061(b)(3) (Common Sense Exemption). The activity is covered by the general rule that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. The LHMP acts as a guidebook for hazard mitigation strategies but does not implement any specific project, action, or funding.

Land Use and Circulation Element Amendments
The City Council adopted a Resolution certifying The Preserve Project Environmental Impact Report (EIR), which included all findings required under CEQA regarding environmental impacts of the Project, mitigation measures and alternatives, adopted a Statement of Overriding Considerations, and adopted a Mitigation Monitoring and Reporting Program. The Draft EIR contains a description of the Project, including the proposed amendments to the General Plan, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less-than-significant impact and provides analysis of potentially significant and significant impacts. The Draft EIR identified the following impacts that were determined to be significant and unavoidable, which requires the City Council to adopt a Statement of Overriding Considerations.

General Plan Consistency- According to Section 23.155.060 of the Zoning Code, in order to amend the General Plan to modify the Land Use Map (Exhibit A), the Circulation Element (Exhibit B) and the Safety Element (Exhibit C) the following findings shall be made:

A. Finding: The proposed amendment is internally consistent with the General Plan.

Evidence: The proposed project area with the proposed land use designation as shown in Exhibit A: Proposed General Land Use Map is consistent with the General Plan Grant Line West Planning Area conceptual plan. The density is consistent with the conceptual plan and preserves a large amount of land that contains various natural resources. The removal of Centennial Drive from the project site as depicted on Figure C-1 of the General Plan was thoroughly analyzed in the EIR. It was concluded that the removal of this section of Centennial Drive would not create inconsistencies with the roadway network LOS standards. In addition, the project is consistent with several of the General Plan goals as stated above. The amendment to the Safety Element is merely a text addition to include language and a link to the approved Local Hazard Mitigation Plan (LHMP).

B. Finding: The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or welfare of the City.

Evidence: The proposed Project will not be detrimental to the public interest, health, safety, convenience, or welfare of the City as the project is expected to result in an improved jobs/housing ratio than what currently exists and includes the designation of public uses including parks and other public or quasi-public uses. The Preserve Project integrates sustainable development practices by preserving a large area of land containing various species and habitats to the north of the proposed residential development. It is a similar development pattern as the project to the south, known as Camden at Somerset Ranch.

C. Finding: In the case of amendments to the General Plan map, the site is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses, and provisions of utilities) for the requested/anticipated land use developments.

Evidence: The site is physically suitable for the proposed density of development. The proposed plan is consistent with the General Plan conceptual Grant Line West Planning Area. Natural Resource areas have been avoided to the extent possible. The proposed circulation plan enhances and expands roadway systems in the area with connections to existing roads. The project land use uses are consistent with the surrounding areas that includes residential and natural resources designations. The project infrastructure that includes utilities will connect into existing infrastructure. The removal of Centennial Drive from the project site as depicted on Figure C-1 of the General Plan was thoroughly analyzed in the EIR. It was concluded that the removal of this section of Centennial Drive would not create inconsistencies with the roadway network LOS standards. In addition, the project is consistent with several of the General Plan goals as stated above. The amendment to the Safety Element is merely a text addition to include language and a link to the approved Local Hazard Mitigation Plan (LHMP).

D. Finding: The proposed project has been reviewed in compliance with the provisions of CEQA.

Evidence: The Preserve Environmental Impact Report identifies all known and protected resources within the project area. Required protection and mitigation measures have been incorporated into The Preserve Mitigation Monitoring Report Program. The Preserve project is consistent with the General Pan Natural Resources Element Goals NR-2, and NR-3 regarding protection and preservation of wildlife, plant habitats, wetlands and creek corridors. The amendment to the Safety Element is merely a text addition to include language and a link to the approved Local Hazard Mitigation Plan (LHMP) and is considered to be exempt from CEQA pursuant to Section 15601(b)(3).

The City Council approves the attached General Plan Amendment as shown in (Exhibit's A) Land Use Map; (Exhibit B) Circulation Map and (Exhibit C) Safety Element, as attached.

Section 7. EFFECTIVE DATE.

This Resolution shall become effective upon the effective date of City Council Ordinance No. XX-2022 adopting The Preserve Project Rezone.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this 4th day of April 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Donald Terry, Mayor

ATTEST:

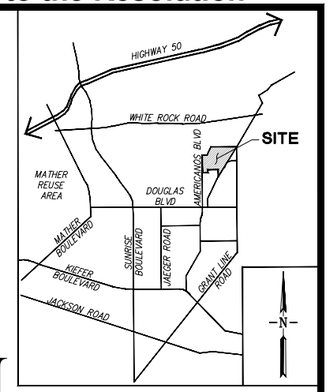
_____
Stacy Leitner, CMC
City Clerk

GENERAL PLAN AMENDMENT FOR THE PRESERVE CITY OF RANCHO CORDOVA, CALIFORNIA

MARCH, 2022 SCALE 1"=600'

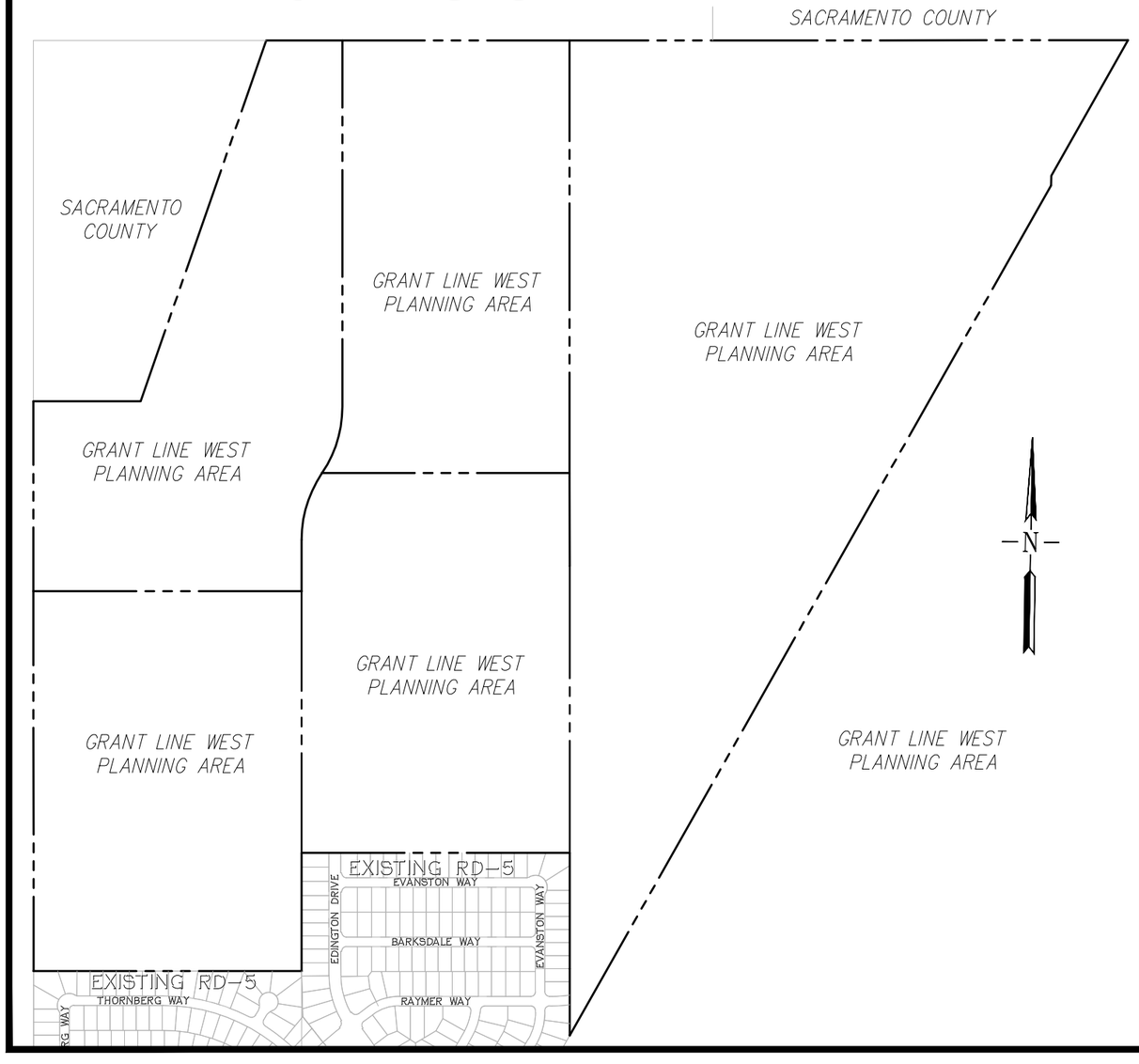
PAGE 1 OF 1

ASSESSOR'S PARCEL #: 073-0010-010, 073-0010-011, 072-0300-001, 072-0300-002, 072-0300-005 & 072-0300-008

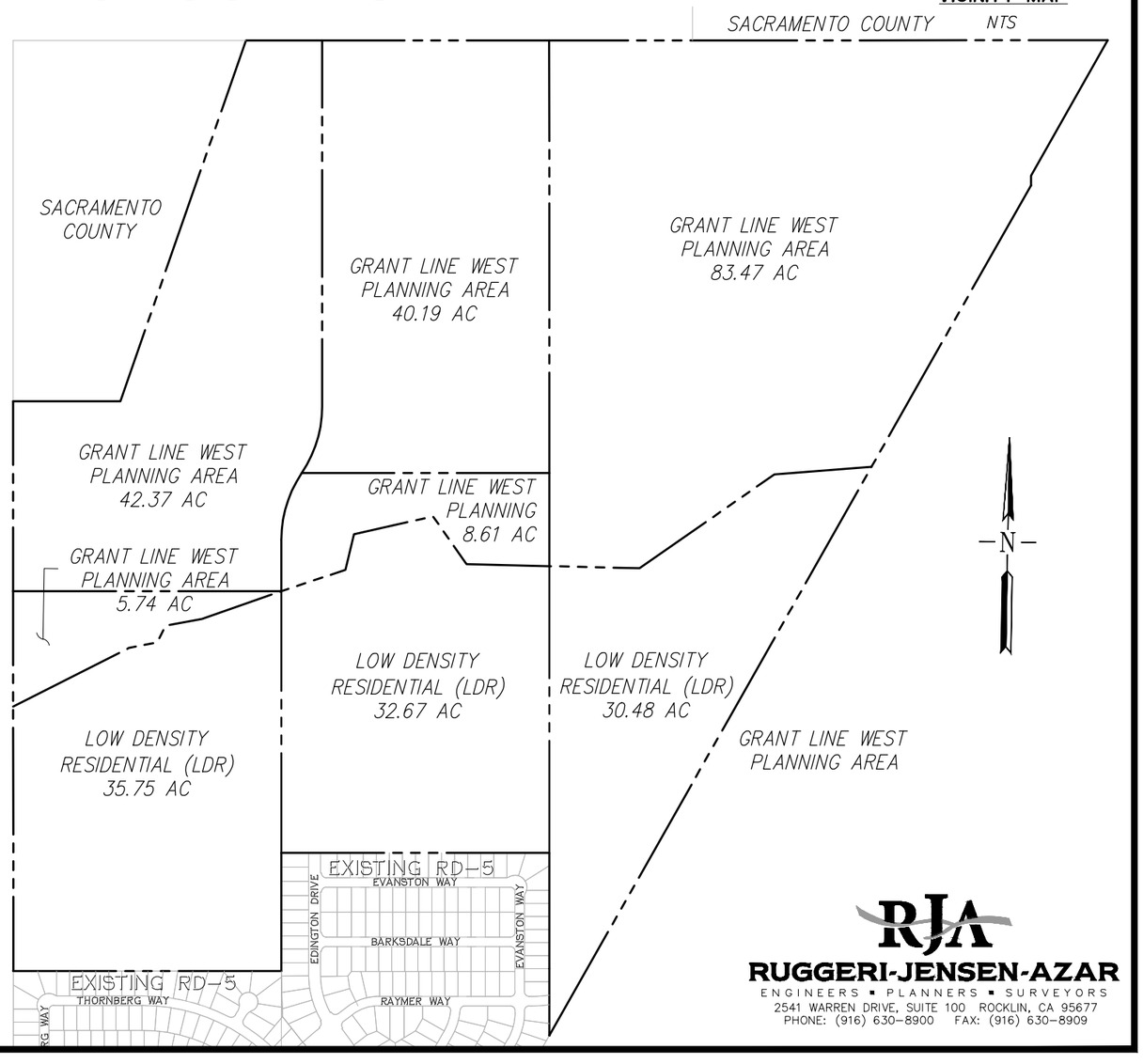


VICINITY MAP NTS

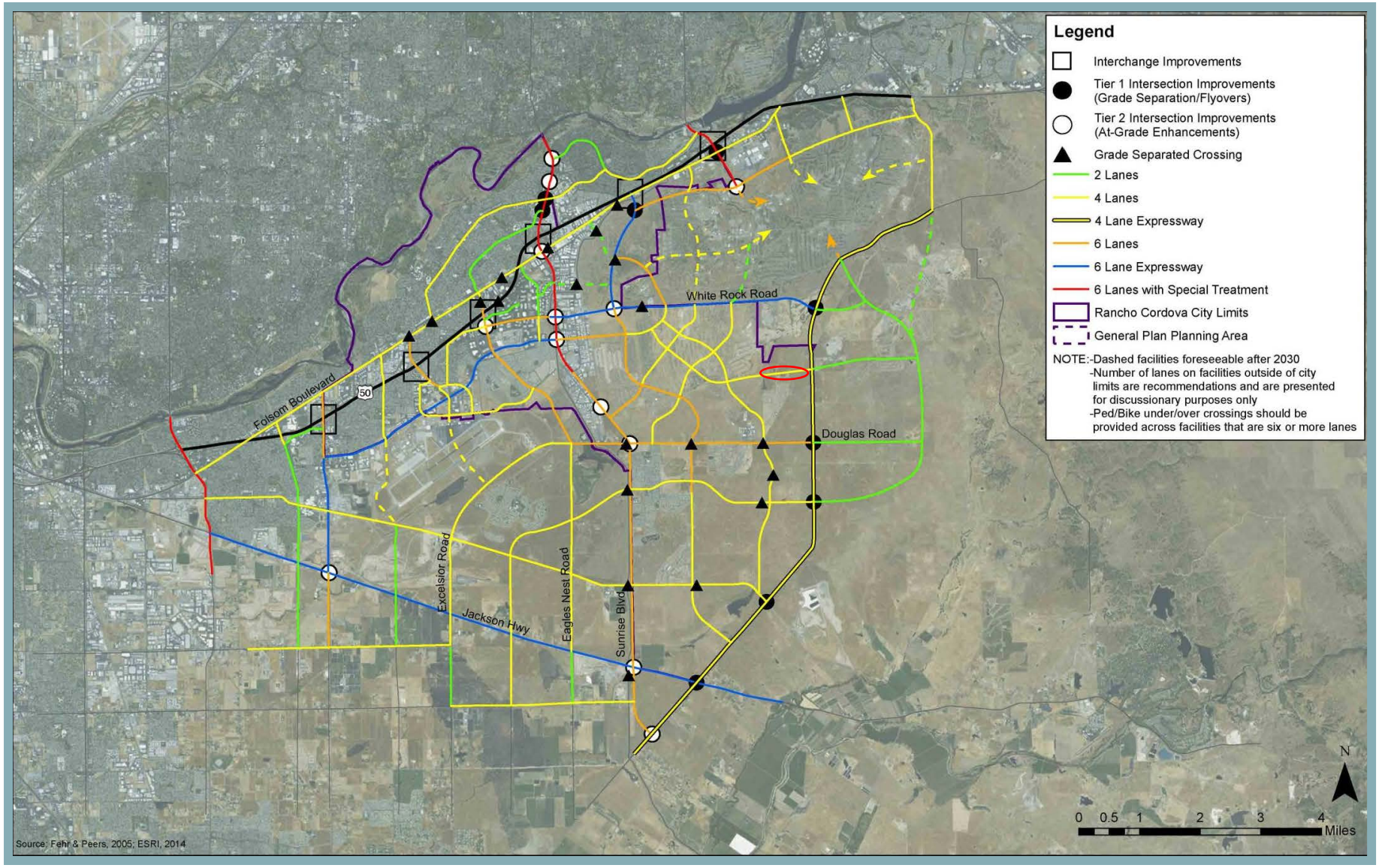
EXISTING GENERAL PLAN



PROPOSED GENERAL PLAN



RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909


Legend
Interchange Improvements
Tier 1 Intersection Improvements (Grade Separation/Flyovers)
Tier 2 Intersection Improvements (At-Grade Enhancements)
Grade Separated Crossing
2 Lanes
4 Lanes
4 Lane Expressway
6 Lanes
6 Lane Expressway
6 Lanes with Special Treatment
Rancho Cordova City Limits
General Plan Planning Area
NOTE:-Dashed facilities foreseeable after 2030
-Number of lanes on facilities outside of city limits are recommendations and are presented for discussionary purposes only
-Ped/Bike under/over crossings should be provided across facilities that are six or more lanes
White Rock Road
Folsom Boulevard
50
Douglas Road
Excelsior Road
Jackson Hwy
Eagles Nest Road
Sunrise Blvd
N
0 0.5 1 2 3 4
Miles
Source: Fehr & Peers, 2005; ESRI, 2014

Related Plans and Programs

The Safety Element relates to several other plans and programs, including the following:

- **Plans and activities of the Federal Emergency Management Agency (FEMA).** FEMA is the federal agency charged with preparing the nation for all hazards and effectively managing federal responses and recovery efforts following any national incident (e.g., major flood, earthquake, tornado, hurricane). FEMA also initiates proactive mitigation activities, trains first responders, and manages the National Flood Insurance Program and the U.S. Fire Administration. FEMA will coordinate with the City's designated emergency responders.

- **Governor's Office of Emergency Services (OES)**. The OES coordinates overall state agency response to major disasters in support of local government. The office is responsible for assuring the state's readiness to respond to and recover from natural, manmade, and war-caused emergencies, and for assisting local governments in their emergency preparedness, response and recovery efforts. OES Headquarters is located in the City of Rancho Cordova and they will review and support the City's adoption of a local Emergency Management Plan.

- **California Environmental Quality Act (CEQA)**. CEQA is the State's environmental review process that requires public agencies to identify the significant environmental effects of a project, including potential safety hazards, and either avoid the significant environmental effects, where feasible, or mitigate the significant environmental effects, where feasible. All qualifying projects within the Rancho Cordova General Plan Planning Area will be subject to environmental analysis consistent with CEQA.

Multi-Jurisdictional Local Hazard Mitigation Plan (LHMP). ~~The LHMP assesses natural hazards of concern to Sacramento County and Cities within; evaluates risk to life safety, public health, property, and the environment; and evaluates mitigation measures to reduce these risks and vulnerabilities, minimize losses and increase community resilience~~. The Local Hazard Mitigation Plan (LHMP) for Sacramento County planning area was developed in accordance with the Disaster Mitigation Act of 2000 (DMA 2000) and followed FEMA's 2011 Local Hazard Mitigation Plan guidance. The LHMP incorporates a process where hazards are identified and profiled, the people and facilities at risk are analyzed, and mitigation actions are developed to reduce or eliminate hazard risk. The implementation of these mitigation actions, which include both short and long-term strategies, involve planning, policy changes, programs, projects, and other activities. (Add website link to the LHMP).

- **Local Emergency Management Plan**. As provided for in State law, local jurisdictions are required to establish plans and ordinances addressing emergency management operations. This includes identifying hazards that may pose a major threat to the City and how to address these potential threats should an emergency occur. OES provides requirements and guidelines for such plans.

CITY OF RANCHO CORDOVA

ORDINANCE NO. XX-2022

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA REZONING THE PRESERVE PROPERTY FROM AGRICULTURAL 80 AND INDUSTRIAL RESERVE TO RESIDENTIAL DENSITY 5 (RD-5)

THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:

WHEREAS, The Preserve, is located in the eastern part of the City, is envisioned as an integral part of the City; and

WHEREAS, The Preserve ("Project") includes subdivision of 279.3 acres to develop 439 single-family residences and associated parks, open space areas, and infrastructure to support the community. Of the 279.3 acres within the project site, 185.3 acres of currently undeveloped land on the northern parcels would remain as open space following development of the Project. A total of 8.65 acres are planned for two park areas located at the northern end of the development area, and an additional 9.77 acres of land would be designated Community Space. Finally, 0.45-acre of the project site would be designated green infrastructure which would include enhanced landscaped areas and trails with connection to the surrounding parks. Off-site improvements could be required, such as utility connection or road development to the east of the site boundary, as well as along Raymer Way up to the intersection with Grant Line Road. Other off-site improvements could include expansion of the roadway or modifications to Morrison Creek; and

WHEREAS, The Preserve proposed zoning of RD-5, is consistent with the Grant Line West Planning Area conceptual plan in the General Plan; and

WHEREAS, the environmental review of The Preserve Project commenced with the release of the Notice of Preparation on October 25, 2019 to public agencies and interested parties for consultation on the scope of the EIR; and

WHEREAS, a Draft Environmental Impact Report ("Draft EIR") was released for a 45-day public and agency review on November 9, 2021. The Draft EIR assesses the potential environmental effects of implementation of the Project, identifies means to eliminate or reduce potential adverse impacts, and evaluates a reasonable range of alternatives to the Project; and

WHEREAS, on April 4, 2022, the City Council held a properly noticed public hearing at which it received a report from City Staff regarding The Ranch Special Planning Area and oral and written testimony from the public, and deliberated on the item; and

WHEREAS, the public hearing was noticed in accordance with the requirements set forth in Government Code section 65090 and 65091.

NOW THERFORE, **THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:**

Section 1. **Recitals.**

The foregoing recitals are true and correct and made a part of this Ordinance

Section 2: Rezone Findings.

A. Finding: The proposed amendment is internally consistent with the General Plan**.**

Evidence: The project is consistent with the General Plan Amendment in that; It would Consolidate the remaining parcels in the Grant Line West Planning Area of the City of Rancho Cordova General Plan in a manner that concentrates development south of Morrison Creek to avoid and minimize potential conflicts with the South Sacramento Habitat Conservation Plan. Develop a residential mixed-density community that is consistent with the General Plan conceptual land use designation for the Grant Line West Planning Area. Develop a residential community that is contiguous to and compatible with adjacent existing development and that provides a range of housing choices. Utilize existing utility capacity for maximum efficiency. Develop a residential community that can provide timely housing to help meet current demand during a period of housing shortages in the region and throughout the State. Contribute to the overall bicycle and pedestrian connectivity of the City by building key components of the regional trail system and providing strong connections for both existing and future residents. Enhance the City's network of parks, trails and open spaces for the enjoyment of all residents.

B. Finding The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or welfare of the City.

Evidence: The proposed Project will not be detrimental to the public interest, health, safety, convenience, or welfare of the City as the project is expected to result in an improved jobs/housing ratio than what currently exists and includes the designation of public uses including parks and other public or quasi-public uses. The Preserve Project integrates sustainable development practices by preserving a large area of land containing various species and habitats to the north of the proposed residential development. It is a similar development pattern as the project to the south, known as Camden at Somerset Ranch.

C. Finding: CEQA Compliance.

Evidence **:** In compliance with the California Environmental Quality Act ("CEQA"), on April 4, 2022, by Resolution, the City certified the Preserve Project EIR (State Clearinghouse #2019100515) adopted environmental findings pursuant to CEQA guidelines Section 15091, adopted a statement of overriding considerations, and adopted a mitigation monitoring program for The Preserve project.

D. Finding: If a map amendment the site is physically suitable (including absence of physical constraints, access, compatibility with adjoining land uses and provisions of utilities) for the requested zoning code.

E.

Evidence: The Preserve Project is not a map amendment. However, site is physically suitable for the proposed density of development. The proposed plan is consistent with the General Plan conceptual Grant Line West Planning Area. Natural Resource areas have been avoided to the extent possible. The proposed circulation plan enhances and expands roadway systems in the area with connections to existing roads. The project land use uses are consistent with the surrounding areas that includes residential and natural resources

designations. The project infrastructure that includes utilities will connect into existing infrastructure.

F. Finding: If a text amendment, the amendment is internally consistent with the other applicable provisions in the zoning code.
Evidence: A text amendment is not part of The Preserve Project.

Section 3: Adoption of the Rezone

The City Council hereby adopts the Rezone of The Preserve, attached as Exhibit A.

Section 4: Severability.

If any section, subsection, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of a court of competent jurisdiction, it shall not affect the remaining portions of this Ordinance that can be given effect without the invalid provision and, to this end, the provisions of this Ordinance are severable. This City Council hereby declares that it would have adopted this Ordinance irrespective of the invalidity of any particular portion thereof and intends that the invalid portions should be severed and the balance of the Ordinance enforced.

Section 5: Publication and Effective Date.

Within fifteen (15) days after adoption, a summary of this Ordinance shall be published once in the Grapevine Independent or the Sacramento Bee, a newspaper of general circulation printed and published in Sacramento County and circulated in the City of Rancho Cordova, in accordance with Government Code section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its adoption.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this _____ day of _____, 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Donald Terry, Mayor

ATTEST:

_____
Stacey Leitner, CMC
City Clerk

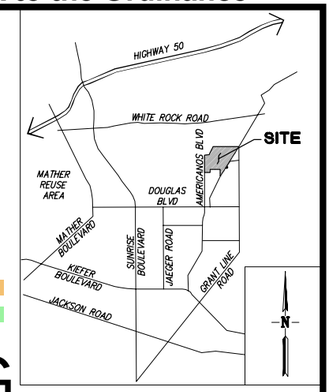
REZONE FOR
THE PRESERVE
CITY OF RANCHO CORDOVA, CALIFORNIA

MAY, 2021 SCALE 1"=600'

PAGE 1 OF 1

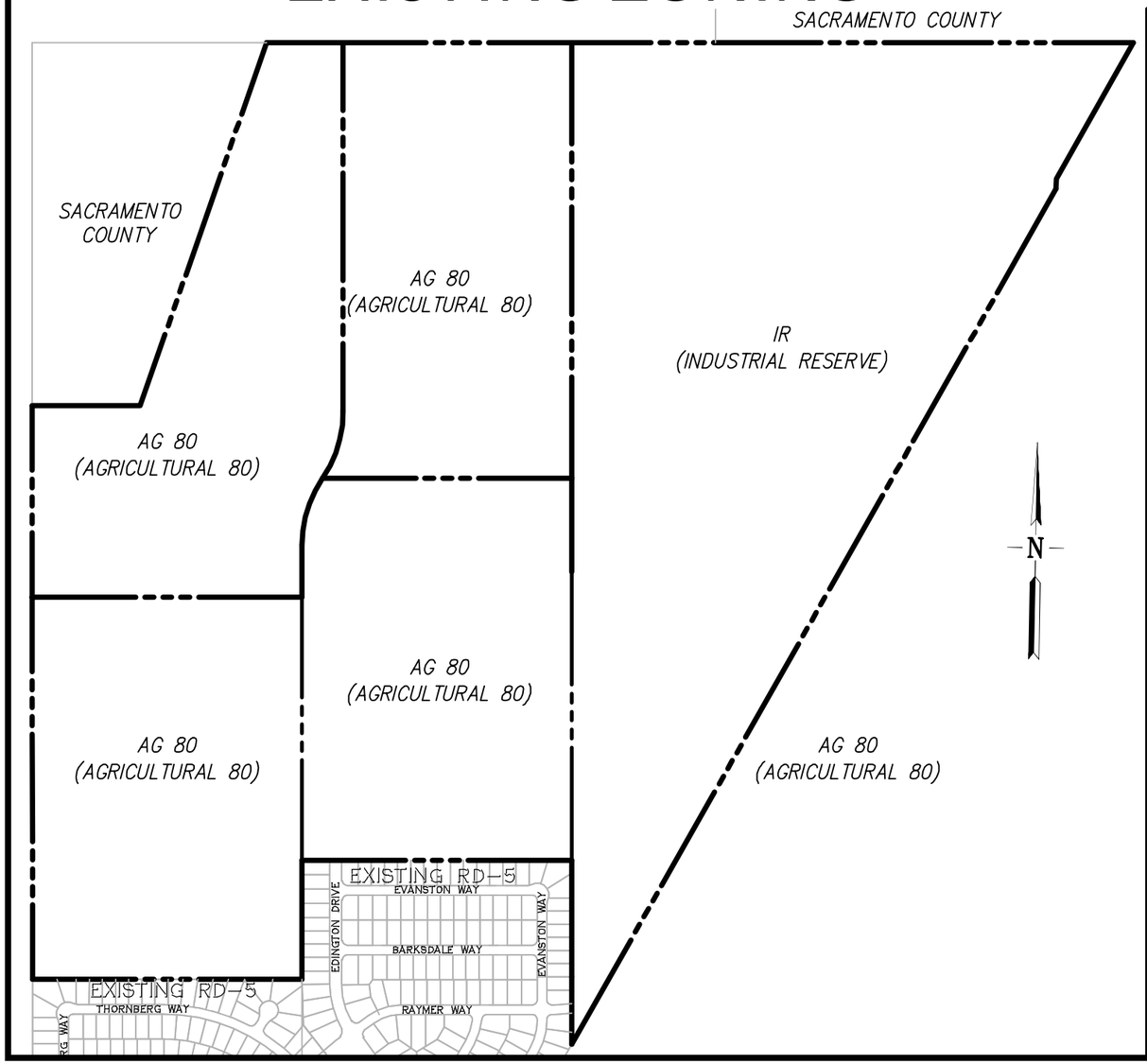
ASSESSOR'S PARCEL #: 073-0010-010, 073-0010-011, 072-0300-001, 072-0300-002, 072-0300-005 & 072-0300-008

TOTAL PROJECT AREA: 279.3 AC
TOTAL PRESERVE AREA: 180.38 AC
TOTAL RD-5 AREA: 98.90 AC
AG-80 TO RD-5: 68.42 AC
IR TO RD-5: 30.48 AC

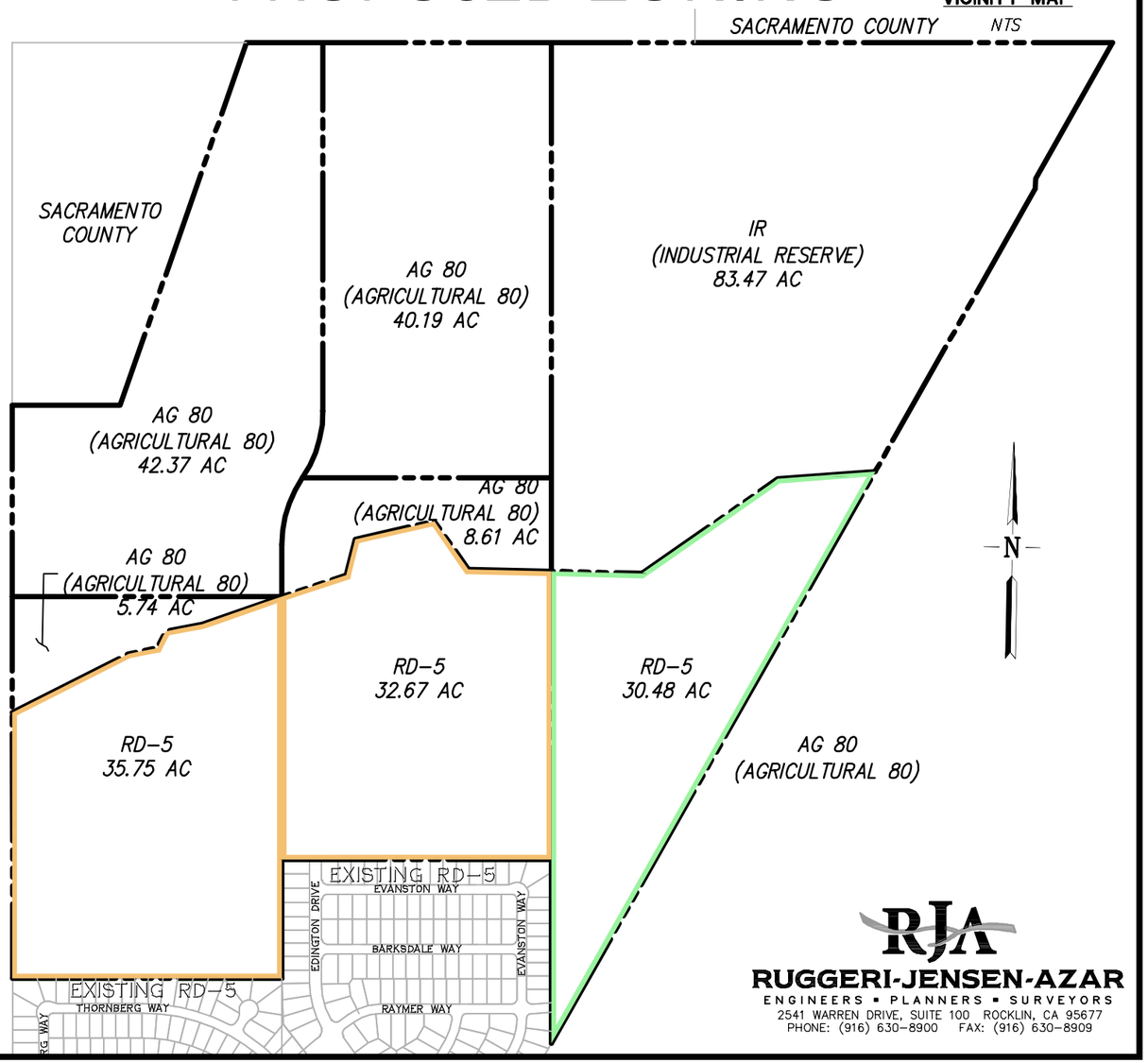


VICINITY MAP
NTS

EXISTING ZONING



PROPOSED ZONING



RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

CITY OF RANCHO CORDOVA

RESOLUTION NO. XX-2022

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING A TENTATIVE SUBDIVISION MAP FOR THE PRESERVE PROJECT ASSESSOR PARCEL NUMBER APNS 073-0010-010 & 011 AND 072-0300-001, 002, 005, AND 008 PROJECT NO. DD9835

WHEREAS, the property referred to as The Preserve ("Project") is proposed by Winn Communities, referred to as "Applicant"; and

WHEREAS, The Preserve project is planned as a 439 single family development, with parks/open space, natural resources, trails and associated infrastructure and roads on approximately 279-acres in the City; and

WHEREAS, the tentative subdivision map meets the requirements of the Subdivision Map Act and the Rancho Cordova Municipal Code as set forth in findings below, and the City Council has conducted a properly noticed public hearing for the approval of the Tentative Subdivision Map attached hereto in accordance with the Subdivision Map Act requirements; and

WHEREAS, on April 4, 2022, the City Council held a properly noticed public hearing at which it received a report from City Staff regarding The Preserve Project and oral and written testimony from the public, and deliberated on the item; and

WHEREAS, the public hearing was noticed in accordance with the requirements set forth in Government Code section 65090 and 65091.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA HEREBY RESOLVES AS FOLLOWS:

Section 1. FINDINGS

In accordance with Government Code section 66473.5, the proposed Tentative Subdivision Map with attached Conditions of Approval ("Tentative Map") attached hereto is consistent with the applicable General and Specific Plan objectives, policies, land uses and programs. Section 66474 of the Government Code requires a City to deny approval of a tentative map if any of the findings are found to be true. In the case of the proposed map, none of the required findings were found to be true. The following evidence supports the map request:

1. *Finding: That the proposed map is not consistent with applicable general and specific plans as specified in Section 65451*.

   Evidence: The proposed project is consistent with the proposed General Plan Amendment for The Preserve Project land use designation. The proposed map, which includes 439 lots, is consistent with the land use designation of Low Density Residential. The overall density is within the 4.1-5.0 dwelling units per acre range. While the proposed density is less intense than what the General Plan had initially contemplated, the density preserve the natural resources and habitat north of the Project site.

2. *Finding: That the design or improvement of the proposed subdivision is not consistent with applicable general and specific plans.*

   Evidence: The proposed Tentative Subdivision Map is consistent with the proposed General Plan Amendment designation of Low Density Residential. The overall layout of the site provides connections to existing roadways and the subdivision to the south. The overall density is within the 4.1-5.0 dwelling units per acre range. While the proposed density is less intense than what the General Plan had initially contemplated, the density preserve the natural resources and habitat north of the Project site.

3. *Finding: That the site is not physically suitable for the type of development.*

   Evidence: The site is physically suitable to subdivide. The existing properties will be split into 439 single family residential lots. It will also include amenities such as parks, community spaces and green infrastructure. The site can be adequately served by all necessary utilities and will provide the appropriate roadway connections.

4. *Finding: That the site is not physically suitable for the proposed density of development.*

   Evidence: The site is physically suitable for the proposed density of development. The proposed RD-5 density meets the density range of 4.1-5.0 dwelling units per acre. The proposed subdivision map is consistent with the proposed General Plan designation. Improvements are provided as shown on the Tentative Subdivision Map.

5. *Finding: That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*

   Evidence: An Environmental Impact Report was prepared for The Preserve project DD9835 where the construction of single-family lots, parks/open space, and the protection of natural resources were addressed in accordance with the requirements of the California Environmental Quality Act (CEQA). The Draft EIR contains a description of the Project, description of the environmental setting, identification of project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives, identification of significant irreversible environmental changes, growth-inducing impacts, and cumulative impacts. The Draft EIR identifies issues determined to have no impact or a less-than-significant impact and provides analysis of potentially significant and significant impacts. The Draft EIR identified the following impacts that were determined to be significant and unavoidable, which requires the City Council to adopt a Statement of Overriding Considerations The proposed project is consistent with the project analyzed in the Environmental Impact Report.

6. *Finding: That the design of the subdivision or the type of improvements is not likely to cause serious public health problems*.

   Evidence: The proposed subdivision has taken into consideration the existing environment and preserving a large area that has significant natural resources and habitat. Proposed development has been planned outside of the protected natural preserve. The proposed Tentative Subdivision Map includes necessary improvements to serve the project. No public health problems will result from approval of the tentative subdivision map.

7. *Finding: That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the legislative body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.*

   Evidence: The proposed improvements on the tentative subdivision map and included within the project are consistent with the City of Rancho Cordova Ordinances and Standards and do not conflict with public easements and related necessary access through the project. The streets proposed include public streets.

B. Approval.

The City Council approves the attached Tentative Subdivision Map (Exhibit A) for The Preserve Project with attached conditions of approval (Exhibit B) as attached.

Section 7. EFFECTIVE DATE.

This Resolution shall become effective upon the effective date of City Council Ordinance No. XX-2022 adopting The Preserve Project Rezone.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this 4th day of April 2022, by the following vote:

AYES:

NOES:

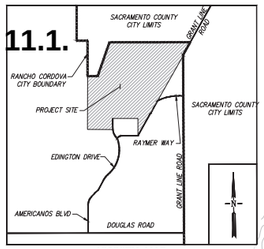
ABSENT:

ABSTAIN:

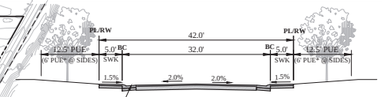
_____
Donald Terry, Mayor

ATTEST:

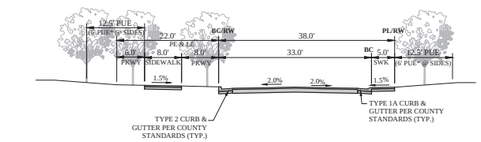
_____
Stacy Leitner, CMC
City Clerk



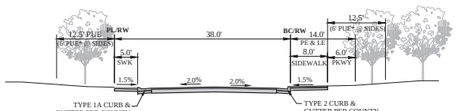
VICINITY MAP
NTS



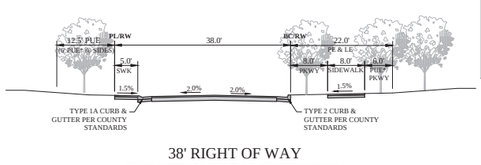
42' RIGHT OF WAY
(A) RESIDENTIAL STREET
NOT TO SCALE
* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)



38' RIGHT OF WAY
(B) RESIDENTIAL STREET
NOT TO SCALE
* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)

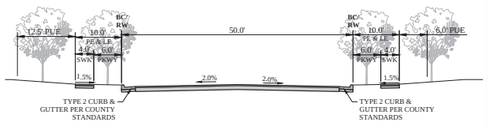


38' RIGHT OF WAY
(C) RESIDENTIAL COLLECTOR STREET
NOT TO SCALE
* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)



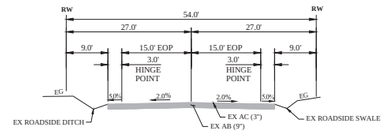
38' RIGHT OF WAY
(D) EDINGTON DRIVE EXTENSION
NOT TO SCALE
* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)

40' RIGHT OF WAY
(G) RAYMER WAY
NOT TO SCALE
* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)



50' RIGHT OF WAY
(E) EDINGTON DRIVE EXTENSION
NOT TO SCALE

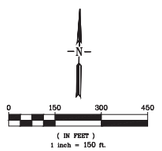
54' EXISTING RIGHT OF WAY
(H) RAYMER WAY
NOT TO SCALE



EXISTING RAYMER WAY
(F)
NOT TO SCALE

54' EXISTING RIGHT OF WAY
(I) RAYMER WAY
NOT TO SCALE

(J) TYPICAL BASIN SECTION
NOT TO SCALE



PROJECT INFORMATION

OWNER / APPLICANT
GRANTLINE ROAD, LLC
3001 I STREET, SUITE 100
SACRAMENTO, CA 95816
CONTACT: GEORGE CARPENTER
PHONE: (916) 343-2401
EMAIL: GEORGECARPENTER@COMCAST.NET

ENGINEER/PLANNER
RUGGERI-JENSEN-AZAR
2541 WARREN DRIVE, SUITE 100
ROCKLIN, CA 95677
CONTACT: JOHN S. ZELLMER
PHONE: (916) 630-8900
EMAIL: JZELLMER@RJA-EPS.COM

ASSESSOR'S PARCEL NO.
073-0010-010 & 073-0010-011
PORTION OF TRACT 3 - 12 RS 27
072-0300-002
PARCEL 6 29 PM 28
072-0300-005
PARCEL 3 29 PM 28
072-0300-006
PARCEL 4 29 PM 28
072-0300-001
PARCEL 5 29 PM 28

AREA
279.3± AC GROSS
185.3± AC NET LESS OPEN SPACE/PRESERVE
73.9± AC RESIDENTIAL LIMITS
26.5± PARKS

LOT SIZE
LOT TYPE:
- 45'X90' MINIMUM = 4,050 SF
- 45'X105' MINIMUM = 4,725 SF
- 55'X105' MINIMUM = 5,775 SF

GENERAL PLAN DESIGNATION
GRANTLINE WEST PLANNING AREA R-MD

EXISTING ZONING
AG-80 (AGRICULTURAL 80)
IR (INDUSTRIAL RESERVE)

PROPOSED ZONING
RD-5

PROPOSED USE
SINGLE FAMILY RESIDENTIAL

FIRM MAP
FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012

NUMBER OF LOTS/PARCELS
- RESIDENTIAL LOTS
  45'X90' = 172 UNITS
  45'X105' = 134 UNITS
  55'X105' = 133 UNITS
  TOTAL = 439 UNITS
- PARK LOTS
  PARCEL D, E, F, G, & H
- POTENTIAL PRESERVE/OPEN SPACE LOTS
  PARCEL A, B, C, N, O, P, Q, R, PARCEL 4 (29 PM 28) & PARCEL 5 (29 PM 28)
- GREEN INFRASTRUCTURE
  PARCEL I, J, K, L, & M

DENSITY
4.4 DU/AC

ELECTRICITY
SMUD

PARK AND RECREATION
CORDOVA REC. & PARK DISTRICT

GAS
PG&E

SCHOOL DISTRICT
CORDOVA UNIFIED

FIRE PROTECTION
SACRAMENTO COUNTY METROPOLITAN FIRE PROTECTION DISTRICT

WATER
SACRAMENTO COUNTY WATER AGENCY

SEWER
SACRAMENTO AREA SEWER DISTRICT

STORM DRAIN
SACRAMENTO COUNTY WATER RESOURCES

PARCELS			
PARCEL	FUTURE OWNERSHIP	LAND USE	ACREAGE
A	"TBD"	POTENTIAL OPEN SPACE/ PRESERVE	83.47±
B	"TBD"	POTENTIAL OPEN SPACE/ PRESERVE	8.61±
C	"TBD"	POTENTIAL OPEN SPACE/ PRESERVE	5.74±
D	CORDOVA RECREATION & PARK DISTRICT	CRPD NEIGHBORHOOD PARK	4.15±
E	CITY OF RANCHO CORDOVA	COMMUNITY PLACES	2.52±
F	CORDOVA RECREATION & PARK DISTRICT	CRPD NEIGHBORHOOD PARK	4.50±
G	CITY OF RANCHO CORDOVA	COMMUNITY PLACES	1.47±
H	CITY OF RANCHO CORDOVA	COMMUNITY PLACES/DRAINAGE	5.88±
I	CITY OF RANCHO CORDOVA	GREEN INFRASTRUCTURE	0.22±
J	CITY OF RANCHO CORDOVA	DRAINAGE	0.03±
K	TO BE RETAINED BY OWNER	RESIDENTIAL	0.11±
L	CITY OF RANCHO CORDOVA	GREEN INFRASTRUCTURE	0.06±
M	CITY OF RANCHO CORDOVA	GREEN INFRASTRUCTURE	0.14±
N	"TBD"	COMMUNITY PLACES	0.58±
O	"TBD"	COMMUNITY PLACES	1.30±
P	"TBD"	COMMUNITY PLACES	1.32±
Q	"TBD"	COMMUNITY PLACES	1.23±
R	"TBD"	COMMUNITY PLACES	2.31±
PARCEL 5 29 PM 28	"TBD"	POTENTIAL OPEN SPACE/ PRESERVE	40.19±
PARCEL 4 29 PM 28	"TBD"	POTENTIAL OPEN SPACE/ PRESERVE	42.68±

TENTATIVE MAP NOTES

1. THIS EXHIBIT IS FOR TENTATIVE MAP PURPOSES ONLY. ALL SITE CHARACTERISTICS ARE VERIFIED PRIOR TO IMPROVEMENT PLANS.
2. MINOR MODIFICATIONS MAY BE MADE TO PARCEL/LOT LINES AT FINAL MAP.
3. FOR PRELIMINARY PLANNING PURPOSES ONLY. BOUNDARY, TOPO, EASEMENTS AND SITE CONDITIONS TO BE VERIFIED PRIOR TO FINAL MAP AND ENGINEERING.
4. PURSUANT TO GOVERNMENT CODE SECTION 66456.1 THE SUB-DIVIDER MAY FILE MULTIPLE FINAL MAPS BASED UPON THIS TENTATIVE MAP. THE FILING OF A FINAL MAP ON A PORTION OF THIS TENTATIVE MAP SHALL NOT INVALIDATE ANY PART OF THIS TENTATIVE MAP, INCLUDING THE AUTHORITY OF THE LOCAL AGENCY TO IMPOSE REASONABLE CONDITIONS RELATING TO THE FILING OF MULTIPLE FINAL MAPS.
5. ALL UTILITY SYSTEMS ILLUSTRATED ON THE TENTATIVE MAP ARE SUBJECT TO CHANGE AT THE TIME OF FINAL DESIGN.
6. GRADING SHOWN ON THIS TENTATIVE MAP ILLUSTRATES A GENERAL GRADING CONCEPT AND IS SUBJECT TO CHANGE AT THE TIME OF FINAL DESIGN.
7. ALL EXISTING STRUCTURES TO BE REMOVED AND ALL EXISTING WELLS & SEPTIC SYSTEMS TO BE ABANDON AND/OR REMOVED.
8. ALIGNMENT OF MORRISON CREEK TRAIL IS SCHEMATIC. EXACT ALIGNMENT WILL BE DEVELOPED WITH PARK PLANS.

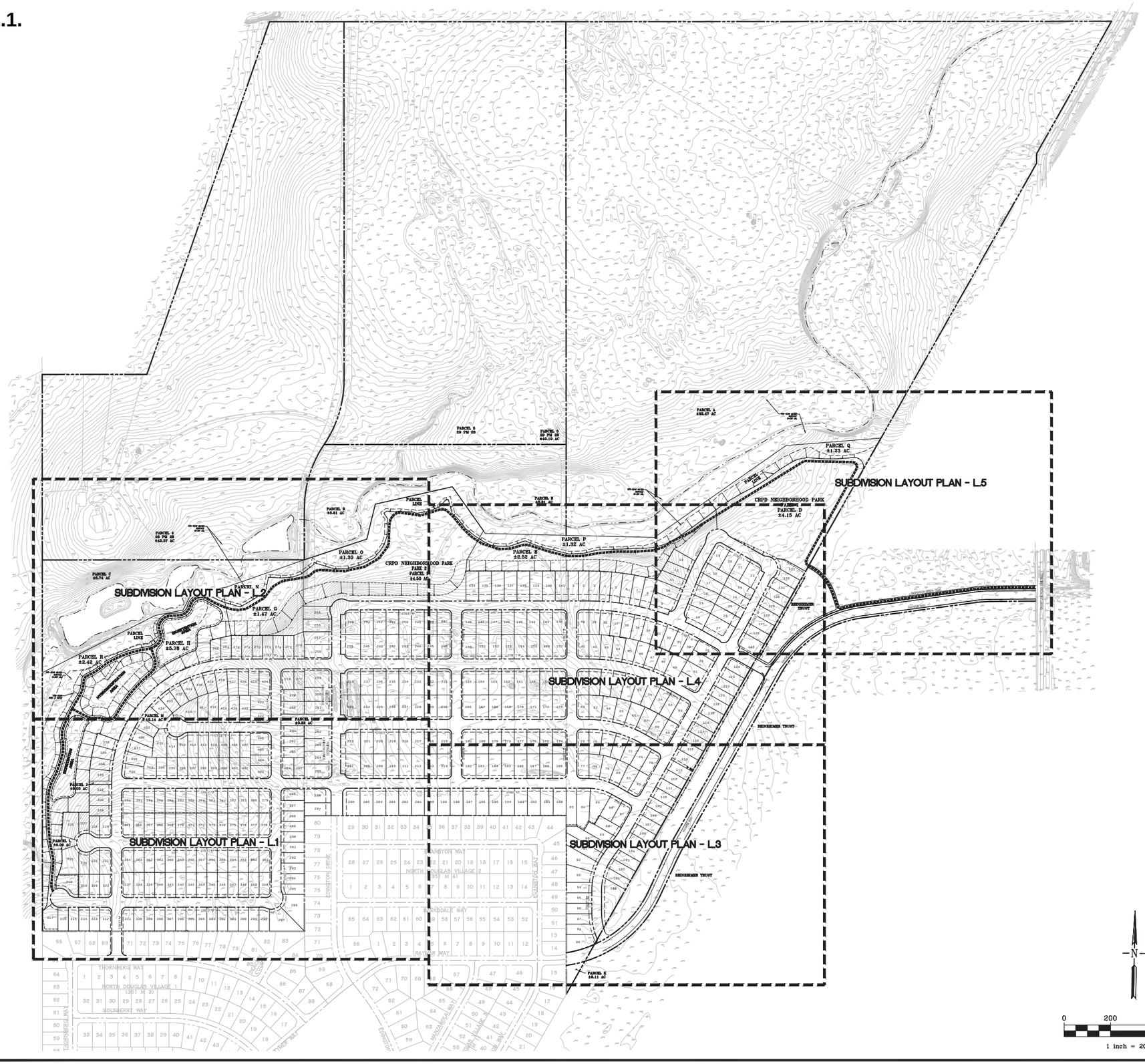
THE PRESERVE
TENTATIVE SUBDIVISION MAP
CITY OF RANCHO CORDOVA, CALIFORNIA

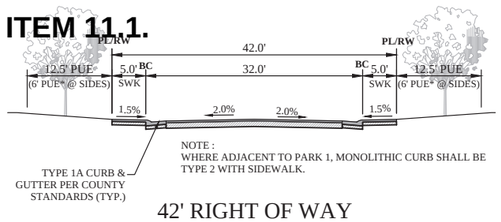
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ENGINEERS ★ PLANNERS ★ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 1 OF 1
JOB NO. 1652
AUGUST 9, 2022

THE PRESERVE

TENTATIVE MAP
REFERENCE SHEETS


SUBDIVISION LAYOUT PLAN – L.1
SUBDIVISION LAYOUT PLAN – L.2
SUBDIVISION LAYOUT PLAN – L.3
SUBDIVISION LAYOUT PLAN – L.4
SUBDIVISION LAYOUT PLAN – L.5
PARCEL A 283.47 AC
PARCEL Q ±1.23 AC
PARCEL D ±4.15 AC
CRPD NEIGHBORHOOD PARK
PARCEL P ±1.32 AC
PARCEL E ±2.52 AC
PARCEL O ±1.30 AC
PARCEL F ±4.50 AC
PARCEL B ±5.81 AC
PARCEL K ±4.61 AC
PARCEL A 39 PM 25 ±48.57 AC
PARCEL C ±5.74 AC
PARCEL N
PARCEL G ±1.47 AC
PARCEL H ±5.78 AC
PARCEL R ±2.42 AC
PARCEL M ±18.14 AC
PARCEL I ±5.52 AC
PARCEL J ±6.79 AC
PARCEL L ±4.97 AC
PARCEL K ±5.11 AC
PARCEL I 39 PM 25 ±46.19 AC
PARCEL J 39 PM 25
PARCEL L 39 PM 25
PARCEL M 39 PM 25
PARCEL N 39 PM 25
PARCEL O 39 PM 25
PARCEL P 39 PM 25
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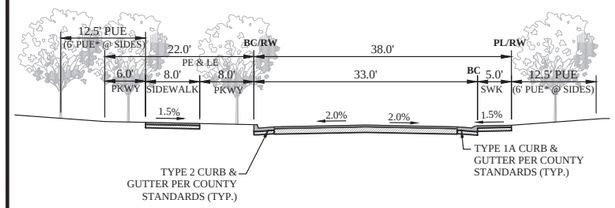


42' RIGHT OF WAY RESIDENTIAL STREET

A

NOT TO SCALE

* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)

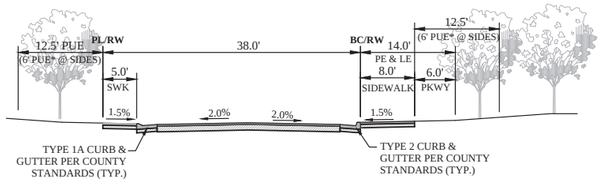


38' RIGHT OF WAY RESIDENTIAL STREET

B

NOT TO SCALE

* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)

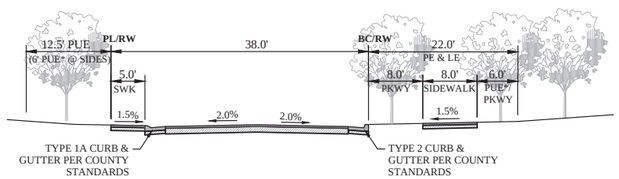


38' RIGHT OF WAY RESIDENTIAL COLLECTOR STREET

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NOT TO SCALE

* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)

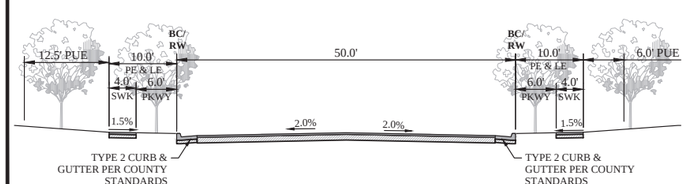


38' RIGHT OF WAY EDINGTON DRIVE EXTENSION

D

NOT TO SCALE

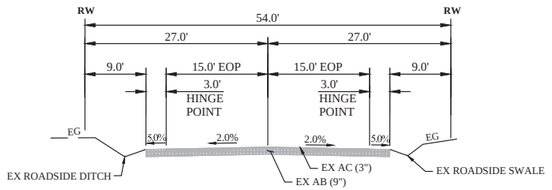
* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)



50' RIGHT OF WAY EDINGTON DRIVE EXTENSION

E

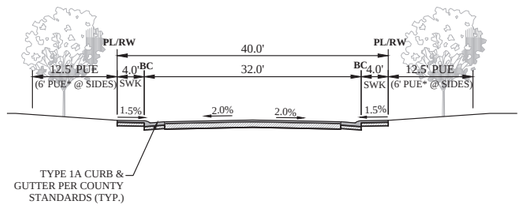
NOT TO SCALE



EXISTING RAYMER WAY

F

NOT TO SCALE

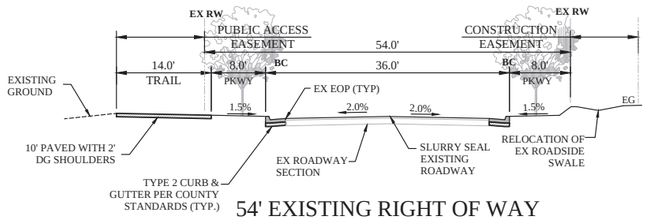


40' RIGHT OF WAY RAYMER WAY

G

NOT TO SCALE

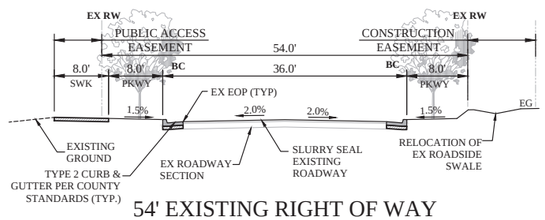
* WIDTH AS REQUIRED BY SERVICING UTILITIES (12.5' MAX)



54' EXISTING RIGHT OF WAY RAYMER WAY

H

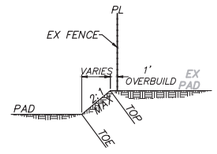
NOT TO SCALE



54' EXISTING RIGHT OF WAY RAYMER WAY

I

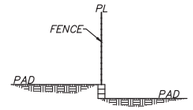
NOT TO SCALE



TYPICAL GRADING SECTION

J

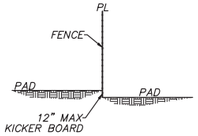
NOT TO SCALE



TYPICAL GRADING SECTION

K

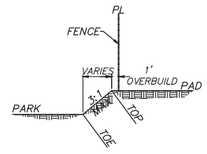
NOT TO SCALE



TYPICAL GRADING SECTION

L

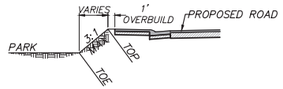
NOT TO SCALE



TYPICAL GRADING SECTION

M

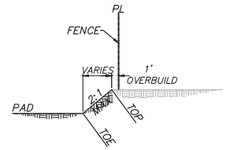
NOT TO SCALE



TYPICAL GRADING SECTION

N

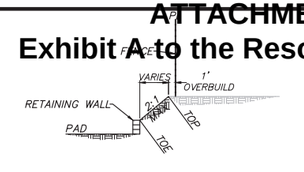
NOT TO SCALE



TYPICAL GRADING SECTION

O

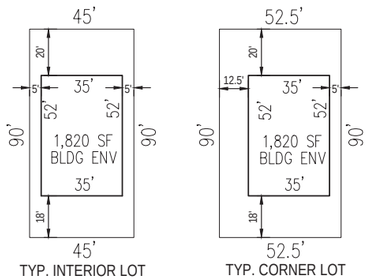
NOT TO SCALE



TYPICAL GRADING SECTION

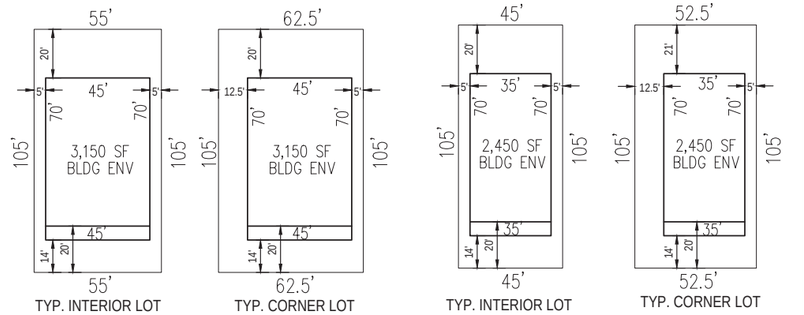
P

NOT TO SCALE



SFD - 45'x90' (4,050 SF)

SETBACKS:
FRONT GENERAL - 18' (MAY BE AMENDED IN DESIGN REVIEW)
FRONT LIVING AREA - 14'
SIDE INTERIOR - 5'
SIDE STREET CORNER - 12.5'
REAR GENERAL - 18'
LOT COVERAGE (MAX) - 75%



SFD - 55'x105' (5,775 SF) SFD - 45'x105' (4,725 SF)

SETBACKS:
FRONT GARAGE - 20'
FRONT LIVING AREA - 14'
SIDE INTERIOR - 5'
SIDE STREET CORNER - 12.5'
REAR GENERAL - 20'
LOT COVERAGE (MAX) - 75%

SETBACKS:
FRONT GARAGE - 20'
FRONT LIVING AREA - 14'
SIDE INTERIOR - 5'
SIDE STREET CORNER - 12.5'
REAR GENERAL - 20'
LOT COVERAGE (MAX) - 75%

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

TYPICAL LOTS & STREET CROSS SECTIONS
CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 2 OF 11
JOB NO. 165018
AUGUST 9, 2021

SEE SHEET 4

PARCEL M
±0.14 AC

PARCEL J
±0.03 AC

PARCEL L
±0.06 AC

PARCEL I
±0.22 AC

MORRISON CREEK TRAIL
(SEE NOTE 8 ON TENTATIVE MAP)

STREET 'E'

STREET 'D'

STREET 'C'

STREET 'B'

STREET 'A'

STREET 'F'

STREET 'G'

EDINGTON DRIVE - EXTENSION

EDINGTON DRIVE

RANCHO CORDOVA DRAINAGE EASEMENT
(20051213-585) (TO BE ABANDONED)

SECONDARY ACCESS

6' EX WOOD FENCE (TYP)

N89°05'59"E 1129.50'

N89°04'52"E 1128.99'

N00°25'52"W 1599.94'

N00°35'48"W 498.05'

THORNBERG WAY

80 CONCOURSE

SEE SHEET 6

N

0 50 100 150

1 inch = 50 ft.

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

SUBDIVISION LAYOUT PLAN - L.1

CITY OF RANCHO CORDOVA, CALIFORNIA

FIRM MAP

FIRM:- 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012
NOTE: PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 3 OF 11
JOB NO. 165018
AUGUST 9, 2021

FIRM MAP
FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012
NOTE: PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN

0 50 100 150
1 inch = 50 ft.

PARCEL 4
29 PM 28
±42.37 AC

PARCEL B
±8.61 AC

PARCEL O
±1.30 AC

PARCEL C
±5.74 AC

PARCEL N
±0.58 AC

PARCEL G
±1.47 AC

PARCEL H
±5.78 AC

PARCEL R
±2.42 AC

PARCEL M
±0.14 AC

PARCEL I
±0.22 AC

CRPD NEIGHBORH
PARK 2
PARCEL F
±4.50 AC

COUNTY OF SACRAMENTO 40' WIDE DRAINAGE EASEMENT (761215-624) QUITCLAIMED TO CITY OF RANCHO CORDOVA (20150122-957)

15' WIDE PT&T EASEMENT
771107-874

IOD
COUNTY OF SCARAMENTO
60' WIDE PUBLIC RIGHT OF WAY
761215-632
ROAD MAINTENANCE CONDITIONS AND RESTRICTIONS
770630-1446
60' (TO BE ABANDONED)

PARCEL LINE

MORRISON CREEK TRAIL
(SEE NOTE 8 ON TENTATIVE MAP)

TRAIL SECTION =
12' PAVED + 2'
DG SHOULDERS

TRAIL SECTION =
10' PAVED + 2'
DG SHOULDERS

STREET 'A'
STREET 'E'
STREET 'F'
STREET 'H'
EDINGTON DRIVE
-EXTENSION

SEE SHEET 7
SEE SHEET 3
SEE SHEET 6

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

SUBDIVISION LAYOUT PLAN - L.2

CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS ■ PLANNERS ■ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8901

SHEET 4 OF 11
JOB NO. 165018
AUGUST 9, 2021

SEE SHEET 6

SEE SHEET 3

STREET 'J'

STREET 'D'

STREET 'M'

42' RW

N89°04'52"E 1128.99

6' EX WOOD FENCE (TYP)

EVANSTON WAY

RAYMER WAY
(SECONDARY ACCESS ROAD)

SEE SECTION F

REINHEIMER TRUST

PARCEL K
±0.11 AC

N00°56'05"W 769.24'

N28°38'41"E 411.492'

SH DOUGLAS VILLAGE 2
(351 M 4)

BARKSDALE WAY

N

0 50 100 150
1 inch = 50 ft.

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

SUBDIVISION LAYOUT PLAN - L.3

CITY OF RANCHO CORDOVA, CALIFORNIA

FIRM MAP
FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012
NOTE: PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
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PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 5 OF 11
JOB NO. 165018
AUGUST 9, 2021

SEE SHEET 7

SEE SHEET 4

SEE SHEET 3

SEE SHEET 5

PARCEL B
±8.61 AC

PARCEL P
±1.32 AC

PARCEL E
±2.52 AC

MORRISON CREEK TRAIL
(SEE NOTE 8 ON TENTATIVE MAP)

ORHOOD PARK
K 2
EL F
) AC

CRPD NEIGHBORHOOD P
PARK 1
PARCEL D
±4.15 AC

STREET 'A'
STREET 'G'
STREET 'H'
STREET 'I'
STREET 'J'
STREET 'K'
STREET 'L'
STREET 'M'

REINHEIMER TRUST

REINHEIMER TRUST

RAYMER WAY

PRIMARY ACCESS

SEE SECTION F

FIRM MAP

FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012
NOTE: PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN

N

0 50 100 150
1 inch = 50 ft.

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

SUBDIVISION LAYOUT PLAN - L.4

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ■ PLANNERS ■ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8908

SHEET 6 OF 11
JOB NO. 165018
AUGUST 9, 2021

PARCEL A
±83.47 AC

PARCEL Q
±1.23 AC

PARCEL LINE

CRPD NEIGHBORHOOD PARK
PARK 1
PARCEL D
±4.15 AC

REINHEIMER TRUST

REINHEIMER TRUST

STREET 'K'

STREET 'L'

STREET 'M'

STREET 'H'

WAY

MORRISON CREEK TRAIL

RAYMER WAY

GRANT LINE ROAD (EXISTING)

SEE SHEET 4

SEE SHEET 6

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

SUBDIVISION LAYOUT PLAN - L.5

CITY OF RANCHO CORDOVA, CALIFORNIA

FIRM MAP
FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012
NOTE: PROJECT IS NOT WITHIN 100-YEAR FLOODPLAIN

0 50 100 150
1 inch = 50 ft.

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8905

SHEET 7 OF 11
JOB NO. 165018
AUGUST 9, 2021

1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2547"(3)(4)(9)
5/8" REBAR (4) SFNF
5/8" REBAR (4)
N89°05'58"E 956.39'
1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2457"(3)(4)(9)
5/8" REBAR & CAP LS 3680 (9)
N89°03'01"E 2352.30'
1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2457"
SACRAMENTO COUNTY
CITY LIMITS RANCHO CORDOVA
HELD RECORD ANGLE OF 60°27'30" PER (2)(3)
GRANT LINE ROAD
N23°35'31"E 656.04'
EX CATTLE FENCE (TYP)
SMUD
10' X 10' POLE BARRIER EASEMENT
20170725-1091
1-1/4" IP W/PLUG, LEANING (NR)
N12°38'38"W 0.78' M-COR
HELD RECORD ANGLE OF 150°39'49" PER (3)
N00°44'40"W 40.81' HELD RECORD DISTANCE PER (1)(3)(5)
1-1/2" BRASS CAMP STAMPED "AG-CORP LS 2457"(3)
SFNF
EX BUILDING
EX DIRT ROAD (TYP)
N00°05'15"W 1541.90'
PARCEL 5
29 PM 28
N00°56'16"W 1821.79'
TDW ENTERPRISES LP
20121214-0851
APNS 073-0010-010 AND 073-0010-011
PORTION OF TRACT 3
12 RS 27
PARCEL 4
29 PM 28
R=500.00'
Δ=34°06'21"
L=297.63'
EX CATTLE FENCE (TYP)
EX DIRT ROAD (TYP)
5/8" REBAR, NO TAG(4)
5/8" REBAR, NO TAG(4)
S38°28'53"W 0.56'
PL-ESMT INTX TO REBAR
N89°03'49"E 1043.02'
5' WIDE PRIVATE UTILITY EASEMENT
IN FAVOR OF BRADLEY ET AL
770630-1450
5/8" REBAR, NO TAG(4)
5/8" REBAR, NO TAG(4)
EX BUILDING (TYP)
COUNTY OF SACRAMENTO 40' WIDE DRAINAGE EASEMENT 761215-624 QUITCLAIMED TO CITY OF RANCHO CORDOVA (20150512-957)
EX MAN MADE POND
MORRISON CREEK
WELL
5/8" REBAR, NO TAG(4)
N89°04'28"E 1129.58'
15' WIDE PT&T EASEMENT
771107-874
5/8" REBAR, NO TAG(4)
30'
30'
IOD
COUNTY OF SACRAMENTO
60' WIDE PUBLIC RIGHT OF WAY
761215-632
ROAD MAINTENANCE CONDITIONS AND RESTRICTIONS
770630-1446
EX DIRT ROAD (TYP)
SEPTIC
EX DIRT ROAD (TYP)
WELL
EX BUILDING (TYP) (TO BE DEMOLISHED)
N00°25'45"W 1599.94'
N00°25'45"W 1319.29'
N00°55'13"W 1599.82'
WHITLOW AND DHILLON
APN 072-0300-005
PARCEL 3
29 PM 28
EX DIRT ROAD (TYP)
EX BUILDING (TYP) (TO BE DEMOLISHED)
WELL
EX CATTLE FENCE (TYP)
SEPTIC
30' WIDE PT&T EASEMENT
780222-958
DAVID AND ALAINA FAMILY
1985 REVOCABLE TRUST
APN 072-0300-002
PARCEL 6
29 PM 28
MORRISON CREEK
EX DIRT ROAD (TYP)
EX BUILDING (TYP) (TO BE DEMOLISHED)
EX MISCELLANEOUS STRUCTURE
N28°36'41"E 1114.92'
CITY LIMITS
RANCHO CORDOVA
SACRAMENTO COUNTY
RAYMER WAY
GRANT LINE ROAD

ENVIRONMENTAL/BIOLOGICAL

- VERNAL POOL
- SWALE
- STREAM/CREEK
- OPEN WATER

NOTES:
1. NO OAK TREES ARE LOCATED IN LIMITS OF DEVELOPED AREA. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
2. ALL BIOLOGICAL RESOURCE INFORMATION SOUTH OF MORRISON CREEK IS PER AQUATIC RESOURCES DELINEATION EXHIBITS PREPARED BY ECORP CONSULTING, INC. DATED 10-18-2018.
3. ALL BIOLOGICAL RESOURCE INFORMATION NORTH OF MORRISON CREEK IS PER FOOTHILL ASSOCIATES, DATED 06-24-2014.

N

0 150 300 450
1 inch = 150 ft

SEE SHEET 9

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

EXISTING CONDITIONS PLAN

CITY OF RANCHO CORDOVA, CALIFORNIA

FIRM MAP
FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8908

SHEET 8 OF 11
JOB NO. 165018
AUGUST 9, 2021

SEE SHEET 8

WHITLOW AND DHILLON
APN 072-0300-005
PARCEL 3
29 PM 28

DAVID AND ALAINA FAMILY
1985 REVOCABLE TRUST
APN 072-0300-002
PARCEL 6
29 PM 28

TDW ENTERPRISES LP
20121214-0851
APNS 073-0010-010 AND 073-0010-011
PORTION OF TRACT 3
12 RS 27

NORTH DOUGLAS VILLAGE 2
(351 M 4)

PARCEL 2
29 PM 28

SACRAMENTO COUNTY

15' WIDE PT&T EASEMENT
5/8" REBAR, NO TAG(4)
EX DIRT ROAD (TYP)
IOD
COUNTY OF SCARAMENTO
60' WIDE PUBLIC RIGHT OF WAY
761215-632
ROAD MAINTENANCE CONDITIONS AND RESTRICTIONS
770630-1446
SEPTIC
WELL
EX BUILDING (TYP)
(TO BE DEMOLISHED)
EX CATTLE FENCE (TYP)
30' WIDE PT&T EASEMENT
780222-958
RANCHO CORDOVA
DRAINAGE EASEMENT
(20051213-585)
5/8" REBAR & CAP LS 7944 (NR)
3/4" IP WITH PLUG LS 7944
S39°09'34"E 0.21' M-TL
CITY OF RANCHO CORDOVA
EASEMENT FOR RIGHT-OF-WAY
20060427-2218 & 20060811-0433
5/8" REBAR & CAP LS 6815 (NR)
GRANT LINE ROAD
RAYMER WAY
EVANSTON WAY
PARKSDALE WAY
RAYMAR WAY
EDINGTON DRIVE
THORNBERG WAY
SOLSBERRY WAY
ROCKDALE DRIVE
MANDALAY WAY
ASHBY CROSS AVENUE
BELMEAD WAY
BOSCOBEL AVENUE

N00°55'35"W 1599.94'
N00°55'35"W 1319.29'
N00°55'13"W 1599.82'
N89°04'52"E 1128.90'
N89°05'59"E 1129.50'
N00°55'35"W 1599.94'
N00°55'48"W 498.05'
N00°56'05"W 769.24'
N28°37'03"E 1005.44'
N00°50'40"W 1310.00'
N38°38'41"E 474.92'
140.00'(S)(G)'

ENVIRONMENTAL/BIOLOGICAL

- VERNAL POOL
- SWALE
- STREAM/CREEK
- OPEN WATER

NOTES:
1. NO OAK TREES ARE LOCATED IN LIMITS OF DEVELOPED AREA. PLEASE REFER TO ARBORIST SURVEY REPORT FOR MORE INFORMATION ON TREE SURVEY DATA.
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3. ALL BIOLOGICAL RESOURCE INFORMATION NORTH OF MORRISON CREEK IS PER FOOTHILL ASSOCIATES, DATED 06-24-2014.

N

0 150 300 450
1 inch = 150 ft.

FIRM MAP
FIRM: 06067C0240H
ZONE X
EFFECTIVE DATE
AUGUST 16, 2012

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

EXISTING CONDITIONS PLAN

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 9 OF 11
JOB NO. 165018
AUGUST 9, 2021



CRPD QUIMBY REQUIREMENTS			
Units	PPU	Population	AREA* (AC)
439	2.95	1295	6.48
* 5.0 AC / 1000 Residents			

CITY OS REQUIREMENTS			
Units	PPU	Population	AREA* (AC)
439	2.95	1295	1.30
* 1.0 AC / 1000 Residents			

PROPOSED PARK ACREAGE		
CRPD	Tentative Map	Quimby
Park 1	4.15	4.09
Park 2	4.50	3.10
TOTAL	8.65	7.19

PROPOSED OPEN SPACE	
Type of Open Space	Acres
Community Places	3.99
Green Infrastructure	6.23
TOTAL	10.22

Area	Parcel	Description	Owner	Acreage
	A	SSHCP "LAND"	SSC JPA	83.47
	B	SSHCP "LAND"	SSC JPA	8.61
	C	SSHCP "LAND"	SSC JPA	5.74
	D	CRPD Neighborhood Park	CRPD	4.15*
	E	Community Places	City	2.52
	F	CRPD Neighborhood Park	CRPD	4.50*
	G	Community Places	City	1.47
	H	Green Infrastructure	City	5.78
	I	Green Infrastructure	City	0.22
	J	Green Infrastructure	City	0.03
	K	Residential	Developer	0.11
	L	Green Infrastructure	City	0.06
	M	Green Infrastructure	City	0.14
	N	Potential OS/Preserve	TBD	0.58
	O	Potential OS/Preserve	TBD	1.30
	P	Potential OS/Preserve	TBD	1.32
	Q	Potential OS/Preserve	TBD	1.23
	R	Potential OS/Preserve	TBD	2.42
	PARCEL 4	SSHCP "LAND"	SSC JPA	40.19
	PARCEL 5	SSHCP "LAND"	SSC JPA	42.37

* Total Acreage for Parcels D & F

This Exhibit is conceptual only. Programmed elements and final concept plan is subject to change and CRPD's Board of Director formal approval process.

N

0 150 300 450

1 inch = 150 ft.

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

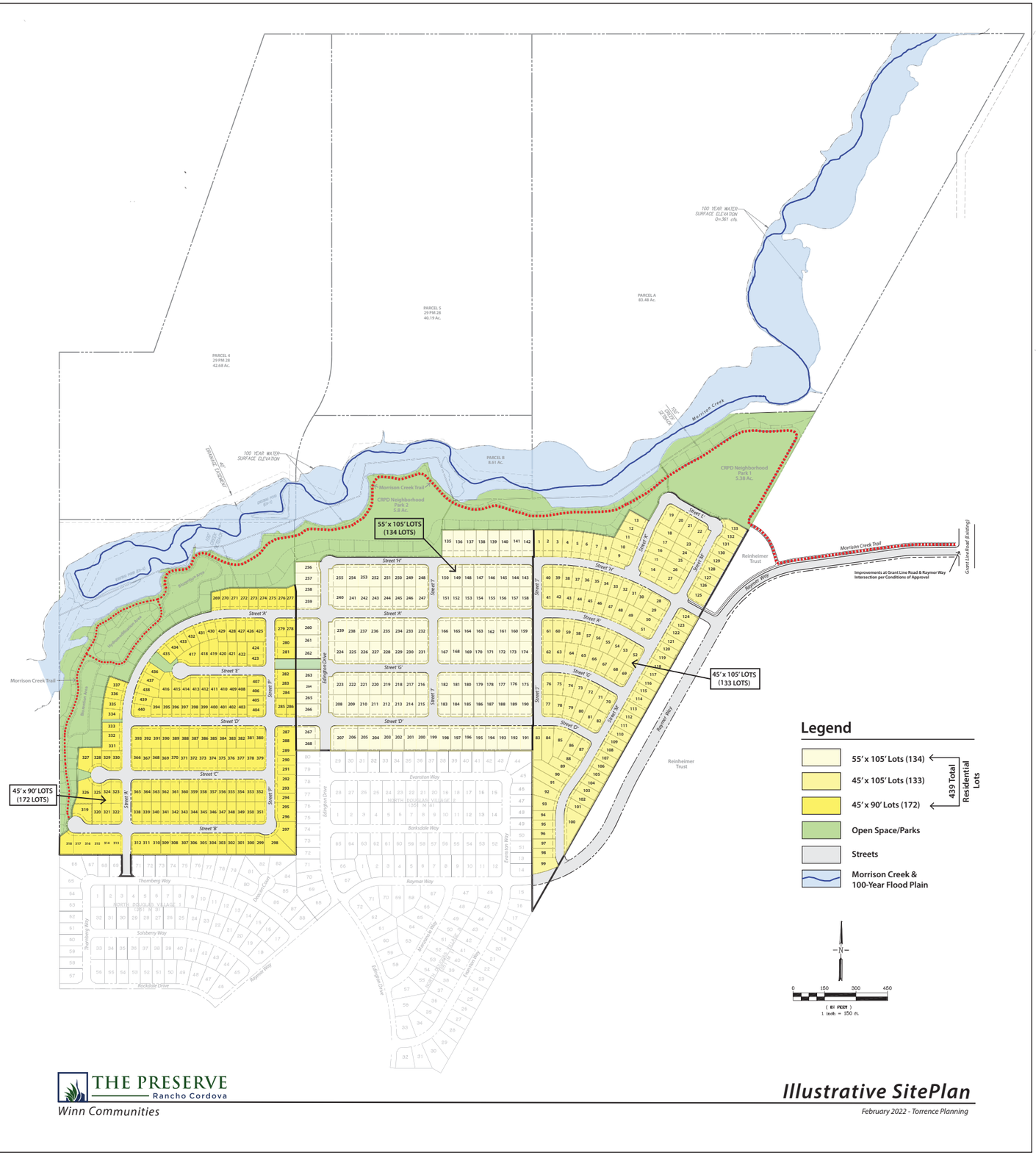
PARKS EXHIBIT

CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 10 OF 11
JOB NO. 165018
MARCH 10, 2022


PARCEL A
±83.47 AC
PARCEL 5
29 PM 28
PARCEL 5
29 PM 28
±40.19 AC
PARCEL Q
±1.23 AC
PARCEL B
±8.61 AC
PARCEL B
±8.61 AC
PARCEL LINE
CREEK CENTERLINE
MORRISON CREEK
CRPD NEIGHBORHOOD PARK
PARK 1
PARCEL D
±4.15 AC
PARCEL 4
29 PM 28
±42.37 AC
PARCEL P
±1.32 AC
PARCEL O
±1.30 AC
CRPD NEIGHBORHOOD PARK
PARK 2
PARCEL F
±4.50 AC
PARCEL E
±2.52 AC
MORRISON CREEK TRAIL
PARCEL C
±5.74 AC
PARCEL N
±0.58 AC
PARCEL G
±1.47 AC
PARCEL
LINE
PARCEL H
±5.78 AC
PARCEL R
±2.42 AC
HYDROMODIFICATION AREA
MORRISON CREEK TRAIL
PARCEL M
±0.14 AC
PARCEL I
±0.22 AC
PARCEL J
±0.05 AC
PARCEL L
±0.08 AC
REINHEIMER TRUST
REINHEIMER TRUST
REINHEIMER TRUST
PARCEL K
±0.11 AC
STREET P
STREET Q
STREET R
STREET S
STREET T
STREET U
STREET V
STREET W
STREET X
STREET Y
STREET Z
EDINGTON DRIVE
EVANSTON WAY
EVANSTON WAY
EDINGTON DRIVE
EDINGTON DRIVE
EVANSTON WAY
EVANSTON WAY
EVANSTON WAY



THE PRESERVE
Rancho Cordova
Winn Communities

Illustrative SitePlan

February 2022 - Torrence Planning



Area	Parcel	Description	Owner	Acreage
	A	SSHCP "LAND"	SSC JPA	83.47
	B	SSHCP "LAND"	SSC JPA	8.61
	C	SSHCP "LAND"	SSC JPA	5.74
	D	CRPD Neighborhood Park	CRPD	4.15*
	E	Community Places	City	2.52
	F	CRPD Neighborhood Park	CRPD	4.50*
	G	Community Places	City	1.47
	H	Green Infrastructure	City	5.78
	I	Green Infrastructure	City	0.22
	J	Green Infrastructure	City	0.03
	K	Residential	Developer	0.11
	L	Green Infrastructure	City	0.06
	M	Green Infrastructure	City	0.14
	N	Potential OS/Preserve	TBD	0.58
	O	Potential OS/Preserve	TBD	1.30
	P	Potential OS/Preserve	TBD	1.32
	Q	Potential OS/Preserve	TBD	1.23
	R	Potential OS/Preserve	TBD	2.42
	PARCEL 4	SSHCP "LAND"	SSC JPA	40.19
	PARCEL 5	SSHCP "LAND"	SSC JPA	42.37

*Total Acreage for Parcels D & F

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CRPD QUIMBY REQUIREMENTS			
Units	PPU	Population	AREA* (AC)
439	2.95	1295	6.48
* 5.0 AC / 1000 Residents			

CITY OS REQUIREMENTS			
Units	PPU	Population	AREA* (AC)
439	2.95	1295	1.30
* 1.0 AC / 1000 Residents			

PROPOSED PARK ACREAGE		
CRPD	Tentative Map	Quimby
Park 1	4.15	4.09
Park 2	4.50	3.10
TOTAL	8.65	7.19

PROPOSED OPEN SPACE	
Type of Open Space	Acres
Community Places	3.99
Green Infrastructure	6.23
TOTAL	10.22

N

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1 inch = 150 ft.

TENTATIVE MAP REFERENCE SHEETS

THE PRESERVE

PARKS EXHIBIT

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SHEET 10 OF 11
JOB NO. 165018
MARCH 10, 2022





A PROPOSED PARK AREA 1
- A1 MULTI USE SOCCER FIELD-(1) 90 YDS X 50 YDS OR (2) 50 YDS X 35 YDS
- A2 YOUTH BASEBALL FIELD - 200' OUTFIELD
- A3 SMALL YOUTH PLAYGROUND AREA 5-12 AGES
- A4 CLIMBER PLAY APPARATUS
- A5 SHADE SHELTER WITH TWO ROOM RESTROOM
- A6 PICNIC AREA WITH TABLES AND BBQ'S
- A7 BOCCE COURT (2)
- A8 1/2 COURT BASKETBALL
- A9 PICNIC AREA GROVE WITH D.G. SURFACING AND BBQ'S
- A10 SHADE TREE ALLEE
- A11 PARKING LOT
- A12 SHADE STRUCTURE WITH TABLES AND BBQ
- A13 VIEWPOINT WITH BENCH AND 48"HEIGHT RETAINING WALL
- A14 VEHICULAR MAINTENANCE ACCESS WITH COLLAPSIBLE BOLLARD
- A15 6' CONCRETE WALKING PATH
- A16 INTERPRETIVE VIEWPOINT WITH SHELTER AND BENCH SEATING
- A17 SEEDED GRASSES AND NATIVE TREE PLANTING AREA
- A18 TREES SHRUB AND GROUND COVER PLANTING



The PRESERVE @ North Douglas

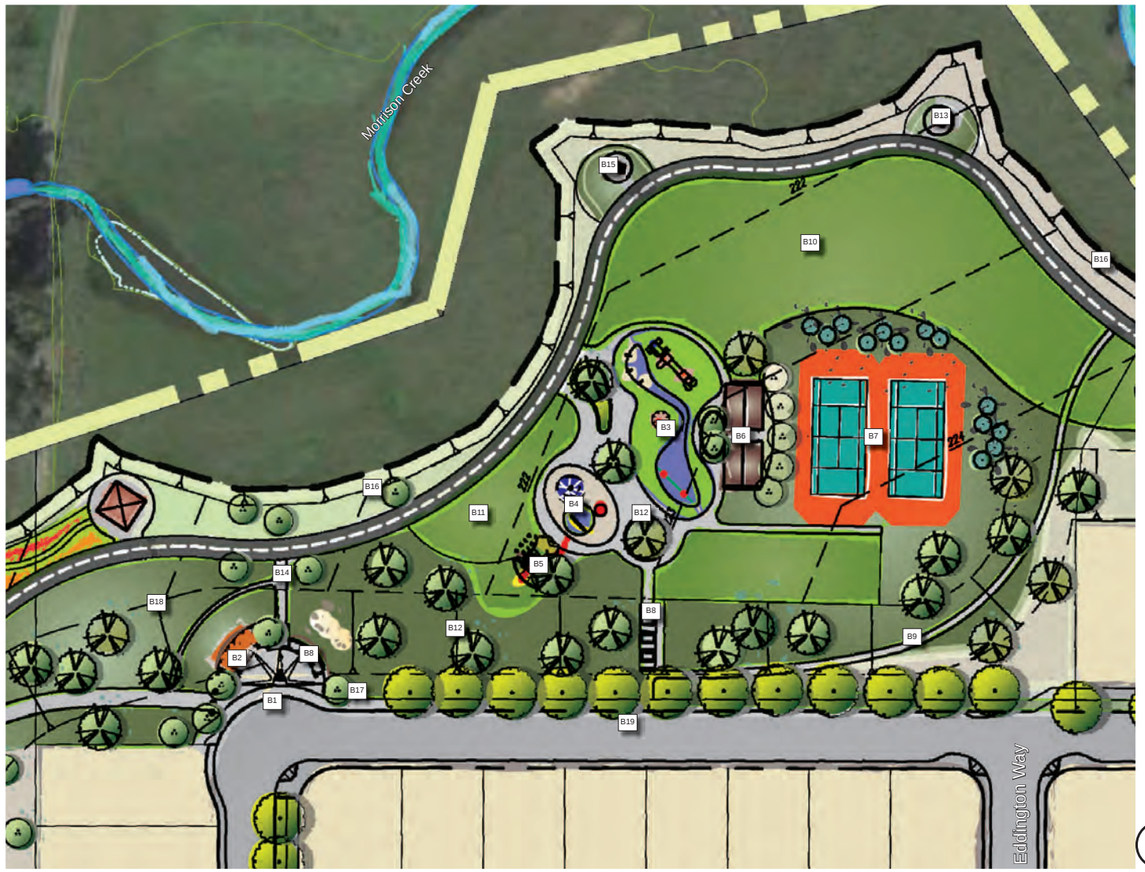
City of Rancho Cordova, CA

Park Site 1 - Conceptual Plan

FUHRMAN LEAMY LAND GROUP
DESIGN + SERVICE + SOLUTIONS

WIN.18076 JANUARY 4, 2022

PL1





B PROPOSED PARK AREA 2

B1 ENTRY PLAZA WITH INTERPRETIVE PANELS-MORRISON CREEK WETLANDS
B2 SHELTER OVER INTERPRETIVE SIGNS
B3 YOUTH ADVENTURE PLAYGROUND AREA 5-12 AGES
B4 YOUTH ADVENTURE TOT LOT AREA 0-4 AGES
B5 HILLSIDE SLIDE
B6 PICNIC AREA WITH 30' X 45' SHADE SHELTER TABLES AND BBQ'S
B7 FENCED MULTI USE COURTS - (2) TENNIS COURTS | (2) FUTSOL COURTS | (4) PICKLEBALL COURTS
B8 STAIRS DOWN
B9 6' CONCRETE WALK 5% MAXIMUM GRADIENT DOWN
B10 OPEN TURF FOR PASSIVE PLAY
B11 MOUNDED TURF AND SHRUB AND GROUND COVER AREA
B12 DRINKING FOUNTAIN
B13 VIEWPOINT WITH PICNIC TABLE AND BBQ
B14 6' CONCRETE WALKING PATH
B15 SWING SET
B16 SEEDED GRASSES AND NATIVE TREE PLANTING AREA
B17 TREES SHRUB AND GROUND COVER PLANTING AREA
B18 COMMUNITY GARDEN
B19 ON STREET PARKING



The PRESERVE @ North Douglas

City of Rancho Cordova, CA

Park Site 2 - Conceptual Plan

FUHRMAN LEAMY LAND GROUP
DESIGN + SERVICE + SOLUTIONS

WIN.18076 JANUARY 4, 2022

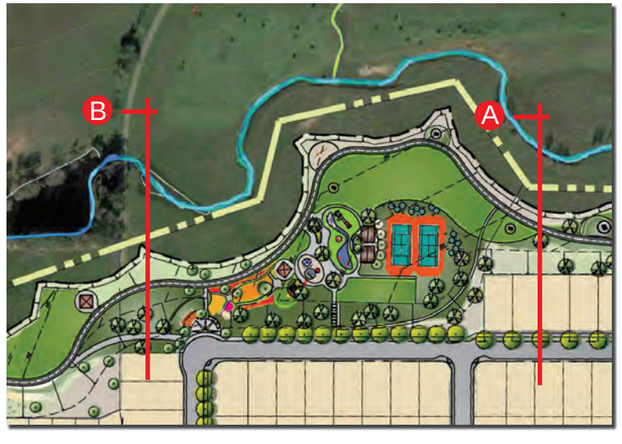
PL2



OPEN SPACE TRAIL SECTION B



OPEN SPACE TRAIL SECTION A



OPEN SPACE TRAIL



THE PRESERVE LAND USE BREAKDOWN	
RESIDENTIAL	**NO. UNITS**
45' x 90' LOTS	172
45' x 105' LOTS	134
55' x 105' LOTS	133
TOTAL UNITS	**439**
PARK ACREAGE	**PROPOSED**
PARK 1	4.15 AC
PARK 2	4.50 AC
TOTAL ACRES	**8.65 AC**
CITY OPEN SPACE ACREAGE	**PROPOSED**
COMMUNITY SPACES	3.99 AC
GREEN INFRASTRUCTURE	6.23 AC
TOTAL ACRES	**10.22 AC**
PRESERVE ACREAGE	**PROPOSED**
POTENTIAL OS/PRESERVE	180.69 AC
TOTAL ACRES	**180.69 AC**

NOTE:
All amenities and imagery depicted herein are conceptual in nature, and are only illustrated here for the purposes of showing design intent and functional relationships within the proposed land plan for The Preserves at the time of this graphic illustration.



VILLAGE ENTRY OFF GRANT LINE ROAD

N

ILLUSTRATIVE SITE PLAN

FUHRMAN LEAMY LAND GROUP
DESIGN • SERVICE • SOLUTIONS

THE PRESERVE
Rancho Cordova

WINN COMMUNITIES

City of Rancho Cordova, CA

WIN.18076
March 21, 2022

L1
OF 6



PARK SITE 2

OPEN SPACE TRAIL AMENTITES

PARK SITE 1

PASEO - PEDESTRIAN CONNECTIVITY



F Swainson's Hawk Shelter

K-Turtle Shell turf area

E-Vernal Pool Pathway

A Morrison Creek Headwater Trail Signage with "art" or climbable art

G Badger Bench - Morrison Ponds overlook

H Resource education interpretive "room" and picnic spot

B Sanford's Arrowhead Point

C Morrison Creek Vista Point

J-Orcutt Grass view bench

I Blackbird's Basin Interpretive signage

D Morrison Creek Interpretive Kiosk



NOTES:
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2. THE DESIGN INTENT FOR THE COMMUNITY PLACES ON LOTS E,G AND H, IS TO IS TO APPLY THE FULL FEE CREDIT AMOUNT, WITH MUTUALLY AGREED UPON ENHANCEMENTS, UPON PREPARATION OF IMPROVEMENT PLAN S AND FINAL BID ACCEPTANCE OF WORK. ENHANCEMENTS MAY INCLUDE INTERACTIVE ART, INTERPRETIVE SIGNAGE, FURNISHINGS, ETC.

SCALE: 1" = 40'-0"
0' 40' 160'
20' 80'

2 SITE KEYNOTES

SYMBOL	DESCRIPTION
2-01	PROPOSED 10' WIDE CLASS 1, "MORRISON CREEK HEADWATERS" TRAIL ADJACENT TO OPEN SPACE.
2-02	PROPOSED LOTS WITH OPEN VIEW FENCING
2-03	PROPOSED POST AND CABLE FENCE ADJACENT TO TRAIL AND 1' 0" FROM TOP OF SLOPE
2-04	PROPOSED CONCRETE WALK 5' 0" WIDTH
2-05	PROPOSED "MORRISON CREEK VISTA POINT" OVERLOOK WITH BENCH AND SHADE TREE
2-06	PROPOSED LIMIT OF GRADING ALONG MORRISON CREEK CORRIDOR
2-07	PROPOSED POST & CABLE FENCE @ BIOREMEDIATION BASIN WITH SEEDED AND OR SODDED NATIVE GRASSES.
2-08	PROPOSED POST & CABLE FENCE @ HYDROMOD BASIN WITH TEMPORARY IRRIGATION AND NATIVE PLANTINGS.
2-09	PROPOSED MAINTENANCE ACCESS GATE AND RAMP INTO BASIN
2-10	PROPOSED MAINTENANCE AND EVA ACCESS ROAD WITH COLLAPSIBLE BOLLARD(S)
2-11	"MORRISON PONDS" PICNIC AREA WITH RETAINING WALL AND EDUCATIONAL SIGNAGE OF STORM WATER SYSTEM.
2-12	PROPOSED ON STREET PARKING WITH "VERNAL POOL PATH" PEDESTRIAN ACCESS INTO OPEN SPACE.
2-13	PROPOSED "SWAINSONS HAWK" SHELTER WITH TABLE
2-14	PROPOSED NON IRRIGATED HYDROSEEDED SLOPE
2-15	PROPOSED BUBBLER IRRIGATED TREES ON HYDROSEEDED, NON IRRIGATED, SLOPE.
2-16	PROPOSED "TURTLE TURF" PASSIVE IRRIGATED TURF GRASS
2-17	PROPOSED, WIDENED, MAINTENANCE ACCESS PATH TO 12' 0" WIDTH.
2-19	PROPOSED "SANFORD`S ARROWHEAD POINT" PICNIC PADS.
2-21	PROPOSED SIGNAGE OF "MORRISON CREEK HEADWATERS" TRAIL @ ENTRY POINTS
2-22	"ORCUTT" OVERLOOK BENCH
2-23	PROPOSED "BADGER`S BENCH
2-24	PROPOSED "MORRISION CREEK" INTERPRETIVE AREA KIOSK.

CONCEPT PLANT SCHEDULE PARCEL E-H

STREET TREE	QUERCUS WISLIZENII / INTERIOR LIVE OAK ULMUS WILSONIANA `PROSPECTOR` / ELM	12
ACCENT TREE	ARBUTUS UNEDO / STRAWBERRY TREE MULTI-TRUNK CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK COTINUS COGGYGRIA 'PURPLE ROBE' / PURPLE ROBE SMOKE TREE	45
NATIVE AND SLOPE TREES	ACER NEGUNDO / BOX ELDER ARBUTUS X 'MARINA' / MARINA STRAWBERRY TREE MULTI-TRUNK CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK PLATANUS RACEMOSA / CALIFORNIA SYCAMORE MULTI-TRUNK QUERCUS LOBATA / VALLEY OAK QUERCUS WISLIZENII / INTERIOR LIVE OAK	84
SLOPE AREA SHRUB AND GOUNDCOVER	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN' / HOWARD MCMINN VINE HILL MANZANITA BACCHARIS PILULARIS 'PIGEON POINT' / PIGEON POINT COYOTE BRUSH CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS CEANOTHUS X 'DARK STAR' / DARK STAR WILD LILAC COTUS X PURPUREUS / ORCHID ROCKROSE COTONEASTER DAMMERI 'LOWFAST' / LOWFAST BEARBERRY COTONEASTER ELAEAGNUS PUNGENS 'MARGINATA' / SILVER-EDGE THORNY ELAEAGNUS ELYMUS CONDENSATUS 'CANYON PRINCE' / CANYON PRINCE WILD RYE ERIOGONUM FASCICULATUM 'WARRINER LYTLE' / WARRINER LYTLE BUCKWHEAT MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS RHAMNUS CALIFORNICA 'MOUND SAN BRUNO' / CALIFORNIA COFFEEBERRY ROSA CALIFORNICA 'PLENA' / CALIFORNIA SEMI-DOUBLE WILD ROSE SALVIA MICROPHYLLA 'HOT LIPS' / HOT LIPS GRAHAM SAGE	3,470 SF
NO IRRIGATED SLOPES	TURF HYDROSEED NON IRRIGATED / BLANDO BROME	163,772 SF
TURF	TURF SOD RHIZOMATOUS TALL FESCUE / RFT-TALL FESCUE	11,432 SF
HYDROMOD BASIN-SEED, PLUGS, AND CUTTINGS	CAREX PANSA / SANDDUNE SEDGE HORDEUM BRACHYANTHERUM / MEADOW BARLEY MAHONIA REPENS / CREEPING MAHONIA MIMULUS CARDINALIS / SCARLET MONKEYFLOWER ROSA CALIFORNICA / CALIFORNIA WILD ROSE SALIX LAEVIGATA / RED WILLOW TURF SEED NATIVE PRESERVATION MIX TM / SEEDED BLEND	46,167 SF
BIOREMEDIATION BASIN-SEED, PLUGS, CUTTINGS	CHONDROPETALUM TECTORUM / SMALL CAPE RUSH ELEOCHARIS MACROSTACHYA / COMMON SPIKERUSH HORDEUM BRACHYANTHERUM / MEADOW BARLEY JUNCUS BALTICUS / BALTIC RUSH MUHLENBERGIA RIGENS / DEER GRASS PHYSOCARPUS CAPITATUS / PACIFIC NINEBARK SALIX EXIGUA / COYOTE WILLOW TURF SOD BIOFILTRATION SOD TM / DELTA BLUEGRASS	66,894 SF

FUHRMAN LEAMY LAND GROUP
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THE PRESERVE
Rancho Cordova

City of Rancho Cordova, CA

PARCEL E COMMUNITY PLACES CONCEPTUAL SITE PLAN

WIN.18076
March 21, 2022

L4



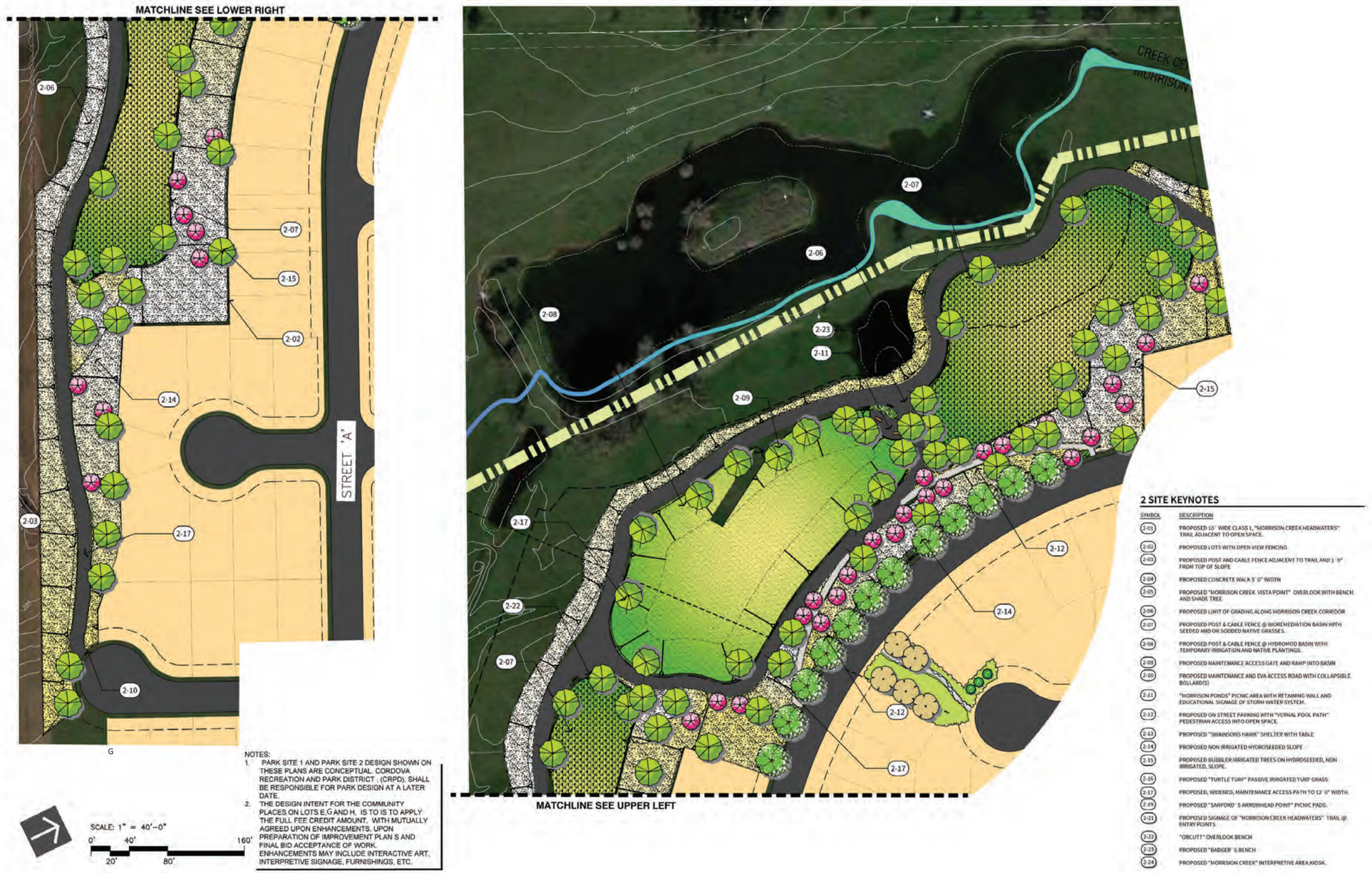
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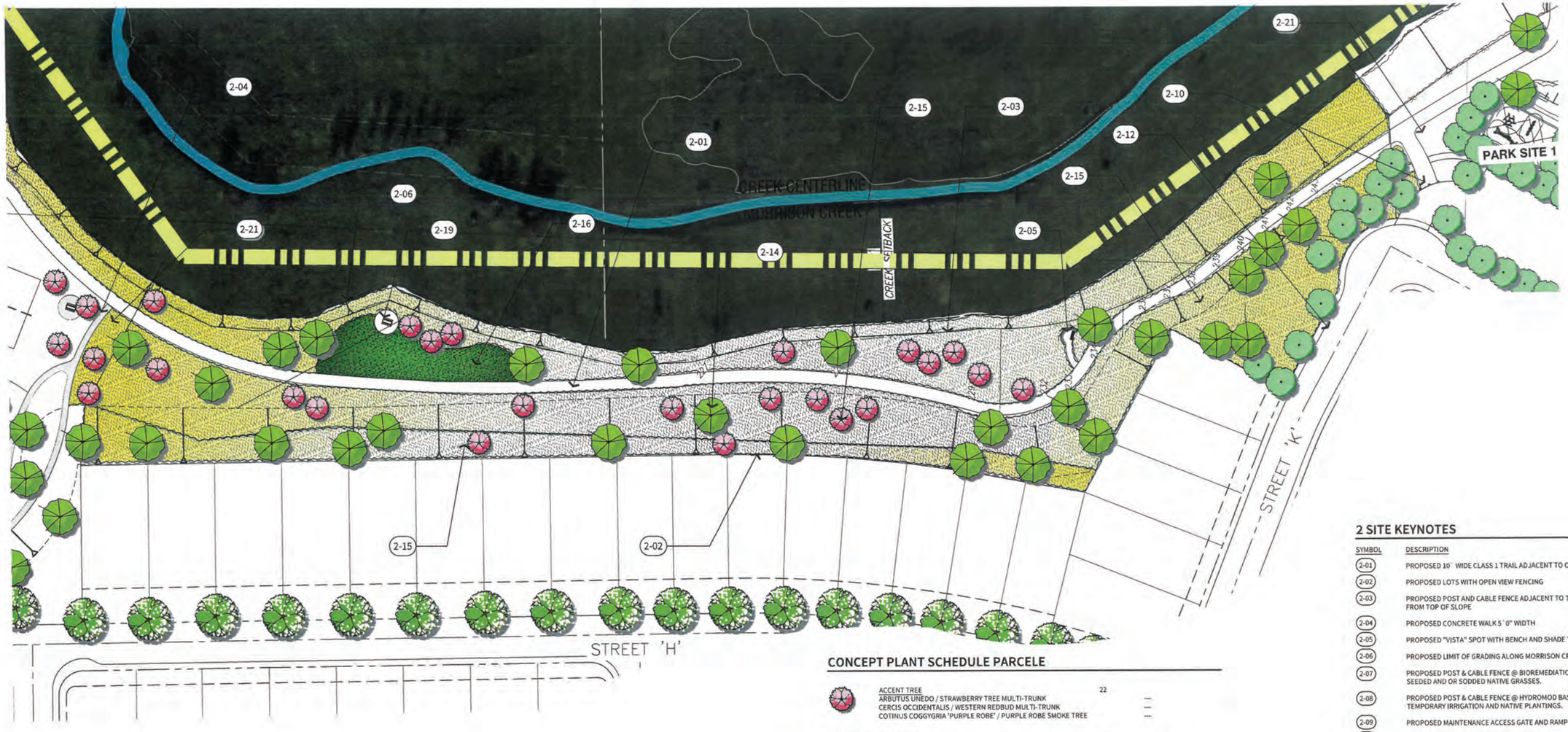
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2-20	PROPOSED LANDSCAPED AND IRRIGATED SHRUB AND GROUND COVER AREA
2-21	PROPOSED SIGNAGE OF TRAIL @ ENTRY POINTS

CONCEPT PLANT SCHEDULE PARCELE

	ACCENT TREE	22	
	ARBUTUS UNEDO / STRAWBERRY TREE MULTI-TRUNK		—
	CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK		—
	COTINUS COGGYGRIA 'PURPLE ROBE' / PURPLE ROBE SMOKE TREE		—
	SHADE TREE	10	
	ACER BUERGERIANUM / TRIDENT MAPLE		15 GAL., MEDIUM
	LAURUS NOBILIS / SWEET BAY		15 GAL., LOW
	PISTACIA CHINENSIS / CHINESE PISTACHE		15 GAL., LOW
	NATIVE AND SLOPE TREES	28	
	ACER NEGUNDO / BOX ELDER		5 GAL., LOW
	ARBUTUS X 'MARINA' / MARINA STRAWBERRY TREE MULTI-TRUNK		5 GAL., LOW
	CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK		5 GAL., LOW
	PLATANUS RACEMOSA / CALIFORNIA SYCAMORE MULTI-TRUNK		5 GAL., LOW
	QUERCUS LOBATA / VALLEY OAK		5 GAL., LOW
	QUERCUS WISLIZENII / INTERIOR LIVE OAK		5 GAL., LOW
	NO IRRIGATED SLOPES	110,182 SF	
	TURF HYDROSEED NON IRRIGATED / BLANDO BROME		—
	TURF	5,569 SF	
	TURF SOD RHIZOMATOUS TALL FESCUE / RFT-TALL FESCUE		—

NOTE: PARK SITE 1 AND PARK SITE 2 DESIGN SHOWN ON THESE PLANS ARE CONCEPTUAL. CORDOVA RECREATION AND PARK DISTRICT, (CRPD), SHALL BE RESPONSIBLE FOR PARK DESIGN AT A LATER DATE.

SCALE: 1" = 40'–0"

0' 20' 40' 80' 160'

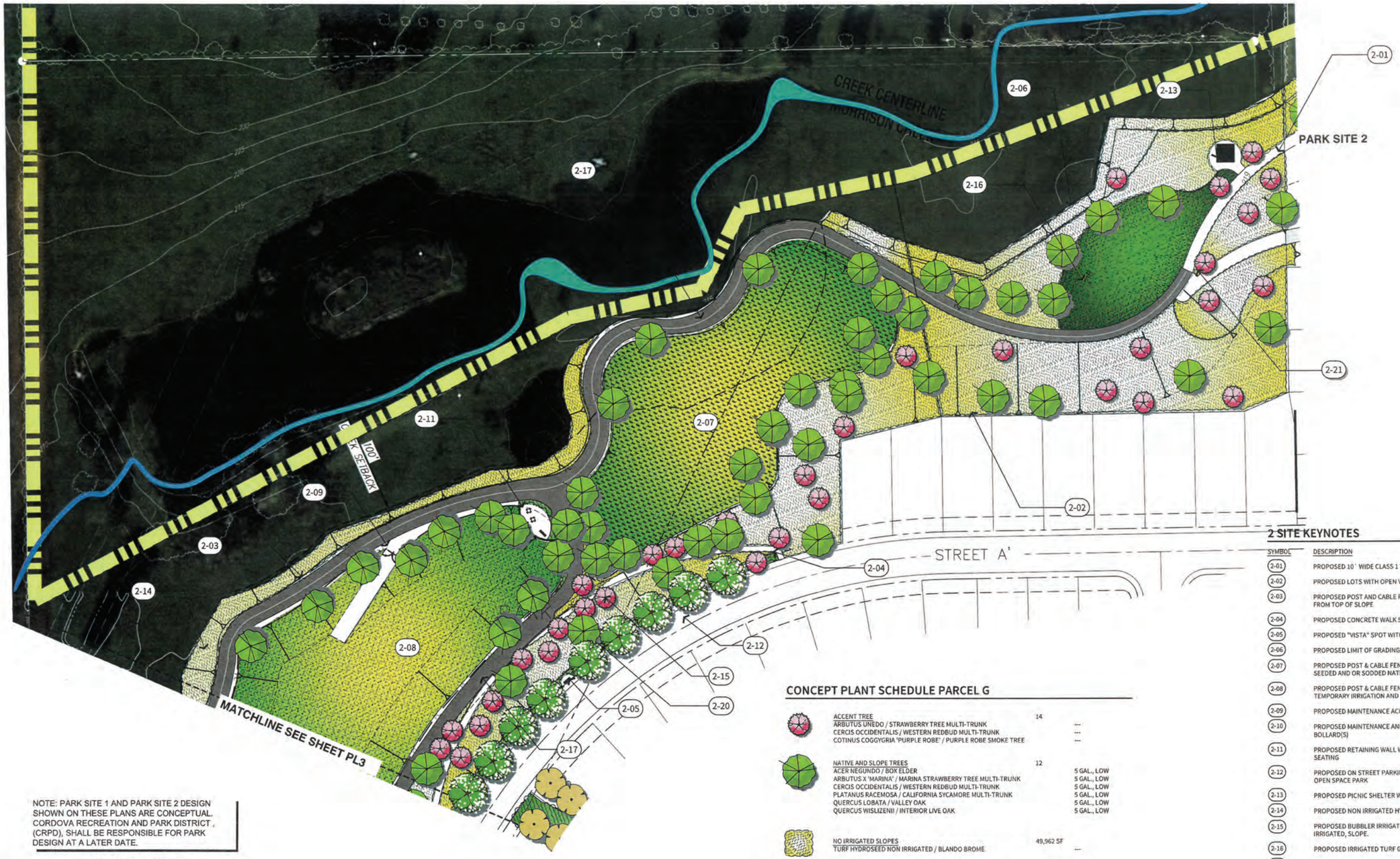
The Preserve
Rancho Cordova, CA

PARCEL E - PRELIMINARY LANDSCAPE PLAN

SHEET
PL1

FUHRMAN LEAMY LAND GROUP
DESIGN • SERVICE • SOLUTIONS
2140 PROFESSIONAL DRIVE, SUITE 115 ROSEVILLE, CA 95661

DATE: January 21, 2022
PROJECT: WIN.18076



NOTE: PARK SITE 1 AND PARK SITE 2 DESIGN SHOWN ON THESE PLANS ARE CONCEPTUAL. CORDOVA RECREATION AND PARK DISTRICT, (CRPD), SHALL BE RESPONSIBLE FOR PARK DESIGN AT A LATER DATE.

SCALE: 1" = 40'-0"

0' 40' 160'
20' 80'

CONCEPT PLANT SCHEDULE PARCEL G

ACCENT TREE		14	
ARBUTUS UNEDO / STRAWBERRY TREE MULTI-TRUNK			---
CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK			---
COTINUS COGGYGRIA 'PURPLE ROBE' / PURPLE ROBE SMOKE TREE			---
NATIVE AND SLOPE TREES		12	
ACER NEGUNDO / BOX ELDER			5 GAL., LOW
ARBUTUS X 'MARINA' / MARINA STRAWBERRY TREE MULTI-TRUNK			5 GAL., LOW
CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK			5 GAL., LOW
PLATANUS RACEMOSA / CALIFORNIA SYCAMORE MULTI-TRUNK			5 GAL., LOW
QUERCUS LOBATA / VALLEY OAK			5 GAL., LOW
QUERCUS WISLIZENII / INTERIOR LIVE OAK			5 GAL., LOW
NO IRRIGATED SLOPES		49,962 SF	
TURF HYDROSEED NON IRRIGATED / BLANDO BROME			---
TURF		11,432 SF	
TURF SOD RHIZOMATOUS TALL FESCUE / RFT-TALL FESCUE			---

2 SITE KEYNOTES

SYMBOL	DESCRIPTION
2-01	PROPOSED 10' WIDE CLASS 1 TRAIL ADJACENT TO OPEN SPACE.
2-02	PROPOSED LOTS WITH OPEN VIEW FENCING
2-03	PROPOSED POST AND CABLE FENCE ADJACENT TO TRAIL AND 1'-0" FROM TOP OF SLOPE
2-04	PROPOSED CONCRETE WALK 5'-0" WIDTH
2-05	PROPOSED "VISTA" SPOT WITH BENCH AND SHADE TREE
2-06	PROPOSED LIMIT OF GRADING ALONG MORRISON CREEK CORRIDOR
2-07	PROPOSED POST & CABLE FENCE @ BIOREMEDIATION BASIN WITH SEEDED AND OR SODDED NATIVE GRASSES.
2-08	PROPOSED POST & CABLE FENCE @ HYDROMOD BASIN WITH TEMPORARY IRRIGATION AND NATIVE PLANTINGS.
2-09	PROPOSED MAINTENANCE ACCESS GATE AND RAMP INTO BASIN
2-10	PROPOSED MAINTENANCE AND EVA ACCESS ROAD WITH COLLABSIBLE BOLLARD(S)
2-11	PROPOSED RETAINING WALL WITH INTERPRETIVE SIGNAGE AND SEATING
2-12	PROPOSED ON STREET PARKING WITH PEDESTRIAN ACCESS INTO OPEN SPACE PARK
2-13	PROPOSED PICNIC SHELTER WITH TABLE
2-14	PROPOSED NON IRRIGATED HYDROSEEDED SLOPE
2-15	PROPOSED BUBBLER IRRIGATED TREES ON HYDROSEEDED, NON IRRIGATED, SLOPE.
2-16	PROPOSED IRRIGATED TURF GRASS
2-17	PROPOSED, WIDENED, MAINTENANCE ACCESS PATH TO 12'-0" WIDTH.
2-19	PROPOSED CONCRETE PAD WITH PICNIC TABLE.
2-20	PROPOSED LANDSCAPED AND IRRIGATED SHRUB AND GROUND COVER AREA
2-21	PROPOSED SIGNAGE OF TRAIL @ ENTRY POINTS

The Preserve
Rancho Cordova, CA

PARCLEL G - PRELIMINARY LANDSCAPE PLAN

SHEET
PL2

FUHRMAN LEAMY LAND GROUP
DESIGN • SERVICE • SOLUTIONS
2140 PROFESSIONAL DRIVE, SUITE 115 ROSEVILLE, CA 95661

DATE: January 21, 2022
PROJECT: WIN.18076



2 SITE KEYNOTES

SYMBOL	DESCRIPTION
2-01	PROPOSED 10' WIDE CLASS 1 TRAIL ADJACENT TO OPEN SPACE.
2-02	PROPOSED LOTS WITH OPEN VIEW FENCING
2-03	PROPOSED POST AND CABLE FENCE ADJACENT TO TRAIL AND 1'-0" FROM TOP OF SLOPE
2-04	PROPOSED CONCRETE WALK 5'-0" WIDTH
2-05	PROPOSED "VISTA" SPOT WITH BENCH AND SHADE TREE
2-06	PROPOSED LIMIT OF GRADING ALONG MORRISON CREEK CORRIDOR
2-07	PROPOSED POST & CABLE FENCE @ BIOREMEDIATION BASIN WITH SEEDED AND OR SODDED NATIVE GRASSES.
2-08	PROPOSED POST & CABLE FENCE @ HYDROMOD BASIN WITH TEMPORARY IRRIGATION AND NATIVE PLANTINGS.
2-09	PROPOSED MAINTENANCE ACCESS GATE AND RAMP INTO BASIN
2-10	PROPOSED MAINTENANCE AND EVA ACCESS ROAD WITH COLLABSIBLE BOLLARD(S)
2-11	PROPOSED RETAINING WALL WITH INTERPRETIVE SIGNAGE AND SEATING
2-12	PROPOSED ON STREET PARKING WITH PEDESTRIAN ACCESS INTO OPEN SPACE PARK
2-13	PROPOSED PICNIC SHELTER WITH TABLE
2-14	PROPOSED NON IRRIGATED HYDROSEEDED SLOPE
2-15	PROPOSED BUBBLER IRRIGATED TREES ON HYDROSEEDED, NON IRRIGATED, SLOPE.
2-16	PROPOSED IRRIGATED TURF GRASS
2-17	PROPOSED, WIDENED, MAINTENANCE ACCESS PATH TO 12'-0" WIDTH.
2-19	PROPOSED CONCRETE PAD WITH PICNIC TABLE.
2-20	PROPOSED LANDSCAPED AND IRRIGATED SHRUB AND GROUND COVER AREA
2-21	PROPOSED SIGNAGE OF TRAIL @ ENTRY POINTS

CONCEPT PLANT SCHEDULE PARCEL H

	STREET TREE	12		
	QUERCUS WISLIZENII / INTERIOR LIVE OAK			24" BOX, LOW
	ULMUS WILSONIANA 'PROSPECTOR' / ELM			15 GAL., MEDIUM
	ACCENT TREE	31		
	ARBUTUS UNEDO / STRAWBERRY TREE MULTI-TRUNK			---
	CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK			---
	COTINUS COGGYGRIA 'PURPLE ROBE' / PURPLE ROBE SMOKE TREE			---
	SUBORDINATE TREE	5		
	COTINUS COGGYGRIA / SMOKE TREE			5 GAL., LOW
	GINKGO BILOBA 'AUTUMN GOLD' TM / AUTUMN GOLD MAIDENHAIR TREE			15 GAL., MEDIUM
	SCREEN TREE	3		
	ARBUTUS X 'MARINA' / MARINA STRAWBERRY TREE MULTI-TRUNK			15 GAL., LOW
	JUNIPERUS CHINENSIS 'BLUE POINT' / BLUE POINT JUNIPER			15 GAL., LOW
	LAURUS X 'SARATOGA' / SARATOGA HYBRID LAUREL			15 GAL., LOW
	NATIVE AND SLOPE TREES	72		
	ACER NEGUNDO / BOX ELDER			5 GAL., LOW
	ARBUTUS X 'MARINA' / MARINA STRAWBERRY TREE MULTI-TRUNK			5 GAL., LOW
	CERCIS OCCIDENTALIS / WESTERN REDBUD MULTI-TRUNK			5 GAL., LOW
	PLATANUS RACEMOSA / CALIFORNIA SYCAMORE MULTI-TRUNK			5 GAL., LOW
	QUERCUS LOBATA / VALLEY OAK			5 GAL., LOW
	QUERCUS WISLIZENII / INTERIOR LIVE OAK			5 GAL., LOW
	SLOPE AREA SHRUB AND GOUNDCOVER	8,691 SF		
	ARCTOSTAPHYLOS DENSIFLORA 'HOWARD MCMINN' / HOWARD MCMINN VINE HILL MANZANITA	565	5 GAL., LOW	48" oc
	BACCHARIS PILULARIS 'PIGEON POINT' / PIGEON POINT COYOTE BRUSH		1 GAL., LOW	
	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER' / KARL FOERSTER FEATHER REED GRASS		1 GAL., LOW	
	CEANOTHUS X 'DARK STAR' / DARK STAR WILD LILAC		5 GAL., LOW	
	CISTUS X PURPUREUS / ORCHID ROCKROSE		5 GAL., M	
	COTONEASTER DAMMERI 'LOWFAST' / LOWFAST BEARBERRY COTONEASTER	565	1 GAL., LOW	48" oc
	ELAEAGNUS PUNGENS 'MARGINATA' / SILVER-EDGE THORNY ELAEAGNUS		5 GAL., LOW	
	ELYMUS CONDENSATUS 'CANYON PRINCE' / CANYON PRINCE WILD RYE	1,004	1 GAL., LOW	36" oc
	ERIOGONUM FASCICULATUM 'WARRINER LYTLE' / WARRINER LYTLE BUCKWHEAT		1 GAL., LOW	
	MUHLENBERGIA CAPILLARIS / PINK MUHLY GRASS	565	1 GAL., LOW	48" oc
	RHAMNUS CALIFORNICA 'MOUND SAN BRUNO' / CALIFORNIA COFFEEBERRY		5 GAL., LOW	
	ROSA CALIFORNICA 'PLENA' / CALIFORNIA SEMI-DOUBLE WILD ROSE	565	1 GAL., LOW	48" oc
	SALVIA MICROPHYLLA 'HOT LIPS' / HOT LIPS GRAHAM SAGE		5 GAL., LOW	
	NO IRRIGATED SLOPES	114,014 SF		
	TURF HYDROSEED NON IRRIGATED / BLANDO BROME		---	
	HYDROMOD BASIN-SEED, PLUGS, AND CUTTINGS	46,167 SF		
	CAREX PANSA / SANDDUNE SEDGE	47,979	PLUG, MEDIUM	12" oc
	HORDEUM BRACHYANTHERUM / MEADOW BARLEY		SEED, VERY LOW	
	MAHONIA REPENS / CREEPING MAHONIA	5,331	4" POT, LOW	36" oc
	MIMULUS CARDINALIS / SCARLET MONKEYFLOWER	11,995	4" POT, LOW	24" oc
	ROSA CALIFORNICA / CALIFORNIA WILD ROSE	2,999	CUTTING, LOW	48" oc
	SALIX LAEVIGATA / RED WILLOW	1,920	CUTTING, MEDIUM	60" oc
	TURF SEED NATIVE PRESERVATION MIX TM / SEEDED BLEND		---	
	BIOREMEDIATION BASIN-SEED, PLUGS, CUTTINGS	66,894 SF		
	CHONDROPETALUM TECTORUM / SMALL CAPE RUSH	17,380	PLUG, MEDIUM	24" oc
	ELEOCHARIS MACROSTACHYA / COMMON SPIKERUSH	17,380	4" POT, MEDIUM	24" oc
	HORDEUM BRACHYANTHERUM / MEADOW BARLEY		SEED, VERY LOW	
	JUNCUS BALTICUS / BALTIC RUSH	7,725	PLUG, MEDIUM	36" oc
	MUHLENBERGIA RIGENS / DEER GRASS	4,345	4" POT, LOW	48" oc
	PHYSOCARPUS CAPITATUS / PACIFIC NINEBARK	2,781	4" POT, MEDIUM	60" oc
	SALIX EXIGUA / COYOTE WILLOW	2,781	CUTTING, MEDIUM	60" oc
	TURF SOD BIOFILTRATION SOD TM / DELTA BLUEGRASS		---	

SCALE: 1" = 40'-0"
0' 40' 160'
20' 80'

NOTE: PARK SITE 1 AND PARK SITE 2 DESIGN SHOWN ON THESE PLANS ARE CONCEPTUAL. CORDOVA RECREATION AND PARK DISTRICT, (CRPD), SHALL BE RESPONSIBLE FOR PARK DESIGN AT A LATER DATE.

The Preserve
Rancho Cordova, CA

PARCEL H - PRELIMINARY LANDSCAPE PLAN

SHEET
PL3

FUHRMAN LEAMY LAND GROUP
DESIGN · SERVICE · SOLUTIONS
2140 PROFESSIONAL DRIVE, SUITE 115 ROSEVILLE, CA 95661

DATE: January 21, 2022
PROJECT: WIN 18076

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
On-Going				
1.	The approved entitlement is for a General Plan Amendment (GPA), Rezone (RZ), Development Agreement, (DA), and Tentative Subdivision Map (TSM), for The Preserve described in the City Council staff report dated April 4, 2022 and project plans (Exhibit A to the Resolution) with the conditions herein, for project number DD9835.	On-Going	Planning	
2.	The Applicant shall hold harmless the City, its Council Members, officers, agents, employees, and representatives from liability for any award, damages, costs and fees incurred by the City and/or awarded to any plaintiff in an action challenging the validity of this permit or any environmental or other documentation related to approval of this permit. Applicant further agrees to provide a defense for the City in any such action.	On-Going	Planning	
3.	The TSM approval is valid for three years from the date of City approval, unless an extension of time is subsequently approved per Government Code Section 66452.6(e), or as otherwise stated in the Project development agreement.	On-Going	Planning	
4.	The project shall comply with the adopted Mitigation Monitoring and Reporting Program for The Preserve project.	On-Going	Planning	
5.	Applicant/Developer shall not carry a negative account balance with the City for the processing of the project. If a negative account balance occurs, it will be the developer's responsibility to pay the balance due, in order to avoid delays in the processing of future permits or recordation of maps. Please email the Finance Department at billings@cityofranchocordova.org for the status of your account with the City.	On-Going	Finance	
6.	In accordance with Government Code Section 65864 through 65869.5 and Zoning Code 23.158, all active Development Agreements must maintain a minimum deposit balance of $5,000	On-Going	Planning	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	and report to the Planning Department annually. This report should include the status of the project, payment of fees, and any change in ownership.			
7.	Applicant shall be responsible for all damage to City streets associated with construction of the project and shall repair any damage as soon as possible.	On-Going	Public Works	
8.	SMUD has existing underground 12kV facilities along Bear Hollow Dr., Zinfandel Dr., and Spoto Dr. that will need to remain. The Applicant shall be responsible for maintaining all CalOSHA and Sate of California Public Utilities Commission General Order No. 128 safety clearances during construction and upon building completion. If the required clearances cannot be maintained, the Applicant shall be responsible for the cost of relocation.	On-Going	SMUD	
9.	SMUD reserves the right to use any portion of its easements on or adjacent to the subject property that it reasonably needs and shall not be responsible for any damages to the developed property with said easement that unreasonably interferes with those needs.	On-Going	SMUD	
10.	The Applicant shall submit payment as needed for Plan Review/ Plan Check Fees required by the Cordova Recreation and Parks District (CRPD).	On-Going	CRPD	
11.	Noise sources associated with construction, repair, remodeling, demolition, paving and/or grading of any real property must adhere to the development standards outlined within the City's Noise Element, RCMC 6.68 and RCMC 16.18.1407(F).	On-Going	Code Enforcement/Police	
Prior to Recordation of the Final Map				
12.	Property Owner/Applicant shall participate in or provide a funding mechanism for maintenance services for the project's stormwater drainage and flood protection system. This may be accomplished through annexation to the City's Stormwater Utility Fee District, or other financial mechanism as may be proposed and provided by the	The annexation shall occur prior to the recordation of any small lot final map. The	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Property Owner for the same purpose of providing a funding mechanism to fund the operation and maintenance of the Project's stormwater drainage and flood protection system. Costs associated with the annexation shall be borne by the Property Owner/Applicant through payment of the annexation costs in the amount of $7,000 per annexation. Contact Elizabeth Sparkman at (916) 851-8714 with regard to the process to satisfy this condition of approval.	annual fee commences when a building permit is issued.		
13.	Enhanced Stormwater Utility Fee Zone. The Project is required to install low impact development measures (LID) for stormwater management pursuant to the City's state stormwater permit. Prior to recordation of the final Small Lot Subdivision Map, the Developer shall, to the satisfaction of the Public Works Director, either (i) annex into and approve a fee for a new zone in the City's Stormwater Utility Fee District that shall provide LID maintenance services in the Project, or (ii) establish another financial mechanism to provide LID maintenance services in the Project.	The annexation shall occur prior to the recordation of any small lot final map. The annual fee commences when a building permit is issued	Public Works	
14.	Property Owner/Applicant shall participate in or provide a funding mechanism for maintenance services for the fair share of existing and all new public improvements associated with the project including, but not limited to, streets, bridges/culverts, traffic signals, traffic signs, striping and legends, ITS operations, street lights and safety lighting, public frontage and median and landscape improvements, and trails. This may be accomplished through annexation to the City's Community Facilities District No. 2014-2 (Street, Lighting and Landscape Maintenance), or other financial mechanism as may be proposed and provided by the Property Owner for the same purpose of providing a financial mechanism to fund the operation and maintenance of the Project's public improvements. Costs associated with the annexation shall be borne by the Property Owner/Applicant through payment of the annexation costs of the CFD annexation in the amount of $5,000 per	The annexation shall occur prior to the recordation of any small lot final map. The annual fee commences when a building permit is issued	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	annexation. Contact Elizabeth Sparkman at (916) 851-8714 with regard to the process to satisfy this condition of approval.			
15.	Property Owner/Applicant shall participate in the provision of funding to provide transit-related services. This may be accomplished by annexation to the City's Transit Related Services Special Tax Area by voting to approve a special tax for the parcels created for this subdivision approval, or other financial mechanism as may be proposed and provided by the Property Owner for the same purpose of providing a funding mechanism to fund transit-related services. The tax shall be the per parcel annual amount as specified in an approving ordinance (with appropriate annual inflation adjustment) as established at the time of voting by the City Council. The election to provide for the tax shall be completed prior to the recording of the final map. Costs associated with the annexation and election of the annual tax shall be borne by the Property Owner/Applicant through payment of the annexation costs in the amount of $5,000 per annexation. In addition, the Property Owner shall hold a deed assessment in the form of Conditions, Covenants & Restrictions against the property or other form as shall be approved by the City, which assessment will take effect in the event described in this Condition Approval is reduced or repealed. Contact Elizabeth Sparkman at (916) 851-8714 with regard to the process to satisfy this condition of approval.	The annexation shall occur prior to the recordation of any small lot final map. The annual fee commences when a building permit is issued.	Public Works	
16.	Property Owner/Applicant shall participate in or provide a funding mechanism for maintenance services for the fair share of existing and all new community places and neighborhood greens as required by the City's Open Space Standards. This may be accomplished through annexation to the City's Community Facilities District No. 2018-1 (Maintenance of Community Places and Neighborhood	The annexation shall occur prior to the recordation of any small lot final map. The annual fee	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Greens), or other financial mechanism as may be proposed and provided by the Property Owner for the same purpose of providing a financial mechanism to fund the operation and maintenance of the Project's public improvements related to community places and neighborhood greens. Costs associated with the annexation shall be borne by the Property Owner/Applicant through payment of the annexation costs of the CFD annexation in the amount of $7,000 per annexation. Contact Elizabeth Sparkman at (916) 851-8714 with regard to the process to satisfy this condition of approval.	commences when a building permit is issued.		
17.	The Landowner shall support the annexation of the Project into the Police Services CFD and cover Landowner's fair-share costs of the CFD annexation, not to exceed $7,000 for the Property. City agrees that the CFD will provide that on lands designated for all residential land use categories, the base year Police Special Tax shall be $450.00 annually per residential dwelling unit, including multi-family units. The special tax imposed by the CFD will be payable on a parcel within the Property only after a building permit has been issued by City for the construction of a building on that particular parcel, and there will be no undeveloped land tax imposed by the CFD. The CFD shall further provide that on each July 1 commencing July 1, 2012, the Police Special Tax shall be escalated by the increase, if any, in the City CPI Index. However, in no event shall the tax per parcel for any fiscal year be less than the amount established for the prior fiscal year. The CFD shall specify that the Police Special Tax shall commence being payable annually following the issuance of a building permit for each parcel subject to the Police Special Tax.	The annexation shall occur prior to the recordation of any small lot final map. The annual fee commences when a building permit is issued.	Finance	
18.	Enter into a Subdivision Improvement Agreement and provide a performance bond and labor and material bond.	Prior to Recordation of the Subdivision Map	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
19.	Prior to recordation of a final map or certificate of compliance, dedicate land or pay in lieu fees, or both, for park purposes, as required by and in accordance with the procedures and standards set forth in Chapter 22.40, Title 22 of the City of Rancho Cordova Zoning Code or as otherwise set forth in a Park Dedication and Improvement Agreement.	Prior to recordation of subdivision map	Public Works	
20.	Dedicate a standard 12.5-foot public utility easement, or smaller to the satisfaction of SMUD, for underground facilities and appurtenancesadjacent to all public street rights of ways	Prior to recordation of the applicable small lot final map	Public Works	
21.	The final map shall show easements or other mapped provisions for the placement of centralized mail delivery units.	Prior to Recordation of the Subdivision Map	Public Works	
Prior to Approval of Improvement Plans				
22.	Prior to any ground disturbance or issuance of grading or improvements plans, the applicant shall obtain a Covered Activities Authorization permit in compliance with the South Sacramento Habitat Conservation Plan (SSHCP).	Prior to issuance of grading or improvement plans	Planning	
23.	Applicant shall photo-document the condition of adjacent streets, sidewalks and infrastructure to the satisfaction of the Public Works Department.	Prior to approval of improvement plans	Public Works	
24.	Cordovan Shuttle loading/unloading areas shall be identified at the time of Improvement Plan review and shall be placed within proposed right-of-way to the satisfaction of the Public Works Department.	Prior to Improvement plan approval	Public Works	
25.	In cases where the roadway cross-sections are phased, extend all utilities beyond edge of pavement to future roadway build out.	Prior to Improvement Plan Approval	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
26.	A final landscape plan shall be submitted in conjunction with improvement plan and or building permit submittal and approved by the planning and public works departments prior to issuance of permits and/or any installation of landscape materials RCMC 23.716.020. The final landscape planting and irrigation plan shall be prepared by a registered licensed landscape architect and include the following items per RCMC 22.180.060: • Planting plan to scale that indicate slope • Irrigation Plan • Soils Test • Water Use Calculations • Irrigation Schedule • Permeability test for LID facilities' locations • Soil media specifications (LID features)	Prior to approval of improvement plans	Public Works	
27.	**Stormwater Quality- Post Construction** The improvement plans shall incorporate all applicable post construction stormwater quality measures; including source control, treatment control, low impact development, hydromodification management, and full capture trash control measures into the site improvement plans in conformance with the most recent version of the Stormwater Quality Design Manual for the Sacramento Region and the approved drainage study dated January 2020. The applicant shall prepare and submit a Post-Construction Stormwater Quality Control Plan that includes details and sizing calculations of all the proposed post construction stormwater quality measures. In addition, a maintenance covenant is required for all proposed post construction stormwater quality measures, as detailed in Appendix B of the Stormwater Quality Design Manual for the Sacramento Region.	Prior to approval of improvement plans	Public Works	
28.	Traffic calming shall be designed to the satiscaction of the Public	Prior to	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Works Department at the following locations: • Provide bulb outs, to satisfaction of the Public Works Department, on Edington Drive at the intersections with Street G and Street H. • Provide bulb outs, to satisfaction of the Public Works Department, on Street H at the intersections with Street I and Street M.	Improvement Plans		
29.	All landscape strips, medians, etc. that contain trees shall be designed to include continuous root barriers. Tree species shall be pre-approved by the Public Works Department.	Prior to approval of improvement plans	Public Works	
30.	There are protected onsite trees greater than 12 inches diameter at standard height proposed for removal totaling 311 inches. Trees shall be replaced or mitigated per Rancho Cordova Municipal Code 19.12.120. Tree replacement is one inch per one inch ratio. In-lieu payment is $165 per inch.	Prior to approval of improvement plans	Public Works	
31.	All stormwater basins shall be designed with a natural appearance including meandering non-linear side slopes, and include amenities such as trails and landscaping in accordance with the City's Open Space Guidelines. Developer shall include a waterline connection and irrigation for landscaping.	Prior to approval of improvement plans	Public Works	
32.	The Stormwater Pollution Prevention Plan in place for the site shall include a contingency plan for the implementation of a process to remove fine clay sediments prior to discharge to The City of Rancho Cordova's storm drain system and/or Waters of the State (e.g., creeks, rivers) to the satisfaction of the City of Rancho Cordova. A polymer treatment system or comparable process shall be designed in the erosion and sediment control plan of the improvement plans. This system shall be implemented by qualified professionals with training and proven experience in this field. Such treatment shall be	Prior to approval of improvement plans.	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	accomplished in a manner that does not pose a toxic threat to fish and other aquatic organisms in receiving waters.			
33.	Provide a permanent concrete stamp, or other permanently applied message to the satisfaction of the City not including paint, which reads “No Dumping-Flows to Creek” or other approved message at each storm drain inlet	Prior to approval of improvement plans.	Public Works	
34.	The improvement plans shall provide post & cable fencing around basins as required by City of Rancho Cordova Drainage Maintenance and Planning staff.	Prior to approval of improvement plans	Public Works	
35.	All landscape corridor walls, where required, shall be designed of masonry construction using graffiti resistant materials. Wall design and materials shall be subject to City’s approval and according to the design standards of the Public Works Department.	Prior to approval of improvement plans	Public Works and Planning	
36.	The drainage impact fees shall be paid to the satisfaction of the City of Rancho Cordova’s Public Works Department.	Prior to approval of improvement plans	Public Works	
37.	**Drainage System Design:** The applicant shall submit and obtain City approval of plans and specifications for the construction of public improvements and all grading. The drainage system shall be designed in accordance with the approved Drainage Study to accommodate runoff from the ultimate development and shall meet Section 9 “Storm Drainage Design” of the City of Rancho Cordova’s Improvement Standards, construction standards, and Floodplain Management Ordinances in effect at the time of first submittal of the improvement plans, provided impacts to the site plan do not reduce total lot count for the project.	Prior to approval of improvement plans	Public Works	
38.	**Permits:** The applicant shall obtain applicable California Department of Fish	Prior to approval of improvement	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	and Wildlife, U.S. Army Corps of Engineers, and other required state and federal permits.	plans		
39.	All development within the City must comply with the regulations of the Federal Emergency Management Agency (FEMA) and the City of Rancho Cordova Floodplain Management Ordinance. All new structures shall be protected from the 100-year (1 percent) flood event. Certified pad elevations (certified by a registered Civil Engineer or licensed Land Surveyor) shall be set at least one and two tenths foot (1.2') above all sources of 100-year flooding (see Section 9-1 of improvement standards). The overland release path must be shown on the plans and the hydraulic computation must be provided to estimate the flow depths along the overland release paths. The calculations must be in conformance with Section 9-15 Improvement Standards.	Prior to approval of improvement plans	Public Works	
40.	**Stormwater Quality– During Construction:** SWPPP –the applicant shall prepare a Storm Water Pollution and Prevention Plan (SWPPP) to be executed through all phases of grading and project construction. The measures included in the SWPPP shall be consistent with the City's Improvement Standards and Land Grading and Erosion Control Ordinance. The SWPPP shall be submitted to the State Water Resources Control Board for approval and to the City for review. During construction, the project applicant shall implement Best Management Practices (BMPs) in accordance with the SWPPP and the City's Improvement Standards. **General Construction Permit –** The project applicant shall file a Notice of Intent (NOI) to obtain coverage under the California State Water Resources General Construction Activity Storm Water Permit (General Construction Permit). Permits are issued by the State Water Resources Control Board, which can provide all information necessary to complete and file the necessary documents. Applicants shall comply with the	Prior to approval of improvement plans	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	terms of the General Construction Permit, the City of Rancho Cordova Municipal Code, and the City's NPDES Permit Requirements.			
41.	**LAND DEDICATION / EASEMENTS:** All drainage courses and appurtenant access roads to be conveyed to the City shall be dedicated and conveyed in fee title as separate parcels. Underground pipelines and open channels shall be located in the public right-of-way or parcels to be conveyed to the City. Parcels to be conveyed shall be a minimum of 25 feet wide. The applicant shall provide minimum 16 foot wide maintenance service roads, consisting of 12 feet of pavement and 2 foot decomposed granite shoulders on each side, along the entire water course(s) to be conveyed. No conditional easements shall be placed on these drainage parcels.	Prior to issuance of Building Permits.	Public Works	
42.	To obtain sewer service, construction of SASD sewer infrastructure will be required. Current SASD Standards and Specifications apply to any offsite or onsite public sewer construction or modification. These improvements must be shown on the plans. Field modifications to new or existing precast manhole bases are not allowed.	Prior to Approval of Improvement Plans	SASD	
43.	SASD requires each building on each lot with a sewage source to have a separate connection to SASD's sewer system. If there is more than one building in any single parcel and the parcel is not proposed for split, then each building on that parcel must have a separate connection to a private onsite sewer line or a separate connection to the SASD public sewer line. These improvements must be shown on the plans.	Prior to Approval of Improvement Plans	SASD	
44.	Alignment of all main lines and structures must provide a minimum of 1 foot vertical clearance and 5 feet horizontal clearance from all other utilities and improvements. Sewer is to be located a minimum of 10 feet (measured horizontally) from any structure or footing.	Prior to Approval of Improvement Plans	SASD	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	Show public sanitary sewer and water supply facilities in accordance with the Health and Safety Code.			
Prior to Issuance of Building Permit				
45.	Applicant shall submit improvement plans to the satisfaction of the Public Works Department. Improvement plans shall include, but shall not be limited to, all streets, water, sewer, storm drain, lighting, signage and striping, utility undergrounding, and other associated facilities for all streets and other public areas depicted on the tentative map or tentative map phase.	Prior to issuance of Building Permits	Public Works	
46.	All existing overhead utilities shall be undergrounded:	Prior to issuance of the first building permit within a TM phase, model homes excluded	Public Works	
47.	Prior to issuance of the first building permit within a TM phase: All streets and improvements shown on the TM phasing plan, all streets necessary for access to the proposed homes, associated improvements included in the approved improvement plans, and other infrastructure as necessary for adequate public access and use shall be substantially complete to the satisfaction of the Public Works Department. Prior to occupancy all streets and improvements shown on the TM phasing plan shall be fully constructed and completed to the satisfaction of the City Engineer. When developer opens model homes to public visitation, any roads not suitable for public access shall be barricaded to the satisfaction of the Public Works Department.	Prior to issuance of the first building permit within a TM phase, model homes excluded	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
48.	The owner must contact Permit Services Unit at PermitServices@sacsewer.com or by phone at (916) 876-6100 to determine if sewer impact fees are due. Fees are to be paid prior to the issuance of building permits.	Prior to Issuance of Building Permit	SASD	
49.	Provide separate public water service to each parcel. All water lines shall be located within a right-of-way or within easements dedicated to SCWA. Easements shall be reviewed and approved by SCWA prior to Improvemetn Plan approval of Final Map approval.	Prior to Improvement Plans or Final Map	SCWA	
Prior to Acceptance of Improvements				
50.	Provide maintenance and operations manual for drainage basins. The manual shall include, but is not limited to: • As-built topography of the basin. • Cut and fill quantities. • Plat map. • Depth volume rating curve. • As builts for steel, concrete and other structures. • Inverts of inlets, outlets, etc. • Updated model based on as-built topography. • Document any sensitive resources.	Prior to acceptance of improvement plans	Public Works	
Prior to Final Inspection				
51.	During and upon completion of the installation of the landscaping for the project, the project landscape architect/designer shall certify that the installed landscape complies with the approved plans. Certification shall be accomplished by completion of site visits at key installation milestones. Key milestones at a minimum shall include:	Prior to final building inspection of the first unit	Public Works	

	Conditions of Approval	Timing/ Implementation	Enforcement/ Monitoring	Verification (date and Signature)
	rough grade, soil amendment verification, Plant material inspection, irrigation coverage test underdrain installation (as applicable) and final installation. Certification shall include signed site observation reports, photographs and documentation verifying implementation of soil report recommendations. Failure to submit complete and accurate documentation to the Planning Department will delay final approval/occupancy of the project.			
52.	Upon completion of the installation of the landscaping, the designer shall certify that the landscape complies with all city water conserving landscape requirements. Certification shall be accomplished by completion of a certificate of compliance on a form approved by the director of the city public works department. Failure to submit a complete and accurate certificate of compliance will delay final approval of the project and/or discontinue water service per RCMC 22.180.090. Upon receipt of the certificate of compliance and site inspection from City staff, the landscaping performance bond will be released.	Prior to final Building Inspection	Public Works	
53.	As-built reproducible grading and improvement plans (1 full size and 1 half size hard copy), as well as a compact disc containing said plans in AutoCAD and pdf format, and a GIS shape file, or equivalent to the satisfaction of the City Engineer shall be submitted and approved by the Public Works Department.	Prior to final building inspection	Public Works	

Advisory

1. SASD - The project has a conditionally approved Level 3 sewer study. Any changes to the sewer study may require an addendum.

2. SCWA – Water supply will be provided by the Sacramento County Water Agency.

3. SCWA - No water supply mains shall be located under structures such as box culverts and bridges. If the project will

build box culverts and bridges to the ultimate width, water mains shall cross above ground attached to the side of the structure. Structures shall be designed accordingly. If the ultimate width is not being built, water mains shall cross underground routed outside of and around the ultimate structure footprint. 15-foot wide water main easements shall be dedicated for the portion outside of ROW. The crossing shall be be approved by the Agency Engineer. Underground crossings and attachments to structures shall be included in the environmental impact analysis. Additional environmental permitting and other associated costs will be at applicant's expense.

4. SCWA - Destroy all abandoned wells on the proposed project site in accordance with the requirements of the Sacramento County Environmental Health Division. Clearly show all abandoned/destroyed wells on the improvement plans for the project. Prior to abandoning any existing agricultural wells, applicant shall use water from agricultural wells for grading and construction.

5. Prior to the issuance of any building permits for the project, the project developer/owner shall pay Zone 40 development fees applicable at the time of building permit issuance in accordance with Title 4 of the Sacramento County Water Agency (SCWA) Code.

6. Prior to the issuance of any building permits for the project, the project shall conform to the specific provisions of the City of Rancho Cordova Landscaping Ordinance (Municipal Code Title 23, Chapter 23.716).

CITY OF RANCHO CORDOVA

ORDINANCE NO. XX-2022

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA APPROVING DEVELOPMENT AGREEMENT FOR THE PRESERVE PROJECT

THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:

Section 1. Recitals

A. In order to strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the Legislature of the State of California adopted Section 65864, et seq., of the Government Code (the "Development Agreement Statute"), authorizing the City, and any person having a legal or equitable interest in the real property, to enter into a development agreement and establish certain development rights in the property, which is the subject of the development project application. Pursuant to Government Code section 65868, Development Agreements may be amended by mutual assent of the parties.

B. The Preserve Project ("Project") is a residential development with parks/open space, trails, natural resources, and associated infrastructure and roads on an approximately 279-acre site in the City. The Project includes 439 residential units; and

C. In compliance with the requirements of the California Environmental Quality Act ("CEQA"), the City prepared an Environmental Impact Report for the Project ("EIR").

F. The property is owned by TDW Enterprises LP (referred to as "Landowner").

G. The Landowner has agreed to enter into a development agreement for The Preserve Project. The attached development agreement, attached hereto as Exhibit A ("Development Agreement").

H. On April 4, 2022, the City Council, pursuant to Resolution No. **-2022, certified the EIR, adopted mitigation findings pursuant to CEQA guidelines Section 15091, adopted a statement of overriding considerations, and adopted a mitigation monitoring program for the Project, which covered the attached Development Agreement.

I. On April 4, 2022, the City Council, as the legislative body for purposes of Development Agreement approval, held a properly noticed public hearing pursuant to Government Code section 65867, and considered all comments received, in writing, and all testimony received at the public hearing.

Section 2: Findings

On the basis of (a) the foregoing Recitals, which are incorporated herein, (b) The Preserve, (c) the City of Rancho Cordova's General Plan, (d) the Environmental Impact Report for The Preserve, and (e) on the basis of the specific conclusions set forth below, the City Council finds and determines that:

A. Finding: *The development agreement is consistent with the General Plan objectives, policies, land uses, and implementation programs and any other applicable Specific Plans.*
Evidence: The Development Agreement is consistent with the objectives, policies, general land uses and programs specified and contained in the City's General Plan. In accordance with Government Code section 65867.5(b), the Development Agreement vest the Landowners' right to proceed with development of the property. The Development Agreement does not amend or revise the development standards of the Rancho Cordova Municipal Code (RCMC). Therefore, the Development Agreement will be consistent with the General Plan if development under the RCMC is consistent with the City's General Plan. The findings and evidence to support this General Plan consistency determination are set forth in the project approval Resolutions. Furthermore, (a) the land use designation for The Preserve site allows for residential, parks/open space, and natural resources, (b) the project is consistent with the fiscal policies of the General Plan with respect to provision of infrastructure and public services, and (c) the Development Agreement includes provisions relating to financing, construction and maintenance of public facilities, park development fees and similar provisions.

B. Finding**:** *The development agreement is in conformance with the public convenience and general welfare of persons residing in the immediate area and will not be detrimental or injurious to property or persons in the general neighborhood or to the general welfare of the residents of the city as a whole.*
Evidence: As described above, the development agreement and the project it allows for, are consistent with the proposed General Plan Amendment and Zoning Code for this site and therefore the development agreement promotes the orderly development of property as well as the preservation of property values, as area properties and their values would be, in part, based on this exact use occurring on this site in the future.

C. Finding: *The development agreement will promote the orderly development of property or the preservation of property values*.
Evidence**:** As described above, the development agreement and the project it allows for, are consistent with the proposed General Plan Amendment and Zoning Code for this site and therefore the development agreement promotes the orderly development of property as well as the preservation of property values, as area properties and their values would be, in part, based on this exact use occurring on this site in the future.

D. Finding: The development agreement does not pertain to any property in the protected 200-year floodplain, unless the development agreement contains conditions that will provide an urban level of protection to the property consistent with California Government Code Section 65865.5.
Evidence: The Development Agreement does not pertain to any property in the protected 200-year floodplain.

E. **CEQA Compliance.** In compliance with the requirements of CEQA, the City prepared an EIR for The Preserve project. On April 4, 2022, the City Council adopted Resolution No. **-2022 certifying the EIR and adopting environmental findings, a statement of overriding consideration and a mitigation monitoring and reporting program for The Preserve Project approvals. Resolution No. **-2022 is incorporated herein by reference.

Section 3: Approval of Development Agreement.

The City Council hereby approves the Development Agreement, attached hereto as Exhibit A, in a form approved by the City Attorney, and authorizes the City Manager to execute the Development Agreement. The attached Development Agreement is as follows:

A. Development Agreement by and between the CITY OF RANCHO CORDOVA and TDW ENTERPRISES LP;

Section 4: Recordation.

Within ten (10) days after the Development Agreement is executed by the City Manager, the City Clerk shall submit the Development Agreement to the County Recorder for recordation.

Section 5: Severability.

If any section, subsection, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of a court of competent jurisdiction, it shall not affect the remaining portions of this Ordinance that can be given effect without the invalid provision and, to this end, the provisions of this Ordinance are severable. This City Council hereby declares that it would have adopted this Ordinance irrespective of the invalidity of any particular portion thereof and intends that the invalid portions should be severed and the balance of the Ordinance enforced.

Section 6: Publication and Effective Date.

Within fifteen (15) days after adoption, a summary of this Ordinance shall be published once in the Grapevine Independent or the Sacramento Bee, a newspaper of general circulation printed and published in Sacramento County and circulated in the City of Rancho Cordova, in accordance with Government Code section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its adoption.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this _____ day of _____, 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____
Donald Terry, Mayor

ATTEST:

_____
Stacy Leitner, CMC
City Clerk

OFFICIAL BUSINESS
Document entitled to free recording
Government Code Section 6103

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670
Attn: City Clerk

(SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE)

DEVELOPMENT AGREEMENT

BY AND BETWEEN

THE CITY OF RANCHO CORDOVA

AND

TDW ENTERPRISES, LP, a California Limited Partnership and

Winn Development II, a California Limited Liability Company

RELATIVE TO THE PRESERVE PROJECT

DEVELOPMENT AGREEMENT
RELATIVE TO THE PRESERVE PROJECT

This Development Agreement ("Agreement" or "Development Agreement") is entered into as of this __ day of _____, 2022, by and between the CITY OF RANCHO CORDOVA, a municipal corporation ("City"), and TDW Enterprises, LP, a California Limited Partnership ("TDW") and Winn Development II, LLC a California Limited Liability Company ("Winn Development") (TDW and Winn Development are collectively referred to as "Developer"), pursuant to the authority of Government Code section 65864 et. seq., relating to Development Agreements. City and Developer are hereinafter collectively referred to as the "Parties" and singularly as "Party."

RECITALS

A. Authorization. To strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, California Government Code section 65864, *et seq.* (the "Development Agreement Statute") and Rancho Cordova Municipal Code chapter 23.158, authorize the City and any person having a legal or equitable interest in real property to enter into a Development Agreement, establishing certain development rights in the Property which is the subject of the development project application.

B. Definitions. All capitalized terms as used herein are defined in Section 3 of this Agreement or otherwise herein.

C. Property. The subject of this Agreement is the development of those portions of the parcels of land consisting of approximately 98.9 acres located in the City of Rancho Cordova, County of Sacramento, depicted in **Exhibit A** and more particularly described in **Exhibit A-1** and Recitals D-F, inclusive, which collectively constitute the "Property" and have been entitled under the marketing name "The Preserve" (and referred to in this Agreement as the "Project"). At the time of approval of the Development Agreement, Developer owns some, but not all, of the Property, but provided that Winn Development acquires those additional parcels identified in Recitals E and F in fee title on or before December 31, 2022, and satisfies the conditions of Section 4.1.1, below, and completes lot line adjustments, all of the Property will be subject to this Agreement and Developer shall be bound by this Agreement. Developer represents that any and all other persons holding legal or equitable interests in the Property shall also be bound by this Agreement.

D. TDW Property. Developer owns in fee title the parcels identified by APN 073-0010-010 and APN 073-0010-011, consisting of approximately 115.27 acres, located in the City of Rancho Cordova, County of Sacramento (the "TDW Property"). Only the portion of the TDW Property constituting approximately 30.4 acres, which is more particularly described in **Exhibit B-1** and depicted in **Exhibit B-2** is within the collective definition of "Developer's Property," and shall be subject to the terms of this Agreement.

E. Whitlow Property. The David B. Whitlow Family 2015 Trust, Gurmeet Singh Dillon, and Satwant Singh Dhillon (collectively referenced as "Whitlow") own in fee title the parcel identified by APN 072-0300-005, consisting of approximately 41.5 acres, located in the City of Rancho Cordova, County of Sacramento (the "Whitlow Property"). Winn Development has an option to acquire the Whitlow Property and Winn Development intends to acquire the Whitlow Property in fee title after approval of the Entitlements and will succeed Whitlow as the owner of the Whitlow Property on or before December 31, 2022. Upon satisfaction by Developer of the conditions of Section 4.1.1, below, the portion of the Whitlow Property constituting approximately

35.7 acres and more particularly described in **Exhibit C-1** and depicted in **Exhibit C-2** will be considered within the definition of "Developer's Property," and shall be subject to the terms of this Agreement.

F. Divine Property. The David and Alaina Divine Family 1985 Revocable Trust ("Divine") own in fee title the parcel identified by APN 072-0300-002, consisting of approximately 41.29 acres, located in the City of Rancho Cordova, County of Sacramento (the "Divine Property"). Winn Development intends to acquire the Divine Property in fee title after approval of the Entitlements and will succeed Divine as the owner of the Divine Property on or before December 31, 2022. Upon satisfaction by Developer of the conditions of Section 4.1.1, below, the portion of the Divine Property constituting approximately 32.8 acres and more particularly described in **Exhibit D-1** and depicted in **Exhibit D-2** will be considered within the collective definition of "Developer's Property," and shall be subject to the terms of this Agreement.

G. Public Hearing and Approval of this Agreement. On _____, 2022, the City Council of the City of Rancho Cordova, serving as the City's planning agency for purposes of Development Agreement review pursuant to Government Code section 65867 and Rancho Cordova Municipal Code chapter 23.158, held a public hearing to consider this Development Agreement. Following the hearing, the City Council introduced City of Rancho Cordova Ordinance No. XX-2022 approving this Agreement. City approved Ordinance No. XX-2022 on _____, 2022.

H. Environmental Review. In compliance with the California Environmental Quality Act ("CEQA"), on _____, 2022, the City certified a Final Environmental Impact Report titled "[insert name of document]" pursuant to CEQA Guidelines Section 15090 (the "FEIR").

I. Development Agreement Ordinance. City and Developer have taken all actions mandated by, and fulfilled all requirements set forth in, Rancho Cordova Municipal Code chapter 23.158, the Development Agreement Ordinance of the City of Rancho Cordova.

J. Consistency with General Plan. Having duly examined and considered this Development Agreement and having held properly noticed public hearings hereon, in City Ordinance No. XX-2022, City found that this Development Agreement satisfies Government Code section 65867.5 and section 23.158.060.A of the Rancho Cordova Municipal Code because this Agreement is consistent with the requirements of the City of Rancho Cordova General Plan.

K. Negotiations. The Parties have, in good faith, negotiated terms set forth in this Development Agreement, which terms are intended to carry out the legislative purposes of the Development Agreement Statute and Rancho Cordova Municipal Code chapter 23.158, and which provide for the mutually desirable development of the Property.

AGREEMENT

1. Incorporation of Recitals. The preamble, the recitals, all defined terms set forth herein, and all exhibits attached hereto, are hereby incorporated into this Development Agreement as if set forth herein in full.

2. **Relationship of City and Developer**. This Development Agreement is a contract that has been negotiated and voluntarily entered into by City and Developer. Neither Party is an agent of the other Party. City and Developer renounce the existence of any form of joint venture or partnership between them. Nothing contained in this Agreement, or in any document executed in connection with this Agreement, may be construed as making City and Developer joint venturers or partners.

3. **Definitions**.

"CC&R Enforcement" means enforcement by a Homeowners Association, a Property Owners Association and/or the City, of covenants, conditions, and restrictions that are recorded against the single family portions of the Property to protect, preserve, and maintain the appearance, condition, and compatibility with residential neighborhood uses as allowed by the Rancho Cordova Municipal Code for single family development.

"City CCI Index" means the construction cost index applied by City in Section 6.1 authorizing the subject fee, assessment, or tax to adjust fees to account for changes to the costs of construction as published by the Engineering News Record, and as may be revised by the City for such Fees.

"City CPI Index" means the consumer price index applied by City in Sections 6.2, 7.2.6 and 8 authorizing the subject fee, assessment, or tax to adjust for changes in the costs of performing and/or providing municipal services as published by the United States Department of Labor Bureau of Labor Statistics.

"City Council" means the City Council of the City of Rancho Cordova.

"Community Places Fee" means the Community Places Fee that the Developer agrees to pay under Section 6.1.(iii).

"Community Renovation Fee" means the Community Renovation Fee that the Developer agrees to pay under Section 6.2.

"CRPD" means the Cordova Recreation and Park District.

"Developer's Property" is the Property subject to this Agreement, with legal descriptions attached as Exhibits B-1, C-1 and D-1 and depicted in Exhibits B-2, C-2 and D-2.

"EDU" means the single-family residential equivalent dwelling unit, as applied within the context of the applicable improvement, facility, or service. All other land uses are assigned EDUs based on their relative impact compared to a single family unit with respect to the applicable improvement, facility, or service.

"Effective Date" of this Development Agreement means the effective date as determined under Section 4.1.1 of this Agreement.

"Entitlements" means (a) a General Plan Amendment; (b) zoning amendment; (c) a large lot tentative subdivision map; (d) small lot tentative subdivision map; (e) the FEIR and all CEQA findings and statement of overriding considerations, if any, all as approved by the City on XX by Ordinance XXXX and on XX by Resolution XXXX (f) this Development Agreement, approved by City on XX, by Ordinance No. XX (the "Adopting Ordinance").

"Exactions" shall have the meaning set forth in Section 5.7 of this Agreement.

"General Plan" means the City of Rancho Cordova General Plan, including all appendices thereto, approved by City and in effect as of the Effective Date of this Agreement.

"Homeowners Association" means an association of owners within the portions of the Property zoned for single family use, if one is formed and operated, in part, to provide CC&R Enforcement.

"Park Development Fee" means the Park Development Fee that the Developer agrees to pay under Section 6.1(iii).

"Project" means the planned development of the Property pursuant to the Entitlements, which was approved under the marketing name of "The Preserve."

"Property" means the land described by legal description in Exhibits A-1 through D-1 and depicted in Exhibits B-2 through D-2.

"Public Facilities" means the public facilities owned by the City or other public agency.

"Subsequent Entitlements" mean those additional permits, plans, and approvals that may be approved following approval of the Entitlements, and which will allow for implementation of the Entitlements by subdivision, development and construction within the Project. Subsequent Entitlements may include, without limitation, small lot tentative subdivision maps, small lot final subdivision maps, parcel maps for non-residential areas, lot line adjustments, conditional use permits, and design review permits.

4. Term and Termination.

4.1 Term.

The term of this Development Agreement commences on the Effective Date and extends for a period of twenty (20) years from the Effective Date, unless said term is terminated, modified, or extended as provided herein. This Development Agreement automatically terminates upon expiration of the 20-year term unless otherwise extended by the Parties, and shall then be of no further force and effect. If and when this Development Agreement expires, Developer shall thereafter retain no vested rights under this Development Agreement, and City shall have the right to modify or repeal the Entitlements and apply new laws, regulations, and fees to the development of the Property subject to any other vested rights that may exist under common law.

4.1.1 The Adopting Ordinance shall provide that the Effective Date occurs on the later date on which Winn Development acquires fee title to the Whitlow Property and the Divine Property. If Developer fails to acquire fee title to the Whitlow Property and the Divine Property prior to December 31, 2022, the terms of this Agreement shall be null and void without further action by either Party. This Agreement is not effective as to the underlying landowners of the Whitlow Property and the Divine Property (identified in Recitals E and F), and said underlying landowners shall have no rights or obligations under this Agreement. In the event of a legal challenge to the Adopting Ordinance, the Entitlements or the EIR, the deadline for acquisition of the Whitlow Property and Divine Property shall be extended by the same number of calendar days necessary to resolve the legal challenge in favor of the City and Developer, subject to the maximum three (3) year extension provided under Section 4.3.

4.2 Tolling and Extension During Legal Challenge or Moratoria. Developer may, at its discretion, extend the term of this Development Agreement for a maximum period of three (3) years if:

4.2.1. a lawsuit is filed by an entity or party that is not a Party to this Agreement challenging any of the Entitlements or if Developer is unable to undertake development of the Project due to the imposition by the City or other public agency of a development moratorium for imminent health or safety reasons unrelated to the performance of Developer's obligations under this Agreement;

4.2.2. the Developer is unable to proceed, or reasonably elects not to proceed with the Project because of litigation described in Section 4.2.1 above; and

4.2.3. the Developer submits to City written notice that this Agreement is tolled.

During any such period that this Agreement and development of the Project are being tolled by Developer, Developer may, at its sole expense and risk, submit applications to process Subsequent Entitlements, including but not limited to tentative subdivision maps and improvement plans for the Property, provided City shall not be obligated to approve and may defer approval of any final subdivision maps, improvement plans, or building permits for the Property during any such tolling period.

4.3 Length of Extension. The tolling period will begin when City receives written notice from the Developer. The tolling period may only extend the term of this Agreement until a final order of judgment is issued upholding the challenged Entitlements, the case is dismissed, a moratorium on development is terminated by the City or other public agency, or the three (3) year maximum tolling period is reached, whichever is shorter. The Developer may also elect to end the tolling period at any time and proceed with the Project at its risk, effective upon delivery of written notice to City.

5. Vested Rights. The Developer shall have the vested right to proceed with development of the Property in accordance with the Entitlements, and to have Subsequent Entitlements considered for approval or denial, based upon the terms, standards and requirements set forth in the Entitlements. City agrees that it shall not use its authority in considering any application for a Subsequent Entitlement to change the policy decisions reflected by the Entitlements. Except as provided in this Section 5, below, this Agreement does not vest Developer's rights to pay development impact fees, Exactions, processing fees, inspection fees, plan check fees, or other permit processing fees or charges.

5.1 Permitted Uses, Density and Intensity, Maximum Height and Size of Structures, and Reservation or Dedication of Land Vested. The permitted uses of the Property, the density and intensity of use, the maximum height and size of proposed buildings, set-backs, provisions for reservation or dedication of land or payment of fees in lieu of dedication for public purposes, the location and maintenance of on-site and off-site improvements, the location of public utilities, and other terms and conditions of Development shall be those set forth in the Entitlements, including the approved Small Lot Subdivision Map layouts showing the intended total units to be Developed and any designated acreages of the proposed land uses.

5.2 Vested Against Moratorium, Quotas, Restrictions or Other Growth Limitations. Subject to applicable law relating to the vesting provisions of Development

Agreements, City agrees that, except as otherwise provided in or limited by the provisions of this Agreement, this Development Agreement vests the Entitlements against subsequent City ordinances, resolutions, rules, regulations, initiatives, and official policies and orders that directly or indirectly limit the rate, timing, or sequencing of Development, or prevent or conflict with the permitted uses, or the density or intensity of uses, or the terms, provisions, standards, or requirements for Development, as set forth in the Entitlements. To the extent allowed by the laws pertaining to development agreements, however, Developer will be subject to any growth limitation ordinance, resolution, rule, regulation, policy or order which is adopted on a uniformly applied, Citywide or area-wide basis, and directly concerns an imminent public health or safety condition, in which case City shall treat in a uniform, equitable, and proportionate manner all properties, public and private, which are impacted by that public health or safety issue.

5.3 Vested Rights Exclude Design and Construction. All ordinances, resolutions, rules, regulations, initiatives, and official policies governing design, improvement, and construction standards and specifications applicable to the Project, and to public improvements to be constructed by the Developer shall be those in force and effect at the time the applicable permit approval is granted, unless such ordinances, resolutions, rules, regulations, initiatives or official policies are inconsistent with the Entitlements or the specific terms of this Agreement, in which case the Entitlements and the terms of this Agreement shall prevail.

5.4 Vested Rights Exclude Changes in State or Federal Law. This Agreement shall not preclude the application to Development of the Property of changes in City laws, regulations, plans or policies, the terms of which are specifically mandated and required by changes in state or federal law or regulation. In the event that state or federal laws or regulations enacted after the Effective Date of this Development Agreement prevent or preclude compliance with one or more provisions of this Agreement or any Entitlements, such provisions of the Agreement shall be modified or suspended insofar as it is necessary to comply with such state or federal laws, regulations, plans, or policies. Any such amendment or suspension of this Agreement or Entitlements shall be approved by the City Council in accordance with the Municipal Code and this Agreement.

5.5 Vested Rights Exclude Building and Fire Codes. The Project shall be constructed in accordance with all applicable local, state, and federal building codes and standards, including the Building, Mechanical, Plumbing, Electrical, and Fire Codes, City standard construction specifications, and Title 24 of the California Code of Regulations (collectively “Building Code”), in effect at the time the applicable building, grading, encroachment or other construction permit is granted for the Project. If no permits are required for infrastructure improvements, such improvements will be constructed in accordance with the provisions of the Building Code in effect at the time of approval by City of the improvement plans for such infrastructure. If a permit that has been granted expires, the Project shall be required to be constructed in accordance with the provisions of the Building Code in effect at the time the applicable replacement permit to the expired building, grading, encroachment or other construction permit is granted for the Project.

5.6 Vested Rights Exclude Processing Fees and Charges. Developer shall pay those processing, inspection, and plan check fees and charges required by City under ordinances, resolutions, rules, regulations, initiatives, and official policies which are in effect when such fees or charges are due under then-existing code or policy.

5.7 Vested Rights Limited for Development Impact Fees, Exactions and Dedications. Developer shall pay all development impact fees, connection or mitigation fees, and Exactions required by City to support the construction of any public facilities and improvements or

the provision of public services in relation to Development of the Property (together "Exactions") authorized by City after the Effective Date, as long as said Exactions otherwise comply with applicable law, and are either (i) required on a Citywide basis, (ii) apply uniformly to all properties within City that are zoned with density and uses similar to those of the subject properties in the Entitlements, or (iii) apply on a fair share basis to all properties that are similarly situated within the portions of the City where new development is occurring. Except as otherwise provided in this Agreement, Exactions required by City to be paid by Developer that do not meet one of the preceding criteria shall only be the Exactions that were authorized on the Effective Date or which have been identified in the Conditions of Approval. Furthermore, notwithstanding anything to the contrary in this Section 5.7, in consideration of Developer's obligations under Section 8 hereof to pay an affordable housing fee, development of the Property shall not be subject to any impact fee, mitigation fee, or exaction related to the provision of affordable housing or inclusionary housing, or other such fee or exaction related to the provision of affordable housing or inclusionary housing that may be subsequently adopted by City during the period that this Section 5.7 is vested by this Agreement.

5.8 Subsequent Entitlements. Subject to Section 12 hereof, City shall accept for processing, review, and action any and all applications submitted by Developer for Subsequent Entitlements, necessary or convenient for the exercise of Developer's rights under the Entitlements for the use and development of the Property.

5.9 Term of Tentative Maps. Consistent with the authority provided in Government Code section 66452.6(a)(1), the term of any tentative subdivision map approved for all or any portion of the Property shall be the later of the date this Agreement expires (including any extensions) or the date on which the tentative map expires pursuant to City approval of the tentative map pursuant to the City of Rancho Cordova Municipal Code, including without limitation Section 22.20.060 ("Expiration of Tentative Map Approval"), as it may be modified from time to time by state law.

5.10 CC&R Enforcement and Property Maintenance Code. Developer agrees to establish, with input and direction from the City, to record covenants, conditions and restrictions ("CC&Rs") against the individual parcels within the Project upon sale that will protect, preserve, and maintain the appearance, condition, function and operation of the single family home development in a similar manner to the City's Property Maintenance Code within Sections 16.18.1700 through 16.18.1709 of the City's Municipal Code, as may be amended from time to time. City may impose a condition, as part of Subsequent Entitlements, for the Developer to include a copy of the Property Maintenance Code as part of individual home sale documents. City may impose a condition, as part of Subsequent Entitlements for single family development, for the Developer to establish a mechanism acceptable to City to provide for CC&R Enforcement within the single family portions of the Property by Developer and/or a Homeowners Association. The City shall be a third-party beneficiary to the duties and covenants imposed by the CC&Rs and shall be entitled to, without obligation take appropriate legal action to enforce the duties and covenants. If an action is commenced, the City shall be entitled to recover costs including reasonable attorney's fees.

6. Park Development Fee and Community Places Fee Obligations.

6.1. Park Development Fee and Community Places Fee.

(i) Dedication of Park Land and In-Lieu Fee:

Developer's obligation is to dedicate 6.48 acres of park land to CRPD pursuant to California Government Code Section 66477 (the "Quimby Act") and Municipal Code Section 22.40.035(A) and (C), calculated by 439 EDU x 0.01475 (factor). The Quimby Act requirement shall be fully satisfied by the dedication of 8.65 acres of neighborhood park land, with the park land to be dedicated depicted on **Exhibit E**. Pursuant to Municipal Code Section 22.40.025, the City Council has determined that Cordova Parks and Recreation District ("CRPD") is the appropriate local agency for conveyance of the park land and CRPD has concurred in the calculation of required park land and also to accept the dedication of park land. City acknowledges that the terms related to dedication of the park land as between Developer and CRPD will be memorialized in a Park Development Agreement between Developer and CRPD, except for the Park Development Fee identified in Section 6.1(iii), no additional park land or park land in-lieu fee is owed by Developer for Development of the Project.

(ii) Dedication of Open Space Land and In Lieu Fee:

Developer is dedicating approximately 10.22 acres of City Open Space, consisting of Community Places and Green Infrastructure, as defined in the City's Open Space Guidelines and as depicted on **Exhibit F**. This dedication shall satisfy Developer's obligation to dedicate 1.295 acres of Community Places and any other Green Infrastructure land dedication requirements under the City's Open Space Guidelines (calculated by 439 EDU x 0.00295 (factor) (amount of land dedication as determined by Rancho Cordova General Plan and Open Space Guidelines). City acknowledges that no additional open space land dedication or open space in lieu fee is owed by Developer for Development of the Project

(iii) Park Development Fee and Community Places Fee:

In addition to the dedication of park land as required under the Quimby Act, the Developer will pay a Park Development Fee in the amount of $11,473.50 per Single Family EDU and a Community Places Fee in the amount of $1,641.89 per Single Family EDU when each building permit for residential development is issued within the Project. In the event Developer constructs the neighborhood park, the Park Development Fee will be reduced through the application of credits to reflect Developer construction of the neighborhood park within the Project, pursuant to the term of a Park Development Agreement between CRPD and the Developer. The Park Development impact fee credits will be determined in accordance with the provision of Section 6.3 of this Agreement. Pursuant to the terms of a future Credit Agreement with the City, the Community Places Fee payable to the City may also be reduced to reflect Developer Turnkey Construction of neighborhood green or other community places amenities as agreed upon by the City.

(a) The Park Development Fee and the Community Places Fee will be adjusted on January 1, 2023, and annually thereafter no later than January 15th by the method provided in City CCI Index as follows: A "mean" index will be computed by averaging the index for 20 U.S. cities with the index for San Francisco by resort to the October issue of the Engineering News Record magazine Construction Cost Index of the year in which the calculation is being made.

(b) An adjustment factor shall be computed by dividing the "mean" index as calculated in subsection (a) of this section by the "mean" index for the previous October.

(c) The adjusted Park Development and Community Places Fees shall be calculated by multiplying the adjustment factor, as calculated in subsection (b) of this Section, by the Park Development and Community Places Fees in place prior to the annual adjustment.

(d) Payment of the Park Development Fee and Community Places Fee shall be calculated subject to Fee Credits that may be owed to Developer pursuant to Section 6.3.

Except as provided in Section 5.7, no additional Park Development Fee or Community Places Fee shall be owed by Developer for Development of the Project.

6.2. Community Renovation Fee. Developer agrees that it shall pay City the total sum of $1,291.09 for each single family dwelling unit (the "Community Renovation Fee"); provided that the Community Renovation Fee shall not be paid for any unit constructed on any parcel dedicated to the City for affordable housing uses, if any. Beginning January 1, 2023, the Community Renovation Fee shall be adjusted annually on each January 1 based upon City CPI Index. The Community Renovation Fee shall be paid to City upon issuance of a building permit for each residential unit within the Property. It shall be used by City, at its sole discretion, to acquire, renovate, repair, improve, or maintain community facilities, parks, neighborhood greens, or other public land or facilities in the City. This payment is made voluntarily by Developer. It is paid in addition to all other existing park and commmunity places fees, and construction and dedication obligations, including without limitation any fees paid pursuant to the Quimby Act, and the Park Development and Community Places Fees described in Section 6.1 above. Developer agrees that it shall not claim any credit against or right to reimbursement from any other existing park fees, and construction and dedication obligations, including Quimby Act fees, or the Park Development and Community Places Fees as a result of paying the Community Renovation Fee required under this Section 6.2. The City Council may, at any time, elect to terminate or reduce this obligation to pay the Community Renovation Fee, which termination shall not require an amendment of this Agreement.

6.3 Credits for Construction of Park and Recreational Improvements or Neighborhood Green or Community **Places Amenities.**

(i) Park Development Fee Credits. If Developer construct(s) park and recreational improvements to the land dedicated or provide(s) equipment for park and recreational facilities, the Park Development Fee will be reduced to reflect the construction of the park and recreational improvements or provision of equipment and Developer shall be entitled to Park Development Fee Credits. The amount of Park Development Fee Credits shall be determined in accordance with the provisions of Municipal Code Section 22.40.085, shall be subject to the same annual adjustments set forth in Section 6.1(iii)(a)-(c) of this Agreement, and shall be available to Developer, only, and not applied generally to reduce the overall cost of improvements or fees paid generally for Park Development. Developer shall not be obligated to construct park and recreational improvements or to provide park and recreational equipment and in no event shall Developer be required to construct improvements or provide equipment in excess of the Park Development Fee obligation stated in this Agreement.

(ii) Community Places Fee Credits. Pursuant to the terms of a future Credit Agreement with the City, the Community Places Fee payable to the City may also be reduced to reflect Developer Turnkey Construction cost for the facilities built within the City Community Places parcels. The maximum credit provided to the Developer pursuant to the Credit Agreement shall not exceed the total amount of Community Places Fees paid by the Developer. No credits or reimbursements from any source other than the Community Places Fees paid by the Developer shall be provided to the Developer.

(iii) Credit Agreements. City and Developer shall enter into a separate Credit and Reimbursement Agreement to memorialize the terms of any Community Places Fee Credits under this Section. CRPD and Developers shall enter into a separate Park Development Agreement to memorialize the terms of the Park Development Fee Credits, which credits shall be available to Developer upon posting of a bond to cover the cost of all improvements to be constructed by Developer(s).

7. Infrastructure and Maintenance Finance.

7.1 Infrastructure Finance. Prior to approval of a final Small Lot Subdivision Map, or for residential properties that do not require subdivision, prior to issuance of building permits, City and Developer will cooperate to establish one or more of what are collectively referred to herein as the "Infrastructure Finance Mechanisms": Community Facilities Districts, ("CFD(s)") pursuant to and as authorized by Government Code sections 53311 et seq., the Statewide Community Infrastructure Program ("SCIP") (or other similar program established by the California Statewide Community Development Authority), the Bond Opportunities for Local Development ("BOLD") program (or other similar program through the California Municipal Finance Authority), or other public finance programs that may be available in the future to fund necessary Backbone Infrastructure, Public Facilities, and/or Development Impact Fees. City and Developer shall cooperate with the formation of the Infrastructure Finance Mechanisms, and shall take related actions as follows:

(i) Developer, in its sole and exclusive discretion, shall have the right from time to time to request City to establish one or more Infrastructure Finance Mechanisms to finance Project infrastructure, including without limitation roadway, drainage, landscape, utility, open space and/or park improvements, and/or the Impact Fees related thereto ("Public Improvements"). Upon receipt of such Developer request, City shall implement such requests subject to applicable state and federal law and other controlling laws.

(a) City's participation in forming any Infrastructure Finance Mechanisms (and the operation thereafter) and in issuing any debt in connection therewith ("Project Debt" and/or "Bonds") approved by City shall include all of the usual and customary municipal functions associated with such tasks, including without limitation, the formation and administration of special districts, the issuance of land secured debt financing, the monitoring and collection fees and taxes, the creation and administration of agency funds, the enforcement of debt obligations, and other functions or duties authorized or required by the laws, regulations, or customs relating to such tasks.

(b) There shall be no limitation on the number or kinds of Infrastructure Finance Mechanisms used on the Project/Property so long as the applicable public finance mechanisms comply with the City's guidelines adopted by Resolution 162-2018 in effect at the time of approval of the financing. Additionally, when allowable, City shall specify that any and all apportionments may be based on land uses rather than benefits received, so that such

apportionment can consider and take into account market acceptance, feasibility, and affordability.

(c) Establishing any Infrastructure Finance Mechanism to finance the construction of Public Improvements, the payment of impact fees and/or land secured debt financing shall be initiated upon the request of Developer in connection with the Development of any phase of the Project, or by City in cooperation with Developer. In such regard, Developer shall submit to City the phasing plan for any facilities to be financed, including without limitation, the priority and financing needs related to such Public Improvements and the type of Infrastructure Finance Mechanism that Developer desires, and phases and Bond issuance related thereto, which Developer elects to use for specified purposes at the earliest possible time.

(ii) As required by applicable law, City may be required to enter into one or more joint community facilities agreements or other comparable agreements with other government entities that will own or operate any of the Public Improvements to be financed by an Infrastructure Finance Mechanism for the Project. The City and Developer agree that they shall take any and all steps necessary to procure the authorization and execution of any required joint community facilities agreement or other comparable agreements before issuance of any Infrastructure Finance Mechanism or other Bonds that finance the construction or acquisition of Public Improvements to be owned or operated by such other governmental entities.

(iii) Developer's request shall be made to the City in written form and shall outline the purposes for which the Infrastructure Finance Mechanism through and/or Project Debt will be established or issued, the general terms and conditions upon which it will be established or issued, the specific list of Public Improvements, and a proposed timeline for its establishment and/or issuance. Said Developer request shall include the substantive provisions to be included in the Rate and Method of Apportionment ("RMA") or other applicable implementation provision for the Infrastructure Finance Mechanism, as well as the relevant and analogous information as required by applicable law. City's consideration of Developer's request shall be consistent with the requirements of this Development Agreement.

(iv) Regardless of the number or kind of Infrastructure Finance Mechanisms used on the Project/Property, the "Special Tax Rate" established for said CFD(s) in conjunction with special tax rates/assessment established for City services (as reflected in Section 7.2 of this Development Agreement) shall not cause the total tax burden on taxed property to exceed 1.75% of the estimated sales price of a dwelling unit to be constructed unless a greater amount is mutually agreed upon by the City and Developer. The sales prices shall be determined in conjunction with an absorption study or appraisal prepared for the CFD at the time of preparation of the RMA.

(v) Based on the phasing plan submitted to the City, the Developer shall have the right to identify the initial and each subsequent phase as a different improvement area of an Infrastructure Finance Mechanism ("Improvement Area") or a future annexation area ("Future Annexation Area") under the applicable law for that Infrastructure Finance Mechanism. The City has determined that the Public Improvements benefit the area burdened by the Infrastructure Finance Mechanism and each Improvement Area as a whole, and therefore, any of the Public Improvements may be financed in any Improvement Area without regard to the specific benefit to such Improvement Area or Future Annexation Area.

(vi) The Parties agree that in the event Infrastructure Finance Mechanism(s) are established, Developer shall have the ability to establish an annual increase of the Special Tax

Rate or other applicable tax rate in an amount increasing no more than 2% per annum and as described by the RMA, or other applicable implementation provision for the Infrastructure Finance Mechanism.

(vii) The appraised or assessed value-to-lien ratio for any Bond issue for an Infrastructure Finance Mechanism will be four to one (4:1) unless a lesser amount is mutually agreed to by City and Developer. City shall not require Developer or any property owner within the CFD(S) to provide a Letter of Credit or other credit enhancement as security for the payment of special taxes in the CFD.

Contemporaneously with the formation of an Infrastructure Finance Mechanism, Developer and City shall execute an acquisition and funding agreement ("Acquisition Agreement") that shall apply to the acquisition and construction of the Public Improvement for each and every Improvement Area. The Acquisition Agreement shall be structured so that it is automatically applicable to any financing by special taxes levied in, or bonds issued for a subsequent phase annexed into its respective Improvement Area of the Infrastructure Finance Mechanism, without requiring any modifications to the Acquisition Agreement or any further approvals by the City.

7.2 Maintenance and Service Finance Mechanisms. Prior to approval of a final Small Lot Subdivision Map, or for residential properties that do not require subdivision, prior to issuance of building permits, City and Developer will complete all actions needed to form, annex into, and/or implement the funding mechanism(s) that have been identified in this Agreement, only, and which includes financing districts and special taxes that have been identified in this Agreement, only, to pay to maintain existing and new public improvements associated with or needed to serve the Project. Developer shall participate in, vote in favor of, and pay all costs incurred by City associated with such actions consistent with this Agreement and the Entitlements. The amount of special taxes or assessments to be included in each new maintenance or services district referred to herein shall not exceed the amounts reasonably determined by City during the formation of such finance district to fund the operations, maintenance, and/or services to be financed thereby. The provisions of this Section 7.2, including all subsections, apply only to the maintenance of improvements that are not included for maintenance in a private Homeowner's Association.

The following is the list of funding mechanisms for maintenance and services:

7.2.1. Annexation into Street, Lighting and Landscape Maintenance. Developer and City agree that the Developer will participate in or provide a funding mechanism for maintenance services for the fair share of existing and all new public improvements associated with the Project, including, but not limited to, streets, bridges, culverts, traffic signals, traffic signs, striping and legends, intelligent transportation systems (ITS) operations, streetlights and safety lights, and landscape maintenance for public frontage and medians. This may be accomplished through annexation to the City's Community Facilities District No. 2014-2 (Street, Lighting and Landscape Maintenance), or other financial mechanism as may be proposed and provided by the Developer for the same purpose of providing a financial mechanism to fund the operation and maintenance of the Project's public improvements. If the Developer does not provide another financial mechanism, prior to the recordation of the final Small Lot Subdivision Map, Developer will support the annexation of the Project into CFD 2014-2, and cover the Developer's fair share costs of the CFD annexation currently estimated at Five Thousand Dollars ($5,000) per annexation.

7.2.2 Park Maintenance. Developer and City agree that the Developer will participate in or provide a funding mechanism for maintenance services for the Project's associated fair share financial impacts to the operation, maintenance, and capital replacement of existing and proposed public parks that are maintained by CRPD. This may be accomplished through annexation to the appropriate Communities Facilities District for park maintenance, or other financial mechanism as may be proposed and provided by the Developer for the same purpose of providing a financial mechanism to fund the operation and maintenance of the Project's public park improvements. If the Developer does not provide another financial mechanism, the Developer will support the annexation of the Project into the appropriate CFD for park maintenance and cover the Developer's fair share costs of the CFD annexation currently estimated at Seven Thousand dollars ($7,000) per annexation.

7.2.3. Community Places and Neighborhood Greens Maintenance. Developer and City agree that the Developer will participate in or provide a funding mechanism for maintenance services for the Project's associated fair share impacts to the operation and maintenance community places and Neighborhood Greens. This may be accomplished through annexation to the City's Communities District No. 2018-2 (Community Places and Neighborhood Greens), or other financial mechanism as may be proposed and provided by the Developer for the same purpose of providing a financial mechanism to fund the Project's associated fair share financial impacts to the operation and maintenance of the Project's public community places and Neighborhood Green improvements. If the Developer does not provide another financial mechanism, the Developer will support the annexation of the Project into CFD 2018-2 (Community Places and Neighborhood Greens), and cover the Developer's fair share cost of the CFD annexation currently estimated at Five Thousand Dollars ($5,000) per annexation.

7.2.4. Annexation into Stormwater Utility Fee. The Developer will participate in or provide a funding mechanism for maintenance services for the Project's stormwater drainage and flood protection system. This will be accomplished through annexation to the City's Stormwater Utility Fee District. Prior to recordation of the final Small Lot Subdivision Map, Developer shall support the annexation and cover Developer's fair share costs of the annexation, currently estimated at Seven Thousand Dollars ($7,000) for the annexation. The base year FY 2020/2021 rate for the Stormwater Utility Fee is $134.93 per single family residential unit. The annual tax or fee will be adjusted annually per the method described in the CFD.

7.2.4.1 Enhanced Stormwater Utility Fee Zone. The Project is required to install low impact development measures (LID) for stormwater management pursuant to the City's state stormwater permit. Prior to recordation of the final Small Lot Subdivision Map, the Developer shall, to the satisfaction of the Public Works Director, either (i) annex into and approve a fee for a new zone in the City's Stormwater Utility Fee District that shall provide LID maintenance services in the Property, or (ii) establish another financial mechanism to provide LID maintenance services in the Property.

7.2.5 Transit Services Funding. The Developer will participate in the provision of a funding mechanism for transit-related services. This may be accomplished by annexation to the City's Transit Related Services Special Tax Area by voting to approve a special tax for the parcels created for this subdivision approval, or other financial mechanism as may be proposed and provided by the Developer for the same purpose of providing a funding mechanism to fund transit-related services. The tax shall be the per parcel annual amount as specified in an approving ordinance (with appropriate annual inflation adjustment) as established at the time of voting by the City Council. The election to provide for the tax shall be completed prior to the recording of the final map. Costs associated with the annexation and election of the annual tax

shall be borne by the Developer through payment of the annexation costs currently estimated at Five Thousand Dollars ($5,000) per annexation.

7.2.6. Annexation into CFD No. 2013-2 (Police Services). Prior to recordation of the first final Small Lot Subdivision Map, or for residential properties that do not require subdivision, prior to issuance of building permits, the Developer shall support the annexation of the Project into CFD No. 2013-2 (Police Services) and cover Developer's fair share costs of the CFD annexation, currently estimated at Five Thousand Dollars ($5,000) for the annexation. City agrees that the CFD will provide that on lands designated for all residential land use categories, the base year FY 2021/2022 Police Maximum Services Special Tax shall be $594.72 annually per residential dwelling unit, including multi-family units (if any). The special tax imposed by the CFD will be payable on a parcel within the Property only after a building permit has been issued by City for the construction of a building on that particular parcel, and there will be no undeveloped land tax imposed by the CFD. The CFD shall further provide that on each July 1 commencing July 1, 2022, the base year Police Special Tax shall be escalated by the increase, if any, in the City CPI Index. However, in no event shall the tax per parcel for any fiscal year be less than the amount established for the prior fiscal year. The CFD shall specify that the Police Special Tax shall commence being payable annually following the issuance of a building permit for each parcel subject to the Police Special Tax.

The Developer acknowledges that no final Small Lot Subdivision Map, or for residential properties that do not require subdivision, prior to issuance of building permits, shall be submitted to City for approval prior to annexation of the Property to the Police Services CFD; provided Developer may at its own risk, process and obtain approvals of any tentative subdivision maps for the Property and submit applications for and process, but not obtain final approval of, any final subdivision maps and improvement plans related thereto.

7.2.7. Amounts and Effect of Alternative HOA Maintenance. If and to the extent Developer proposes and City approves that a Homeowners Association that includes the Property may perform any of the maintenance obligations that would otherwise be performed by the districts described in sections 7.2.1, 7.2.2 or 7.2.3 above, the applicable maintenance financing districts shall include a mechanism whereby the amount of the special taxes or assessments to be levied thereby shall be credited by the savings to be realized by the districts from the performance of such maintenance obligations by the Homeowners Association and the relieving of the districts from having to perform such maintenance obligations. This provision is subject to the reasonable discretion of the City that the performance by the Homeowners Association is adequate. City shall defer the annexation of the Property into an assessment district so long as City is assured of the adequacy of the performance thereof by the Homeowners Association.

7.2.8. Special Taxes. Provided that City has provided Developer with budgets for the maintenance services to be provided and Developer has no objections to those budgets, after formation of the assessment districts described in this Section, Developer agrees that it will not vote to repeal or amend any of the special taxes being imposed in the amounts or as set forth above in Sections 7.2.1 through 7.2.6, inclusive. In the event Developer objects to any special tax referenced in Section 7.2.1 through 7.2.6, inclusive, after the formation of the applicable assessment districts and during the term of this Agreement, Developer shall have the opportunity to meet and confer with City about the reasons for the objection and shall also have an opportunity to be heard by the City Council on any objections. If the City Council overrules those objections, the Developer may seek relief from a court of competent jurisdiction for continued payment of the special tax that is the subject of the objection. If, after exhausting all

such remedies, a Developer continues to fail to pay the special tax, City shall be entitled to those remedies allowed for in Sections 7.2.1 through 7.2.6, as well as any remedies City has in law for failure to pay a special tax.

7.3 Infrastructure Phasing Plan. The Infrastructure Phasing Plan (**Exhibit G**) addresses sequencing and full build-out of major public onsite and offsite infrastructure necessary to support the Project including but not limited to, major roadways, signals, trails, offsite paseos, sewer, water, drainage facilities, parks and neighborhood greens, and other utilities. The phasing plan may be amended from time-to-time upon written approval by the Public Works Director. Prior to issuance of building permits (except permits for model homes) within an individual map phase, all streets and improvements shown on the phasing plan, all streets necessary for access to the proposed homes, associated improvements included in the approved improvement plans and other infrastructure as necessary for adequate public access and use shall be substantially complete to the satisfaction of the Public Works Director. These improvements including sound walls and landscaping shall be fully constructed to the satisfaction of the City's Public Works Department prior to the first occupancy. The credit for the proposed signal at the intersection of Raymer Way and Grant Line Road shall be based on the actual cost, but not more than the four hundred thousand dollars ($400,000) through the Citywide Transportation Development Impact Fee Program. The terms of this credit shall be incorporated into a Credit and Reimbursement Agreement between City and Developer.

7.4 Centennial Drive. The Entitlements include a General Plan Amendment to remove Centennial Drive within the boundary of the Project from the City's Circulation Element of the General Plan. City acknowledges and agrees that Developer has no obligation to construct this portion of Centennial Drive and that this provision is vested for the Term of this Agreement and, thereafter, unless and until a subsequent General Plan Amendment is adopted by the City.

7.5 County Reciprocal Funding Agreement. City has evaluated in the FEIR the potential impacts to roads outside the City boundaries and whether this Project has any obligation to contribute towards any impacts that may be included within a reciprocal funding agreement with the County of Sacramento ("County") that addresses the impacts of projects on Sacramento County roadways, as well as other cross-jurisdictional roadway impacts related to planned development in the City and County. City has concluded, based upon a review of the Traffic Impact Analysis in the FEIR that Developer shall not be required to contribute to any fees under the County Reciprocal Funding Agreement.

7.6 Purchase of Credits. City acknowledges that Developer may have the opportunity to purchase credits from other owners of property within the City. To the extent the purchase of credits from a third party are allowed under a Credit and Reimbursement Agreement, City will allow for those credits to be applied against any similar fees owed under this Agreement. The Credit will identify any applicable geographic limitations on the use of credits purchased from other owners of property.

8. Affordable Housing Plan. This Section 8 is the Affordable Housing Plan for the Project required by Rancho Cordova Housing Element Policy H.1.5. It has two components: the Property's fair share of the Regional Housing Needs Allocation (RHNA) and affordable housing performance by an in-lieu fee pursuant to the City's Housing Element Action H.1.2.1 and Action H.1.5.1.

8.1 Regional Housing Needs Allocation for The Preserve. The Project is less than 100 gross acres, therefore pursuant to Housing Element Action H.1.2.1, the RHNA acreage obligation is zero (0) acres of land zoned for high density housing at a minimum of 30 dwelling uniters per acre, and zero (0) acres of land zoned for medium density housing at a minimum of 10 dwelling units per acre.

8.2 Affordable Housing In-Lieu Fee. Developer shall pay City a fee of $6,264.48 for each single-family dwelling unit (the "Affordable Housing In-Lieu Fee"). Beginning January 1, 2023, the Affordable Housing Fee shall be adjusted annually on January 1 based upon the October to October index value increase found in the 20 City Building Cost Index published in Engineernig News Records (ENR), averaged with the ENR's index of the City of San Francisco between October and October of each year. The Affordable Housing Fee shall be paid to City upon issuance of a building permit for each residential unit within the Property. It shall be used by City, at its sole discretion, to acquire, renovate, repair, improve or otherwise create any units of affordable housing to households with incomes ranging from zero to 120% of the Sacramento County area median income. City acknowledges that Developer's payment of the Affordable Housing In-Lieu Fee satisfies Developer's obligation to provide affordable housing or inclusionary housing or such other exaction related thereto associated with Development of the property.

9. Dedication of Public Rights of Way and Other Public Lands. Within thirty (30) days of receipt of a written dedication request from City, regardless of the status of any final or tentative maps, Developer shall grant irrevocable dedications of rights of way and easements to City, in a form acceptable to City, for those portions of the Property required to construct such infrastructure or improvements. Consistent with Developer's right to construct infrastructure in phases (as defined in Section 7.3), Developer has the right to dedicate (whether in fee, by easement or right of way) by phases, including but not limited to land required for public improvements, park land and open space land, and with reference only to the land included within a particular phase. This provision shall be included as a note on all tentative subdivision maps. The cost of preparing the dedication documents, including the engineering and surveying costs related thereto, shall be paid by the Developer initiating or necessitating the request for the dedication. In addition to granting such irrevocable offers of dedication, Developer shall also grant temporary construction easements for reasonable access onto the Property to construct such infrastructure or improvements, which shall be assignable to any Developer who intends to construct such infrastructure or improvements. Developer shall obtain the consent of any and all beneficiaries under any deeds of trust or mortgages or other such holders of monetary claims or liens against the Property to subordinate their interests therein to such dedicated rights of way and easements.

9.1 Off-site Improvements (Acquisition). Developer may be required to perform off-site improvements included in **Exhibit G**. If Developer is unable to secure suificient title or interest in lands, or access to the lands, despite Developer's best faith effort, nothing shall prohibit Developer from exercising any and all rights available to it pursuant to Government Code section 66462.5 prior to the filing of any final or parcel map for which such off-site improvement was conditioned. If Developer is unable to secure the Real Property Interests necessary for off-site improvements, Developer shall provide evidence to City that Developer has exercised all reasonable efforts to acquire the Real Property Interests. Developer may thereafter request and, at City's sole and absolute discretion, City may agree to assist in the acquisition of the necessary Real Property Interests, subject to the additional conditions in this Section. City shall provide to Developer a reasonable estimation of all costs the City may reasonably incur (including the costs of eminent domain proceedings, legal fees

and costs, and the value of the Real Property Interests) and Developer shall provide this amount to the City as Security. Upon receipt of the Security in a form acceptable to the City Attorney, City shall commence negotiations to purchase the necessary Real Property Interests to allow Developer to construct the public improvements. If necessary, and only after such negotiations by City and in accordance with the procedures established and to the extent allowed by law, City shall within a reasonable time frame and so as not to delay construction of improvements to serve the Project consider the exercise of its power of eminent domain to acquire such Real Property Interests, including securing an order for immediate possession. Any such acquisition by the City is subject to the City's sole and absolute discretion, which is expressly reserved by City, to consider whether or not it chooses to exercise its eminent domain power and to make all necessary findings to acquire such Real Property Interests, including a finding of public necessity. After Developer has provided the Security in a form acceptable to the City Attorney, the City shall not withhold any building permits based on the lack of the necessary title to Real Property Interests for off-site improvements. However, notwithstanding any provision contained in this Agreement to the contrary, the City shall not have any obligation to acquire the Real Property Interests.

10. Amendment or Cancellation.

10.1 Amendment by Mutual Consent, Minor Revisions. This Agreement may be amended in writing from time to time by mutual consent of the Parties hereto, and in accordance with the procedures of state law and the Municipal Code. Any amendment of this Agreement that does not constitute a Minor Revision as defined herein shall require amendment of this Agreement. Any such amendment that does not constitute a Minor Revision may be requested and made with respect to the Property, or a portion thereof, in which case only the owner(s) of such portion of the Property subject thereto shall be required to apply for and sign such partial amendment of this Agreement. A Minor Revision shall mean any change to this Agreement which does not relate to the term (excluding automatic extensions), permitted uses, density or intensity of use, height or size of buildings, provisions for reservation or dedication of land, or monetary contributions by the Developer, or other similar or material provisions, in so far as the revision meets any applicable City-wide standards. The City Manager, with the consent of the Developer, has the discretion to approve Minor Revisions without the requirement for a public hearing or approval by the City Council.

10.2 Cancellation by Mutual Consent. Except as otherwise permitted herein, this Agreement may be canceled in whole or in part only by the mutual written consent of the Parties or their successors in interest, in accordance with Government Code section 65868 and the Municipal Code. Any fees paid pursuant to this Agreement and spent by City prior to the date of cancellation shall be retained by City.

10.3 Automatic Termination Upon Completion and Sale of Residential Unit. This Agreement shall automatically be terminated, without any further action by either Party or need to record any additional document, with respect to any single-family residential lot for residential use, upon completion of construction and issuance by City of a final inspection for a dwelling unit upon such residential lot and conveyance of such improved residential lot by Developer to a bona-fide good faith purchaser thereof. In connection with its issuance of a final inspection for such improved lot, City shall confirm that: (i) all improvements which are required to serve the lot, as determined by City pursuant to the Entitlements and Subsequent Entitlements, have been accepted by City; and (ii) the lot is included within any financing districts or mechanisms required by Section 7 or other financing mechanism acceptable to City, to the extent required hereby. Termination of this Agreement for any such residential lot as

provided for in this Section 10.3 shall not in any way be construed to terminate or modify any assessment district or Mello-Roos Community Facilities District lien affecting such lot at the time of termination.

10.4 Termination upon Request. This Agreement may also be terminated, at the election of the then property owner, with respect to any legally subdivided parcel designated for residential or nonresidential use (other than parcels designated for public use), when recording a final subdivision map for such parcel, or receiving a certificate of occupancy or final inspection, whichever is applicable, by giving written notice to City of its election to terminate the Agreement for such parcel, provided that: (i) all improvements which are required to serve the parcel, as determined by City pursuant to the Entitlements and Subsequent Entitlements, have been accepted by City; (ii) the parcel is included within any financing districts or mechanisms required by Section 7, or other financing mechanisms acceptable to City, to the extent required hereby; (iii) all other financial obligations to City under this Agreement that are outstanding or as to the parcels subject to the request for termination, have been satisfied, including without limitation, satisfaction of all obligations under Sections 6 - 8 hereinabove to pay Park Development Fee, Community Renovation Fees, Community Places Fees, Affordable Housing Fees, and/or planning reimbursements, that are then outstanding for the portion thereof subject to such termination; and (iv) the Developer of such portion of the Property is not in Default of this Agreement and no notice of Default has then been issued by City with respect to such portion of the Property. City shall cause any written notice of termination approved pursuant to this Section to be recorded with the Sacramento County Recorder against the applicable parcel at Developer's expense. Termination of this Agreement for any such residential parcel as provided for in this Section 10.4 shall not in any way be construed to terminate or modify any assessment district or Mello-Roos Community Facilities District lien affecting such parcel at the time of termination.

10.5 Termination on Preserve Buffer. This Agreement shall terminate as to the buffer parcels (N, O, P, Q and R) shown in **Exhibit E** or any parcels thereof when (i) the Developer has completed all its obligations under the Development Agreement and the Entitlements regarding the buffer, and (ii) the South Sacramento Habitat Conservation Agency Joint Powers Authority (HCP) accepts the transfer of title and maintenance responsibility for the buffer to the JPA. The City shall, upon request by the Developer or the HCP and receipt of written notice of the above from the Developer or the HCP, cause a notice of termination to be recorded or provide other evidence of termination of the Agreement on the subject buffer to the Developer or the HCP.

11. <u>Annual Review</u>.

11.1 Annual Review. City reserves the right to annually monitor and review each Developer's good faith compliance with the terms of this Agreement and the Entitlements.

11.2 Monitoring. City has discretion to monitor the continuing compliance of the terms of this Agreement and the Entitlements by updating decision-makers, conducting field inspections in compliance with applicable laws, implementing and interpreting requirements, monitoring any litigation relating to the Property, and taking any other actions that are within the City's exercise of its legal, permit or contractual obligations.

11.3 Annual Review Date. City intends to conduct an annual review each year during the term of this Agreement in September of each year after the Effective Date.

11.4 Initiation of Review. City's Planning Director initiates the annual review by giving Developer written notice that City will conduct the annual review. The Planning Director's

written notice will include an estimate of the total costs City expects to incur in connection with the review. Within thirty (30) days of City's notice, Developer must provide evidence to the Planning Director to demonstrate good faith compliance with this Development Agreement. The burden of proof, by substantial evidence of compliance, is upon the Developer. City's failure to timely initiate the annual review is not a waiver of the right to conduct a review at a later date or otherwise enforce the provisions of this Development Agreement. Developer is not in default under this Agreement by virtue of a failure by City to timely initiate review.

11.5 Staff Reports. City shall deposit in the mail to Developer a copy of all staff reports and related exhibits concerning contract performance at least twenty (20) days prior to any annual review. City shall also, to the extent practicable, make reasonable efforts to provide simultaneous notice to Developer by e-mail or other then-available means of electronic technology.

11.6 Costs. Costs reasonably and directly incurred by City in connection with the annual review and monitoring shall be paid by Developer in accordance with the City's schedule of fees and billing rates in effect at the time of review. The costs that Developer may be required to pay are not limited to the amount in the Planning Director's estimate.

11.7 Non-compliance with Agreement; Hearing. If the Planning Director determines, on the basis of substantial evidence, that Developer has not complied in good faith with the terms and conditions of this Development Agreement during the period under review, the City Council may initiate proceedings to modify or terminate the Agreement, at which time an administrative hearing shall be conducted before the City Council in accordance with the procedures of state law (Government Code sections 65090 and 65091). As part of that final determination, the City Council may impose conditions on the Project that it considers necessary and appropriate to protect the interests of City. Developer shall notify the City in writing at least seven (7) days before the hearing of any and all issues of non-compliance by City with the terms of this Development Agreement, and the City Council shall review and make findings concerning the compliance of all Parties to the Agreement. If the City contends that Developer has not complied in good faith with the terms and conditions of this Development Agreement, City shall provide Developer in writing the basis for that conclusion no later than seven (7) business days before the hearing of any and all issues of noncompliance by the City Council.

11.8 Appeal of Determination. The decision of the City Council as to a Developer's compliance shall be final. Any court action or proceeding to challenge, review, set aside, void, or annul any compliance determination by the City Council must be commenced within ninety (90) days of the final decision of the City Council in accordance with the California Code of Civil Procedure, or the Developer forfeits the right to seek judicial review.

12. Violation of Entitlements. In addition to complying with all terms of this Agreement, Developer agrees to perform all terms, conditions, and requirements of all other Entitlements. Any failure by Developer to perform any material term, condition, or requirement of any of the other Entitlements or Subsequent Entitlements is a violation of this Agreement, subject to default under Section 13 or if such a violation is identified as part of an Annual Review it is subject to the procedures set forth in Section 11.

13. Default and Opportunity to Cure. Subject to any applicable extension of time agreed to by the Parties in writing, failure by any Party to perform any term or provision of this Agreement required to be performed by such Party, including without limitation any violation of Section 12, constitutes an event of default ("Event of Default"). For purposes of this Agreement,

a Party claiming another Party is in default shall be referred to as the "Complaining Party," and the Party alleged to be in default shall be referred to as the "Party in Default." Except as provided in Section 11, a Complaining Party shall not exercise any of its remedies as the result of such Event of Default unless such Complaining Party first gives notice to the Party in Default as provided in Section 23, and the Party in Default fails to cure such Event of Default within the applicable cure period.

13.1 Procedure Regarding Defaults.

13.1.1. Notice of Default. If an Event of Default occurs, prior to exercising any remedies, the Complaining Party shall give the Party in Default written notice of such default, including a description of the factual basis for the alleged default. After City as the Complaining Party provides notice of an Event of Default by Developer, if such Event of Default is not cured within thirty (30) days after the Developer's receipt of such notice, City may thereafter cease to issue any permit or approve any entitlement for which an application has been filed for any portion of the Property then owned or controlled by the Party in Default until the Default is cured pursuant to the procedures in this Section 13 or if the Event of Default is discovered or determined in the course of the Annual Compliance Review and there is a determination under the procedures set forth in Section 11 that there is no default.

13.1.2. Cure. The Party in Default must cure the default within thirty (30) days from the Notice of Default. The Complaining Party may pursue all available remedies if the Party in Default fails to cure the default within the 30-day time period. If the nature of the alleged default is such that it cannot reasonably be cured within thirty (30) days, the 30-day time period will be tolled if: (a) the cure is commenced at the earliest practicable date following receipt of the notice; (b) the cure is diligently prosecuted to completion at all times thereafter; (c) at the earliest practicable date (in no event later than thirty (30) days after the Party in Default's receipt of the notice), the Party in Default provides written notice to the Complaining Party that the cure cannot practicably be completed within such thirty (30) day period; and (d) the cure is completed at the earliest practicable date. In no event shall Complaining Party be precluded from exercising remedies if a default is not cured within ninety (90) days after the first notice of default is given. If the Event of Default is discovered or determined in the course of the Annual Compliance Review, in addition to other remedies and potential cures, City shall have the statutory authority pursuant to Government Code section 65865.1 to decide to terminate or modify the Development Agreement following the opportunity to cure as provided in this Section 13.1.2.

13.1.3. Failure to Assert. Any failures or delays by a Complaining Party in asserting any of its rights and remedies as to any default shall not operate as a waiver of any default or of any such rights or remedies. Delays by a Complaining Party in asserting any of its rights and remedies shall not deprive the Complaining Party of its right to institute and maintain any actions or proceedings which it may deem necessary to protect, assert, or enforce any such rights or remedies.

13.1.4. Legal Proceedings. If the Party in Default fails to cure a default in accordance with the provisions of Section 13.1.2, the Complaining Party, at its option, may institute legal proceedings pursuant to this Agreement or terminate this Agreement. Upon the occurrence of an Event of Default, the Parties may pursue all other remedies at law or in equity, which are not otherwise provided for or prohibited by this Agreement or City's regulations governing development agreements, expressly including the remedy of specific performance of this Agreement. In no event, except as provided in Sections 17, 20, and 21 of this Agreement, will either Party be liable to the other Party for any monetary damage for claims arising out of this

Agreement, and both Parties hereby expressly waive any such monetary damages. Notwithstanding the foregoing, City may immediately institute any legal proceedings relating to this Agreement without the notice and opportunity to cure required in the case of an emergency or immediate danger to public health, safety, or welfare.

14. Estoppel Certificate. Either Party may, at any time, and from time to time, deliver written notice to the other Party requesting that the other Party certify in writing that, to the knowledge of the certifying Party: (i) this Agreement is in full force and effect and a binding obligation of the Parties; (ii) this Agreement has not been amended or modified either orally or in writing, or if so amended, identifying the amendments; and, (iii) the requesting Party is not in default in the performance of its obligations under this Agreement, or if in default, describing therein the nature and amount of any such defaults. A Party receiving a request hereunder shall execute and return such estoppel certificate, or give a written detailed response explaining why it will not do so, within thirty (30) days following the receipt of each such request. Each Party acknowledges that such an estoppel certificate may be relied upon by third parties acting in good faith. A certificate provided by City establishing the status of this Agreement with respect to the Property or any portion thereof shall be in recordable form and may be recorded at the expense of the recording Party.

15. Severability. If any part of this Agreement is for any reason held to be unenforceable, the rest of the Agreement remains fully enforceable. If, however, a provision of this Agreement is determined to be invalid or unenforceable and the effect is to deprive a Party of an essential benefit of this Agreement, then the Party so deprived may request that the other Party meet and confer in an attempt to amend the Agreement in a manner that is acceptable to both Parties and/or terminate this entire Agreement upon written notice to the other Party.

16. Applicable Law. California law applies to this Agreement without regard for any choice-of-law rules that might direct the application of the laws of any other jurisdiction. Venue for all legal proceedings arising out of this Agreement shall be the Superior Court for the State of California, County of Sacramento.

17. Attorneys' Fees and Costs in Legal Actions by Parties to the Agreement. Should any legal action be filed by either Party for breach of this Agreement or to enforce any provisions herein, the prevailing party in the action is entitled to reasonable attorneys' fees, expert witness fees, court costs, and any other costs as may be fixed by the Court.

18. Agreement Runs with the Land. Except as otherwise provided for in this Agreement, all of the provisions, rights, terms, covenants, and obligations contained in this Agreement are binding upon the Parties and their respective heirs, successors and assignees, representatives, lessees, and all other persons acquiring the Property, or any portion thereof, or any interest therein, whether by operation of law or in any manner whatsoever. All of the provisions of this Agreement are enforceable as equitable servitudes and constitute covenants running with the land pursuant to applicable laws, including but not limited to Section 1468 of the California Civil Code. Each covenant to do, or refrain from doing, some act on the Property, or with respect to any owned property: (i) is for the benefit of such properties and is a burden upon such properties; (ii) runs with such properties; and (iii) is binding upon each Party and each successive owner during its ownership of such properties or any portion thereof, and shall be a benefit to and a burden upon each Party and its property hereunder and each other person succeeding to an interest in such properties.

19. Bankruptcy. The obligations of this Agreement are not dischargeable in bankruptcy unless so adjudicated by a court of competent jurisdiction. In the event of a bankruptcy by Developer, Developer shall include City as an interested party entitled to notice.

20. Indemnification from Construction, Improvement, Operation, and Maintenance Claims. Developer agrees to indemnify, defend with counsel selected by City, and hold harmless City, and its elected and appointed councils, boards, commissions, officers, officials, agents, employees, and representatives, from any and all claims, costs (including legal fees and costs incurred by City or awarded to plaintiffs) and liability for any personal injury or property damage which may arise directly or indirectly as a result of any actions or inactions by Developer, or any actions or inactions of Developer's contractors, subcontractors, agents, or employees in connection with the construction, improvement, operation, or maintenance of the Property or the Project. Developer has no indemnification obligation with respect to the gross negligence or willful misconduct of City, or its elected and appointed councils, boards, commissions, officers, officials, agents, employees, and representatives or with respect to the maintenance, use, or condition of any improvement after the time it has been dedicated to and accepted by City or another public entity (except as provided in an improvement agreement or maintenance bond). The provisions of this Section 20 shall survive the termination of this Agreement.

21. Cooperation and Indemnification of City in Event of Legal Challenge to This Agreement or Entitlements. In the event of any legal or equitable action or other proceeding instituted by any third party challenging the validity of any provisions of this Agreement or the Entitlements, or seeking to overturn or invalidate any approval granted pursuant to this Agreement:

21.1 The Parties agree to cooperate in defending against the action or proceeding;

21.2 The Developer shall be solely responsible for its own costs and any costs incurred by City for such defense;

21.3 Developer will indemnify, defend with counsel selected by City and hold harmless City, and its elected and appointed councils, boards, commissions, officers, officials, agents, employees, and representatives from any and all claims, costs (including legal fees and costs incurred by City or awarded to plaintiffs) and liability;

21.4 Neither Developer nor City shall settle any action or proceeding on grounds that include non-monetary relief or admissions of liability without written consent of the other Party. Neither Developer nor City shall settle any action with any monetary relief without the written consent of other Party, unless City is solely liable and agrees to pay such monetary relief; and

21.5 The provisions of this Section 21 shall survive the termination of this Development Agreement.

22. Third Party Beneficiaries. This Development Agreement is made and entered into for the sole protection and benefit of Developer and City and their successors and assigns. No other person, agency or entity shall have any right of action based upon any provision in this Agreement.

23. Notices. All notices and other communications required or permitted under this Agreement, the enabling legislation, or the procedure adopted pursuant to Government Code section 65865, must be in writing and must be delivered in person or sent by certified mail, postage prepaid, or by facsimile or electronic mail.

Notice required to be given to City shall be addressed as follows:

CITY OF RANCHO CORDOVA
Director of Community Development
2729 Prospect Park Drive
Rancho Cordova, CA 95670
Fax: (916) 851-8762
E-mail: esparkman@cityofranchocordova.org

Notice required to be given to Developer shall be addressed as follows:

George M. Carpenter, Jr.
TDW Enterprises
3001 I Street, Suite 300
Sacramento, CA 95816
Fax: (916) 930-0927
E-mail: georgemcarpenter@comcast.net

With a copy to:
Martha Clark Lofgren
Brewer Lofgren LLP
106 N. Granite Circle
Folsom, CA 95630

mlofgren@brewerlofgren.com

Field Cod

Either Party may change the address stated herein by giving notice in writing to the other Party, and thereafter notices shall be addressed and transmitted to the new address.

24. Assignment and Release. From and after recordation of this Agreement against the Property, Developer shall within forty-five (45) days of the recording of the sale of the Property, or any portion thereof, assign this Agreement as to the Property, or such portion thereof, in connection with any sale, transfer or conveyance thereof, provided that Developer has paid City any and all fees or amounts due to City arising out of this Agreement or the processing of the Entitlements, or the development of the portion of the Property to be assigned. The assignment will recognize and include in the assignment payment of fees such as permit fees and impact fees that will become due and payable at the time of building permit issuance or certificate of occupancy and which have not yet become due and payable at the time of the assignment and transfer of the Property (or portion thereof). The form of the assignment and assumption agreement is attached hereto as **Exhibit H**. The assignment will be effective after (i) written notice to the City of the intent to assign this Agreement, (ii) confirmation by the Planning Director

that Developer is not in default of any provision of this Agreement, (iii) confirmation by the Planning Director that Developer has paid to City any and all fees or amounts that are due to City at the time of the assignment, subject to any limitations on the scope of fees, Exactions, assessments or charges set forth in this Agreement, and (iv) Developer has provided to the City Planning Director the express written assignment by Developer and assumption by the assignee of such assignment in the form attached hereto as **Exhibit H**. Upon the satisfaction of each of the preceding items and the conveyance of Developer's interest in the Property related thereto, Developer shall be released from further liability or obligation related to the portion of the Property so conveyed and the assignee will be considered the "Developer," with all rights and obligations related thereto, with respect to such conveyed property (the "Assigned Property").

25. Mortgagee Protection. The parties hereto agree that this Agreement shall not prevent or limit Developer, in any manner, at Developer's sole discretion, from encumbering the Property or any portion thereof by any mortgage, deed of trust or other security device securing financing with respect to the Property. City acknowledges that lenders providing any such financing may require certain Agreement interpretations and modifications, and agrees upon request, from time to time, to meet with Developer and representatives of such lenders to negotiate in good faith any such request for interpretation or modification. City will not unreasonably withhold its consent to any such requested interpretation or modification, provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any lender or other such entity (a "Mortgagee") that obtains a mortgage or deed of trust against the Property shall be entitled to the following rights and privileges:

(a) Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

(b) The Mortgagee of any mortgage or deed of trust encumbering the Property, or any part thereof, for which Mortgagee has submitted a request in writing to City in the manner specified herein for giving notices, may request to receive written notification from City of any Event of Default by Developer in the performance of Developer's obligations under this Agreement.

(c) If City receives a timely request from a Mortgagee requesting a copy of any notice of an Event of Default given to Developer under the terms of this Agreement, City shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of Event of Default to Developer. The Mortgagee shall have the right, but not the obligation, to cure the Event of Default during the remaining cure period allowed to Developer under this Agreement.

(d) Any Mortgagee who comes into possession of the Property, or any part thereof, by any means, whether pursuant to foreclosure of the mortgage, deed of trust, or deed in lieu of such foreclosure or otherwise, shall take the Property, or part thereof, subject to the terms of this Agreement; provided, however, notwithstanding anything to the contrary above, any Mortgagee, or successor or assign of such Mortgagee, who becomes an owner of the Property through foreclosure shall not be obligated to pay any fees or construct or complete the construction of any improvements, unless such owner desires to continue Development of the Property consistent with this Agreement and the Entitlements, in which case the owner by foreclosure shall assume the obligations of Developer hereunder in a form acceptable to City.

(e) The foregoing limitation on Mortgagees and owners by foreclosure shall not restrict City's ability pursuant to Section 9 of this Agreement to specifically enforce against such Mortgagees or owners any dedication requirements under this Agreement or dedication requirements under any conditions of any other Entitlements.

26. Priority of Enactment. In the event of conflict between this Development Agreement and the Entitlements, this Development Agreement is controlling, and the Parties will meet and confer in good faith to amend the Entitlements accordingly.

27. Form of Agreement; Recordation; Exhibits. This Agreement shall be deemed "entered into" for purposes of Government Code section 65868.5 as of the date of execution by the City and the City will record this Agreement and any subsequent amendment to this Agreement, with the County Recorder within ten (10) days as required by Government Code section 65868.5. In the event that Developer fails to meet the requirements of Section 4.1.1, the Developer shall sign and City will record documentation prepared by the City to evidence termination of this Agreement. City will also record any termination of this Agreement, including any parts or provisions of this Agreement, except when this Development Agreement automatically terminates due to the expiration of the Term of this Agreement. Any amendment or termination of this Development Agreement that affects less than all of the Property must describe the portion of the property that is the subject of the amendment or termination. This Agreement is executed in three duplicate originals, each of which is deemed to be an original. This Agreement consists of __ pages and __ exhibits, which constitute the entire understanding and agreement of the Parties.

28. City Manager Authorization. The City of Rancho Cordova, a municipal corporation, has authorized this Development Agreement to be executed in duplicate by its City Manager and attested to by its City Clerk under the authority of Ordinance No. _____adopted by the Council of the City on the __ day of , 2021, and has caused this Agreement to be executed.

"CITY"

CITY OF RANCHO CORDOVA,
a municipal corporation

By: _____

Name: Cyrus Abhar

Its: City Manager

Date: _____

"DEVELOPER"

TDW Enterprises LP,
a California limited partnership

By: Brothers R.P. LLC,
a California limited liability company,
its General Partner

By: _____
Name: Thomas P. Winn
Its: Manager

Date: _____

Winn Development II, LLC,
a California limited liability company

By: _____
David L. Winn, Manager

ATTEST:

_____
City Clerk

Date: _____

APPROVED AS TO FORM:

_____
Adam U. Lindgren
City Attorney

Date: _____

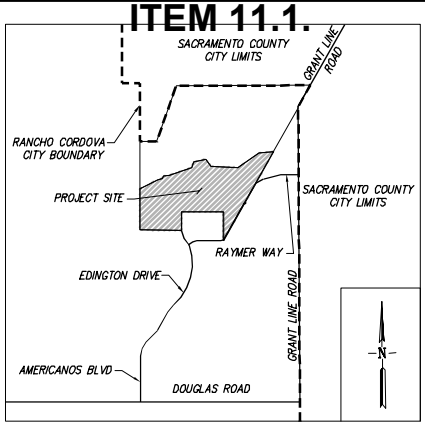
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EXHIBIT LIST

Exhibit A:	Map of the Property
Exhibit A-1	Legal Description of the Property
Exhibit B-1:	Legal Description of the TDW Property
Exhibit B-2:	Map Depicting the TDW Property
Exhibit C-1:	Legal Description of the Whitlow Property
Exhibit C-2:	Map Depicting the Whitlow Property
Exhibit D-1:	Legal Description of the Divine Property
Exhibit D-2:	Map Depicting the Divine Property
Exhibit E:	Map Depicting Park Land Dedication
Exhibit F:	Map Depicting Open Space Dedication
Exhibit G:	Infrastructure Phasing Plan
Exhibit H:	Form of Assignment and Assumption Agreement

EXHIBIT A
MAP OF THE PROPERTY

ITEM 11.1.



VICINITY MAP
NTS

WHITLOW AND DHILLON
APN 072-0300-005
PARCEL 3
29 PM 28

DAVID AND ALAINA FAMILY
1985 REVOCABLE TRUST
APN 072-0300-002
PARCEL 6
29 PM 28

TDW ENTERPRISES LP
20121214-0851
APNS 073-0010-010
AND 073-0010-011
PORTION OF TRACT 3
12 RS 27

PORTION OF PARCEL 3 (APN 072-0300-005)
PORTION OF PARCEL 6 (APN 072-0300-002)
PORTION OF TRACT 3 (APN'S 072-0010-010
072-0010-011)

TOTAL ACREAGE= 98.9±

N

THE PRESERVE

EXHIBIT A (PROPERTY)

CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

SCALE:	DATE:	JOB NO.:
1" = 500'	10-22-2021	165018

G:\JOB2016\165018\TENT-MAP\EXHIBIT\D.A. EXHIBITS\D.A. EXHIBIT A-1.DWG 10/22/2021 10:54:16 AM RON MCGLUMPHY

EXHIBIT A-1
LEGAL DESCRIPTION OF THE PROPERTY

EXHIBIT A-1

LEGAL DESCRIPTION

Real property situate in the City of Rancho Cordova, County of Sacramento, State of California and being a portion of Parcel 3 as shown on that certain Parcel Map recorded December 16, 1976 in Book 29 of Parcel Maps at Page 28, Sacramento County Records, and being more particularly described as follows:

Beginning at the southwest corner of said Parcel 3, thence along the west line of Parcel 3, North 00° 55' 35" West – 1114.01 feet, thence leaving said west line of Parcel 3 for the following sixteen (16) courses:

1) North 62° 13' 01" East - 545.41 feet;
2) North 78° 00' 42" East - 122.26 feet;
3) North 26° 12' 33" East - 79.12 feet;
4) North 78° 27' 05" East - 154.52 feet;
5) North 69° 47' 56" East - 354.95 feet;
6) North 70° 44' 08" East - 283.92 feet;
7) North 12° 50' 01" East - 154.97 feet;
8) North 76° 22' 02" East - 340.74 feet;
9) South 36° 00' 57" East - 246.16 feet;
10) South 89° 34' 20" East – 729.30 feet;
11) North 54° 11' 29" East - 691.87 feet;
12) North 84° 38' 07" East - 410.52 feet;
13) South 28° 36' 41" West - 2753.19 feet;
14) North 00° 56' 05" West - 769.24 feet;
15) South 89° 04' 52" West - 1128.90 feet;
16) South 00° 55' 48" East - 498.05 feet to the southerly line of said Parcel 3;

thence South 89° 05' 59" West - 1129.50 feet to the **Point of Beginning.**

Containing 98.915 acres of land area, more or less.

EXHIBIT B-1
LEGAL DESCRIPTION OF THE TDW PROPERTY

EXHIBIT B-1

LEGAL DESCRIPTION

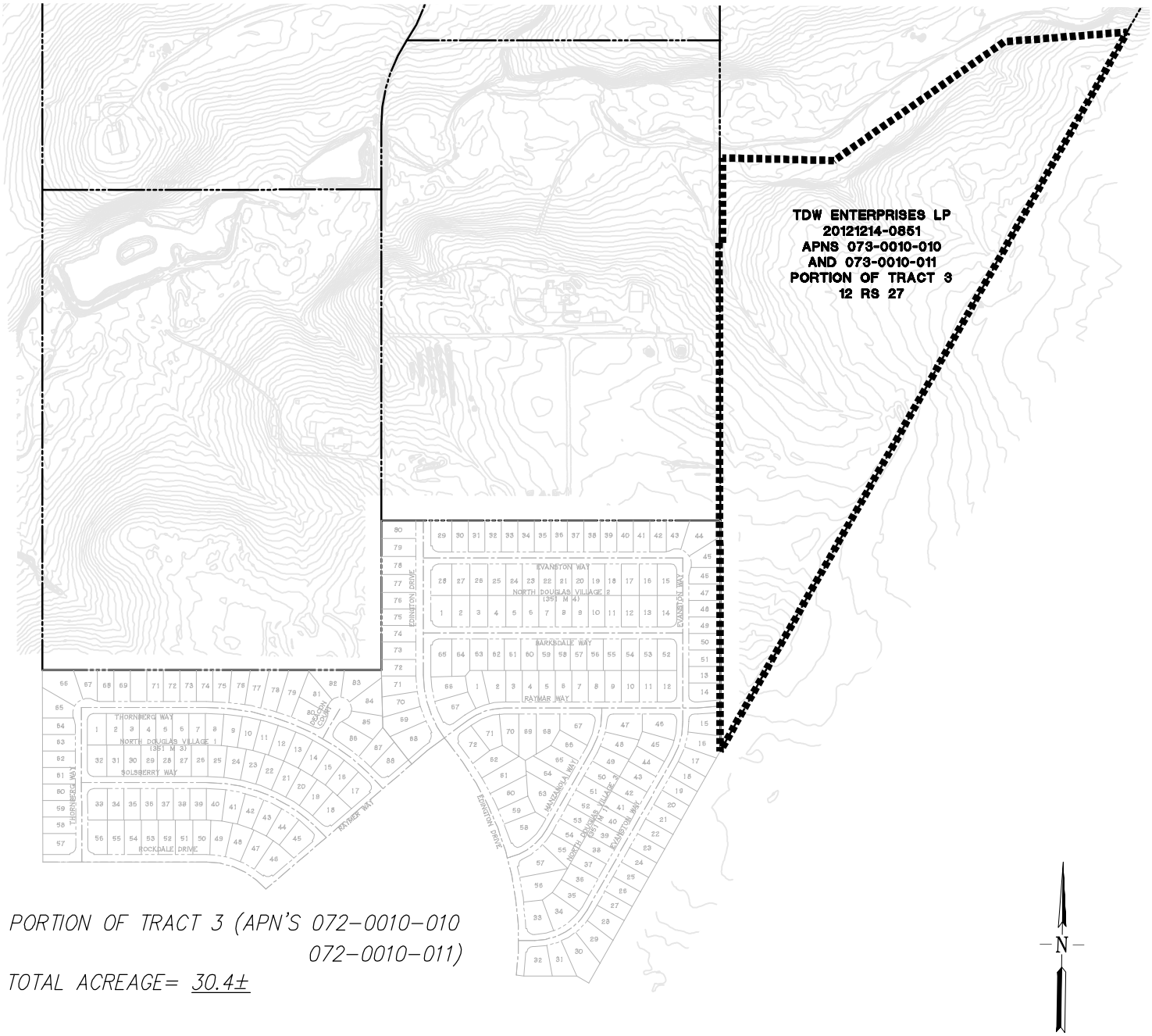
Real property situate in the City of Rancho Cordova, County of Sacramento, State of California and being a portion of the Tract 3 as shown on the Plat of Survey of Property of John B Haase, et al, in Rancho Rio De Los Americanos recorded September 11, 1928 in Book 3 of Surveys, Map No 21, Sacramento County Records, and being more particularly described as follows:

Beginning at the southeast corner of Parcel 6, as shown on that certain Parcel Map recorded December 16, 1976 in Book 29 of Parcel Maps at Page 28, Sacramento County Records thence North 00° 55' 13" West – 1207.67 feet, thence for the following five (5) courses:

1) South 89° 34' 20" East - 380.54 feet;
2) North 54° 11' 29" East - 691.87 feet;
3) North 84° 38' 07" East - 410.52 feet;
4) South 28° 36' 41" West - 2753.19 feet;
5) North 00° 56' 05" West - 769.24 feet to the **Point of Beginning**.

Containing 30.487 acres of land area, more or less.

EXHIBIT B-2
MAP DEPICTING THE TDW PROPERTY



PORTION OF TRACT 3 (APN'S 072-0010-010
072-0010-011)

TOTAL ACREAGE= 30.4±

THE PRESERVE

EXHIBIT B-2 (TDW PROPERTY)

CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

SCALE:	DATE:	JOB NO.:
1" = 500'	10-22-2021	165018

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EXHIBIT C-1
LEGAL DESCRIPTION OF THE WHITLOW PROPERTY

EXHIBIT C-1

LEGAL DESCRIPTION

Real property situate in the City of Rancho Cordova, County of Sacramento, State of California and being a portion of Parcel 3 as shown on that certain Parcel Map recorded December 16, 1976 in Book 29 of Parcel Maps at Page 28, Sacramento County Records, and being more particularly described as follows:

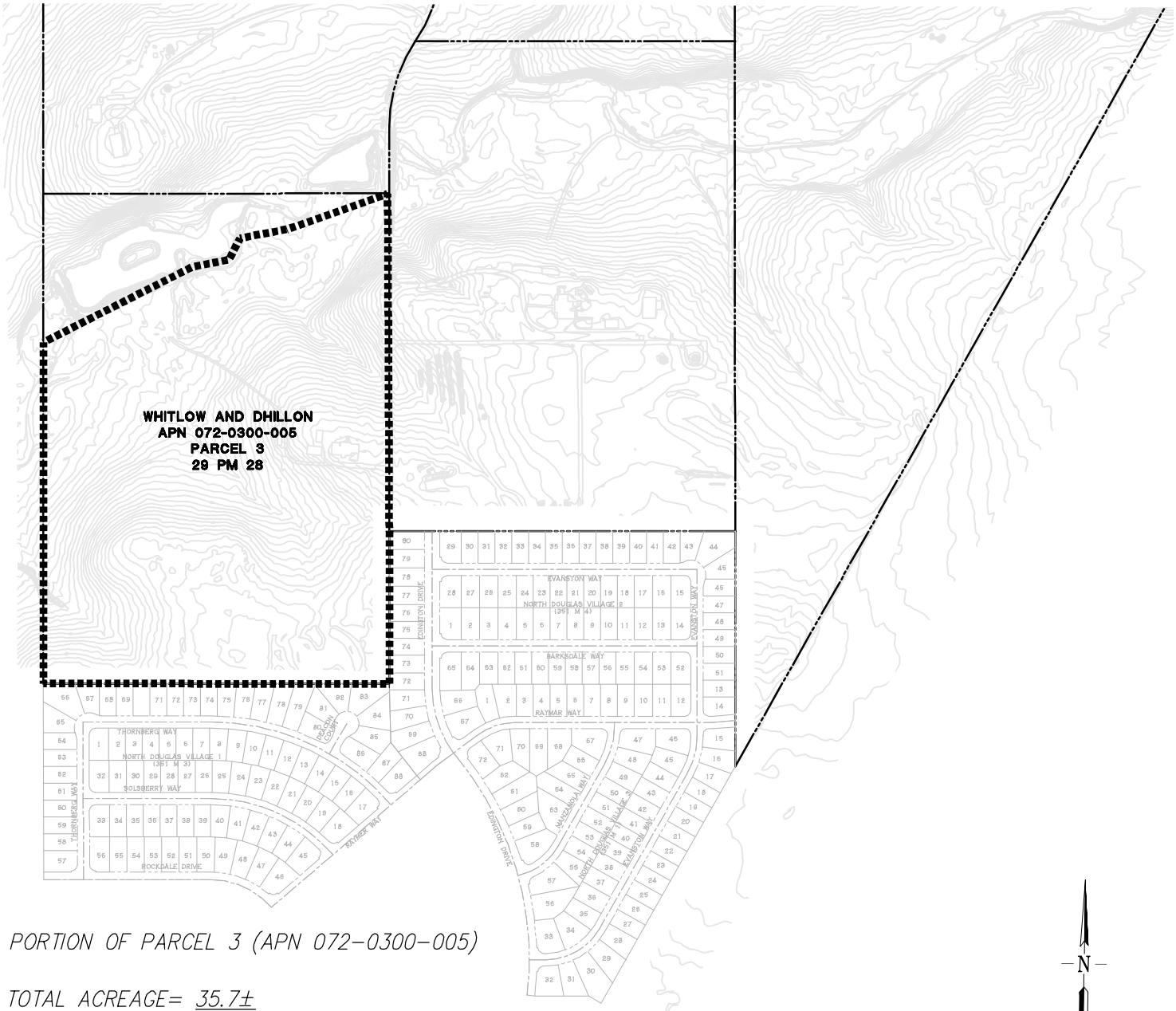
Beginning at the southwest corner of said Parcel 3, thence along the west line of Parcel 3, North 00° 55' 35" West – 1114.01 feet, thence leaving said west line of Parcel 3 for the following eight (8) courses:

1) North 62° 13' 01" East - 545.41 feet;
2) North 78° 00' 42" East - 122.26 feet;
3) North 26° 12' 33" East - 79.12 feet;
4) North 78° 27' 05" East - 154.52 feet;
5) North 69° 47' 56" East - 354.95 feet;
6) South 00° 55' 15" East - 342.45 feet;
7) South 00° 55' 15" East - 759.94 feet;
8) South 00° 55' 48" East - 498.05 feet to the southerly line of said Parcel 3;

thence South 89° 05' 59" West - 1129.50 feet to the **Point of Beginning.**

Containing 35.755 acres of land area, more or less.

EXHIBIT C-2
MAP DEPICTING THE WHITLOW PROPERTY



PORTION OF PARCEL 3 (APN 072-0300-005)

TOTAL ACREAGE= 35.7±

THE PRESERVE

EXHIBIT C-2 (WHITLOW PROPERTY)

CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

SCALE:	DATE:	JOB NO.:
1" = 500'	10-22-2021	165018

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EXHIBIT D-1
LEGAL DESCRIPTION OF THE DIVINE PROPERTY

EXHIBIT D-1

LEGAL DESCRIPTION

Real property situate in the City of Rancho Cordova, County of Sacramento, State of California and being a portion of Parcel 6 as shown on that certain Parcel Map recorded December 16, 1976 in Book 29 of Parcel Maps at Page 28, Sacramento County Records, and being more particularly described as follows:

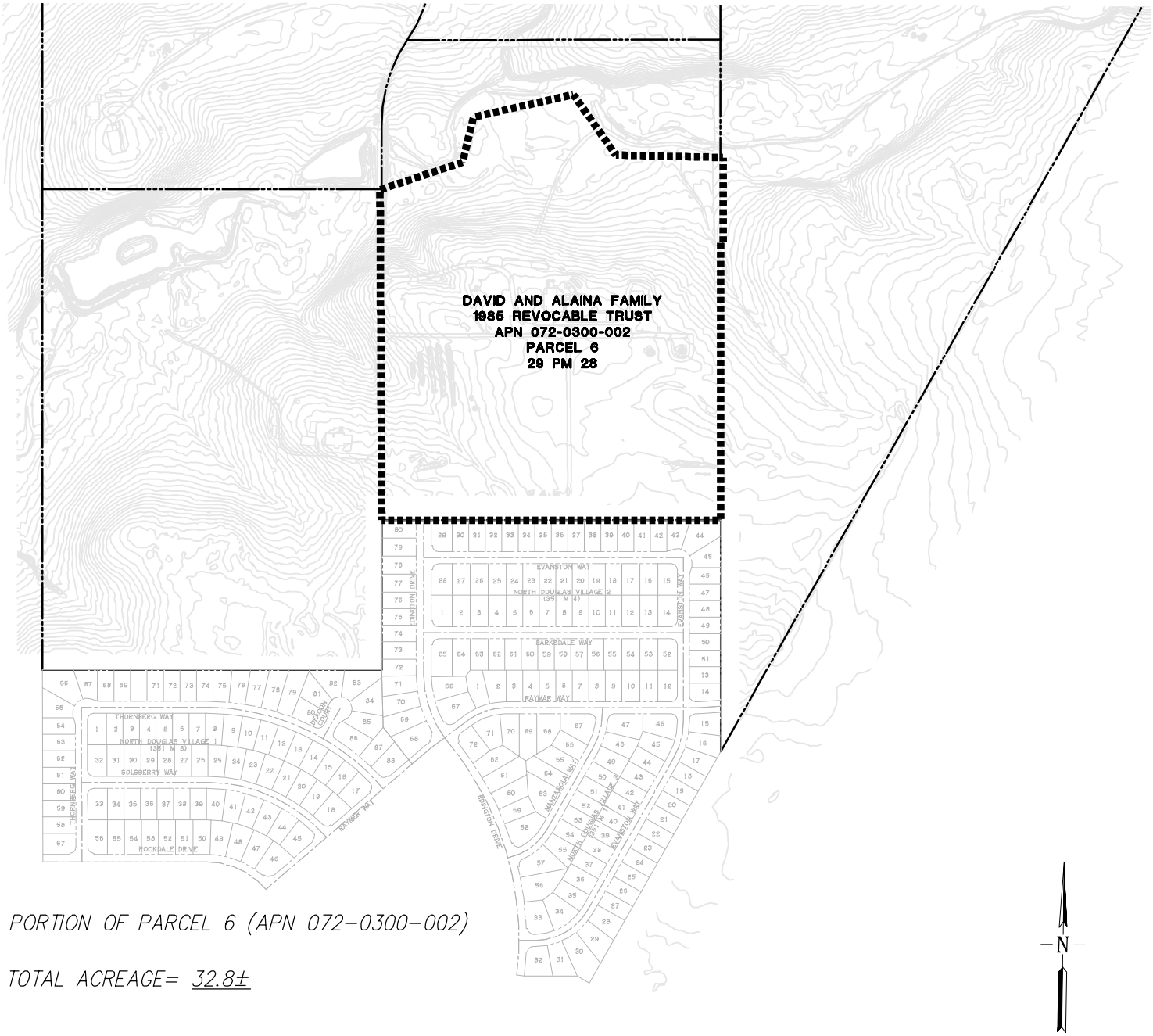
Beginning at the southeast corner of said Parcel 6, thence along the south line of Parcel 6, South 89° 04' 52" West - 1128.90 feet, thence for the following nine (9) courses:

1) North 00° 55' 15" West - 1102.39 feet;
2) North 70° 44' 08" East - 283.92 feet;
3) North 12° 50' 01" East - 154.97 feet;
4) North 76° 22' 02" East - 340.74 feet;
5) South 36° 00' 57" East - 246.16 feet;
6) South 89° 34' 20" East - 348.76 feet to the easterly line of Parcel 6;

thence along said easterly line South 00° 55' 13" East - 1207.67 feet to the **Point of Beginning.**

Containing 32.673 acres of land area, more or less.

EXHIBIT D-2
MAP DEPICTING THE DIVINE PROPERTY



PORTION OF PARCEL 6 (APN 072-0300-002)

TOTAL ACREAGE= 32.8±

THE PRESERVE

EXHIBIT D-2 (DIVINE PROPERTY)

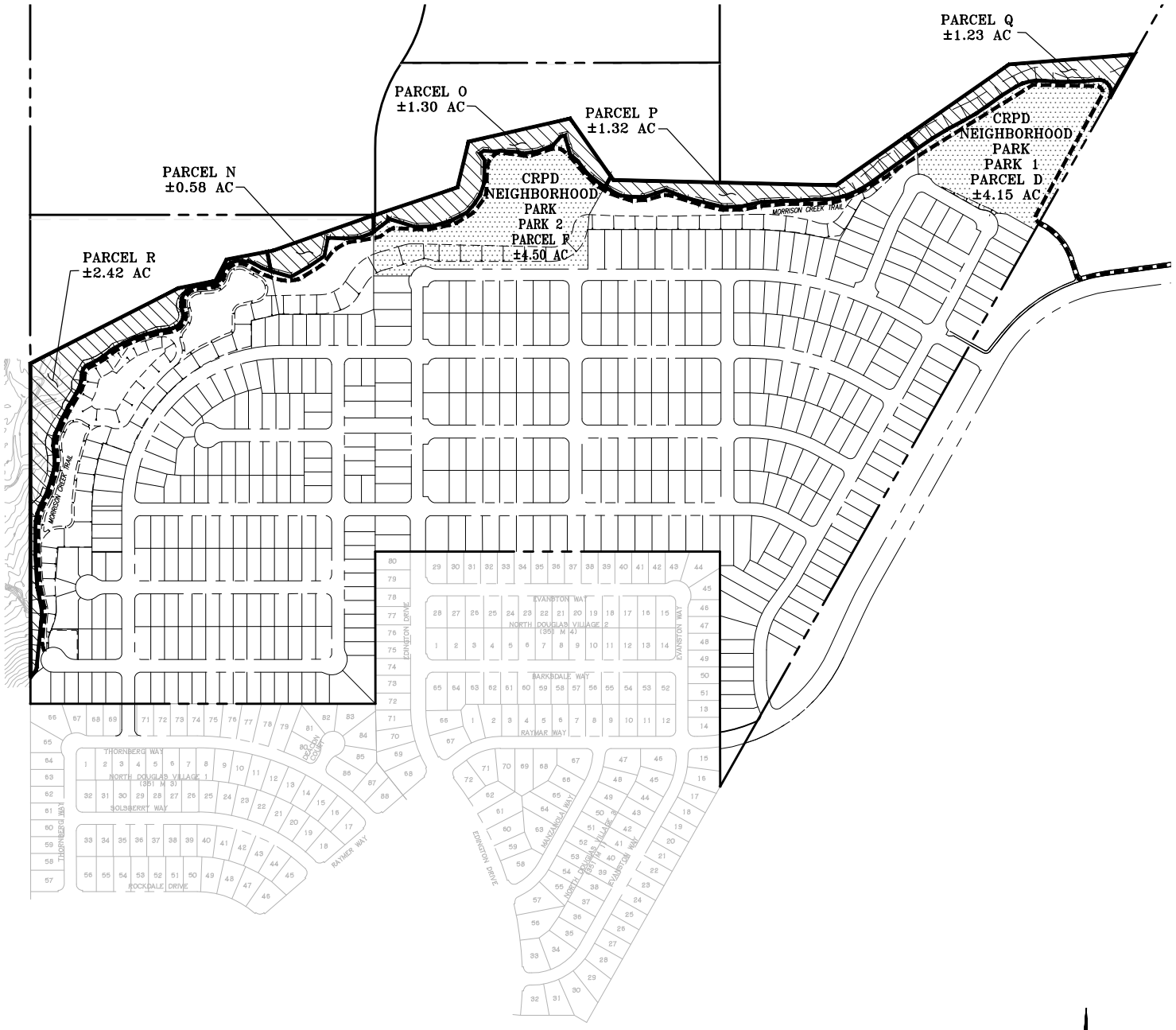
CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

SCALE:	DATE:	JOB NO.:
1" = 500'	10-22-2021	165018

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EXHIBIT E
MAP DEPICTING PARK LAND DEDICATION



CRPD NEIGHBORHOD PARKS (TOTAL ACREAGE=8.65±)

BUFFER PARCELS (N,O,P,Q,R) 6.85± AC TOTAL
(BUFFER PARCELS ARE NOT INCLUDED IN PARK LAND DEDICATION)

N

THE PRESERVE

EXHIBIT E - (CRPD NEIGHBORHOOD PARKS)

CITY OF RANCHO CORDOVA, CALIFORNIA

RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

SCALE:	DATE:	JOB NO.:
1" = 500'	3-23-2022	165018

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EXHIBIT F
MAP DEPICTING OPEN SPACE DEDICATION



GREEN INFRASTRUCTURE 6.23±AC
COMMUNITY PLACES 3.99±AC

TOTAL ACREAGE= 10.22±

THE PRESERVE

EXHIBIT F - OPEN SPACE (GREEN INFRASTRUCTURE) & (COMMUNITY PLACES)

CITY OF RANCHO CORDOVA, CALIFORNIA

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RUGGERI-JENSEN-AZAR
ENGINEERS ▪ PLANNERS ▪ SURVEYORS
4690 CHABOT DRIVE, SUITE 200 PLEASANTON, CA 94588
PHONE: (925) 227-9100 FAX: (925) 227-9300

SCALE:	DATE:	JOB NO.:
1" = 500'	3-10-2022	165018

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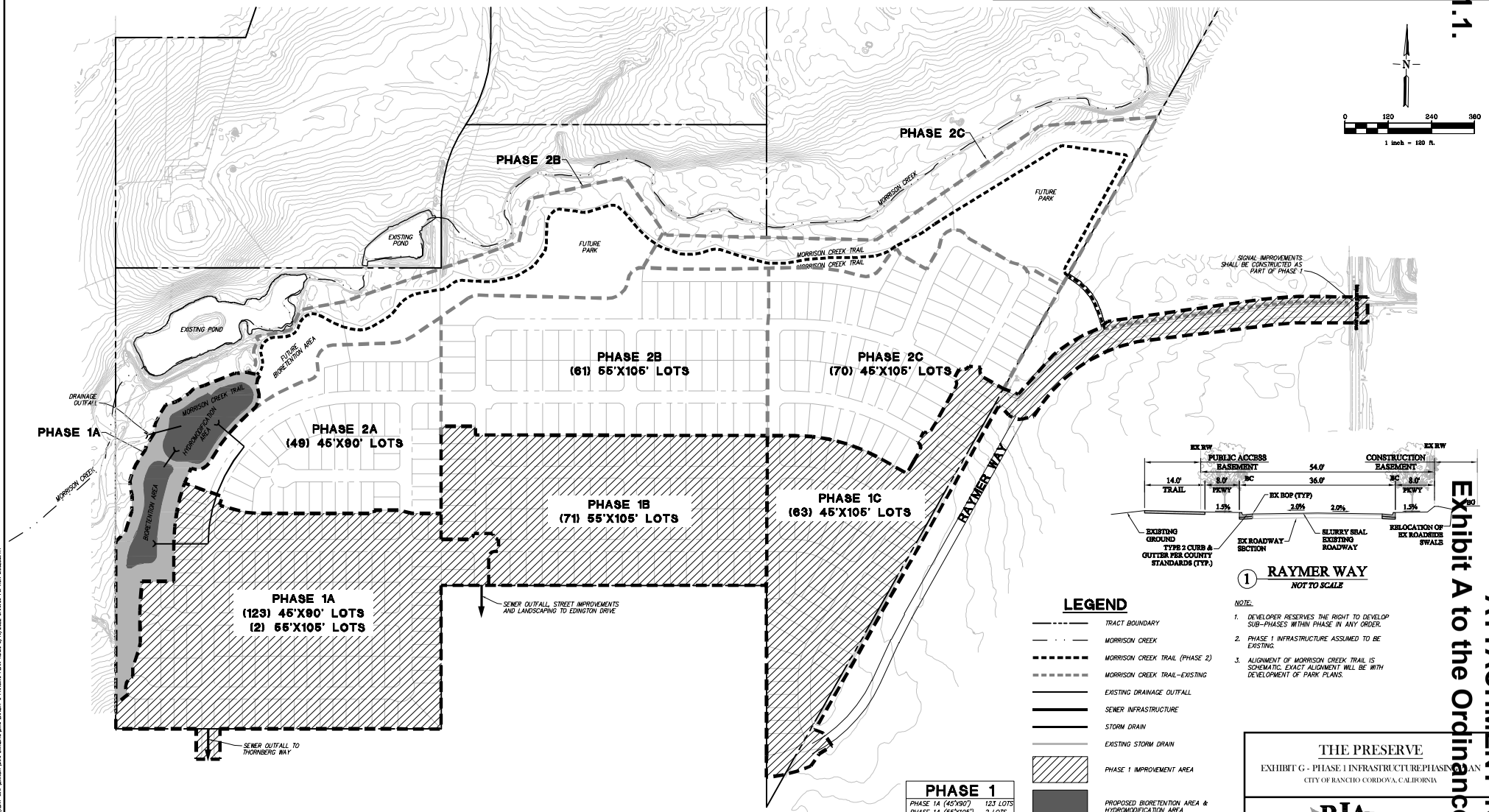
EXHIBIT G
INFRASTRUCTURE PHASING PLAN

THE PRESERVE

EXHIBIT G - PHASE 1 INFRASTRUCTURE PHASING PLAN

CITY OF RANCHO CORDOVA, CALIFORNIA

INFRASTRUCTURE TIMING NOTE:
PRIOR TO ISSUANCE OF THE FIRST BUILDING PERMIT WITHIN A PHASE: A CONTRACT SHALL BE LET AND CONSTRUCTION SHALL BE UNDERTAKEN FOR ALL STREETS, TRAILS, DRAINAGE INFRASTRUCTURE, LANDSCAPING, ASSOCIATED IMPROVEMENTS SHOWN ON THE PHASING PLAN AND ALL STREETS NECESSARY FOR ACCESS TO THE PROPOSED HOMES TO THE SATISFACTION OF THE PUBLIC WORKS DEPARTMENT. PRIOR TO FIRST OCCUPANCY WITHIN A PHASE: ALL ABOVE IMPROVEMENTS SHALL BE FULLY CONSTRUCTED AND COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER.



1 RAYMER WAY
NOT TO SCALE

LEGEND

- TRACT BOUNDARY
- MORRISON CREEK
- MORRISON CREEK TRAIL (PHASE 2)
- MORRISON CREEK TRAIL–EXISTING
- EXISTING DRAINAGE OUTFALL
- SEWER INFRASTRUCTURE
- STORM DRAIN
- EXISTING STORM DRAIN
- PHASE 1 IMPROVEMENT AREA
- PROPOSED BIORETENTION AREA & HYDROMODIFICATION AREA
- OPEN SPACE

NOTE:

1. DEVELOPER RESERVES THE RIGHT TO DEVELOP SUB-PHASES WITHIN PHASE IN ANY ORDER.
2. PHASE 1 INFRASTRUCTURE ASSUMED TO BE EXISTING.
3. ALIGNMENT OF MORRISON CREEK TRAIL IS SCHEMATIC. EXACT ALIGNMENT WILL BE WITH DEVELOPMENT OF PARK PLANS.

PHASE 1	
PHASE 1A (45'X90')	123 LOTS
PHASE 1A (55'X105')	2 LOTS
PHASE 1B (55'X105')	73 LOTS
PHASE 1C (45'X105')	63 LOTS

THE PRESERVE
EXHIBIT G - PHASE 1 INFRASTRUCTURE PHASING PLAN
CITY OF RANCHO CORDOVA, CALIFORNIA

RJA
RUGGERI-JENSEN-AZAR
ENGINEERS • PLANNERS • SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 1 OF 2
JOB NO. 165018
MARCH 10, 2022

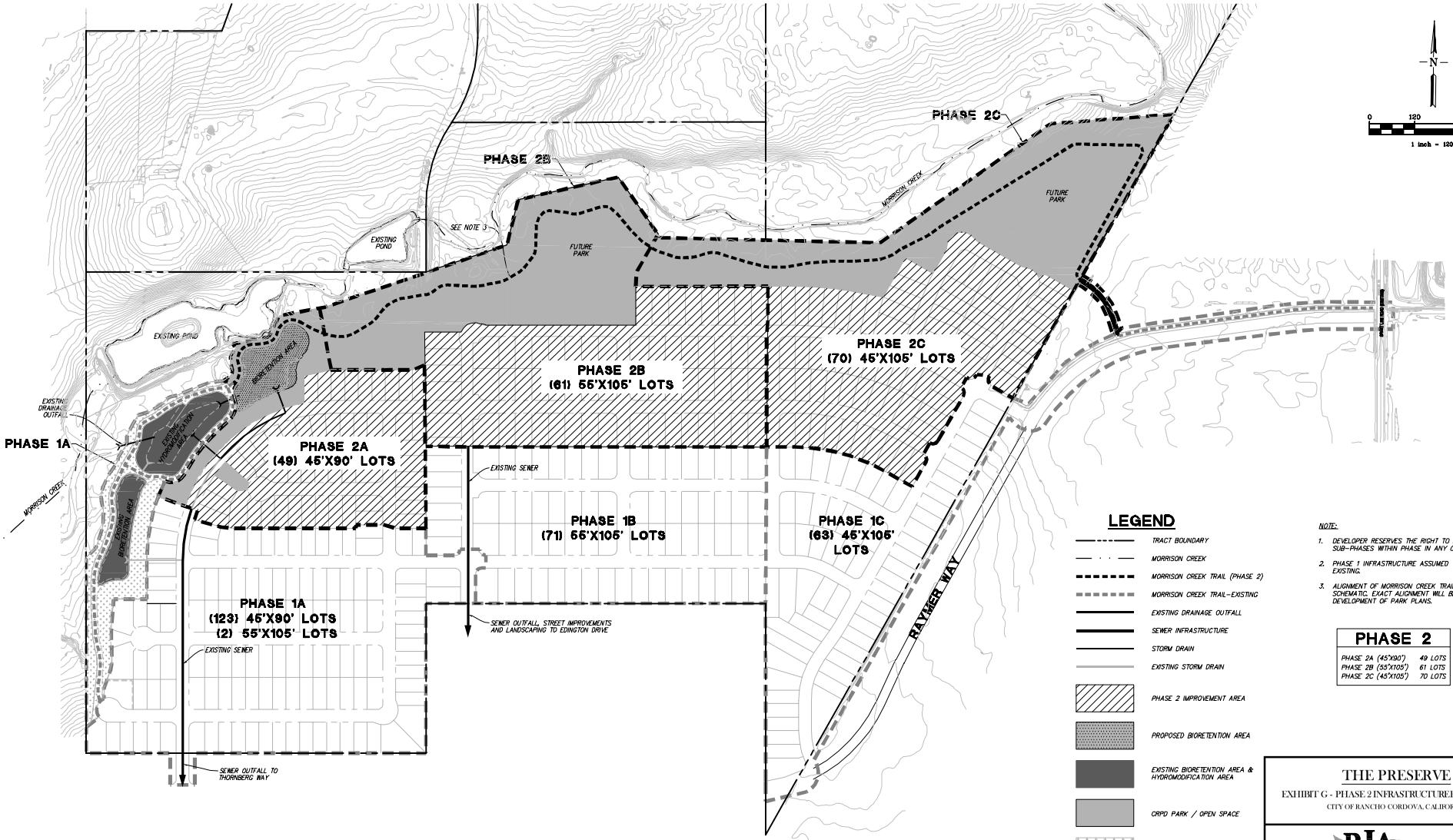
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THE PRESERVE

EXHIBIT G - PHASE 2 INFRASTRUCTURE PHASING PLAN

CITY OF RANCHO CORDOVA, CALIFORNIA

INFRASTRUCTURE TIMING NOTE:
PRIOR TO ISSUANCE OF THE FIRST BUILDING PERMIT WITHIN A PHASE: A CONTRACT SHALL BE LET AND CONSTRUCTION SHALL BE UNDERTAKEN FOR ALL STREETS, TRAILS, DRAINAGE INFRASTRUCTURE, LANDSCAPING, ASSOCIATED IMPROVEMENTS SHOWN ON THE PHASING PLAN AND ALL STREETS NECESSARY FOR ACCESS TO THE PROPOSED HOMES TO THE SATISFACTION OF THE PUBLIC WORKS DEPARTMENT. PRIOR TO FIRST OCCUPANCY WITHIN A PHASE: ALL ABOVE IMPROVEMENTS SHALL BE FULLY CONSTRUCTED AND COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER.



LEGEND

- TRACT BOUNDARY
- MORRISON CREEK
- MORRISON CREEK TRAIL (PHASE 2)
- MORRISON CREEK TRAIL-EXISTING
- EXISTING DRAINAGE OUTFALL
- SEWER INFRASTRUCTURE
- STORM DRAIN
- EXISTING STORM DRAIN
- PHASE 2 IMPROVEMENT AREA
- PROPOSED BIORETENTION AREA
- EXISTING BIORETENTION AREA & HYDROMODIFICATION AREA
- CRPD PARK / OPEN SPACE
- EXISTING OPEN SPACE

NOTE:

1. DEVELOPER RESERVES THE RIGHT TO DEVELOP SUB-PHASES WITHIN PHASE IN ANY ORDER.
2. PHASE 1 INFRASTRUCTURE ASSUMED TO BE EXISTING.
3. ALIGNMENT OF MORRISON CREEK TRAIL IS SCHEMATIC. EXACT ALIGNMENT WILL BE WITH DEVELOPMENT OF PARK PLANS.

PHASE 2	
PHASE 2A (45'X90')	49 LOTS
PHASE 2B (55'X105')	61 LOTS
PHASE 2C (45'X105')	70 LOTS

THE PRESERVE
EXHIBIT G - PHASE 2 INFRASTRUCTURE PHASING PLAN
CITY OF RANCHO CORDOVA, CALIFORNIA

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ENGINEERS • PLANNERS • SURVEYORS
2541 WARREN DRIVE, SUITE 100 ROCKLIN, CA 95677
PHONE: (916) 630-8900 FAX: (916) 630-8909

SHEET 2 OF 2
JOB NO. 165018
MARCH 10, 2022

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EXHIBIT H
FORM OF ASSIGNMENT AND ASSUMPTION AGREEMENT

EXHIBIT H
FORM OF ASSIGNMENT AND ASSUMPTION AGREEMENT

ASSIGNMENT AND ASSUMPTION AGREEMENT
RELATIVE TO _____

THIS ASSIGNMENT AND ASSUMPTION AGREEMENT (hereinafter, the "Agreement") is entered into this _____ day of _____ 20__, by and between _____, a _____ (“Developer”), and _____, a _____ ("Assignee").

RECITALS

On _____, 2022, the City of Rancho Cordova and TDW Enterprises, LP, a California Limited Partnership (“TDW”) and Winn Development II, LLC (“Winn Development”) (TDW and Winn Development II are collectively referred to as “Developer”) entered into that certain agreement entitled "Development Agreement relative to the Preserve Project” ("Development Agreement"). Pursuant to the Development Agreement, Developer agreed to develop certain property more particularly described in the Development Agreement ("Property"), subject to certain conditions and obligations as set forth in the Development Agreement. The Development Agreement was recorded against the Property in the Official Records of Sacramento County on _____, 2022, as Instrument No. 2022-_____.

Developer intends to convey a portion of the Property to Assignee, commonly referred to as Parcel(s) _____, and more particularly identified and described in Exhibit A, attached hereto and incorporated herein by this reference (hereinafter the "Assigned Parcel").

Developer desires to assign and Assignee desires to assume all of Developer’s rights, title, interest, burdens and obligations under the Development Agreement with respect to and as related to the Assigned Parcel.

ASSIGNMENT AND ASSUMPTION

NOW, THEREFORE, Developer and Assignee hereby agree as follows:

Developer hereby assigns, effective as of Developer's conveyance of the Assigned Parcel to Assignee, all of the rights, title, interest, burdens and obligations of Developer under the Development Agreement with respect to the Assigned Parcel. Developer retains all the rights, title, interest, burdens and obligations under the Development Agreement with respect to all other property within the Property owned by Developer.

Assignee hereby assumes all of the rights, title, interest, burdens and obligations of Developer under the Development Agreement with respect to the Assigned Parcel, and agrees to observe and fully perform all of the duties and obligations of Developer under the Development Agreement with respect to the Assigned Parcel. The parties intend hereby that, upon the execution of this Agreement and conveyance of the Assigned Parcel to Assignee, Assignee shall become substituted for Developer as the "Developer " under the Development Agreement with

respect to the Assigned Parcel and Developer shall be released of and from any obligations or liabilities under the Development Agreement with respect to the Assigned Parcel.

All of the covenants, terms and conditions set forth herein shall be binding upon and shall inure to the benefit of the parties hereto and their respective heirs, successors and assigns.

The Notice address described in Section 23 of the Development Agreement for the Assignee with respect to the Assigned Parcel shall be:

_____
_____
_____
Attn: _____

IN WITNESS HEREOF, the parties hereto have executed this Agreement as of the day and year first above written. This Agreement may be signed in identical counterparts.

DEVELOPER:	ASSIGNEE:
_____,	_____,
a _____	a _____
By: _____	By: _____
Print Name: _____	Print Name: _____
Title: _____	Title: _____

MEMORANDUM

ITEM 12.1.

DATE: April 4, 2022

TO: Honorable Mayor and Council Members

FROM: Stacy Delaney, Community Enhancement and Investment Senior Management Analyst

SUBJECT: **UPDATE ON FISCAL YEAR 2022/23 COMMUNITY ENHANCEMENT & INVESTMENT FUND APPLICATIONS RECEIVED FOR COUNCIL CONSIDERATION**

RECOMMENDATION

Staff to introduce and provide an update on the Fiscal Year 2022/23 Community Enhancement & Investment Fund grant applications received for Council consideration.

RESULT OF RECOMMENDED ACTION

City Council will receive a summary of Community Enhancement & Investment Fund grant applications, copies of applications and supplemental documents received for Council consideration. Staff will return with an update on April 18, 2022 and provide the Council with an adjusted summary of the grant applications received, including evaluation of each application for compliance with the established criteria and an overall recommendation. Additionally, a summary of internally led initiatives and the Legacy Fund allocation will be included.

BACKGROUND

The application period for the Fiscal Year 2022/23 Community Enhancement & Investment Fund opened on February 7, 2022 and closed on March 18, 2022. During this time, we received 94 grant applications. One application was withdrawn, leaving 93 for consideration.

Staff is in the process of reviewing each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/23 Grant Application Process and Criteria document. While uncertainties about the COIVD-19 pandemic continue, and while California has moved past its "Blueprint for a Safer Economy", there may be future state and/or Sacramento County actions and/or orders which may restrict or prohibit certain activities from happening due to responses to the pandemic.

This information is being monitored closely to provide the best recommendation possible.

FISCAL IMPACT AND FUNDING SOURCE

The latest projection, shows that Measure H will provide approximately $11.4 million in revenue in Fiscal Year 2022/23. It is anticipated that the Community Enhancement & Investment Fund

process will run concurrent with the City's budget process with adoption planned in June of 2022.

ATTACHMENT(S)

1. April 4, 2022 Community Enhancement and Investment Fund PowerPoint
2. Community Enhancement and Investment Fund Application Matrix
3. FY 2022 2023 CEIF Grant Applications Binder



Community Enhancement & Investment Fund

April 4, 2022

CityOfRanchoCordova.org

CITY OF RANCHO CORDOVA
COMMUNITY ENHANCEMENT & INVESTMENT FUND

Agenda

Initial Update on the Grant Applications

- Overview
- Budget Update
- Applications Received



OVERVIEW

COMMUNITY ENHANCEMENT & INVESTMENT FUND

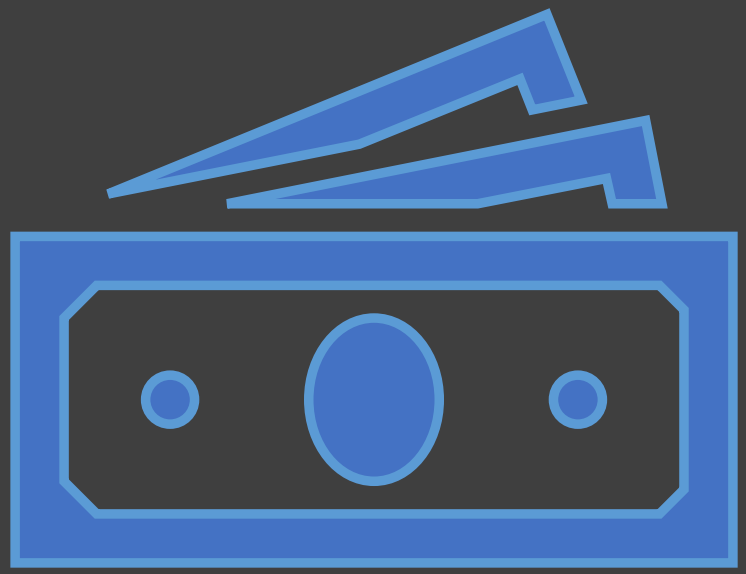
CITY OF
COMMUNITY ENHANCEMENT
& INVESTMENT FUND
RANCHO CORDOVA

Revenue Forecast

FY 2021/22 Approved Budget: $10 million

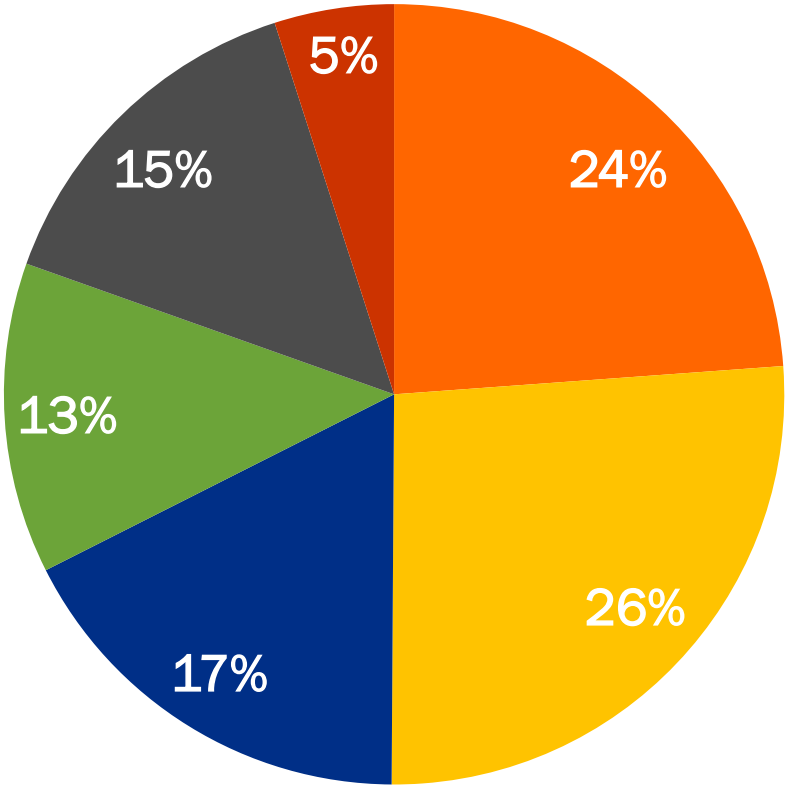
- Current forecast for FY 2021/22 is $11.2 million

FY 2022/23 Estimated Budget: $11.4 million



Allocation by Key Community Priority FY 2021/22

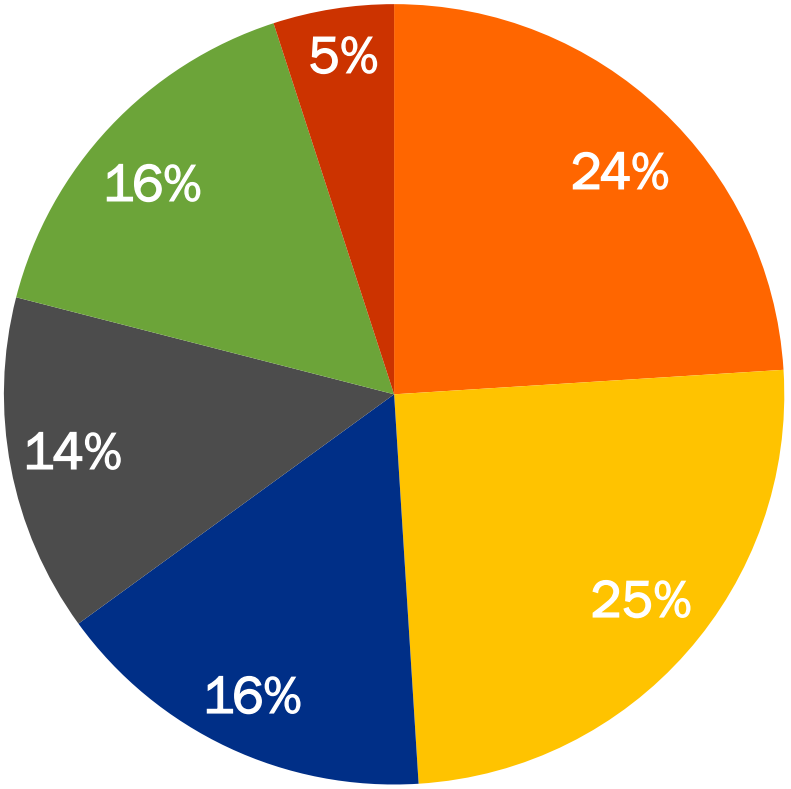
- Legacy Fund
- Community Grants
  (Roll-up of Arts, Sports, Education, Other, etc.)
- Public Safety
- Public Works
- Community & Economic Development
- Administration & Communications



Based on the $10 million Approved budget

Tentative Allocation by Key Community Priority FY 2022/23

- Legacy Fund
- Community Grants
  (Roll-up of Arts, Sports, Education, Other, etc.)
- Public Safety
- Community & Economic Development
- Public Works
- Administration & Communications



Based on the projected $11.4 million budget

Budget Amounts

Funding Categories	Current Budget FY 2021/22	*Estimated Budget FY 2022/23*
Legacy Project Allocation	**2,407,000**	*2,736,000*
Community Grants *(FY 2022/23 recommendations will be shared starting 4/18)*	**2,650,374**	*2,850,000*
Public Safety	**1,761,839**	*1,824,000*
Infrastructure/Public Works	**1,300,000**	*1,824,000*
Community Development/Economic Development	**1,475,000**	*1,596,000*
Administration of Fund	**500,000**	*570,000*
Total	**$10,094,213**	*$11,400,000*

Applications Received

PLANNING FOR THE FUTURE



CITY OF
COMMUNITY ENHANCEMENT
& INVESTMENT FUND
RANCHO CORDOVA

Recap of Applications Received

Community Enhancement & Investment Fund grant applications were accepted from February 7, 2022, to March 18, 2022:

- 94 grant applications received, 1 withdrawn, leaving 93
- Totaling more than $10 million dollars
- Anticipate recommending $2.85 million dollars in community grant projects
- Recommendations will be presented starting at the April 18th City Council Meeting

Timeline to CEIF Budget Adoption

- Broad overview tonight
- **April 18 Regular Meeting** start the recommendations on the community grant applications, internal departments and legacy fund allocation, and any Council requested items for consideration
- **May 2 Regular Meeting** continue the review of community grant applications and any other sections as needed
- **May 16 Regular Meeting** make preliminary budget decisions by this date; no later than May 24th
- **June 6 Regular Meeting** adopt CEIF Resolution concurrent with the City's budget process



App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
1	Arts, Culture, History, Entertainment & Sports	Learning STEAM Let's Build a Light Sculpture!	This project proposes a semester-long program tailored for seventh and eight graders to teach them about methods and technology involved in the fabrication of an acrylic light sculptures. Each class session will be 60 to 90 minutes long and held once per week. The light sculpture will consist of 8 acrylic panels vertically attached to a 3D printed base. A row of LED lights embedded in the base below each panel will illuminate the panels through their edges, causing the patterns drawn or engraved on the panels to glow. The LEDs will be addressable, meaning that the color and brightness of each LED can be programmatically altered to allow for varying animated light patterns. The light patterns will be controlled by a smartphone connected to the art piece through a dedicated Wi-Fi connection on the phone. The students will build the sculpture during the final sessions of the semester and will see how the elements and technology learned throughout the semester will apply to the sculpture.	$ 11,180.00
2	Arts, Culture, History, Entertainment & Sports	Rancho Cordova River City Concert Band: Enhancements	This project would provide funds to the Rancho Cordova River City Concert Band (RCRCCB) for equipment, musical talent, and related expenses, thereby enhancing its potential to provide high-quality musical performance events in the City of Rancho Cordova and to equip the RCRCCB to represent the City of Rancho Cordova as musical ambassadors within the region. The goal of the volunteer-driven RCRCCB is to engage with and represent the community of Rancho Cordova with superior musical performances, foster musical interest among children, bring world-class guest artists, conductors and composers to the Rancho Cordova stage, and to provide performance opportunities for skilled community musicians.	$ 20,000.00
3	Arts, Culture, History, Entertainment & Sports	Nu Art Education: Theater Arts & SEL Integration Program at Williamson Elementary School	NorCal School of the Arts outreach program proposes to provide every classroom at Williamson Elementary School with 10 theatre arts and social-emotional learning (SEL) integrated classes as well as an after school production for students wanting to engage in further after school theatre arts programming. Grant funds provided by the City will enable NorCal School of the Arts to serve more than 500 students during school in the Fall of 2022. During the Spring of 2023, students will have the option to participate in an after-school program that will culminate in a fully-produced musical at the school. NorCal teaching artists are trained in weaving SEL strategies into theatre arts lessons. These classes will also act as a professional development opportunity for the Williamson Elementary classroom teachers to learn how to integrate SEL strategies through theatre arts. Teachers will have access to all the curriculum and Theatre/SEL-Integrated resources to continue the exercises once the program is completed.	$ 25,000.00
4	Arts, Culture, History, Entertainment & Sports	Little Glory and the Wamdemic! Education Through Story Telling	This project proposes to fund the illustration and publication of the book, Little Glory and the Wamdemic! It features multi-cultural characters, colorful illustrations, rhyming words, and humor. It also addresses water conservation and coping with depression and anger. It is a true story of how to make lemonade when life gives you lemons.	$ 5,000.00
5	Arts, Culture, History, Entertainment & Sports	Sacramento Performing Arts Conservancy: Cordova Youth Spotlight Orchestra Expansion	This proposed project builds on progress in 2021/22, the pilot year of the Cordova Youth Spotlight Orchestra (CYSO). It expands student membership from 24 to 32 students. It opens beginning strings to all elementary grades. Based on learnings from the pilot, this project increases the frequency of classes from once to twice a week and seeks funds to pay all student tuition and supplies. Twenty-four scholarship students completed one year of instruction: 11 in orchestra and 13 in beginning strings. These students want to continue developing their skills, and new students are needed to expand the orchestra by 30% to 32 members or more. This project extends the beginning strings class to all elementary grades with parent participation required for students in grades 1 through 3 and encouraged for grades 4 through 6. In 2021, almost half of the CYSO applicants were elementary students who had no experience playing a musical instrument. Sacramento Performing Arts Conservancy accommodated them by adding a beginning strings class. By the end of the year, four beginning students were promoted to the orchestra, and beginning strings students outnumbered orchestra students. Students will receive instruction twice a week for 34 weeks beginning in September 2022 and ending in May 2023. Like the pilot project, students will perform at least two concerts for the Rancho Cordova community. Additional mini concerts were held during the pilot project and are likely to be held again.	$ 22,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
6	Arts, Culture, History, Entertainment & Sports	Application Withdrawn	Application Withdrawn	$ -
7	Arts, Culture, History, Entertainment & Sports	Mandarins of Sacramento: Imperial Winds	Mandarins proposes to introduce “Imperial Winds”, a winter performing arts ensemble focusing on brass and woodwind instruments, to be based in Rancho Cordova. Winter Winds ensembles present an original show each year, approximately 8–10 minutes in length, and refine it throughout the winter season. Shows are performed and are judged in various musical and visual categories. Musical repertoires vary widely among corps and include symphonic, jazz, big band, contemporary, rock, wind band, vocal, rap, Broadway, and Latin music, among other genres. Winter Winds ensembles do not have any required instrumentation. In fact, there are purposely less regulations and restrictions against winds groups, in regard to instrumentation. These less stringent rules exist in order to encourage experimentation and freedom of expression. Winds groups also often incorporate percussion elements and guard elements into their performances, resulting in a unique mix of electric synergy. Imperial Winds will address a current need in the community – high schools in Rancho Cordova only offer winter percussion and winter guard programs and Sacramento State only offers an independent winter percussion group. It will be open to all interested woodwind and brass players between the ages of 16-23 years of age. Experience camps will be held in November and December during which students will have the opportunity to hone the musical skills and learn basic movements used in the performances. In January, any interested student is eligible to audition for the forty available competitive openings in the ensemble. The ensemble will continue to practice and perfect their music and visual performance as a team.	$ 20,050.00
8	Arts, Culture, History, Entertainment & Sports	Sacramento Theatre Company: After-School Musical Production and In-Class Theatre Arts	Sacramento Theatre Company teaching artists work alongside classroom teachers, and will introduce theatre arts integration concepts and techniques that will also enhance the teacher's ability to teach their students. This proposed program also engages parent and community participation with set building days, creating props and costumes, and helping with publicity. Decades of research demonstrates participation in theatre arts offers students a toolbox of fundamental skills that will enhance their ability to succeed in school and beyond. The benefits of theatre arts education for low-income children are especially profound. Specifically, studies have shown that theatre arts instruction and the creative process associated with theatre helps students to better succeed at school as they garner new ways of learning, creating, and focusing. This is a semester long-after-school theatre arts program. The project proposal includes professional development for the teachers in Theatre Arts Integration strategies for the classroom. In the 2021-2022 school year, STC was funded at White Rock Elementary School through a grant and funding would ensure their presence for another year. The program begins with theatre classes in every classroom for the purpose of engaging student interest in theatre arts prior to the start of the after-school program as well as to provide alternative arts integration methods to teach math, English and science through the arts to reach multiple learning styles.	$ 20,000.00
9	Arts, Culture, History, Entertainment & Sports	Western Swing Society: The “Swing Sweet Home” Project	The Western Swing Society (WSS) "Swing Sweet Home" Project is meant to engage the community of Rancho Cordova and nationwide about the preservation of Western Swing music, traditional dance, and history. The goal is to expand the outreach further into Rancho Cordova by posting monthly concerts from their dancehall in Rancho Cordova and post so others can see the activities going on in the heart of Rancho Cordova. Dances are held every 1st Sunday of the month that showcase a featured guest band, the house band, and are enjoyed by dancers who take to the dance floor. Recording live performances from the dances of classic tunes and making them available online for the community to enjoy is the purpose of the grant request.	$ 7,272.84
10	Arts, Culture, History, Entertainment & Sports	Phoenix Productions: Rancho Cordova Rise-Up Theatre Company Development and Construction Project	This grant will provide funds to Rancho Cordova Rise-up Theatre Company (RCRUT) for the continuing development of a high-quality, thriving theatre company and the construction of a 99-seat complex in the arts section of Rancho Cordova for the benefit of RCRUT and other Rancho Cordova non-profit performing arts organizations. Funding would provide plays, musicals, large and small events, and theatre complex construction.	$ 150,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
11	Arts, Culture, History, Entertainment & Sports	FCUSD: Mills Middle School Drumline	Drumline intends to teach students how to become active members in a working and performing percussion ensemble. This course intends to attract those students who are less apt to sign-up for traditional band/orchestra courses, while continuing to offer the same fundamental musical training that motivates and inspires positive creativity. All students will learn to play and will be expected to demonstrate competency on battery percussion (snare/bass/tenor-drums), and orchestral percussion (marimba/xylophone/bells/timpani etc.). Grades are based on participation, attendance, practice, and rehearsal technique. Drumline performs at concerts, assemblies, school rallies and sporting events throughout the school year. Their sporting events attract members of the Rancho Cordova Community who will hear, see, and experience the community pride represented by Mills performance drumline. Drumline shows are cross-curricular in that they incorporate dance and movement, theatrical performance, and artistic set-design to create a narrative or explore a theme. Such productions are a reflection of the opportunities to celebrate and exchange ideas and interests unique to community culture, demonstrating positive personal and cultural awareness. Drumline will aid in creating repertoire for school and community building such as pep-rallies and athletic events. If funded, in years 2-4, a small amount of subsequent funding is requested ($1,500 each year).	$ 15,000.00
12	Arts, Culture, History, Entertainment & Sports	Sacramento Children's Museum: “XOXO" An Exhibit About Love & Forgiveness"	Sacramento Children's Museum requests funding for a new exhibit called "XOXO" which is about love and forgiveness. If funded, it would debut in the Fall of 2022. This exhibit will help children explore their feelings and learn how we emotionally connect with others. Funding will also provide free admission to Rancho Cordova families on Sundays. For the past 10 years, the Sacramento Children’s Museum (SCM) has been a cornerstone educational and community resource in Rancho Cordova, providing children ages birth-8 with exciting, hands-on learning opportunities. Children learn STEM, art and literacy concepts through play in their 15 exhibit areas.	$ 46,450.00
13	Arts, Culture, History, Entertainment & Sports	Symphony d'Oro Rancho Cordova: Season 2022-23	This proposed project would provide funding to Symphony d'Oro Rancho Cordova to be expended for music, performance venue rental, recording fees, guest performing artist/composer fees and related expenses to continue and expand would-class orchestral music offerings in traditional and non-traditional venues in the City of Rancho Cordova.	$ 26,000.00
14	Arts, Culture, History, Entertainment & Sports	Sacramento Children’s Museum: General Operations Support	The Sacramento Children's Museum requests funding for three years to support their rebuilding efforts so that they can create more engaging and innovative learning experiences for children. Funding will ensure their stability as they move forward in rehiring staff, increasing hours and capacity, and bringing back community events. With funding support they aim to increase education staffing, hire marketing staff, implement a retention plan for current staff, host six large special events annually, and offer 50% of events at no cost to visitors.	$ 150,000.00
15	Arts, Culture, History, Entertainment & Sports	Sacramento Philharmonic & Opera: Rancho Cordova Pop-Up Concerts	With grant funding , the Sacramento Philharmonic & Opera would be able to again present a free concert series (at least five concerts, depending on the number of musicians) in locations throughout Rancho Cordova. These concerts would take place in different venues throughout Rancho Cordova and would feature small groups of musicians (4-6) who could perform a variety of classical, pops, and other styles of music. Due to the flexible nature of these concerts, they could tailor each presentation to make it most engaging for the intended audience and for the location. For these performances, they would look to again collaborate and communicate with established partners to assess dates and times for performances that they could perform in conjunction with, and potential new opportunities for concerts that would be impactful for the community.	$ 15,000.00
16	Arts, Culture, History, Entertainment & Sports	Hummingbird Theatre Company: 2022-23 Season	Hummingbird Theatre Company wants to make theatre accessible to the people. They believe in engaging audiences with performances that no only reflect thoughtfully, laugh longer, and feel more, but also inspire pride in their hometown of Rancho Cordova. This season, they would like to bring some laughter and cheer to the children of Rancho Cordova by presenting “From the Page to the Stage” Literary Adaptation Children’s Show in either November or December of 2022. This production would be a one-hour touring show suited for all ages, where they would bring classic children’s stories and tales to life by adapting and performing them onstage. Their show in April, would be geared towards the whole family, as they would like to present “The Greatest Showcase” – a Musical Theatre Broadway Review. This show would feature local talented performers singing, dancing, and acting out songs from musical theatre favorites, such as Phantom of the Opera, Shrek the Musical, Hamilton, and Rent.	$ 29,800.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
17	Arts, Culture, History, Entertainment & Sports	CCCF: Rancho Cordova Youth Poet Laureate	The project would provide funds to the Cordova Community Council (CCC) to further develop and conduct a Youth Poet Laureate program for the City of Rancho Cordova which is in alignment with the National Youth Poet Laureate program. Using a timeline that aligns with the National Youth Poet Laureate program, the CCC would design a Rancho Cordova schedule and program which would eventually put local contestants in line to compete for the national title. The CCC inherited this project late in 2021-22, too late to engage in the national program. By extending the project into 2022-23, the CCC believes a local program can align with the curriculum and standards developed for the national program and launch with the cooperation of local schools and teen organizations. The National Youth Poet Laureate program celebrates the nation's top youth poets who are committed to artistic excellence, civic engagement and social justice. As part of this national framework, which CCC has joined, the national organization works with local youth literary arts organizations to identify and celebrate exceptional youth poets who use their voice to inspire change.	$ 10,000.00
18	Arts, Culture, History, Entertainment & Sports	Department of Sound: Valley Producer Pop-ups	Department of Sound provides opportunities to youth through music and podcasting education. They seek to hold 10 Valley Producer Pop-up events throughout Rancho Cordova to engage young people in the community through music and podcast production. They are a Sacramento-based 501(c)(3) providing opportunities to youth through music and podcasting education, focused on students aged 11-24 in under-serviced communities. As of 2022, they've partnered with 13 schools in 4 districts in Northern California. In addition to their existing partners, they seek to collaborate with other local organizations such as Unseen Heroes' NeighborGood Market, Robert Family Development Center Pop-up events, Anatolia Community Center, local events, Creative Kids Craft Fair, and the Chamber of Commerce Business Expo & Job Fair. The pop-up events include music production petting zoos featuring musical instruments, audio equipment, and production software for participants of all ages to experiment with and create content. Pop-Ups also include beat showcases, in which students share their music and podcast projects with the community. The benefits of music and sound include mental health benefits, improved social skills, attendance, and academic performance, and potential economic opportunities in the music and entertainment industry, as well as a sense of belonging for students through shared experiences of creativity.	$ 35,268.80
19	Arts, Culture, History, Entertainment & Sports	Ankur, Inc.: Festival of Knowledge	A grant would provide funds to Ankur to organize and host the Festival of Knowledge a whole day/night event, symbolizing and celebrating education, arts, and culture. The event displays the talent that children and adults have in various arts and cultural fields. This includes an essay competition, music, dance performances, drawing exhibitions, public speaking, etc.	$ 12,500.00
20	Arts, Culture, History, Entertainment & Sports	Marathi Mandal Sacramento: Ganesh Festival	Marathi Mandal Sacramento (MMSAC) is a non-profit and charitable organization that brings together Marathi speaking families in the greater Sacramento area. Their mission is to celebrate the Maharashtrian culture, traditions, and customs. They organize activities and events and are seeking grant funds to hold the Ganesh Festival in Rancho Cordova. The festival generally falls in mid-August to September and marks the birthday of the elephant-headed Lord Ganesha. Ganesha is known as the God of wealth, sciences, knowledge, wisdom and prosperity.	$ 2,000.00
21	Arts, Culture, History, Entertainment & Sports	Sacramento Telangana Association: Festival of Flowers	A grant would provide funds to Sacramento Telangana Association (STA) to organize and host the "Bathukamma" Festival known as the Festival of Flowers. Every year during the September - October timeframe the festival is held and celebrates the inherent relationship between earth, water, plants, flowers, and human beings. They are partnering with other nonprofits and organizations for wider community outreach. A grant would allow STA to help educate and organize this unique festival in Rancho Cordova.	$ 12,000.00
22	Arts, Culture, History, Entertainment & Sports	Sacramento Telangana Association: International Kite Festival	Sacramento Telangana Association (STA) proposes to bring the International Kite Festival to the City of Rancho Cordova. Across the world and the United States, many cities have similar festivals held annually and attracts kite flyers from all over. STA and Rancho Cordova Travel and Tourism (RCTT) will be partnering to bring an International Kite Festival to the City of Rancho Cordova. RCTT will help promote it with an objective of promoting tourism to the City of Rancho Cordova. This will be a free event open to all ages.	$ 3,000.00

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23	Arts, Culture, History, Entertainment & Sports	Sacramento Telangana Association: Festival of Colors	A grant would provide funds to Sacramento Telangana Association (STA) to organize and host the Festival of Colors. STA will be partnering with WeEmbrace and other community organizations to celebrate the Festival of Colors in 2023. This festival marks the arrival of spring and is a celebration of fertility, color, and love, and a time for people to get together and enjoy themselves with friends, families and the community. STA partners with WeEmbrace serving families of individuals with disabilities.	$ 3,000.00
24	Arts, Culture, History, Entertainment & Sports	Kannada Sangha of Sacramento: 2023 Multi Cultural Community Event Festival of Arts & Culture	Kannada Sangha of Sacramento (KSS) celebrates multiple events in the greater Sacramento area during the year to bring community members on to one stage to share happiness, educate the significance of art and culture and encourage community involvement. KSS is a non-profit and charitable organization committed to preserve and promote the art, culture, and history of India through multi-cultural activities in the community. KSS also conducts educational and leadership workshops for the community members. KSS is seeking grant funds to celebrate Ranga Vasantha which will be the Festival of Art & Culture in the April to May timeframe. The festival is an event which is conducted to welcome spring. People perform stage plays depicting mythological characters or Indian folk dances. This also gives an opportunity for high school students to actively participate on stage and help in lighting and dialog prompting arrangements.	$ 12,000.00
25	Arts, Culture, History, Entertainment & Sports	FCUSD: Community Cultural Appreciation Concert	The Folsom Cordova Unified School District (FCUSD) serves students and families from a variety of diverse cultures. FCUSD wishes to create an opportunity for students and the community to engage in and celebrate the diverse cultures through music. FCUSD would create an opportunity to appreciate the Armenian culture by creating an opportunity to learn about and hear folk music. The project would include working with an Armenian musical group to provide a learning opportunity for both students and the general community. The Cordova High School Performing Arts Center would be the venue for the project. The performance group, Chookasian Armenian Concert Ensemble would be secured to do a matinee performance during school for students and on the same day, do an evening performance for the community. Both events would be free of charge to students and the community to attend. The performances would occur during March 2023.	$ 7,912.00
26	Arts, Culture, History, Entertainment & Sports	Indian Association of Sacramento: Teej Festival	The Teej Festival brings diverse women to a single platform to celebrate togetherness with singing, traditional dance performances, enjoying a grand feast and praying to Lord Shiva, an Indian God. The Indian Association of Sacramento (IAS) is a non-profit organization that aims to share and showcase the cultural beauty with their fellow citizens in the greater Sacramento area and keep the culture alive for future generations. IAS is responsible for development and delivery of this project.	$ 9,000.00
27	Arts, Culture, History, Entertainment & Sports	FCUSD: Athletic Improvement Plan	This proposed project would provide for increased opportunities for student-athletes for afterschool sports. This plan encourages physical fitness as a positive outlet for afterschool sports. This project will enhance the educational programs and athletic programs at Cordova High School, Mills Middle School, and Mitchell Middle School. Evidence supports that one of the best Positive Behavior Intervention and Supports (PBIS) for students is athletics. During the COVID-19 pandemic the need to support Social Emotional Learning (SEL) for our students is greater than ever and athletics is one of the best models for SEL. Ensuring our athletic programs have the necessary equipment, supplies, and means to support our students is paramount to the success of our community.	$ 200,000.00
28	Arts, Culture, History, Entertainment & Sports	Ranch Cordova Student Athlete Coalition: Cordova High School Athletic Improvement Plan	The Rancho Cordova Student Athlete Coalition (RCSAC) has worked with Folsom Cordova Unified School District staff to identify academic and athletic needs at Cordova High School. The purpose of RCSAC is to equitably and efficiently support and recognize the diverse Rancho Cordova student-athletes while maintaining, improving, and upgrading all that is Rancho Cordova athletics. Funding will support tutoring programs, educational field trips, advertising and marketing, physical improvements such as a new marquee and signage, some general facility improvements, recognition awards, and salaries for additional coaches, trainers, and enrichment staff. RCSAC has a booster club component and through this, aims to increase the fundraising efforts at Cordova High School. This is a multiyear request.	$ 196,500.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
29	Arts, Culture, History, Entertainment & Sports	Rancho Cordova Track Club: Implements and Equipment	The Rancho Cordova Track Club seeks funding to provide the youth-athletes participating in track and field and cross country the proper tools to develop in their events. The implements and equipment they are seeking will make practice and competition much easier for the coaches to demonstrate to the youth-athletes; and help them perform to the best of their ability. These implements and equipment will be used for years to come and help many generations of youth-athletes. Rancho Cordova Track Club will continue to host events and provide opportunities for youth-athletes in Rancho Cordova and the greater Sacramento area. Their vision is to be the track and field, cross country, and road race destination.	$ 25,000.00
30	Arts, Culture, History, Entertainment & Sports	CCCF: Youth Sports Fee Assistance	This project would provide funds to the Cordova Community Council for distribution by the Rancho Cordova Athletic Association (RCAA) to create and manage a fee assistance program for children unable to participate in youth sports programs due to family financial barriers. Cordova Community Council will work with RCAA to establish criteria for assistance, operational guidelines for distribution of funds, as well as bookkeeping and reporting operations. This is a multiyear request.	$ 22,000.00
31	Arts, Culture, History, Entertainment & Sports	CCCF: Youth Sports Leagues Promo Campaign 2022-23	The project would provide funds to the Cordova Community Council to assist the Rancho Cordova Athletic Association (RCAA) to continue efforts to improve and expand promotion of youth sports leagues in the City of Rancho Cordova. The project will utilize digital and traditional outreach efforts to boost the profile of youth sports leagues, including collaborative efforts which include mass distribution of flyers, development of high quality and effective signage and an expanded means to extend information to grow year-to-year league participation by 5 percent. This project will build upon previous upgrading of youth sports leagues digital profiles at www.rcathletics.org. The elevation of publicity for youth sports is critical to success for these leagues. During league COVID shutdowns, Rancho Cordova recreational leagues reported that many families have left their leagues to play in “pay to play” private leagues, especially among older players. Leagues will need to be rebuilt with younger players and parents with less experience in skills such as coaching and officiating. This is a nationwide challenge of the post-COVID era. This proposal would also continue to expand the outreach to schools in Rancho Cordova that are part of the Elk Grove and Sacramento City Unified school districts.	$ 42,000.00
32	Arts, Culture, History, Entertainment & Sports	Rancho Cordova Track Club: Outdoor Synthetic Track	Rancho Cordova Track Club is in need of a home track and field location for local Rancho Cordova community athletes and other track club members. They are seeking grant funds to build a new outdoor synthetic track on existing Rancho Cordova (City owned) property. Future plans would include building fields and amenities that would support additional Rancho Cordova youth leagues such as baseball, soccer, football, cheerleading, rugby, and lacrosse. New build items would include an 8-lane synthetic track, steeplechase pit, long jump pit, discus ring, and moving the existing hammer cage to the new home track location.	$ 3,000,000.00
33	Arts, Culture, History, Entertainment & Sports	CCCF: Renovation and Maintenance of Youth Sports Facilities	This project would provide funds to the Cordova Community Council (CCC) on behalf of the Rancho Cordova Athletic Association to be expended for materials and services to improve and maintain youth sports fields and facilities located on property owned by the Folsom Cordova Unified School District (FCUSD) and/or Cordova Recreation and Park District (CRPD). The project is currently operating in the City of Rancho Cordova, wherein the school district or park district provides labor or other services for field or facility improvements and repairs on their property with material and other services costs, and volunteer effort provided by the Rancho Cordova Athletic Association (RCAA). The projects are selected by a consortium of Rancho Cordova youth sports league leaders organized under the RCAA, a project of the CCC. The sports leagues which stand to benefit from this project include Rancho Cordova Little League, Cordova Girls Softball, Rancho Cordova Soccer, Rancho Cordova Track Club, Cordova Blue Marlins, Cordova Cordettes, Cordova Jr. Lancers, and possibly others.	$ 50,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
34	Arts, Culture, History, Entertainment & Sports	Sacfit: Parkway Half Marathon	Sacfit proposes to continue funding of the Parkway Half Marathon and Otter Run to align as a first-class major active-lifestyle event with the City of Rancho Cordova. There are two components of the request. First, maintain the start and finish line configuration from the previous year's grant, which considers the start line in William Pond Park (to facilitate larger volume parking accommodations) and all finish lines and the entire Kid's Otter Dash within the Rancho Cordova City limits. The section along the American River Parkway, from River Bend to Sunrise, is the main route for the Parkway Half Marathon. A grant to continue the Parkway Half Marathon route and finish line within the Rancho Cordova City limits aligns the City with a major running event, as well as a meets the goal of having a community health a fitness event. The alignment of the Parkway Half Marathon with Rancho Cordova elevates the City as a primary regional supporter of the Parkway. Having the race route and finish line within the City and connected to other existing events should be beneficial to all local residents. Second, maintain support for the Kid's 1k "Otter Dash" run. The goal is to align this event to the morning of Kids' Day in the Park. As Kids' Day is no cost to participants, the object is to continue with keeping the Otter Run at no charge to all Rancho Cordova children as well.	$ 15,000.00
35	Arts, Culture, History, Entertainment & Sports	Mather Wrestling Club	The sport of wrestling is offered for girls and boys at both Mills and Mitchell Middle Schools and Cordova High School. The Mather Wrestling Club is a youth sports and fitness club providing an outlet for youth (girls and boys) between the ages of 8 to 14. The club promotes community pride and supports the growth and development of youth. Participation in the club will include an application and anticipated fee of $75. Scholarships will be made available to those who cannot afford the participation fee up to the allotted grant funds made available to award scholarships. An optional competition would be offered. Club members will need a USA wrestling card to compete and tournament fees to be paid by wrestler at the venue. Parents would provide transportation. Coach Zilles will be at tournaments with pre-planning for those wishing to compete at a local event. Coach Zilles has been coaching wrestling at Mitchell Middle School for the past 6 years.	$ 24,000.00
36	Arts, Culture, History, Entertainment & Sports	Sacramento Area Bicycle Advocates: Capacity Building for Community Bicycling in Rancho Cordova	Sacramento Area Bicycle Advocates (SABA) and Bicycle Advocates of Rancho Cordova (BARC) seek funding for a host of activities that encourage bicycling in Rancho Cordova. Activities include valet bicycle parking at community events, bicycle repair and maintenance clinics, social rides, bicycle education, and a bicycle apprenticeship program and outreach. SABA and BARC have provided experiences for Rancho Cordova community members with grant funds from the City. These funds have provided bicycle encouragement activities for Rancho Cordova citizens, and has built capacity in BARC, with the goal that it become a self-sufficient bicycling non-profit. These activities have all been a part of a larger community cycling program for Rancho Cordovan citizens. BARC will provide valet bike parking at a full set of venues this year. With funding from the 2021-22 grant plus a sponsorship acquired by SABA, they supported four Rancho Cordova community members in becoming Licensed Certified Instructor's (LCI) with the League of American Bicyclists. They will provide RIDEshops - quick education and refresher skill builders - before social rides and BARC will organize and implement two bike rodeos. SABA will provide a senior LCI to coach the new LCI's, increasing the reach of the events. SABA's vision is to open a "Bicycle Fix-it Kitchen", a place where community members can work on their own bicycles, or have them worked on by mechanics who have completed SABA's mechanic apprenticeship program. This program teaches basic mechanic skills. SABA's apprenticeship program will produce a cohort of bicycle mechanics who can work in the community on bicycles in need of basic repair.	$ 18,585.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
37	Education	916 Ink: Find Your Voice Creative Writing Workshop Series	916 Ink will partner with classroom teachers to provide high-quality, creative writing workshops for 175 third through twelfth grade students. Each student will receive 18 hours of California arts and common core standards-aligned instruction with trained teaching artists and become a published author in an anthology of student work. Find Your Voice is a semester-length, school site–based program. Students generate original poetry, fiction, and creative nonfiction. 916 Ink releases one anthology of student work per school site at the conclusion of each program. During the COVID-19 pandemic, 916 Ink's staff found that students were struggling to process their feelings of anxiety and social isolation due to the shift to distance-learning and the suspension of many wraparound services that schools provided. Using best practices in trauma-informed curriculum design, 916 Ink staff pivoted quickly to design a series of creative writing lessons. Students develop social emotional learning skills through interactive writing prompts, revision-based activities, and lessons in literary devices. This helps students realize the impact of obstacles, relationships, and decisions they make. Our workshop method creates a safe environment for exploration and experimentation for participating students. The writing and sharing of stories builds empathy, increases confidence, and gives youth the agency to understand the power of their personal narratives. We structure our workshops to stimulate social emotional learning, including small group settings, peer collaboration and reflection exercises, multiple modes of response, active listening practice and peer-to-peer feedback.	$ 52,506.96
38	Education	FCUSD: Mills Middle School Positive Behavior Intervention Supports	The Positive Behavior Intervention Supports (PBIS) team at Mills Middle School supports the student engagement and the behavioral success of all students. Additionally, the program supports and promotes the climate and culture of the school. They do this through the use of reward and incentive programs as well as student engagement programs. All students begin the school year with 100 merits. Students are required to maintain 96-100 merits to be eligible for participation in school social activities including but not limited to: dances, rallies, assemblies, Friday rewards, Mills scholar events, access to the blacktop at lunch, sporting events, field trips and more. The program is restorative and students may earn merits back at any time by completing merit recovery which includes restorative conversations, helping a teacher in the classroom, campus beautification, letters of apology, participating in conflict mediation, lunch detention, etc. Students with 96 or more merits are rewarded bi-monthly with our rewards. Each month Mills has a "Behavior of the Month" which is one of their Mustang Pride 5 P's (Positive, Polite, Productive, Prompt and Prepared) behaviors. Lessons are taught during Advisory class that promote the monthly behavior. Students may earn Mills Bills for exhibiting the positive behavior to use at the Student Store. Students are rewarded by being nominated at Mustang of the Month and/or receiving Mills Bills for demonstrating the Behavior of the Month or the Mustang Pride 5 P's. The program also includes academic goal setting and field trips. This is a multiyear request.	$ 20,000.00
39	Education	CL3: Mentors at Cordova High, Mills, and Mitchell	This project is to continue the Mentors at Cordova High and MACH @ Mills programs, and expand the program to Mitchell Middle School. The MACH program is a free community-based mentoring program focused on promoting positive behavior, improved academics and attendance, community service, and life and vocational skill development while rewarding participants for their accomplishments. Students identified by school staff, teachers, and the MACH program coordinator, are invited to participate in the program. Students receive guidance and direction to help get them on or keep them on a positive path. Participants earn rewards for demonstrating improvement in their attendance, grades, and/or behavior as well as for participating in community service opportunities. Rewards include educational experiences, school based rewards, and social rewards. MACH participants attend weekly meetings where expectations are set, guest speakers from the community deliver life skill or messages about particular vocations, and program participants share and celebrate their successes. Monthly Saturday support sessions and weekly group tutoring sessions are held to provide participants with homework support as needed. Funding is being requested for the continuation of the year-round MACH program at Cordova High School to include an increase in the funding in the educational rewards category so that we can take selected MACH members on a field trip to the Museum of Tolerance to participate in their full day Tools for Tolerance Teen workshop; for the continuation and further development of the MACH @ Mills program that was implemented in 2021; and to expand the MACH program to include Mitchell Middle School. Beyond the immediate benefit the students participating in the program receive through the rewards they earn and the successes they achieve, the community at large benefits through the reduction in behavioral issues in the community amongst participants and through their contributions as volunteers.	$ 103,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
40	Education	Center for Land Based Learning: The Student and Landowner Education and Watershed Stewardship Program with George Washington Carver School of Arts & Science	The Student and Landowner Education and Watershed Stewardship (SLEWS) program engages high school students in habitat restoration through a series of hands-on field days at real projects that develop science skills and environmental stewardship in youth. Through his program, they would work with students from George Washington Carver School of Arts and Science to complete a restoration project that would incorporate hands-on, place-based, environmental education activities. SLEWS connects classroom learning to the real world to enhance high school education and provides students with transformative experiences in nature to increase their appreciation, commitment and respect for sustainable agriculture and the natural world. SLEWS staff recruit and train volunteers from non-profits, public agencies, and universities to mentor students throughout their SLEWS year. In the program, students "adopt" their restoration site for the duration of the school year, visiting and working on the project for three or more full-day field trips. Through hands-on activities such as water quality and bird box monitoring, students develop science and inquiry skills needed for lifelong learning. Because they partner with restoration professionals from public agencies, local watershed groups, and nonprofit organizations, SLEWS projects have a real and lasting impact on the land. Since its inception, students have planted over 75,021 native trees/shrubs, 332,967 grass/forbs plugs, and installed 827 wildlife structures. By including students in habitat restoration, SLEWS addresses the needs for healthier land and more wildlife habitat, and the need to instill conservation and stewardship values in high school students. With grant funds, they would be able to expand the SLEWS Program to include Carver and offer local youth these experiences.	$ 15,000.00
41	Education	SCUSD: Carver College Prep and Summer Bridge Program	The Carver College Prep and Summer Bridge program will create a space where students from George Washing Carver School of Arts and Science and throughout Rancho Cordova can reconnect to school, make up graduation credit and prepare for the college application process. Students will be able to choose to participate in one or both of the courses available in the summer program. Students continue to struggle with the transition to full in-person learning. Their challenges are multi-dimensional: they continue to lose valuable time learning in-person with their peer groups and teachers; they continue to have difficulty socially because of their previous isolation; they continue to lose opportunities to prepare for the college application process including taking college admissions tests. College application process has become very uncertain of their options and opportunities. The Carver College Prep/Summer Bridge Program will provide more guidance and access. This is a multiyear request.	$ 29,150.00
42	Education	Soil Born Farms: Rancho Cordova Food, Health and Environmental Career Pathway Program	Soil Born Farms will continue to grow the impact and sustainability of Rancho Cordova's K-12 food, health, and environmental career pathway. School garden support systems will be expanded, curriculum will be integrated at the district level, and students will dig into experiential learning at Soil Born Farms. The proposed project will build on past years' successes and continue to grow a comprehensive, standards-based career pathway in partnership with target Rancho Cordova schools, including Cordova Gardens, White Rock, Cordova Meadows, A.M. Winn, Mills Middle School, Cordova High School, and additional sites based on school interest.	$ 72,875.00
43	Education	FCUSD: Physical Education Enhancement	This proposed project seeks to enhance the physical education programs at each of Folsom Cordova Unified School District's (FCUSD) school sites in Rancho Cordova to promote a healthy active lifestyle and lifelong exercise learners. If funded, it will allow school sites the opportunities to update equipment and accessories to provide students with a more robust fitness experience. Traditionally, the physical education programs have gained support from parent organizations and site funds. This has not been available for various reasons at this time. Grant funds would be used at all FCUSD sites in Rancho Cordova.	$ 110,000.00
44	Education	PRO Youth - Governments Engaging Youth in the City of Rancho Cordova	Youth @ City Council and Summer @ City Hall provide Rancho Cordova youth opportunities to learn about City functions and civic processes. Participants gain a unique perspective into City Hall as they interact with City staff and leaders while also gaining valuable skills that support their success as students and community leaders. The program provides a two-pronged approach for 60 youth, ages 13-18, to engage in government and civic education in the City of Rancho Cordova. Students will learn more about the history of Rancho Cordova and be provided with opportunities to share their views and suggestions for continuing to improve community relationships by making the City a welcome and safe place for all. Youth participants will meet and interact with local and regional leaders in the private, public, and non-profit sectors to learn about those leaders' views of the business/economic climate in Rancho Cordova and share their own views on innovative and creative ways the City can thrive.	$ 81,188.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
45	Education	FCUSD: Enhanced Family Life Education for Cordova High School Students	The health education staff at Cordova High School would like to purchase parent simulator dolls to provide hands-on parenting experience. The goal is to educate students about the responsibility of caring for a baby and the importance of preventing pregnancy until ready to take on the responsibility of parenting. According to Sacramento County Public Health, In 2018, the teen birth rate was 5.5 births for every 1,000 females ages 15-19. An estimated eight percent of young men will become fathers before their 20th birthday. Teen pregnancy has a significant impact economically. Teen parenting costs taxpayers an average of $5,500 per year for each teen parent. Teen parents and their children usually require an increased amount of public service support throughout their entire lives related to behavioral problems, chronic medical conditions, and increased need for foster care. The economy also has lost tax revenue due to the teen mom having low academic achievement which often leads to the mom being unemployed or underemployed. One effective way to prevent teen pregnancy is through comprehensive family life education. Comprehensive family life education includes topics about healthy relationships and methods to prevent pregnancy; including abstinence and proper use of birth control. Per California law, high school students must receive family life education at least one time during high school. The family life curriculum that is taught in the health classes is Positive Prevention Plus which is an evidence-based curriculum that is compliant with California's law.	$ 5,000.00
46	Education	Boys & Girls Club: Navigator Elementary	The Boys & Girls Club program would continue its work at Navigator Elementary, providing a comprehensive after-school program Monday-Friday for over 100 Navigator students during the school day through targeted outreach activities. Despite the COVID-19 pandemic, the Club has continued to serve hundreds of youth on the campus of Navigator Elementary; providing academic support and enrichment programs designed to keep youth on track and successful both in and out of school. The Club has become a trusted partner and valued member of the school team; providing additional academic support and resources to the schools most vulnerable students. Twice weekly the Boys & Girls Club facilitates High-Yield Learning Activities (HYLA) at recesses that are open to all students on campus. Their Site Coordinator is always "on call" at Navigator during the school day, there to assist with students who have behavioral issues and need time away from the classroom environment. They work with those students to process through their behavior/feelings, offer guidance, and redirect the youth back in to the classroom in a better frame of mind. The Club focuses on helping youth in three critical areas; academic success, good character and citizenship and healthy lifestyles.	$ 75,000.00
47	Education	FCUSD: Book Recovery and Expansion	During the 2020-21 and 2022-23 school years, FCUSD library staff encouraged families to check out books from their school library. This initiative helped curb learning loss, contributed to social-emotional learning while at home, and emboldened students to continue their love of reading despite distancing from one of their favorite places on campus. This was a successful campaign, as thousands of books went home with students at curbside pickups. Due to circumstances beyond families' and the district's control, many of these books did not return to campus. Several titles were school libraries' most popular novels, non-fiction texts and picture books. They would like to recover these lost books with the help of grant funding. In Rancho Cordova, 22 percent of students met or exceeded state reading standards. In Folsom, 52 percent of students met or exceeded state reading standards. According to the American Association of School Libraries, when spending for libraries rises, better reading scores follow. Furthermore, the average age of Rancho Cordova school library collections is 1999, which is a 23-year-old collection. This means many non-fiction books are outdated and need replacement titles for factually accurate information. New titles, which better reflect student background and life experience, ought to be added to library collections. As an educational institution, newly purchased titles are essential so that they can align themed and non-fiction books to supplement their curriculum and select material that reflects each school's population. Their request is for one additional new library-bound book per Rancho Cordova student this year, with the goal to fully realize a 20:1 ratio in four years. This is a multiyear request.	$ 153,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
48	Education	SCUSD: “A Day in the Life” A Collaboration with George Washington Carver School of Arts and Science and California Capital Film Office	"A Day in the Life" program is a collaboration between California Capital Film Office and George Washington Carver School of Arts and Science. California Capital Film Office will work directly with Carver students to produce a 10-15 minute documentary relevant to the City of Rancho Cordova. Student documentaries will have the possibility of being showcased in the annual Documentary Film Festival with the school participating as one of several viewing locations. As a Waldorf school, arts integration is fundamental to student learning; however, Carver has lost many of their arts programs due to limited funding. The partnership with California Capital Film Office provides students the opportunity to engage in every aspect of film production, explore career possibilities in the film industry, learn about the people and the City, highlight the City of Rancho Cordova, enter and host the annual Documentary Film Festival while earning community service credit. The finished product would be of broadcast quality and able to be screened. The students would be guided through the whole process.	$ 48,500.00
49	Education	Save the Snakes: Snakes to Schools Project	The Snakes to School project seeks to educate elementary through high school-aged students, teachers, parents, and other outdoor enthusiasts in the Sacramento region about snake ecology, snake conservation, and snakebite first aid. Although there is only one venomous snake (the Northern Pacific rattlesnake) in the Sacramento area, encounters with them are common and serious rattlesnake bites do occur. Many snakes that live in human occupied areas are killed regardless of if they are harmful or not, because of fear. Snakes play a crucial role in ecosystems by maintaining ecosystem health and environments, however, their role is often highly overlooked. To address these issues, Save The Snakes seeks to empower our community members to safely coexist with snakes through their education and outreach programs. Their community of wildlife biologists and educators will implement all objectives of the Snakes to Schools project to mitigate human-snake conflict in the Sacramento area through effective education about snake ecology and wildlife conservation. The overall goals of the Snakes to Schools project are to successfully educate communities and learners about snakes found in the Sacramento area, which will build awareness and understanding of snakes, reduce snakebite, and lessen conflict between humans and snakes.	$ 6,300.00
50	Education	FCCP: VSP Professional Pathways	Folsom Cordova Community Partnership (FCCP) is proposing to provide professional pathways to students who want direct employment placement with VSP. VSP is one of their recent partnerships added to provide students who completed a career assessment the opportunity for training and future job placement. FCCP’s Youth Engagement Specialist will provide one-on-one support to help with outreach, recruitment, enrollment and ongoing support to students during their training. Enrolled students will be provided further support to address barriers that arise. FCCP’s partnership with VSP is a direct investment into Rancho Cordova’s workforce development. The career assessment fosters career awareness but more importantly reveals the top three areas of interest.	$ 25,009.20
51	Education	FCCP: Youth Career Centers	The goal of this project is to continue providing career development services for students at Cordova, Walnutwood and Kinney High Schools. The Youth Career Center (YCC) will allow students to graduate with firsthand exposure to a wider array of career opportunities, an informed sense of their career direction, and a strong correlation between continuing education and achieving their career goals. FCCP has established a solid base and has exceeded outcomes in the three previously funded fiscal years and continues to see the number of students they assist grow each year. The components of this project include: intentional career planning, integrated workplace experiences, and adulting skills.	$ 55,865.60
52	Education	SAC Connect: The Connect Workshop	The Connect Workshop is an 8-week workforce development training program for underrepresented youth/young adults ages 16-24 that provides independent living skills, lessons, and tasks to enhance mental heath and wellness. Participants who attend the weekly groups will receive a monetary stipend upon completion of group curriculum and tasks. Up to 32 youth and young adults will participate in the weekly groups and complete two community service projects. The Connect Workshop project is a curriculum designed to provide youth and young adults with the relevant research, job training and education to assist in supporting long-term employment and/or applying to an educational program. Youth and young adults will have the opportunity to employ career fields, job shadowing, college tours, networking and more through the Connect Workshop project. The location of the group meeting is TBD.	$ 80,000.00

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53	Education	FCCP: Financial Empowerment	Folsom Cordova Community Partnership (FCCP) was able to create a financial empowerment program through a pilot grant from the Office of Child Abuse Prevention (OCAP). Although this grant came to an end, it provided them with seed money to develop and adopt Consumer Financial Protection Bureau's (CFPB) financial empowerment curriculum and tools to the unbanked and underbanked. They have created visuals, activities and handouts to provide an experience that addresses all learning modalities in multiple languages; English, Spanish, Farsi, Russian and adding Armenian, Hindi and Ukrainian. Each language series has specific adoptions based on cultural specifics regarding money and banking practices. They have piloted and administered this teaching series in both classroom and web-based modules as well as through one-on-one financial coaching. They have been funded by Calmoney Smarts based on their success and demand for financial empowerment to serve an additional 80 participants throughout Sacramento County. They are seeking grant funding to increase their capacity further to serve and target 80 Rancho Cordova residents to receive a comprehensive financial empowerment curriculum.	$ 59,963.60
54	Education	Sacramento Splash: Youth Environmental Leadership Camp	Youth Environmental Leadership Camp (YELC) is an immersive summer program for 6th/7th grade students. Campers will attend a 1-week camp, Monday - Friday from 8:30 a.m. – 5:30 p.m., in groups of 15 where youth will design and implement climate-smart solutions aimed at improving air/water quality and/or natural habitats where they live. They will be conducting four weeks of camp. During the week-long camp, each day they will cover topics related to climate change including but not limited to: air quality, water, energy, transportation, food/consumption/waste, land use, and natural habitats. The campers will visit local sites for hands-on guided experiences related to these topics. Campers will sample and collect data, gaining experience using some of the tools and materials that scientists and engineers use in their work. Campers will get the chance to engage with professional environmental scientists, engineers, social scientists, and environmental protection activists to learn about their careers and what they did to work in their specific fields of expertise. After the camp, Splash will convene YELC campers monthly in a 2-hour after-school club for the remainder of the 12-month rolling year. Campers will work together on a team project that will have a positive impact on the environment and climate in their community. They will learn about project management, from identifying & defining a problem, to planning & budgeting, project implementation and measuring their success and impact. Throughout the process, they will have the support of mentors and staff. Splash will provide a small project budget for each team to use in implementation of their team project. Projects will be brainstormed, developed, and led by campers in groups of 4-6. Mentors will guide the projects, and will also coach campers on their collaboration, engagement, listening and communication skills.	$ 45,000.00
55	Education	Folsom Lake College: Rancho Cordova/Folsom Lake College Promise Program	Folsom Lake College proposes to continue the partnership with Rancho Cordova to offer the Rancho Cordova/Folsom Lake College Promise program, providing two years of virtually fee-free education to Rancho Cordova residents. Funding of tuition, fees, books, and basic needs will continue to ensure access to education for Rancho Cordova students and veterans. Recent high school graduates who are Rancho Cordova residents receive funding. For those students who are not eligible for a California Promise Grant or Los Rios Promise grant, the funding would cover their tuition and fees. For those who qualify for one of the aforementioned grants, the Rancho Cordova Promise would provide "first dollar" aid for books, supplies, and basic needs in the amount equivalent to students' unit load. In essence, Rancho Cordova residents taking anywhere from 6-18 units would receive Promise support as participants in the Rancho Cordova/Folsom Lake College Promise Program. In addition to its support for new students, Folsom Lake College proposes to continue offering support to veteran students who are Rancho Cordova residents using the same funding parameters outlined above. Further, the college proposes to extend eligibility for the Promise program to students who are retraining/refining career skills because of pandemic displacement. Fall 21 data shows 20 new Rancho Cordova students whose goals are noted as updating career skills or pursuing a career education related certificate. As part of its expansion of the Promise program, Folsom Lake College will offer support to new students from Rancho Cordova who are pursuing career education certificates or updating job skills. This is a multiyear request.	$ 145,400.00

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56	Education	Animation Intern Education	Animation Intern Education (AI) will provide instruction to 60 students split between two classes (30 students per class) to learn how to be Production Assistants (PA). At the completion of class, students will receive a certificate of completion. Students who complete the class will be added to the City of Sacramento Film Office hiring list as PA's. Two PA classes will be taught during the grant cycle. One class of 30 students in the Fall of 2022 and one class of 30 students in the Spring of 2023. At the completion of the class, students will receive a certificate of completion. Four computer units (hardware and software) will be purchased with the grant money to be used to create animation curriculum to be used in future classes for students.	$ 201,000.00
57	Education	Kiwanis Club of Rancho Cordova Foundation: The Kiwanis Family Literacy Initiative of the Book Buddies' Club	"The family that reads together, succeeds together" is the motto of the Book Buddies' family literacy initiative of the local Kiwanis Club. Through a vibrant, multi-agency network, Kiwanians engage the broader community in promoting reading at home, while giving books to local youth. The initiative helps families to embrace reading at home as a way to compensate for the negative impact on learning that the pandemic has had, especially for at-risk children in the community. The Kiwanis Club will expand its family literacy focus in order to help families to overcome any deficits children are experiencing because of COVID-19 and distance learning. By providing free books to local children and youth, the Kiwanis Club of Rancho Cordova creates and expands home libraries for youngsters. By providing information that promotes reading at home and embedding other family literacy activities within family-focused community events and programs, the initiative broadens the impact and visibility of the club's and community's commitment to family literacy. They will continue to distribute books through schools in Rancho Cordova, and will now include two Sacramento City Unified School District campuses in this initiative: A.M. Winn and Abraham Lincoln Elementary Schools. They will also incorporate book giveaways at community events.	$ 4,500.00
58	Education	Studio T Arts and Entertainment: Side Hustle Academy	The Side Hustle Academy was created in 2020 as a response to the pandemic. Through a grant from the City of Sacramento, they were able to build all necessary infrastructure for the program and test and refine the process across 75 youth in multiple cohorts. In addition to the training curriculum and youth-business partnership curation, they provide participants with up to three months of ongoing support to help them complete projects and monetize their new skills. The program provides underserved youth career opportunities that promote long-term economic growth, while also supporting local small businesses in the transition to a digital world. They will match 6-12 youth with local small businesses in order to create positive outcomes for both groups. Studio T will provide youth participants 120+ hours of digital marketing curriculum and training, then pair them with small businesses hit hard by the pandemic and still struggling to establish a digital presence. The participants will utilize digital expertise and innate talents to build online branding and marketing campaigns for up to 6 small businesses in the City of Rancho Cordova. Youth keenly discern the difference between quality content and design that will work and content that will not. This makes them a gold mine for content creators and focus groups for shaping what works online. With the heavy impact of COVID-19 on our youth workforce and our small business community, they seek to enhance youth employment opportunities while helping small businesses reboot, rebrand, and relaunch in the digital community.	$ 39,790.00
59	Education	California Capital Film Office, Corp.: Life! Camera! Action!	Life! Camera! Action! (LCA) is a leadership and life skills development program that will use digital video and the art of storytelling to teach Rancho Cordova youth, 12-17 years of age to become productive citizens. Partnering with the Rancho Cordova Police Activities League, LCA will be a program that will provide students opportunities to use technical and digital media to explore issues important to them and their community by developing Public Service Announcements (PSA) from concept to delivery. Students will be formed into groups and each group will decide on a PSA they want to make. They will be instructed on how to use camera equipment, lights, sound and more. Students will be shown how to download their footage from the camera memory card into a computer and introduced to the editing program Final Cut. Each group will edit their film into a 30-second PSA. Music, effects, and credits will be added. Students will be guided through the color correction process, a process that colors the film to broadcast quality.	$ 26,395.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
60	Education	Suvidha International: Robotics Training Program for Students	The proposed robotics program will help elementary and middle school students in grades 4-8 in designing and coding the robots to perform specialized real world operations. The program makes the students engage in STEAM subjects, hones their computer programming skills and creativity, and develops engineering skills, leadership skills, and presentation skills. These skills will also help students in excelling their regular academics and make them successful engineers in cutting edge career spaces such as aerospace engineering, computer science, medicine, and automotive manufacturing. The proposed robotics program is the continuation of previous calendar year. The program will also incorporate additional components including python coding classes and stress management training. The first year program students will have entry level training while the second year program students will have more in-depth training including maze follower. The program will continue to use previous year's robotic gear for current year training. The program will also facilitate team building activities through youth empowerment and stress-management program for students. As students learn to reduce stress and manage emotions through interactive fun games and activities, they gain the skills to build more positive relationships with their peers, parents, and coaches and can be great team members. The students also gain the ability to focus and perform well academically at school. This is a multiyear request.	$ 17,600.00
61	Education	Suvidha International: Speech and Debate Programs	The proposed educational program will help elementary and middle school students with speech and debate training sessions. The speech and debate program will provide the students with valuable skills that they will use for the rest of their lives, including but not limited to researching, writing, critical thinking, organization, persuasion, conflict resolution and communication proficiency. These educational tools are necessary in every part of our lives and successfully mastering them at a young age will allow the participants to utilize them in their day-to-day activities. Whether it is online or in person, the skills will help them articulate their opinions in a constructive format, delivering their thoughts in a clear and concise manner. They will also communicate with peers their own age, develop a level of confidence in themselves, and leave a positive impression upon the people around them. The program will engage the students and the skills acquired will help them excel in their academics and place them on a path to becoming successful future leaders in politics, business, law, academics, entertainment, and many other fields. The speech program will provide a foundation for various types of speech, categorized as oratorical, persuasive, impromptu, dramatic, humorous, and poetic. The programs attendees will be encouraged to focus their training in their preferred speech category. The introductory training classes will include demo sessions for each of the speech categories to help familiarize the students with their choices. The debate program will provide an overview of different styles of debate, categorized as parliamentary, public forum, Lincoln-Douglas, spontaneous argumentation, team policy, and cross-examination. The elementary and middle school student program attendees will receive more comprehensive training in the debate category of their choice. This is a multiyear request.	$ 7,500.00
62	Education	Falkon Academy: Competitive Robotics	The aim of this proposed project is to build competitive VEX robotics and FTW drone teams for students who are 9-15 years of age. Riverview STEM Academy has VEX robotics as part of their curriculum. These teams will build robots and drones and compete in regional and potentially state and national levels. Falkon has developed custom curriculum to teach youth. The VEX Robotics Design System, which was created by Innovation First, Inc., is recognized as a leading classroom robotics platform. It has been designed to nurture creative advancement in robotics and knowledge of science, technology, engineering, and math education. It could be compared to Lego Robotics. The added advantage of VEX robotics is that its being used at Riverview STEM.	$ 23,914.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
63	Education	FCUSD: Elementary Field Trip Partnership with Sly Park for Rancho Cordova Schools	Folsom Cordova Unified School District would like to bring more STEM focused field trip opportunities to their Rancho Cordova schools/students. Every 5th grade class will have a Sly Park experience which will result in academic gains through greater engagement. This is a growing, high demand area of study that has the potential to create substantial economic benefits for our children and community. "The study found that, regardless of gender, ethnicity or socioeconomic status, youth who take educational trips have better grades (59 percent), higher graduation rates from high school (95%) and college (63%), and greater income (12% higher annually). In fact, 89% said educational trips had a positive, lasting impact on their education and career because the trips made them more engaged, intellectually curious and interested in and out of school." -National Education Association, NEA	$ 45,000.00
64	Education	Maximum Reach 4 Economic Equity: Thinking Like a CEO: From Non-Employer to Employer	Thinking Like a CEO is a 12-month program wherein participants receive classroom instruction with hands-on experiences to address the knowledge and skills gaps as well as the thought patterns and behaviors that impede small business success. Through the proposed program, they will also receive one-on-one business coaching to develop sales and revenue generation capacity, and support services to practice and experience how hiring professional service providers for day-to-day tasks allows them to drive their business goals and achieve professional results. Participants apply their training to their businesses in real time. Each deliverable is developed and customized for their unique business needs. The program walks participants through identifying and documenting their unique goals and objectives, budgeting to meet these goals and objectives, branding and representing their businesses, building sales capacity, and finally leading teams. Their+G79 instructional team is composed of local certified professionals, including a Balanced Scorecard champion, a doctor of behavioral sciences, a Forbes 50 Champion, a multi-business entrepreneur, and a professional copy writer.	$ 75,000.00
65	Education	California PAL: The California Police Activities League's Rancho Cordova Youth Apprenticeship Readiness Accelerator Program	California PAL will provide overall coordination and management of the Youth Apprenticeship Readiness Accelerator (YARA) program. The Youth Center in Rancho Cordova is the proposed facility for the YARA program. The program will include two cohorts each consisting of 12 Rancho Cordova youth. The Cohorts will participate in a comprehensive suite of activities to explore and prepare them for living wage employment through this pre-apprenticeship program. The program will begin with the participants attending California PAL's flagship program, Life After High School Destination Success, a 4-day, 3-night conference held at Fresno State University providing college and career preparedness and workforce development skills including college/career readiness workshops and fair, life skills, resume and business interviews and motivational guest speakers from the trades. The YARA program will be the follow-up to ensure a successful pathway towards achieving career goals and living wage jobs. At the core of YARA is the Laborers Training & Retraining Trust Fund for Northern California's (LTC) Pre-Apprenticeship Construction Training, a 6-week (40 hours/week) program that includes certificates in Fundamentals of Construction, OSHA 10, First Aid/CPR, Confined Space, Traffic Control and Hazardous Waste courses. The participants will be presented a comprehensive experience with a combination of hands-on and classroom learning to prepare the participants for the next step in their workforce development journey, including but not limited to entering a formal apprenticeship or post-secondary education. A building project and graduation week activities will also be part of the program.	$ 50,000.00
66	Other	Rancho Cordova Moose Lodge: Parking Lot Improvement Initiative	The Rancho Cordova Moose Lodge parking lot has multiple sink holes and disintegrating asphalt. The proposed project will provide the Rancho Cordova Moose Lodge members and residents with a repaired and resurfaced parking lot for improved safety and accessibility. It will also benefit the many activities held in the parking lot for the community.	$ 68,000.00
67	Other	BAPS Charities: Joy Of Others Walk-Run	BAPS Charities is proud to once again support Susan G. Komen® and their fight to address breast cancer from multiple fronts. The walk is organized to celebrate the families and inspires people to carry forth the spirt of service. They are seeking funding for shirts, facility and logistics support, drinks, awards, certificates, and flyers and plan to do the fundraising walk at a Rancho Cordova park.	$ 5,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
68	Other	Blessings in a Backpack: Rancho Cordova	Blessings in a Backpack (BIAB) provides weekend food for 350 children in the local community who have food shortage issues over the weekends. Their belief is that kids should not worry about where their next meal will come from. BIAB began providing weekend food to 30 children in 2014, and have grown to over 350 kids, currently. Participating students receive free breakfast and lunch, Monday through Friday, during the school year. BIAB helps to fill that void with weekend meals geared for just that child. It's not feasible for BIAB to feed the entire family, not just from a cost standpoint, but also the children aren't all capable of bringing a big bag of food home. Whether the child receives a prepackaged kit or bulk food, it's completely manageable and easily fits in their backpack. BIAB is currently sending weekend food home for students from Williamson, Rancho Cordova, Cordova Villa, Cordova Gardens, and Cordova Meadows Elementary Schools. They also serve students at Abraham Lincoln Elementary School within Sacramento City Unified School District. This is a multiyear request.	$ 25,000.00
69	Other	Whisker Warriors Animal Defense Fund: Spay, Neuter, and Vaccine Program	The application intends to continue the funding of the spay/neuter program for canines and felines and a small number of rabbits in Rancho Cordova and the continuation of the caring of community (homeless) felines. Education and spay/neuter services are needed to reduce pet overpopulation. Felines continue to be unaltered and abandoned, which increase the need for immediate action.	$ 43,000.00
70	Other	FCUSD: CHS Locker Room Facilities Update	Enhancing the physical education locker rooms at Cordova High School to improve the aesthetics, provide a safe environment, and increase natural light, will provide a top-notch facility for students and the community. The project would allow the maintenance department to complete the renovation of the boys and girls locker room at Cordova High School. The funds would be used to purchase new lockers and windows in the existing locker rooms. Funds would also be used to install the lockers and windows.	$ 380,000.00
71	Other	SafeStation®	SafeStation® is an identification, detection, and mitigation system that gives facilities' owners and the public confidence to gather and enjoy sporting events, performing arts, shopping, traveling, or just going back to work in person. The system provides a multi-step processing sequence to reduce the risk of infectious diseases entering facilities. The system combines several technologies into one integrated packaged solution that allows efficient processing and screening of large quantities of entrants into a venue. The detection technology includes not only standard metal detection but also the latest in thermal imaging to measure human body temperature in a safe, quick and non-contact process that allows near instant detection of persons having a fever. Furthermore, it takes the next step by employing spread mitigation technologies that are safe to humans but deadly to viruses and bacteria. It uses far-UVC 222 nm light wash wavelength doses (again, in low exposure, human safe quantities) to neutralize as many pathogens as possible residing on a person and their belongings.	$ 32,800.00
72	Other	Rebuilding Together Sacramento: Home and Neighborhood Improvement Campaign	This project will support Rebuilding Together's commitment to improving homes and neighborhoods in the City of Rancho Cordova. This is a two-year request to improve 30 homes each year. Both years, 13-15 homes will receive extensive health, safety, efficiency, and beautification upgrades and 10-12 will receive minor safety modifications. The work will vary per home but will include upgrades such as landscaping, fencing, roofs, accessibility modifications, HVAC, electrical, plumbing, carpentry, and energy efficiency. The work will occur throughout the year by volunteer groups, contractors, students, AmeriCorps members, etc. The selection process includes community outreach, an application process, and a home preview using a safe and healthy homes assessment. The assessment is focused on identifying deficiencies in the homes related to the principles of keeping the home safe, dry, ventilated, pest-free, accessible, energy-efficient, and maintained. They also identify exterior improvements to enhance the look of the home and neighborhood. The homeowner is also interviewed to identify any other issues such as food insecurity. Community and City resource information is shared with those in need of additional assistance. Tackling substandard housing in neighborhoods cannot be accomplished by one organization in isolation no matter the quality of services and resources invested. They leverage the strengths of volunteers and partners including nonprofit and faith-based organizations, local businesses, financial institutions, occupational therapists, and other service providers to accomplish the project goals.	$ 150,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
73	Other	Sacramento Valley Live Steamers Railroad Museum: Locomotive Storage Building	In this proposal, the Sacramento Valley Live Steamers Railroad Museum, in collaboration with the City of Rancho Cordova, and the Cordova Recreation and Park District, intends to invest in the community through the construction of a locomotive storage building adjacent to the Hagan community barn for the secure keeping of the museum's locomotives. After 45-years of existence in Rancho Cordova, parents and grandparents bring their families to ride on the same train they have fond memories of enjoying as a child. To keep the trains moving down the track, the locomotives need a house for protection and shelter between run days. The museum has outgrown the capacity of existing storage facilities. In addition to the security the building will bring, the structure will also serve as an educational aid demonstrating to children and visitors what was once a common sight in towns throughout our nation, the locomotive house. The locomotive storage building is designed to be reminiscent of a locomotive house that might have been seen on one of California's many short line railroads. Such a building existed at the terminus of the (former) Southern Pacific line that traverses Rancho Cordova up to Folsom and then to Placerville. This structure has been designed to meet the current need for locomotive storage and the foreseen needs of the museum's future in Rancho Cordova.	$ 338,634.00
74	Other	Rancho Cordova Food Locker: Capacity Expansion	In this proposal, Rancho Cordova Food Locker (RCFL) plans to purchase and install two large refrigeration units (a cooler and a freezer) to handle the increased quantities of frozen foods provided by Sacramento Food Bank & Family Services and other local businesses and private donors. RCFL plans to use grant funds for two purposes. First, to design, purchase, and install new commercial-grade refrigeration equipment in the most appropriate location(s) to best meet operational needs. The new refrigeration equipment would be pallet-jack-friendly. The two units could be collocated either in a newly rented/leased warehouse for food storage and processing, or the cooler could be installed at the current facility instead of the contracted warehouse. The new refrigeration unit would also allow the RCFL to end its lease of one smaller walk-in cooler. The new equipment would greatly expand RCFL's food-processing capacity and also greatly improve its cost efficiency for storage. Second, if any grant funds remain after installation of the refrigeration units, RCFL would apply such residual funds toward the monthly rental costs for the off-site contracted warehouse still in the procurement stage.	$ 250,000.00
75	Other	CCCF: Mills Station Building Exterior Painting	This project would provide funds to the Cordova Community Council to enter into a contract with a painting professional to paint the exterior of the Mills Station Building, home of the MACC. The iconic Mills Station Building exterior was last painted upon arrival at its current location on Mills Station Road around 1998. The building is showing wear and paint is peeling in several locations. In keeping with its stature in the community, this project would fund pressure washing, scraping peeling paint, spot prime as needed, and applying two coats of fresh paint to exterior walls and trim.	$ 28,500.00
76	Other	Boy Scouts of America: Troop 363 Tents	Local Troop 363 needs to replace their current tents that are over 10 years old. The tents are used year-round, and the current tents require constant repair or replacement of the poles after almost every use. The current tent model is discontinued, making it difficult to keep up with the worn parts. A major component of the scouting program is camping and being in the outdoors. Troop 363 camps every month, including in the snow. In the summer, they camp up to twice a month. Scouting is designed to take place outdoors. It is in the outdoors that Scouts share responsibilities and learn to live with one another while learning skills that will last a lifetime. Giving back to the community is another aspect of the Scouting program. The Citizenship in the Community Merit Badge is an Eagle Scout required merit badge. Community service is also a component of rank advancement in Scouting. Troop 363 has done many projects in Rancho Cordova.	$ 5,291.84

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
77	Other	CCCF: RCAA Capacity Building Feasibility Study	This project would provide funds to the Cordova Community Council (CCC) to hire a consultant to explore the feasibility, potential structure, cost and benefits of creating a professional staff position to operate, expand and enhance the activities of the Rancho Cordova Athletic Association (RCAA). The CCC is currently spending great effort to keep a number of RCAA projects moving forward, but the demands of this expanding effort are growing beyond staff resources currently available to support it. This project envisions a deeper understanding of the demands and importance of this sector and solutions to its most pressing issues. This project would hire a qualified consultant to guide the RCAA in the areas of project management, fundraising and league coordination to advance and enhance youth sports offerings in the City of Rancho Cordova. Youth sports leagues are at a crossroads. Blessed with strong and dedicated leadership for many decades, there is a wide understanding among experienced leaders that over the next few years this cadre will "age out" and likely retire, leaving a big leadership gap. Continuity is a concern which could be alleviated by the formation of a staff position focused on preserving and planning for these eventual transitions. Second, Rancho Cordova is on the cusp of population explosion and more -- not less -- youth sports will be needed to make Rancho Cordova a desirable hometown for young families. A forward-looking plan of how to prepare for this growth is needed. Third, a crisis of youth sports support infrastructure is looming. A unified system that could address these needs should be developed, however league leaders currently do not have the capacity to address. Fourth, facility development and access issues, fundraising needs and opportunities, unified planning for future needs, unified publicity campaigns and more are fertile grounds for elevating youth sports in the city, making Rancho Cordova a leader in this area.	$ 45,000.00
78	Other	Boy Scouts of America: Troop 1601	Local Troop 1601, the first all-girl troop in Rancho Cordova, was established in 2019. The Troop started up with no camping supplies or tents. Scouts are expected to hold fundraisers to obtain much needed equipment and tents to participate in camping and the outdoors as this is a major component to the Scouting program. Unfortunately, COVID-19 restrictions and shut-downs prevented the girls from raising the necessary funds to purchase many items to participate in the opportunities. Troop 1601 is requesting funding to purchase new tents for year-round use to include snow camping in the winter. The troop is also in need of a patrol box for setting up a kitchen at campsite, a 3-burner camping stove and three lanterns. Troop 1601 has missed out on opportunities to go snow camping such as the annual Klondike-a competition between troops focused on cold weather activities. While Troop 1601 is relatively new in the Scouting world, they have participated in volunteer activities in Rancho Cordova. The new tents and camp equipment will allow the Troop to deliver a quality outdoor program.	$ 4,825.09
79	Other	Rancho Cordova HART: Winter Sanctuary and Homeless Services in Rancho Cordova	Rancho Cordova HART's mission is to provide services to the homeless in our community by continuing to provide life-changing services. Unhoused neighbors will receive much-needed shelter and services during the coldest months of the year. Funds will be allocated to bus passes, services to provide clients with rental assistance, move-in costs, application/background check fees, and the general operation of the Winter Sanctuary Shelter Program. Citizens and faith communities operate the Winter Sanctuary Shelter Program in Rancho Cordova to provide free overnight shelter, warmth, meals, and connection to mainline health and housing-related services for men and women who are experiencing homelessness in our area during the coldest months of winter. Potential guests are invited to arrive at the intake site each evening during the program to create a consistent meeting place. Guests of the winter sanctuary meet with the outreach navigator and, most importantly, become part of the HART family and Rancho Cordova community. Housing Counseling/Relocation - Rancho Cordova HART partners with Sacramento Self-Help Housing (SSHH) to assist those on the street or in the Winter Shelter Program, to achieve housing. SSHH helps by rapidly connecting clients with landlords, property owners, and housing program options. HART will support by using the grant funds to remove the barriers to housing by covering the costs of security deposits, bus passes, or similar "move-in costs." These funds will also go to supporting those moving out of the new transitional house.	$ 33,900.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
80	Other	Habitat for Humanity: Home Repairs and Neighborhood Revitalization in Rancho Cordova	Habitat for Humanity of Greater Sacramento is seeking support to work in partnership with the City of Rancho Cordova to fund 25 or more home repair projects for low-income Rancho Cordova homeowners to help beautify the neighborhood, increase neighborhood pride, and support underserved low-income homeowners with deferred home repairs. Renovation include work to correct critical exterior life/safety and structural deficiencies as well another high-priority exterior habitability repairs, and maintenance related exterior repairs such as painting and landscaping. Example renovations include replacing leaking and structurally unsound roofs and porches, correcting leaking windows, exterior painting/landscaping, substantial accessibility and aging in place upgrades, dry rot remediation, and health and safety related critical exterior repairs. The majority of the labor on Habitat projects is typically provided by volunteers. Where possible they leverage grant funding by actively soliciting in kind donations of materials to reduce project costs or layering on additional funding pools to stretch grant dollars farther and impact more Rancho Cordova households.	$ 300,000.00
81	Other	FCCP: Rancho Resilience & Reinvestment Project	This proposed project is aimed at supporting Rancho Cordova residents hit the hardest by the economic and social impacts of COVID-19. They will offer wrap-around case-managed coaching services focused on holistic support of each participant's needs. Resource Specialists offering a strengths-based, culturally responsive empowerment model will work with participants toward their financial, educational, employment, housing, domestic violence, recovery and stress reducing goals. The outcome of this program is to revitalize the community, create participant support networks and recovery to those most impacted by COVID-19. Triple R will offer participants a chance to change their lives 180 degrees. Coaches will work with participants to identify and access next steps in their social and economic recovery. Immigrants, refugees and communities of color were impacted at disproportionately with loss of employment, income and access to services throughout the pandemic. While this program does not only focus on these groups, FCCP has a strong relationship with each community in Rancho and this program will work to help participants help themselves. These supports will build community cohesion through networking, provide a positive outlet for self-discovery, inquiry, understanding and knowledge of support systems available. As each participant deepens in their own goals accomplishment and participation in programs this will provide a socio or economic benefit to the city by promoting community relations, residents' well-being, safety and increased economic stability. This is a multiyear request.	$ 1,752,074.00
82	Other	Salvation Army of Rancho Cordova Corps: Community Hub Program	This proposed project is to assist low-income elementary children and their families by purchasing school supplies and related items for them. Each student will have $100 to shop at a local store for school supplies or school related items only. This may include things such as writing materials, paper, notebooks, binders, backpacks, desk supplies, folders, hand sanitizer, school uniforms, shoes, socks, jackets, sweaters, etc.	$ 5,000.00
83	Other	Soil Born Farms: Center for Food, Health and the Environment	This proposed project is to create new entrance signage and landscaping at Soil Born Farms, marking the final phase of major driveway and parking lot developments at the historic American River Ranch. These improvements are key steps in developing the site into a premier interpretive facility for food, health, and the environment.	$ 313,969.00
84	Other	FCUSD: Homeless Student Services	Education is a key element for the success of every great city. Students experiencing homelessness face unique challenges in accessing and succeeding in school. In partnership with the Department of Homeless Student Services of the Folsom Cordova Unified School District they propose to assign a fund to support the most vulnerable students in Rancho Cordova. The Department of Homeless Student Services identifies and supports students experiencing homelessness as described under federal law McKinney Vento Homeless Student Act. This act was enacted in 1987 to ensure that children and youth experiencing homelessness have access to the same free, appropriate public education and services as their non-homeless peers. Homeless Student Services works in collaboration with schools and community partners towards this goal. Gift cards would be purchased and distributed so students can get clothing, shoes, food, etc. This is a multiyear request.	$ 15,000.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
85	Other	FCUSD: Outdoor Kindergarten Learning Area at Cordova Meadows	FCUSD wants to build an outdoor learning area with a shaded structure and tables in the kindergarten playground area at Cordova Meadows Elementary School. There is an area of the kindergarten playground that once housed a large redwood tree. As parts of the tree were dying and creating a safety hazard it had to be removed. Unfortunately, when the tree was removed, the shade it provided was eliminated. Since it has been removed, they would like to turn the area into an inviting, outdoor learning area. If funded, they will cement part of it with tables and a shade structure. In the other part of it, they will include bark and tree stump jumping stones for the students to play on. In this area, they would also put some garden boxes for the children to grow plants.	$ 27,000.00
86	Other	Sacramento Valley Spark: Spark Mobile	In this proposed project, Sacramento Valley Spark will bring interactive games, a cooling center, and neighborhood cleanup tools to community events around the region. The Spark Mobile will provide a flexible platform for taking Sacramento Valley Spark's unique creative energy to numerous (at least six) Rancho Cordova events over the course of a year. Through the "Spark" drive-thru and "art stops" events Sacramento Valley Spark has shared the art, music and energy of the local Burning Man community. The artistically wrapped Spark Mobile will bring hula hoop lessons, silent disco, and scores of additional interactive games to events in Rancho Cordova and contingent on funding, around the region. In addition to the interactive activities, the spark mobile will include a water tank to provide a cooling zone (misters) and tools to help the community clean up. Sacramento Valley Spark and other groups have taken action to clean up our communities. The truck can support those efforts by providing grabber sticks, buckets and other supplies to these trash pickups. While they envision seeking funding from additional agencies, contingent on funding, they'll commit to activities at least six Rancho Cordova events.	$ 10,000.00
87	Other	Sierra Service Project: Rancho Cordova School-Year Service Program	Sierra Service Project (SSP) seeks funding to continue its long-standing home repair and youth service program. This project will focus on engaging groups of local middle and high school students during the school year in hands-on home repair and community-based service projects. Youth will gain skills, and the community will benefit. Since 2015, SSP has hosted over 1,400 volunteer days and completed 106 exterior home repair projects for 74 low-income City residents. In 2022, they are focusing projects on equipping local youth volunteers. Objectives of this program are reciprocal and benefit youth volunteers and the home repair or community-based project beneficiaries. In coordination with City of Rancho Cordova staff and the new volunteer platform, coordinate two regular monthly work days to aid in volunteer recruitment and project scheduling. Also work with school, church, and other youth volunteer groups to commit to multiple work days during the school year in advance of the funding cycle. This proactive approach will keep interested groups accountable, and help them plan projects for faster completion and set clear expectations for beneficiaries. Additionally, focus on building long-term relationships within the community.	$ 70,700.00
88	Other	Sierra Service Project: Rancho Cordova Summer Service Program	Sierra Service Project (SSP) seeks funding for a new youth summer program in Rancho Cordova. This project focuses on negating middle and high school students in hands-on home repair and community-based service projects during a week of their summer break. Youth will gain skills, have fun, and the community will benefit. Since 2015, SSP has hosted over 1,400 volunteer days and completed 106 exterior home repair projects for 74 low-income city residents. They are proposing a summer service-learning program in 2023. Objectives of this program are reciprocal and benefit local youth, youth from outside the community, and home repair and community-based project beneficiaries. For the first time, SSP is proposing to establish a summer site in Rancho Cordova. Currently their other summer community partners are based throughout California in Del Norte and San Diego Counties, and in the Navajo Nation in Arizona. In 2022, their summer program will host over 800 volunteers who dedicate a week of their summer to service-learning. By adding a site in Rancho Cordova, they will be adding a closer option for our pool of volunteers from the middle of the state, including the Bay Area and the greater Sacramento region. They will invite youth volunteers from Rancho Cordova, and other regions, to join together to spend a week completing home repairs for low-income residents, and projects with community-based organizations. The program will offer day and overnight programs, to accommodate the needs and interests of both local and outside volunteer groups.	$ 92,800.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
89	Other	KITNCUT: Learning Tools For A Successful Community	This proposed project is to empower the Rancho Cordova community for economic success through domestic violence awareness and hands-on technical training. By equipping the residents with the new abilities of proven techniques for safety and lifelong learning, this project's goals are to contribute to job placement and retention in Rancho Cordova. Victims of intimate partner violence lose a total of 8 million days of paid work each year and the cost of intimate partner violence exceeds $8.3 billion per year. Furthermore, between 21-60% of victims of intimate partner violence lose their jobs due to reasons stemming from the abuse. People try to leave abusive relationships, but they lack the tools to change. This project will use technical training and a series of awareness events to equip women and the community with the lifelong tools to be economically independent. The participants in the training will learn how to make self-defense tools, domestic violence awareness materials, and artistic displays that reflect their experiences. By using modern manufacturing equipment, the participants will be exposed to viable manufacturing careers. This project will be aligned with the California Mobility Center's Career Pathways model which intends to establish pipelines from underrepresented communities into economically viable manufacturing careers needed to support Clean Mobility. The culmination of job training, self-empowerment, and domestic violence awareness will lead to enhanced community connectedness. In connected communities, members gain a sense of belonging and purpose from the experience of both deriving value from and adding value to their community. Stronger connections increase a person's sense of hope and self-worth, and the ability to cope adaptively in the face of adversity. As a result, community connectedness is a protective factor that enhances well-being, fosters resilience, and promotes prevention.	$ 112,000.00
90	Other	Benevolent and Protective Order of Elks, Rancho Cordova Lodge #2484: Facility Improvements for Use by Local Fundraising Entities	The Rancho Cordova Elk's Lodge is requesting funds to improve the kitchen capacity, efficiency, and to reduce operating expenses. With a location just off Sunrise Boulevard, just four miles south of Highway 50, the lodge can be adapted to provide the location for any number of events at a significantly lower cost than commercial providers. It is difficult to find locations in the Rancho Cordova area that provide meeting space, access, parking and a full commercial kitchen to provide a location for non-profit events that support the community – and at an affordable price. The Elk's Lodge cannot currently fund the improvements to improve capacity and the flexibility needed to support a variety of events. The Elk's Lodge can provide a significant asset to the community. Costs can be kept to a minimum, with no mark-up on food costs or labor – straight pass through on support costs and a minimal rate to cover Lodge operating expenses (estimating 15 – 20% of revenues). The current Elk's Lodge has some shortcomings that should be addressed to maximize it's potential. The Kitchen has a limited capacity to provide enough meals in a timely manner, and to adapt to a variety of uses. The only griddle is small, and needs to be replaced with a larger unit for breakfast and quick meal preparation. The dishwasher is undersized and it's capacity is not adequate for proposed needs. Upgrading and adding several other appliances will also improve the capacity and flexibility of use.	$45, 245.34
91	Other	Sacramento Children's Museum: Exterior Entryway Enhancements	Sacramento Children's Museum (SCM) requests funding support to renovate the Museum's exterior front entrance. There are two components to this project. The first is the construction of an exterior canopy above the entrance doors. This canopy will be composed of aluminum columns and beams draped with woven wire mesh panels in the Museum's brand colors. The second component is the addition of a concrete seating area bench outside the front doors. This seating area bench will match that at the entrance to Rancho Cordova City Hall, with a gathering area in front. Sacramento Children's Museum is a favorite family destination for Rancho Cordova residents and families from afar. This new exterior entryway design will differentiate the building from others nearby and make the building more identifiable as a Children's Museum. This also has the potential to draw in more families who simply pass by the Museum. These transformations also will enhance the Museum experience for the thousands of children and adults who visit each year. The colorful canopy will provide guests with a glimpse of the playful adventures awaiting them inside, leaving a lasting impact for children and their families. The outdoor seating bench area is another great addition for guests. It can serve as a gathering area for school field trips, family picnics, and outdoor Museum-led programs.	$ 194,652.00

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
92	Other	KITNCUT: Empowering Our Peace-Keepers to De-escalation	This project proposes to enforce the training of officers to de-escalation techniques. The project team plans to accomplish this by having Jiu Jitsu trainer and author, Tom Deblass in for a conference to teach against use of excessive force. This paired with training from the Dr. King Center in George will be provided. Travel and lodging and seminar price will be covered by the grant, and they would like to host a Q & A for the officers with both parties. They will partner with and encourage local Jiu Jitsu gym owners to attend, so they can further the lessons offered by Mr. Deblass. They plan to leverage existing mental health services in the community to bridge the divide of reactive to responsive in our officers. The non-violent communication talks will be continued by John Brewer, certified NVC specialist in town. The de-escalation techniques already being taught would help our officers stay safer in dangerous situations, giving them more tools to communicate with people they are in contact with. This will empower police officers and give them pride in their ability to not discharge their weapons unnecessarily.	$ 111,000.00
93	Other	Greater Sacramento Urban League: Black Child Legacy Campaign Rancho Cordova Service Extension	To address the disparities and to breakdown the barriers, Sacramento County's Board of Supervisors asked to create a plan for change to address the higher mortality rate of black children than other children in Sacramento County. In response, the Black Child Legacy Campaign (BCLC) was launched in 2015, with the goal of saving children's lives by transforming community systems of support. Currently, seven neighborhoods within the City of Sacramento have full-fledged BCLC operations and offer a comprehensive menu of programs and services managed by seven community-based organization in each respective neighborhood. The Greater Sacramento Urban League is the organization leading the BCLC efforts in Oak Pak. Some residents of Rancho Cordova come to the Oak Park office for services and to participate in their programs. Due to the structure of the BCLC funding agreement and limited staff capacity, they are not always able to provide the level of support and allow participation in their programs to residents of Rancho Cordova. An award of funding will allow them to provide fuller services and program participation to Rancho Cordova residents reaching out to them in Oak Park, as well as allow them to deliver services and offer programs on occasion physically within the City of Rancho Cordova.	$ 70,000.00
94	Other	Boys Scouts of America: Pack 387 Pinewood Derby/ Space Derby Tracks	Pack 387 is in need of a pinewood derby and space derby track so scouts can participate in these annual pack events. They currently borrow a track from another pack in the Sacramento area so they can hold these events locally. One of the most popular events that people think of when looking back on their Cub Scouting past is the Pinewood Derby. Pack 387 is a new pack in Rancho Cordova and the tracks will be used for their annual Pinewood Derby and Space Derby races. These events teach youth about camaraderie and sportsmanship as well as experience the sense of accomplishment and excitement of competition. These tracks would also be a great event to bring out for youth events in Rancho Cordova that Pack 387 participate in.	$ 2,543.00
End of Grant Applications Submitted during grant cycle (February 7, 2022 - March 18, 2022)				**$ 10,422,664.93**

Fiscal Year 2022/23 Community Enhancement Investment Fund Project List

App.	Category	Application Name	Applicant's Project Description	FY 2022/2023 Requested
N/A	Arts, Culture, History, Entertainment & Sports	CCCF: MACC Programming and Operations for FY 22/23	This project was approved as a multiyear request beginning in FY 2021/22 and ending in FY 2023/24.	$ 180,610.00
CC1	Arts, Culture, History, Entertainment & Sports	Arts in Public Places Bucket	Under prior Council direction, established funding for future public art projects in the City. This is an estimated amount.	$ 50,000.00
CC2	Arts, Culture, History, Entertainment & Sports	Performing Arts Bucket	Under prior Council direction, established funding for performing arts projects in the City. This is an estimated amount.	$ 30,000.00
CC3	Arts, Culture, History, Entertainment & Sports	Youth Sports Growth and Startup Fund Bucket	Under prior Council direction, established funding for youth sports for the purpose of growing an existing league or starting a new league in Rancho Cordova, including, but not limited to, the purchase of new equipment, new uniforms, fees, and other required costs. This is an estimated amount.	$ 30,000.00
CC4	Education	Field Trips & Assemblies Bucket for FCUSD	Under prior council direction, established funding for future field trips/assemblies and other experiential learning opportunities for Rancho Cordova public school students/schools. This is an estimated amount.	$ 35,000.00
CC5	Education	Field Trips & Assemblies Bucket for SCUSD	Under prior council direction, established funding for future field trips/assemblies and other experiential learning opportunities for Rancho Cordova public school students/schools. This is an estimated amount.	$ 7,500.00
CC6	Education	Field Trips & Assemblies Bucket for EGUSD	Under prior council direction, established funding for future field trips/assemblies and other experiential learning opportunities for Rancho Cordova public school students/schools. This is an estimated amount.	$ 7,500.00
N/A	Other	Rancho Cordova Chamber of Commerce: Explore	This project was approved as a multiyear request beginning in FY 2021/22 and ending in FY 2023/24.	$ 53,000.00
N/A	Other	Rancho Cordova PAL: Adventure Van	This project was approved as a multiyear request beginning in FY 2021/22 and ending in FY 2023/24.	$ 21,000.00
CC7	Other	Local Community Service Partnerships Bucket	Under prior Council direction, established funding to grow and strengthen community partnerships in Rancho Cordova. Small community grants are available through an ongoing application process for up to $5,000 each and no more than $10,000 per organization in a calendar year. Other details and restrictions are found on our website. This is an estimated amount.	$ 75,000.00
Additional items that will be factored into the discussion, budget, and presentation anticipated on April 18, 2022.				**$ 489,610.00**

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Tuesday, March 1, 2022 7:33:46 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1503303
IP Address:	98.224.107.7
Submission Date:	03/01/2022 7:33
Survey Time:	17 minutes, 22 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Learning STEAM. Let's Build a Light Sculpture!

Project Synopsis

A semester long program tailored for seventh and eighth graders to teach them about science, technology, engineering, art and math (STEAM) through a hands-on project.

Project Description

This program is a hands-on after-school or weekend classroom activity for seventh and eighth graders. Each class session will be 60 to 90 minutes long and held once per week. In each session, I will introduce the students to an aspect of the methods and technology involved in the fabrication of an acrylic light sculpture. The light sculpture will consist of 8 acrylic panels vertically attached to a 3D printed base. A row of LED lights embedded in the base below each panel will illuminate the panels through their edges, causing the patterns drawn or engraved on the panels to glow. The LEDs will be addressable, meaning that the color and brightness of each LED can be programmatically altered to allow for varying animated light patterns. The light patterns will be controlled by a smartphone connected to the art piece through a dedicated WiFi connection on the phone. The sculpture will be similar to the one shown in the attached file "SplineWaveDescription.pdf", the only exception being that it will consist of eight instead of sixteen acrylic panels. The students will build the sculpture during the final sessions of the semester and will see how the elements and technology learned throughout the semester will apply to the sculpture. In the interest of safety, the sculpture will be designed in a manner that allows students to simply snap or screw the pieces together. No soldering, cutting, or other potentially unsafe activity will be involved.

Project Team

I will be able to teach and facilitate the class myself. I plan to limit enrollment to 20 students per semester.

Project Goals

The goal of this program is to give students an opportunity to learn STEM in a fun and engaging way, through the creation of an art piece that they can take home, enjoy, and proudly display. This will hopefully encourage them to pursue STEM related subjects in high school and college.

Funding Request

Application #1

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

Estimated $13,180.

Estimated breakdown of project expenditures

Materials and supplies for two semesters at 20 students per semester (Micro-controllers, acrylic, wiring, 3D printer filament, etc.): $3,650 Labor: Pre-assembly of project components (4 hours per student x 20 students/semester x 2 semesters x $25/hour): $4,800 Development of course materials: $1,200 Class preparation (load software in laptops, set up slide presentation, etc.): $840 Class instruction time (estimated 23 hours over two semesters x $25/hour): $690 Other costs (Administrative or facility fees charged by school, possible cost overruns, etc.): $2,000

Matching Funds

I propose charging an enrollment fee of $50 per student per semester. At an enrollment rate of 20 students per semester for two semesters, this would yield $2,000 to help cover the above costs.

Include any other funding contributions

None

Ongoing operations and maintenance costs (if applicable)

Not applicable

Total Community Enhancement & Investment Funds requested

$11,180 (Total project cost of $13,180 less $2,000 from student enrollment fees)

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

Not applicable

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

Other than the $2,000 I expect to receive through the student enrollment fees, I don't have a specific plan to receive additional funding. I can try to appeal to the school superintendent for additional funding if needed.

Project Schedule, Timeliness and Adaptability

Project Schedule

March 2022: CEIF grant application, submission, and approval April – July 2022: Develop and prepare curriculum May – July 2022: Announcements and advertising July 2022: Prepare for fall 2022 semester July – September 2022: Procurement of light sculpture materials. Preliminary fabrication. August – November 2022: Execute curriculum for fall 2022 semester December 2022: Prepare for spring 2023 semester January – April 2023: Execute curriculum for spring 2023 semester May – June 2023: Analysis and reporting

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

I will be limiting the program to just the fall 2022 and spring 2023 semesters.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The curriculum can be taught on-line over Zoom, if needed.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

Mills Middle School, 10439 Coloma Road, Rancho Cordova, CA 95670
Rancho Cordova, CA 95742

Other physical addresses if project/program is at multiple sites

Not applicable

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Christopher Biddle

Title

Owner and Founder, Light23 Company

Submitting as

Individual

Phone

9166165404

Email

ckbiddle@pacbell.net

Organization's legal name, if applicable

Light23 Company

Mailing Address of Submitter

4303 Sardonyx Way
Rancho Cordova, CA 95742

Signatory's Name

Mr. Christopher Biddle

Signatory's Title

Owner and Founder, Light23 Company

Signatory's Phone

9166165404

Signatory's Email Address

ckbiddle@pacbell.net

Signatory's Mailing Address

4303 Sardonyx Way
Rancho Cordova, CA 95742

Attach any additional documents here

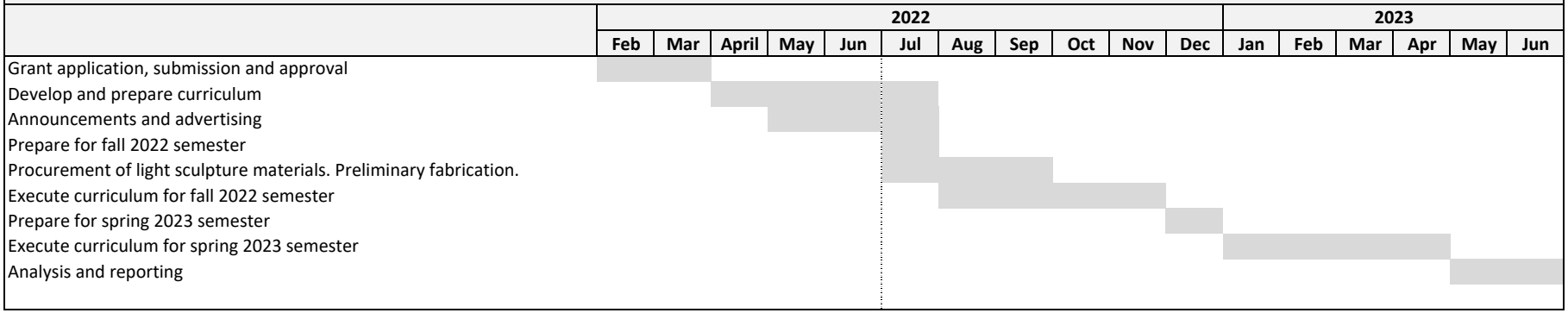
Project_Timeline_CurriculumOutline_Budget.xlsx
SplineWaveDescription.pdf
ArtistBio.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Community Enhancement and Investment Fund 2022/2023 Grant Project - "Learning STEAM. Let's Build a Light Sculpture!"
Project Timeline



Click on the tabs below to see the curriculum outline and budget for the project.

Application #1

Community Enhancement and Investment Fund 2022/2023 Grant Project - "Learning STEAM. Let's Build a Light Sculpture!" Curriculum Outline			
Topic Name	**Description**	**Number of Class Sessions**	**Supplies and Resources Needed**
Overview of project	Describe to the students the goal of the project: To build an animated desktop light sculpture that can be controlled from your smart phone.	1	Projector or some means to present PowerPoint slides.
3D printing and Fusion 360	Introduce students to 3D printing. Give them an opportunity to choose something on Thingiverse and 3D print it for them. Show them the basic steps: (1) CAD design in Fusion 360, (2) exporting the STL, (3) slicing and generating g-code using Cura, (4) creating the 3D print.	2	Access to 3D printer. Laptops with Cura installed. PLA filament.
Electronics	Teach students about Ohm's law and LEDs. Give them a simple hands-on breadboard project using a battery, resistor, LEDs, and switches.	2	Electronics supplies.
Web programming	Introduce the students to web programming and the elements of HTML. Show them how to build a simple web page locally on their laptop and how to send a simple GET request to a server.	2	Laptops with Internet access.
Intro to Arduino programming	Introduce students to the elements of an Arduino program. Have them write a simple "hello world" program.	1	Arduino UNO, laptops with Arduino IDE installed.
FastLED	Have the students write a program to drive an 8x8 LED matrix.	1	Arduino UNO, laptops with Arduino IDE installed. LED matrix, breadboard, resistors, wiring, etc.
I2C	Show how to set up I2C communication between an Arduino and NodeMCU.	2	Arduino UNO, laptops with Arduino IDE installed, NodeMCU, breadboard, resistors, wiring, etc.
IoT using NodeMCU	Modify the NodeMCU code	1	Arduino UNO, laptops with Arduino IDE installed, NodeMCU, breadboard, resistors, wiring, etc.
Project build and integration.	Start assembling the pieces that make up the light sculpture. Snap and screw together assembly only. All wiring will be pre-soldered. The acrylic panels will be pre-engraved with a pattern which the students can choose from.	2	All parts required to make up the project: The Arduino UNO, NodeMCU, wiring, acrylic panels, 3D printed base, LED matrices. Laptops with Arduino IDE installed.
Discussion and review.	End of curriculum. Discussion and review session.	1	
Total number of class sessions		**15**	

Application #1

Community Enhancement and Investment Fund 2022/2023 Grant Project - "Learning STEAM. Let's Build a Light Sculpture!" Project Budget			
Number of students	**20**		
Description	**Quantity**	**Unit Price**	**Extended Price**
Materials and supplies:			
Arduino Uno	40	20	800
NodeMCU	40	10	400
3D printer filament	14	30	420
Acrylic sheets (est. 10 sheets per student)	400	1	400
Wiring	40	5	200
Barrel jacks (5-pack)	8	10	80
Switches, resistors, etc.	40	5	200
8x8 LED matrix	40	20	800
Electrical tape	10	15	150
Paper and ink for printing course materials	40	5	200
Total materials and supplies			**3,650**
Labor (quantity in hours):			
Pre-assembly of project components (4 hours per student)	160	30	4,800
Develop course materials	40	30	1,200
Class preparation (load software in laptops, set up slide presentation, etc.)	28	30	840
Class session time	23	30	690
Total labor			**7,530**
Other costs:			
Estimated fees charged by school for hosting after school activities			1,000
Other potential costs			1,000
Total other costs			**2,000**
Total project budget			**13,180**

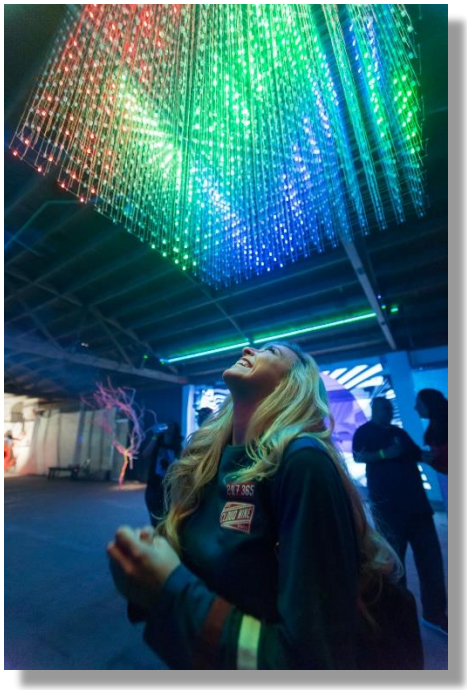
Application #1



About the Artist

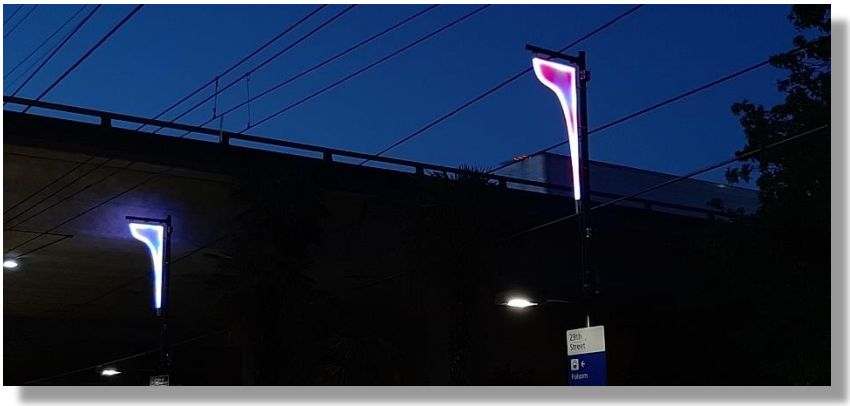
Throughout his life, Sacramento based artist, Chris Biddle, has been fascinated by both art and technology, intrigued by the infinite ways in which the two fields could be merged. The idea of creating light sculptures using LEDs literally lit his path!

"I already had a strong career background in computer programming and knew a lot about electrical engineering through having earned a bachelor's degree in physics. Building and programming my own LED sculptures, therefore, was quite attainable and I felt would be a great way of leveraging my skills."

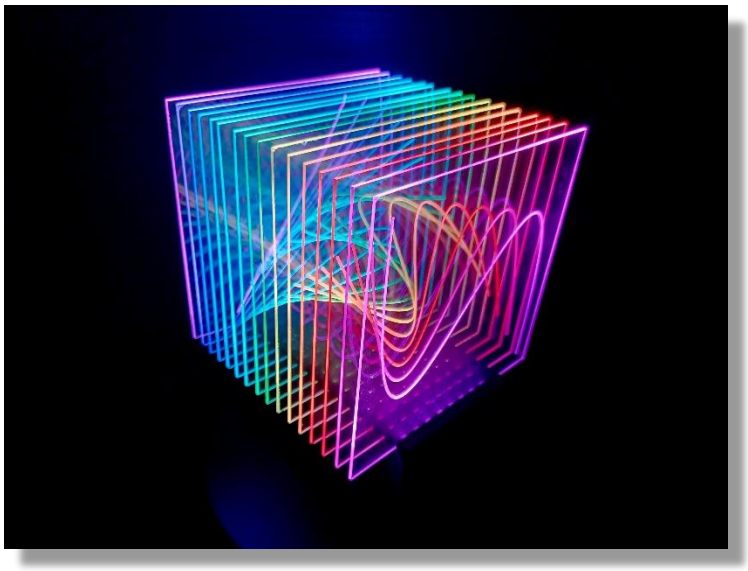


Chris started his work on LED driven art by building a small cube matrix of 27 LEDs at a hackathon in 2013. He showed how the cube could be controlled through a WiFi connection and a web page. The idea was a prize winner at the hackathon, and he moved on to building larger cubes. In 2015, he sold a cube to the newly opened Warehouse Artist Lofts on R Street as part of their curated collection in the community room. He later built a large-scale multi-color cube of 4,096 LEDs and, in 2018, was awarded a $5,000 Creative Economy grant from the City of Sacramento to modify the cube with interactivity and to display it at various events within the city. The most notable of these events was Alex Trujillo's LIGHT.WAV tech art showcase held in Midtown, Sacramento.

Chris' latest large-scale work, completed in July of 2021, can be seen at the 29th and R Street Light Rail Station in Midtown. As a partnership project for Regional Transit and Midtown Association, he installed a set of six LED panels on the banner poles at the station to attract ridership and to help beautify the Midtown and Alhambra corridor.



"Large or small, each art piece has its own set of unique challenges that can sometimes be frightening to overcome. But when I overcome those fears with a can-do attitude, I feel I am at my best. Backed by a commitment to my faith and family, that brings me a sense of fulfillment and makes me whole."



Spline Wave

Artist: Christopher Biddle
Medium: LED edge lit acrylic
Completed: November 1, 2021
Price: $225

Splines are continuous functions defined by polynomials. Because of their continuity, they provide designers with an aesthetically pleasing, best fitting curve through a given set of points. The curve on each panel in the art piece was designed by fitting a spline through a set of four points, then moving the points slightly in each successive panel. The resulting design was then engraved into the acrylic, yielding a beautiful, graceful, and dynamic 3D wave pattern.

The lighting is provided by an 8 x 16 matrix of multi-color LEDs shining through the edges of the panels from the base. Each LED is individually addressable, allowing for an infinite combination of moving colors, with varying brightness and animation rates. The matrix is controlled by an Arduino Uno, a popular micro-controller often used in robotics.

A set of pre-defined lighting patterns have been programmed into the art piece, and these patterns can be selected through your smart phone. To do so, follow these simple steps:

1. With the art piece nearby and running, access the available WiFi connections on your smart phone.

2. Look for a connection called “EL1601 Night Light”.

3. Connect to it using the password “Z1mb@bw3” (That is “Zimbabwe”, but substituting 1, @ and 3 for the letters i, a, and e).

4. Once connected, open the web browser on your phone and go to

   http://192.168.4.1

   You will see a page with various links that will allow you to change the patterns and brightness levels.

   Note: If you are a guest temporarily viewing this art piece, please be sure to leave the Run Mode “On” when leaving, and to leave the Pattern Selection at “Cycle All Patterns”.

If you have any questions about the art piece, please feel free to contact the curator Cheryl Gleason at cheryl@cordovacouncil.org or myself at contact@light23.com. Thank you!

Christopher Biddle

Application #1



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Learning STEAM. Let's Build a Light Sculpture!

Name of Organization: Light23 Company

Name of Applicant and Title: Christopher Biddle, Company Founder

Applicant's Phone: (916) 616-5404 **Applicant's Email:** ckbiddle@pacbell.net

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given — No. We invite the requestor to work with our staff to develop integrated

Endorsement Withheld — programming at no cost to students in advance of the next school year.

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #1

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Thursday, March 3, 2022 11:32:16 AM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1507510
IP Address: 76.127.106.227
Submission Date: 03/03/2022 11:32
Survey Time: 6 minutes, 13 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Cordova River City Concert Band Enhancements

Project Synopsis

Continuing Expansion for Community Musical Performance Programs

Project Description

This project provides funds to the Rancho Cordova River City Concert Band (RCRCCB) for equipment, musical talent, and related expenses, thereby enhancing its potential to provide high-quality musical performance events in the City of Rancho Cordova and to equip the RCRCCB to represent the City of Rancho Cordova as musical ambassadors within the region. The goal of the volunteer-driven RCRCCB is to engage with and represent the community of Rancho Cordova with superior musical performances, foster musical interest among children, bring world-class guest artists, conductors and composers to the Rancho Cordova stage, and to provide performance opportunities for skilled community musicians. We strive to provide a rich social environment to those seeking life enrichment through musical interaction while providing connection through our community. The band performs a wide range of music from traditional band literature to contemporary arrangements in addition to premiering new compositions. RCRCCB is proud to be the 2022 recipient of the Rancho Cordova Distinguished Community Service Organization Volunteer Award. The RCRCCB continues to partner with the community of Rancho Cordova to provide an extensive range of music to multiple venue types including full band concerts and small ensemble presentations. The band has continued to cooperatively engage and support multiple events within Rancho Cordova such as the 15th Birthday of Rancho Cordova event, artist receptions at Rancho Cordova City Hall, the Pop-up Gallery at the MACC, and Memorial Day and Veterans' Day observances. The band looks forward to continuing this partnership with the City of Rancho Cordova and the Cordova Community Council Foundation.

Project Team

The Band is currently an incorporated volunteer performing group operating as an independent 501(c)(3) federal tax-exempt nonprofit organization in the State of California. The implementing team will be led by Tom Seaton, Conductor; Melanie Freer, President; and the Board of Directors of the organization. Members of the band, consisting of 50-70 volunteer musicians will participate in implementation.

Application #2

Project Goals

Goal #1: Bring high-quality musical performance events to Rancho Cordova's citizens and visitors Goal #2: Strengthen Rancho Cordova's Arts profile image Goal #3: Further enhance the Rancho Cordova Arts' goal of making the city "a place for art and artists" Goal #4: Incorporate community outreach and integration with audience members to foster musical interest and enhancement in the community (especially with our youth)

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

Total Project Cost: $380,018 = $40,986 + $339,032

Estimated breakdown of project expenditures

Operating budget (materials, storage, music, consultants, and maintenance): $40,986 In-kind contributions for operational materials: $339,032 = $12,343 (outside partnerships) + $326,689 (RCRCCB Members)

Matching Funds

In-Kind Contributions: $1,192 Rancho Cordova Food Locker: Use of their 26 foot, liftgate truck for movement of sensitive equipment to and from our concerts. $4,234.86 Rise Up Theater Company: Photography, videography, livestreaming, vocalists for concerts $6,916.60 Koreana Plaza: Concert venue for at least two concerts per year with staging, lighting, closed circuit TV, audio/sound system, backdrop. $326,689 Rancho Cordova River City Concert Band Volunteers based on volunteer hours for concerts, ensembles, rehearsals, administrative tasks, virtual performance and livestreaming. $33.61/volunteer hour

Include any other funding contributions

Cordova Community Council RCRCCB has partnered with the Cordova Community Council Foundation (CCC) for years to provide high-quality musical performances in Rancho Cordova. The CCC generously contributes consulting services as well as a financial stipend for operational expenses.

Ongoing operations and maintenance costs (if applicable)

Operating budget (materials, storage, music, consultants, and maintenance): $40,986

Total Community Enhancement & Investment Funds requested

$20,000

Is this a multiyear request?

No

How many years have you received funding for this project?

5

When will your request for funding sunset for ongoing programs?

As RCRCCB intends to continue to perform, afford educational opportunities, and provide a space for local musicians to enhance their skills for years to come, sunsetting for this project is not anticipated. We would not have been able to achieve success without financial support in prior years and anticipate applying for funding in the future to maintain operations, invest in enhanced performance opportunities, and continue to develop the music community in Rancho Cordova and beyond. We are continuing to develop and foster partnerships within Rancho Cordova to bring musical experiences to the community in new and integrative ways.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will continue to seek the generous sponsorship of the Cordova Community Council. The Rancho Cordova River

City Concert Band continues to seek other fundraising opportunities through our fundraising committee efforts. Before COVID, we held an annual Santa Pancake Breakfast Fundraiser. We currently are working on becoming a part of "The Big Day of Giving" annual fundraiser. Other fundraising efforts include a donation bin at our concert, Amazon Smile, and Fundraisers held through Facebook as different members request donations for their birthdays be donated to the Band.

Project Schedule, Timeliness and Adaptability

Project Schedule

• “Brushes & Beats” concert event at Soil Born Farm* • Rancho Cordova Veterans Day Event 2022* • Community Concert Koreana Plaza in Rancho Cordova Fall/Winter 2022 • Community Concert Rancho Cordova Performing Arts Center Fall/Winter 2022 • Community Concert Koreana Plaza in Rancho Cordova Spring 2023 • Rancho Cordova Memorial Day Event 2023* • Rancho Cordova 20 year Anniversary Celebration 2023* • Community Concert Rancho Cordova Performing Arts Center Spring/Summer 2023 • Music ensembles at Rancho Cordova events and gatherings including City Hall Events, Rancho Cordova Artist Receptions,*Retirement Home Concerts, Rancho Cordova Santa Train, collaborative partnership musical theater production with Rise Up Theater Company * These events are in collaboration with the Cordova Community Council ** All in-person events are subject to COVID-19 regulations

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

• Leverage: This project leverages existing community assets, previous City investments, and the musical art expertise of the Rancho Cordova River City Concert Band. • Return on Investment: The value of positive publicity through proper, effective promotion will bring Rancho Cordova the notoriety it seeks as a pioneer in supporting its community through arts. This positive value easily has the capacity to exceed the investment. • Capacity: The Project Team has a proven track record and well-documented capacity for delivery of this project. • Timeline for Execution: This fund would be accessible to meet existing needs immediately upon funding and would be expended by the Rancho Cordova River City Concert Band during the grant period 2022-2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The Rancho Cordova River City Concert Band has a proven track record of being pioneers in the field of virtual performances. The international group known as the Association of Concert Bands has featured the Rancho Cordova River City Concert Band and our virtual engineer to help other community music groups with the knowledge necessary to perform in a virtual environment. The Band's YouTube channel is where our virtual performances are freely accessible. (https://www.youtube.com/channel/UCLBZg31MzxoLRZ7cSr_Gt8Q) The Cordova Community Council has been kind enough to e-blast these different performances in celebration of a variety of holidays. We have even collaborated with the schools, MACC and the Symphony d'Oro to produce a virtual concert.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

9792 Business Park Drive
Sacramento, CA 95827

Other physical addresses if project/program is at multiple sites

*Please note: Letter of Support from the Mandarins was not requested because all rehearsal fees are through a separate Grant. Cordova High School PAC; 2239 Chase Dr.; Rancho Cordova, CA 95670 Koreana Plaza Market; 10971 Olson Dr.; Rancho Cordova, CA 95670 Soil Born Farms; 2140 Chase Dr.; Rancho Cordova, CA 95670 Rancho Cordova

City Hall; 2729 Prospect Park Dr.; Rancho Cordova, CA 95670 MACC; 10191 Mills Station Rd.; Sacramento, CA 95827 Carmichael Park; 5750 Grant Ave; Carmichael, CA 95608

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Melanie Freer

Title

President

Submitting as

Non-Profit

Phone

9168786161

Email

floutistfreer@gmail.com

Organization's legal name, if applicable

Rancho Cordova River City Concert Band

Mailing Address of Submitter

P.O. Box 1433
Rancho Cordova, CA 95741-1433

Signatory's Name

President Melanie Freer

Signatory's Title

President of the Rancho Cordova River City Concert Band

Signatory's Phone

9168786161

Signatory's Email Address

floutistfreer@gmail.com

Signatory's Mailing Address

P.O. Box 1433
RANCHO CORDOVA, CA 95741-1433

Attach any additional documents here

2022-23 Band Enhancements RCRCCB - FINAL.pdf
3-03-2022 Email Submission to FCUSD for Endorsement.pdf
RCRCCB Supplemental Endorsement Form 2022-2023 Folsom Cordova Unified.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #2

Rancho Cordova River City Concert Band Enhancements

Continuing Expansion for Community Musical Performance Programs

Project Description

This project provides funds to the Rancho Cordova River City Concert Band (RCRCCB) for equipment, musical talent, and related expenses, thereby enhancing its potential to provide high-quality musical performance events in the City of Rancho Cordova and to equip the RCRCCB to represent the City of Rancho Cordova as musical ambassadors within the region.

The goal of the volunteer-driven RCRCCB is to engage with and represent the community of Rancho Cordova with superior musical performances, foster musical interest among children, bring world-class guest artists, conductors and composers to the Rancho Cordova stage, and to provide performance opportunities for skilled community musicians. We strive to provide a rich social environment to those seeking life enrichment through musical interaction while providing connection through our community. The band performs a wide range of music from traditional band literature to contemporary arrangements in addition to premiering new compositions.

RCRCCB is proud to be the 2022 recipient of the Rancho Cordova Distinguished Community Service Organization Volunteer Award. The RCRCCB continues to partner with the community of Rancho Cordova to provide an extensive range of music to multiple venue types including full band concerts and small ensemble presentations. The band has continued to cooperatively engage and support multiple events within Rancho Cordova such as the 15th Birthday of Rancho Cordova event, artist receptions at Rancho Cordova City Hall, the Pop-up Gallery at the MACC, and Memorial Day and Veterans' Day observances. The band looks forward to continuing this partnership with the City of Rancho Cordova and the Cordova Community Council Foundation.

Application #2

Objectives

Goal #1: Bring high-quality musical performance events to Rancho Cordova's citizens and visitors
Goal #2: Strengthen Rancho Cordova's Arts profile
Goal #3: Further enhance the Rancho Cordova Arts' goal of making the city "a place for art and artists"
Goal #4: Incorporate community outreach and integration with audience members to foster musical interest and enhancement in the community

Project Team

The Band is currently an incorporated volunteer performing group operating as an independent 501(c)(3) federal tax-exempt nonprofit organization in the State of California.

The implementing team will be led by Tom Seaton, Conductor; Melanie Freer, President; and the Board of Directors of the organization. Members of the band, consisting of 50-70 volunteer musicians will participate in implementation.

Project Criteria

This project meets multiple factors of the Community Enhancement Fund criteria as follows:

- **Community Pride:** Represent Rancho Cordova as musical ambassadors both within the city and touring abroad.
- **Civic Engagement:** Community outreach to bring engaging quality musical events to children, families, and the community.
- **Quality of Life:** Provide performance opportunities for skilled community musicians who seek enrichment through musical interaction while providing musical art experiences to families in Rancho Cordova.
- **Arts and Culture:** Bring exciting arts and culture to Rancho Cordova families through this musical outreach.
- **Growth and Education:** Support and recruit skilled local volunteer musicians to continue to grow and develop as lifelong learners of music. This unique platform allows us to foster the same growth and development in the youth of Rancho Cordova.
- **Children and Youth:** Foster musical interest in children with live musical art experiences.

Prioritization Criteria

- **Leverage:** This project leverages existing community assets, previous City investments, and the musical art expertise of the Rancho Cordova River City Concert Band.
- **Return on Investment:** The value of positive publicity through proper, effective promotion will bring Rancho Cordova the notoriety it seeks as a pioneer in supporting its community through arts. This positive value easily has the capacity to exceed the investment.
- **Capacity:** The Project Team has a proven track record and well-documented capacity for delivery of this project.

Application #2

- **Timeline for Execution:** This fund would be accessible to meet existing needs immediately upon funding and would be expended by the Rancho Cordova River City Concert Band during the grant period 2022-2023.

Metrics

Goal	Metrics
Goal #1: Bring high-quality musical performance events to Rancho Cordova's citizens and visitors	Quality musical performances will be presented by the full ensemble and small ensembles in a wide variety of venues, measured by attendance.
Goal #2: Strengthen Rancho Cordova's Arts profile image	Elevate RCRCCB's ability to serve as an ambassador of the city as measured by audience growth and an expanded performance calendar to include more and new venues both within Rancho Cordova and through touring.
Goal #3: Further enhance the Rancho Cordova Arts' goal of making the city "a place for art and artists"	Incorporation of unique, world-class guest musical talents will further enhance the draw to Rancho Cordova as an arts destination. Given the uncertainty of the pandemic to our in-person attendance, we will measure this by the social media outreach and response through platforms such as You Tube, Facebook, and NextDoor, which will incorporate links to view and share our concerts (including virtual and livestreamed concerts) on a local, national and international scale.
Goal #4: Incorporate community outreach and integration with audience members to foster musical interest and enhancement in the community (especially with our youth)	By expanding RCRCCB's performance materials, musicians will have the tools and repertoire of music necessary to provide a diversity of music that is both engaging and enjoyable for musicians and audiences alike. Given the uncertainty of the pandemic to our in-person attendance, we will measure this by the social media outreach and response through platforms such as You Tube, Facebook, and NextDoor, which will incorporate links to view and share our concerts (including virtual and livestreamed concerts) on a local, national and international scale.

Our Proposal

The Rancho Cordova River City Concert Band Enhancements Project builds upon successes initiated under the 2017-18 Community Enhancement Fund allocations which have brought stability and musical improvement to this valuable volunteer organization by providing support for music stands and percussion equipment.

Building the band to equity with other musical performing groups in the region will require continued effort. This request continues to leverage prior investments in a unique community asset which has proven to be a critical tool in improving community image, engages new sectors of the Rancho Cordova community and lifts the city through high quality classical music and contemporary musical performances.

Funding Request

Total Project Cost: $380,018 = $40,986 + $339,032

Estimated Breakdown of Project Expenditures:

Operating budget (materials, storage, music, consultants, and maintenance): $40,986

In-kind contributions for operational materials:

$339,032 = $12,343 (outside partnerships) + $326,689 (RCRCCB Members)

How many years have you received funding for this project?
We have received funding for this project in five prior years.

When will your request for funding sunset for ongoing programs?
As RCRCCB intends to continue to perform, afford educational opportunities, and provide a space for local musicians to enhance their skills for years to come, sunsetting for this project is not anticipated. We would not have been able to achieve success without financial support in prior years and anticipate applying for funding in the future to maintain operations, invest in enhanced performance opportunities, and continue to develop the music community in Rancho Cordova and beyond. We are continuing to develop and foster partnerships within Rancho Cordova to bring musical experiences to the community in new and integrative ways.

Project Location:
Rehearsals occur Monday evenings 6:45pm – 9:15pm at Mandarins of Sacramento, Inc.; 9792 Business Park Drive; Sacramento, CA 95827.

Performances will take place in a variety of locations including, but not limited to: the Cordova High School Performing Arts Center, Koreana Plaza Market, Soil Born Farms, Rancho Cordova City Hall, Mills Station Art & Culture Center, Hagan Park, and Carmichael Park.

Application #2

Matching Funds (including any in-kind contributions):

In-Kind Contributions:

Rancho Cordova Food Locker
The Rancho Cordova Food Locker has generously allowed the band to use their 26 foot, liftgate truck for movement of sensitive equipment to and from our concerts. The use of a liftgate truck is essential for safe transportation of our equipment. In turn, we collect food and donations for the Rancho Cordova Food Locker at our concerts.

$1,192.00: Estimated value of the in-kind donation usage of the truck is calculated as follows:

- 6 concerts x $181/truck rental for each concert = $1086.00 (Enterprise Truck rental rate)
- 6 concerts x 34 miles/concert x $0.25/mile (Enterprise Truck rental rate) = $51.00
- 6 concerts x 25 miles/concert x 15 miles/gallon of gas x $5.50/gallon gas = $55.00

Rise Up Theater Company
The Rise Up Theater Company has become an integral partner with RCRCCB to bring the Arts to life in Rancho Cordova. They have been instrumental in videography and livestreaming our performances for our YouTube channel to bring music to those who are unable to make it to our in-person performances. The Summerset Retirement home in Rancho Cordova has the capacity to have their residents view our performances on their large screen television in live-time thanks to the efforts of this partnership. The Rise Up Theater Company has also brought their vocal talents alongside RCRCCB in performances at our concerts to both showcase their musical gifts as well as encourage audience participation in sing-a-longs. We look forward to reciprocating in this partnership by bringing our instrumentalists to provide music during their future theater productions.

$4,234.86: Estimated value of In-Kind Annual Contributions from the Rise Up Theater Company

- 6 concerts x 2 hours livestreaming/videography x 3 persons= 54 hours
- 6 events post-production collaboration with RCRCCB visual/digital artist x 4 hours= 24 hours
- 6 events x 2 hours x 2 singer/performers (on average) with RCRCCB = 24 hours
- 12 rehearsals x 1 hour x 2 singer/performers (on average) with RCRCCB = 24 hours
  54 hours +24 hours + 24 hours + 24 hours = 126 hours x $33.61/volunteer hour = $4,234.86

Koreana Plaza
Koreana Plaza has generously allowed the band to use its food court area for conducting annual holiday fall/winter and spring/summer concerts. The use of this space has brought instrumental music to the citizens of Rancho Cordova. Koreana Plaza has been a gracious host by setting up a stage, sound system, a back drop curtain and beautiful colored lights. They also provide closed-circuit television cameras which project the band on their huge wall of screens for all audience members to view.

$6,916.60: Estimated value of In-Kind Annual Contributions from Koreana Plaza

- 2 concerts x 5 hours (2 concert hours and 3 set-up/cleanup hours)/concert
  - $180/hour (non-profit rate for the Cordova PAC) x 10hours = $1800
  - $30 application fee per event (per the Cordova PAC rates) x 2 events/year = $60
- Elevated stage Estimate (ABA Daba Daily Rental for similar stage) = $500 x 2 concerts = $1000
- Backdrop (Elite Party Rental, Rancho Cordova) 4 x 10 foot sections = 4 x $29/section = $116 x 2 concerts = $232.00
- Lighting (ABA Daba Daily Rental for similar) $61 x 5 lights = $305 x 2 concerts = $610
- Closed Circuit TV to allow all guests to see. Estimate = $500/ concert x 2 concerts = $1000
- Sound/Audio system (Elite Party Rental, Rancho Cordova) = $99 x 2 concerts = $198
- Volunteer hours to set up staging, lighting, sound system, audience seating
  - 3 persons x 10 hours/concert x $33.61/hour volunteer rate x 2 concerts/year = $2016.60

The Rancho Cordova River City Concert Band Members

Band members contribute thousands of volunteer hours throughout the year to the community and provide a minimum of four concerts by the full band, and a minimum of four additional performances by ensemble groups. It is projected the band will be central performers in the following events during the grant period:

- "Brushes & Beats" concert event at Soil Born Farm*
- Rancho Cordova Veterans Day Event 2022*
- Community Concert Koreana Plaza in Rancho Cordova Fall/Winter 2022
- Community Concert Rancho Cordova Performing Arts Center Fall/Winter 2022
- Community Concert Koreana Plaza in Rancho Cordova Spring 2023
- Rancho Cordova Memorial Day Event 2023*
- Rancho Cordova 20 year Anniversary Celebration 2023*
- Community Concert Rancho Cordova Performing Arts Center Spring/Summer 2023
- Music ensembles at Rancho Cordova events and gatherings including City Hall Events, Rancho Cordova Artist Receptions,*Retirement Home Concerts, Rancho Cordova Santa Train, collaborative partnership musical theater production with Rise Up Theater Company

  * These events are in collaboration with the Cordova Community Council
  ** All in-person events are subject to COVID-19 regulations

$326,689: Value of in-kind annual contributions from the Rancho Cordova River City Concert Band, calculated at the most recent California standard of $33.61 per volunteer hour* include:

- 8 concerts x 3 hours per concert x 60 musicians: 1440 hours
- 40 rehearsals x 2.5 hours per rehearsal x 60 musicians: 6000 hours
- 50 small ensemble concerts/rehearsals x 2 hours x 10 musicians: 1000 hours

- Virtual recording productions may be substituted for concerts of any kind with use of a virtual digital artist. If used 8 times x 35 hours per recording = 280 hours
- Livestreaming and recording concerts for future viewing on our YouTube Channel requires the use of our virtual digital artist for editing and production. If used 8 times
- Executive board meetings, budget meetings, grant writing, newsletters, and bookkeeping: 1000 hours

* Rate obtained from the state-level value of volunteer time breakdown from https://independentsector.org/resource/vovt_state_2021/

Cordova Community Council

RCRCCB has partnered with the Cordova Community Council Foundation (CCC) for years to provide high-quality musical performances in Rancho Cordova. The CCC generously contributes consulting services as well as a financial stipend for operational expenses.

Community Enhancement Funding Request Total: $20,000

Performance Venues and Festival Participation	$3,000
Production Materials and Musical Equipment	$4,500
Equipment Protection	$6,000
Musical Guests and Local Talent Partnership	$4,500
Community Outreach and Publicity	$2,000
TOTAL	$20,000

Performance Venues and Festival Participation: Our band has successfully performed in multiple outdoor and indoor venues; however, attaining concert venues which provide a stage large enough for our 50-70 member ensemble, appropriate lighting, appropriate sound and technical staff can be very costly to rent and very challenging to find. Securing venues which can provide these amenities will enhance the quality of our performances, attract guest performers, conductors and composers which will in turn attract a broader audience. The band plans to apply to represent the Rancho Cordova Community at both the San Francisco Golden Gate Park Festival and the National Association of Concert Bands Convention in 2023. There are associated costs involved with the application process for this event including but not limited to application fees, recording fees, and photography suitable for promotional materials. Additional costs may include safe, and appropriate equipment transportation.

Production Materials and Musical Equipment: The band uses production materials to continue to provide high level performances to the Rancho Cordova community. We typically perform over six concerts per year and hold weekly rehearsals. We are currently working on improving our livestreaming and recording abilities to bring music to vulnerable residents who cannot attend our concerts in person such as seniors at our community senior centers and assisted living facilities. We would like to invest in equipment to bring our music to life through livestreaming and recording platforms. Our new partnership with the Rise Up Theater Company has brought knowledge and manpower to produce these events at a quality level representative of Rancho Cordova's strength and beauty. Our band membership has had an increased level of turnover due to the effects of the COVID pandemic. We have surprisingly gained many new members while others await the final lifting of restrictions, mandates and safety when masks are no longer needed to protect one another. As such, some of the materials we have been using over the past several years have been worn down and need replacement or supplementation. It is necessary to provide appropriate equipment and supplies to all musicians at

performances and rehearsals. Our schedule of performances for the upcoming season is very busy and diversified and will require a variety of music for smaller ensemble groups and for the whole band. Funds will be used for supplies which may include additional chairs, stands, music folders, and lighting equipment as well as sheet music and music books.
Many compositions require specific percussion instruments in order to perform them. While most band members provide their own instruments, percussion equipment is not typically owned by the percussionists but provided by the band. As the band is looking to incorporate percussion instrument sounds in smaller ensemble settings, we are looking to acquire electronic percussion equipment for those smaller venues. The added benefit to incorporate electronic percussion equipment is the reduction of liability in moving our larger pieces and using them in inclement conditions which can really cause undue wear and tear to the instruments.

Equipment Protection: With a growing arsenal of delicate musical instruments, a paper music library, and other equipment, it is essential to maintain storage space which provides adequate protection which is secure, climate controlled and rodent proof. It is necessary to ensure that the equipment purchased in prior years is protected during transportation to performances and while being stored in a facility. Cases – specifically, for brass and percussion – are needed to protect existing instruments as well as the volunteers handling instruments during transport to and from rehearsal and concert venues.

Musical Guests and Local Talent Partnership: The band brought the 2015 National Association of Concert Bands' Convention to Rancho Cordova. The band has proudly performed and maintains in its library "River City" by world-renowned composer Jacob de Haan commissioned specifically for the band. With the composer in attendance and actively interacting with the audience, the band performed the 2019 West Coast premiere of "The Sword of Titan" a composition by renowned and prolific band and movie score composer/orchestrator Rossano Galante.

Continuing the momentum of bringing the City of Rancho Cordova to the national and world stage, the band strives to attain and bring exclusive compositions, arrangements, guest artists, composers and conductors to our community. Jerry Brubaker is a prolific and world-renowned composer/arranger of over 200 works who was a member of the US Navy band for over 30 years as French horn soloist. The band commissioned a piece in 2021 from Jerry Brubaker titled "Proudly They Served." The Band plans on performing the live world premiere of "Proudly They Served" as the central theme for the Cordova Community Council's 2022 Memorial Day event at the Rancho Cordova Performing Arts Center. Additionally, the band wants to support and collaborate with local artists and musicians to showcase the amazing talent we have here in the Rancho Cordova area. Funding for additions original compositions, arrangements suited specifically for the band's membership, and for guest artists, conductors and composers to visit Rancho Cordova would enhance the Rancho Cordova Arts' goal of making the City an arts destination.

Community Outreach and Publicity In order to enhance community outreach efforts, increase civic engagement, increase community pride, and be a visible manifestation of the community enhancement funds locally and abroad, it is essential for us to produce high-quality promotional materials and to consult with public relations and marketing professionals. Outreach materials to help the band engage the audience to participate in our performance, plan to attend future concerts, and become involved in instrumental music fosters the sense of community and stimulates the interest of individuals to become involved in music. The band has the opportunity to encourage people to want to play a musical instrument (especially young persons) or to dust off an instrument that may have not been used in some time to play once again.

Application #2

Application Submitted by:

Name: Melanie Freer **Title:** President, Rancho Cordova River City Concert Band
501(c)(3) Non-profit
Phone: 916-878-6161
Email: floutistfreer@gmail.com
Mailing Address: P.O. Box 1433; Rancho Cordova, CA 95741-1433

Signatory's Name: Melanie Freer **Title:** President, Rancho Cordova River City Concert Band
501(c)(3) Non-profit
Phone: 916-878-6161
Email: floutistfreer@gmail.com
Mailing Address: P.O. Box 1433; Rancho Cordova, CA 95741-1433

Gmail

Melanie Freer <floutistfreer@gmail.com>

Rancho Cordova River City Concert Band Request for Supplemental Endorsement for Measure H Grant

1 message

Melanie Freer <floutistfreer@gmail.com> Thu, Mar 3, 2022 at 10:16 AM
To: "agriffin@fcusd.org" <agriffin@fcusd.org>

Hello Ms. Angela Griffin Ankhelyi,

Please find the enclosed request from the Rancho Cordova River City Concert Band for the endorsement of the Folsom Cordova Unified School District for school site usage. Our Band looks forward to renting the Rancho Cordova Performing Arts Center for free in-person band concerts this upcoming year.

I have enclosed a copy of the Band's 2022-2023 Measure H Grant proposal as I believe this is supposed to accompany our request to your school superintendent. Thank you so much for your continued support of the performing arts in Rancho Cordova.

I can be reached most easily at 916-878-6161 should you have any questions.

Sincerely,

Melanie Freer, President
Rancho Cordova River City Concert Band

2 attachments

2022-23 Band Enhancements RCRCCB - FINAL.pdf
242K

RCRCCB Supplemental Endorsement Form 2022-2023 Folsom Cordova Unified.pdf
146K

Application #2



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Rancho Cordova River City Concert Band Enhancements

Name of Organization: Rancho Cordova River City Concert Band

Name of Applicant and Title: Melanie Freer, President

Applicant's Phone: 916-878-6161 **Applicant's Email:** floutistfreer@gmail.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only Yes

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #2

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 1:58:48 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1510349
IP Address: 73.220.53.141
Submission Date: 03/04/2022 1:58
Survey Time: 27 minutes, 29 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

NorCal School of the Arts Theater Arts & SEL Integration Program at Williamson Elementary School

Project Synopsis

NorCal School of the Arts Outreach Program will provide every classroom at Williamson Elementary with 10 Theater Arts & SEL integrated classes as well as an after school production for students wanting to engage in further after school theater arts programming. Williamson Elementary is a Title 1 school in FCUSD.

Project Description

Funds provided by the City of Rancho Cordova's Enhancement Fund will enable NorCal School of the Arts to serve 537 students at Title one school, Williamson Elementary with Theater Arts & Social-Emotional Learning-Integrated classes during school in the fall of 2022. During the spring of 2023, students will have the option to participate in an after-school program that will culminate in a fully-produced musical at the school. Each Williamson Elementary classroom will experience ten Theater Arts & SEL-Integrated classes led by a NorCal professional teaching artist throughout the school day. NorCal teaching artists are trained in weaving social-emotional learning strategies into theater arts lessons. These classes will also act as a professional development opportunity for the Williamson Elementary classroom teachers to learn how to integrate SEL strategies through theater arts. Throughout this program, NorCal School of the Arts will serve as a resource for classroom teachers. Teachers will have access to all the curriculum and Theater/SEL-Integrated resources to continue the exercises once the program is completed. Social-emotional learning activities are imperative as a COVID-responsive strategy for helping students reengage with their peers in the classroom. This project benefits the children and families from Williamson Elementary as it supports the growth and development of young students. It enhances the quality of educational services to Rancho Cordova students because it acts as a professional development opportunity for teachers while engaging students in the arts. With the goal being to nurture safe, emotionally healthy, and engaged students, this COVID responsive Theater Arts and SEL-Integrated program will help students express their emotions and engage in creative activity as a means of working through the effects of covid-19 and over dependence on electronics, which more and more studies are revealing a detrimental impact on our children.

Project Team

Michele Hillen-Noufer - Executive Director Michele Hillen-Noufer, M.Ed., AEA, SAG is the Executive Director for

NorCal School of the Arts. She is a member of Actors' Equity Association and SAG/AFTRA and has a master's degree in education, is an arts advocate and administrator. Michele is an arts integration specialist and keeps her skills current by teaching at NorCal and local elementary schools and providing workshops and professional development opportunities for conferences and in-services for educators. Kevin B. Johnson - Teaching Artist aka K' Von Blakemore-Johnson is an Equity actor, singer, dancer, director and visual artist. He was taught theatre for over 30 years. For NorCal School of the Arts he has taught at Williamson Elementary in FCUSD, F.C. Joyce in Twin Rivers Unified School District as well as several schools in the Sacramento City Unified School District. Elaine Lenae Douglas - Teaching Artist Elaine Lenae Douglas has been performing for many theater companies in Sacramento and other nearby areas for over 20 years. Elaine Douglas is a graduate from the University of California Berkeley with a double major in sociology and ethnic studies. She later obtained a teaching and administrative services credential from California State University, where she studied theater arts as a minor. Mitch Worrell-Olsen - Teaching Artist Mitchell Worrell-Olson is an ever studying student of the theatrical arts. He is a Sac State Graduate with a Theater degree and is currently in the process of preparing for grad school applications where he hopes to pursue a PhD in Theater and Performance with the hopes of teaching at the collegiate level one day. For a comprehensive list of NorCal staff and faculty go to https://www.norcalsota.org/

Project Goals

NorCal School of the Arts goal at Williamson Elementary School is to provide classes for students that also act as a professional development to teachers on theatre arts and SEL integration techniques for the classroom. These classes will further engage students and support the emotional and academic well-being of students. NorCal School of the Arts will provide an after-school theatre program to help students obtain life skills related to increased ability and confidence with public speaking, self-management, communication and collaboration. Student involvement in theater arts and SEL-integrated activities provides students critical thinking opportunities to help them in school and beyond. Student engagement in the arts also positively impacts cognition. Upon the completion of the program, NorCal's Executive Director will provide an impact report to include video and photo documentation of teaching artists in the classroom/rehearsal room and the students' final presentation. The impact report will contain attendance records; weekly lesson plans with the specific ELA, SEL, and VAPA standards achieved; as well as survey results. NorCal management will observe teaching artists in the classroom and review daily reports. After each class, classroom teachers will fill out a survey via Google Docs that is programmed to go directly to the teaching artist and the Executive Director/Program Manager so that feedback can be immediately incorporated into the next lesson. Student progress will be notated throughout the process. Formative assessments will be woven into the lesson plans throughout the artistic process of both the classes and the after-school theater program. The curriculum will be created through a backward design approach with the summative assessment (final outcomes) referred to during the curriculum creation process.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

31,100

Estimated breakdown of project expenditures

Teaching Artists for 10 class SEL/Theater Arts integrated classes: $17,100 ($60.00 a class at 19 classrooms, $20 lesson plan prep fee a class) (serving the entire student body of 528 students) Administration/project management for 30 weeks: $5,000 Director, Choreographer & Music Director for show: $6,000 Production costs: set, costumes, light rental, sound equipment rental $3,000

Matching Funds

$6,100

Include any other funding contributions

other grants pending

Application #3

Ongoing operations and maintenance costs (if applicable)

n/a

Total Community Enhancement & Investment Funds requested

$25,000

Is this a multiyear request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

The program will be completed by the end of April/early May 2023.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

NorCal School of the Arts applies for many grants throughout the year to enable programs to continue at school sites. As much as possible, we want students to have an on-going experience with theater arts so it isn't just a one year offering. Once committed to a site, we do everything we can to come back year after year to enable students to continue to grow their skills in the art form. NorCal School of the Arts has been successful in obtaining grants from California Arts Council and the City of Sacramento Office of Arts & Culture.

Project Schedule, Timeliness and Adaptability

Project Schedule

September 2022 Meet with school principal to schedule classroom visitations and regular day/time for each classroom, decide on show title for spring show and discuss goals. October - December 2022 NorCal School staff will implement 10 theater arts/SEL integrated classes in each classroom at Williamson Elementary School. This will have the added benefit of generating excitement about a spring musical. Final class of the 10 class series will include a final presentation for students to share skills obtained. January Auditions & registration take place for April production. NorCal School of the Arts (NorCal) invites parent involvement with organized parent meetings that help to explain process, rehearsal schedules, time commitment, and to solicit parent engagement (community building). January-April Rehearsals begin 3-4 days a week, After- school, 3 to 4 days a weeks for 1-2 hours of rehearsal each day. Community and parent engagement occurs by actively getting them involved in building sets, creating costumes and props, and helping with publicity. days over two weekends. to engage parents and community to support the final production April Dress and tech rehearsals, final presentation, performance, & assessments Note: At Williamson Elementary, the principal, Leslee Cottrell, is extremely supportive of NorCal School of the Arts programming and realizes the need for the students and teachers to have SEL strategies integrated into the arts. This grant would provide an amazing opportunity for students to participate in the arts while receiving the added benefit of addressing student emotional health. Theater Arts & SEL integrated classes and rehearsals include: Physical and vocal exercises, Improvisation games and SEL welcoming signature activities, movement and main lesson. Students devise a final piece and engage in the creative process together to support building community.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Executive Director, Michele Hillen-Noufer, M. Ed, has over 20 years experience producing children's plays, musicals and educational programs grounded in academic and vapa standards. NorCal School of the Arts has had great success in after school programs in another Rancho Cordova school since 2018. The timeline provided is completely reasonable and NorCal has had a track record of success.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The program proposed is also designed for a virtual platform and can be transferred to a virtual or hybrid format. NorCal School of the Arts has provided the proposed programs both virtually and "in-person" in the past. In SCUSD during Fall 2020, NorCal School of the Arts was in 70 classrooms virtually providing Theater Arts & SEL integrated classes and this school, NorCal is in 150 classrooms in person in SCUSD.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

2275 Benita Dr.
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

NorCal LTR.pdf

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Michele Hillen-Noufer

Title

Executive Director

Submitting as

Non-Profit

Phone

9169559462

Email

michele.hillen@norcalsota.org

Organization's legal name, if applicable

Nu Art Education, Inc.

Mailing Address of Submitter

803 Vallejo Way
Sacramento, CA 95818

Signatory's Name

Executive Director Michele Hillen-Noufer

Signatory's Title

Executive Director

Signatory's Phone

9167475608

Signatory's Email Address

michele.hillen@norcalsota.org

Signatory's Mailing Address

4377 Rosenstock Way
Rancho Cordova, CA 95742

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #3

Williamson Elementary School

Home of the Wildcats

To whom it may concern:

I am writing to express our support and excitement for the opportunity to have NorCal School of the Arts return in the 2022-23 school year with their Theater Arts Program integrated with Social Emotional Learning (SEL) at Williamson Elementary. During this school year, thanks to last year's City of Rancho Cordova Enhancement fund award, each classroom is receiving 10 Theater Arts & SEL classes. Williamson classroom teachers were thrilled to see their students and especially their English Language Learners engage creatively with the lessons, expressing their emotions and learning valuable communication and collaboration skills.

Now, more than ever, our students need SEL strategies as we return to a new normal and educators compete with social media influences as well as the overuse of electronics. The arts are a perfect way to deliver Social Emotional Learning strategies as the Arts already provide so many opportunities for students to connect, build community and act as an outlet for self-expression and creativity.

With our past arts programming, the teachers and families have seen that bringing the arts into our school deepens the concepts that they are trying to teach in their class and engages students to want to come to school. Our resources have been unable to support a theater program at our school for many years and we welcome this opportunity to continue to partner with NorCal School of the Arts. Bringing a continued Theater Arts/SEL program to Williamson Elementary would help all students but especially students who learn differently and excel in other ways such as through movement, singing and verbal expression. It would help our students connect to each other in a meaningful way and this Arts Integration program in the classroom would also act as a continued professional development for the classroom teacher, giving the teacher some new strategies and perspectives to address students' emotional needs.

Here are just a few of the many positive comments I have seen from the classroom teachers.

"Thank you so much for bringing this program to our students. They needed this so much and we are grateful to have NorCal at our school."

"Thank you. This is a dream come true!"

"Thank you for this opportunity."

Thank you, City of Rancho Cordova, for your consideration for Williamson Elementary. Thank you for investing in our youth as we continue to try to nurture our students' talents and prepare them for a successful future.

Sincerely,

2275 Benita Drive Rancho Cordova, CA 95670 | [P] 916.294.9185 | www.fcusd.org/we

Application #3

Williamson Elementary School

Home of the Wildcats

L. Cottrell

Leslee Cottrell, Principal

Williamson Elementary School

Application #3

2275 Benita Drive Rancho Cordova, CA 95670 | [P] 916.294.9185 | www.fcusd.org/we

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: NorCal School of the Arts Theater Arts & SEL Integration Program at William

Name of Organization: NorCal School of the Arts

Name of Applicant and Title: Michele Hillen-Noufer, Executive Director

Applicant's Phone: 916-955-9462 **Applicant's Email:** michele.hillen@norcalsota.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #3

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 4, 2022 3:14 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1510528
IP Address:	73.41.138.209
Submission Date:	03/04/2022 3:14
Survey Time:	55 minutes, 45 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Little Glory and the Wamdemic! Education Through Story Telling

Project Synopsis

Get the book, Little Glory and the Wamdemic! illustrated and published. It features engaging multi-cultural characters, colorful illustrations, rhyming words and humor. It also addresses water conservation and coping with depression and anger. It is a true story of how to make lemonade when life gives you lemons. If I am awarded the grant, I will do story telling in the RC school district every 3 weeks at different sites for 1 year. Each instructor will get a copy of the book and each child will get a potted plant to feel like part of the solution.

Project Description

Please see project description phases 1-6 in the attached supplemental document.

Project Team

I, Kimberly Austin is solely responsible for the development and delivery of this project. However, I do intend on hiring an illustrator. Hopefully he or she will be a Rancho Cordova illustrator suggested by Cheryl Gleason at Cordova Council.org. I will also get the book published either through Amazon self-publishing or through the I Street Press at Sacramento Public Library. Plants for the children may be provided by Soil Born Farms in Rancho Cordova if possible.

Project Goals

Goal#1 Find an illustrator. I will right down all illustrators I contact and the date. I will make note of the correspondence between the illustrators and I. I will make a note if I like their portfolio. If I like their body of work, I will move forward with meeting with them and engaging in a contract. Every part of this process will be documented. Goal#2 Get the illustrations in the book completed. During the illustration process, I will ask the illustrator to send me sketches of pages to be approved. I will document this process carefully with dates of approvals and dates of when final pages will be completed. Goal#3 Choose a publisher. I will carefully document the call with the publishers. What the process involves, cost, time and dates of the entire process. Show the signed contract Goal#4 Complete the publishing process. Document the start and finish date of publishing Goal#5 Volunteer for 1 year doing story time reading Little Glory and the Wamdemic! at schools in the Rancho Cordova district, Hagen Park Recreation Center and possibly Soil Born Farms in Rancho Cordova.

Application #4

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$8,070

Estimated breakdown of project expenditures

• Illustrator $3,000 to $5,000 TBD • Publishing $200 • Plants $450 • Pots $550 • Books for 18 classes $250 • General Commercial Liability insurance for no less than 1 million dollars $400 • Sexual Molestation and abuse insurance for no less than $500,000 $600 • Auto Mobile liability insurance no les than 1 million is $620 a year • No rental fee for the school • No rental fee for the park • No event fees

Matching Funds

N/A

Include any other funding contributions

Any project cost above the $5,000 grant will be paid by me Include any other funding contributions including your own: My labor to create the rock animals for the children and the cost of materials. $200 for the rocks and $70 for the paints.

Ongoing operations and maintenance costs (if applicable)

I may plan to ask for money in the future for additional story times and more books for the teachers and plants in pots for the children.

Total Community Enhancement & Investment Funds requested

$5,000.00

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

In the year of 2024

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None other than what was mentioned above

Project Schedule, Timeliness and Adaptability

Project Schedule

1/22/2022 – 5/22/2022 find an illustrator 7/1/2022 sign the contract with an illustrator 10/31/2022 Book illustration completed 11/1/2022 Publishing complete/Project complete 1/1/2023 start volunteer story telling

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

1. Find an illustrator, keep records of the process 2. Illustrations complete. Approve sketches after pages to stay on track 3. Find a publisher sign a contract a keep in touch with publisher regarding timeliness 4. Document each part of the publishing process and the suggested time it will take 5. Make a schedule showing specific dates and times of the volunteer schedule

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Application #4

Yes, I will be able to adjust. If there is a change I would be able to read to the children via Zoom and drop the book and plants off with the instructor or person in charge of the group of children that day.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

9980 River Mist Way
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

Please see attachment of schools and park location

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

John Bliss approval letter.pdf

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Kimberly Austin

Title

Submitting as

Individual

Phone

9166010867

Email

KimberlyAustin5678@yahoo.com

Organization's legal name, if applicable

Mailing Address of Submitter

9980 River Mist Way
Rancho Cordova, CA 95670

Signatory's Name

Kimberly Austin

Signatory's Title

Signatory's Phone

Application #4

9166010867

Signatory's Email Address

KimberlyAustin5678@yahoo.com

Signatory's Mailing Address

9980 River Mist Way
Rancho Cordova, CA 95670

Attach any additional documents here

Good Phases of project 1-6 and Contacts made.docx
Kimberly signed park form endorsement.pdf
KimberlySignedSchoolEndorsementForm.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #4

Project Description Phase 1-6

Phase one

I have lived in the same house in Rancho Cordova for 26 years, approximately 1 mile from Cordova Meadows Elementary School. My master plan started as a water conservation project. I removed all the grass in my front yard with a rototiller and replaced the landscape with a variety of rocks with different textures, shapes, sizes and colors. I carefully laid the rocks in various patterns to create designs with movement. I planted trees, water friendly shrubs, grasses and bushes to add even more color and texture.

Phase two

Began when I wanted to make a big lizard out of rock providing a “free” walking rock art museum of sorts for the kids in the neighborhood. My mother who has dementia, with a child like glint in her eyes asked me to make a big turtle instead sooo… I made a big turtle made of several river rocks with smooth glass black eyes. By this time the pandemic was in full swing, isolation had begun. A family walked by and a little boy yelled out look Glory there is your dream house with the turtle. I was plenty depressed about not going to the office and feeling shut in, all alone and bored stiff. The pandemic hit me like Wham! Thus, the word, Wamdemic in the title of my book. Life as I knew it came to a screeching holt. I did not know little Glory from Adam, but after hearing what the little boy said I wanted to create another creature for Glory and other children to get excited about. I called my girlfriend and told her all about what I was doing, I was so thrilled about the project. She said Kimberly that sounds like a children’s book to me.

Application #4

Phase 3

Involved purchasing a lot more rocks and plenty of paint. If I was going to write a children's book about the front yard, I was going to have to make a lot more creatures and animals to feature in the book. In all, I made 9, a cat, bird, 3 dragon flies, 3 rabbits, Ghecko, Scorpion, Snake, frog and a turtle. They are all placed near shrubs, plants and ground cover to mimic a natural habitat and make it more interesting for the children to find them and point them out.

(Attached are pictures of my front yard Little Glory's Animal Rock Garden)

Phase 4

I wrote the actual story. Little Glory and the Wamdemic! It is a true story, loosely based on how the rock garden got started. It is about how Mrs. Kimberly and a little girl name Glory learned to cope with the isolation of the pandemic and turned lemons into lemonade. It features the neighborhood's multi- cultural neighborhood, painted rock animals, painted rock creatures, trees, shrubs and succulents. Plant life, animals and creatures will be labeled through-out the book. Little Glory and the Wamdemic takes about 12 minutes to read out loud.

Phase 5

Involves getting the book illustrated and self- published through Amazon or I Street Press at Sacramento Public Library TBD.

Phase 6

This phase brings everything full circle, back to the Rancho Cordova Community. I will sign a written commitment to volunteer at 5 schools in my area, Soil Born Farm in Rancho and the Hagan Park Recreation Center here in Rancho Cordova for one year. I will do 1 story telling event every 3 weeks between them. After story- telling, I will talk about water conservation, how little Glory and Mrs. Kimberly overcame anger and depression from being shut in during the Pandemic by channeling that negative energy into a creative expression and making

something wonderful. I will share how a community of different nationalities come together in one place to enjoy the rock garden. I will have an open question and answer time to engage with the children about the book and what they did during the pandemic to create a more positive environment for themselves. I will ask them questions about what trees and shrub names they remember. The back of the book has a question & answer page for parents or teachers to interact with their child or children. At the end of story telling, I will give away a book to the class and a small potted succulent plant to each student for them to feel like a real part of the story. The child could paint the pot and water their little plant to awaken their own creative, nurturing side.

This is my first book and I am over joyed to share my experience through this book with my community. Hopefully sharing my story will help children work through some of their feelings regarding the pandemic or other obstacles that come up in their life by demonstrating a creative way to help themselves feel better. The project shows community pride, beautifying the neighborhood by creating something that can be enjoyed by all. The book is both fun and educational, it teaches children about nature and water conservation.

Application #4

Contacts Made

I have sent emails to 5 principals, attached a letter telling them all about myself and pictures of my front yard project and visited all 5 schools personally. I communicated via email the March 4th deadline. (attached the letter I sent to principals)

Principal Kim Christierson at White Rock Elementary located at: 10487 White Rock Rd. Rancho Cordova CA 95670 is currently working on the school budget and said she will contact me.

Principal Jessica Hutchinson at Rancho Elementary School located at: 2562 Chassella Wy Rancho Cordova, CA 95670 called me back and said she will read the email and get back with me.

Principal John Bliss with Cordova Gardens Elementary School located at: 2400 Dawes St. Rancho Cordova, CA 95670 signed my letter and said he is looking forward to me volunteering at his school. I have attached his letter.

Principal Amber Fontaine at Cordova Meadows Elementary School located at: 2550 La Loma Dr. Rancho Cordova CA 95670 office manager Kelley said she will talk to the principle regarding my email and be in touch.

Principal Christy Wilkerson at Cordova Villa Elementary School located at: 10359 S White Rock Rd, Rancho Cordova CA 95670 front office lady said they will give her my message. I am waiting to hear back from her.

I have also visited the Hagen Parks and Recreation and written the administrator there. I spoke to Brandy Dionne with Hagen Parks and Recreation on 3/3/2022. She spoke to Christina James, they are going to endorse me and sign the letter. They will send it directly to the Chamber of Commerce before the deadline of March 18, 2022. I attached her letter.

I spoke to Emily Hain at Soil Born Farms who helps plan the community events. She is going to check with her supervisor to see if they can provide the starter plants and if I could volunteer on a Sat. to read to the children that visit the farm.

I spoke to Angela Griffen Ankhelyi, Director of Communication who instructed me to get a letter from the principles of the schools I wanted to volunteer at. She would then give the letters to the Superintendant Dr. Sarah Koligian to sign.

Application #4

I am going to call the lady in charge of the art museum on Folsom Blvd for a referral to local illustrators. I will retain all rights to my book and will ask the Chamber of commerce to sign an agreement stating this fact.

Personal letters of recommendation:

I have a letter from a parent from when I was Kimberly the Clown. (letter attached)

I have a letter from elected Rancho Cordova Clerk, Chris Clarke. I will email this letter seperately

I have a letter from the owner and teacher of Folsom Montessori School where I worked as Kimberly the Klown for many years

I will email a letter from a neighbor of a child who enjoys Little Glory's Rock Garden in my neighborhood before the deadline of March 18th.

Required Insurance:

I will get all the required insurances listed. I have no employees (need no workmen's comp).

Personal Letters of recommendations

3/4/2022

Kimberly Austin, as Kimberly the Klown, was associated with our school in the late 90's and early 2000's. She provided entertainment at our school's "Last Day Celebrations" every year. She wore many hats: she led the children in movement games and activities, she did face painting and she gave a magic show.

In addition to the children, as the owner of Folsom Montessori School, I looked forward to her visits! We held our Last Day Celebrations at a local park with our preschool classes celebrating in the morning and our kindergarten class celebrating in the afternoon. Kimberly began with face painting and in this way interacted with each child individually. She is a very sweet, peaceful, kind person and the children loved to be with her.

Application #4

Kimberly was a magician! The children were captivated by her magic tricks. They would remember them from year to year!

She also led the children in games like sack races, musical chairs, etc. She was very successful organizing the games and leading the children. She would end the game time with a parachute game that involved the children's parents. This was a much, anticipated highlight!

Putting all this together, I was honored to have Kimberly the Klown as the highlight of our annual celebrations. She was professional. She arrived on time, set up her activities, engaged children as a group and individually, interacted with the parents successfully, was flexible with timing of activities as needed. She was confident and very successful leading the group activities on her own and also incorporating the parents and teacher as "her helpers".

Our students and their parents loved Kimberly and looked forward to her visits every year!

Later, Kimberly did a wonderful art installation for our school. She made three very large paintings to install on our fence. She incorporated elements from our classroom and playground plus our school's love for the Earth! Each of our students had the opportunity to paint with Kimberly as she made these wonderful paintings!

In conclusion, I highly recommend Kimberly Austin for any event or activity involving children. I would be delighted to have the opportunity to have Kimberly introduce and read her book to our students. Her concept to read and to give children books and plants is an inspiration!

Folsom Montessori School
Lise Witthaus Owner/Admin/Teacher
502 Riley Street, Folsom 95630
916-351-0345
Peek inside our classrooms:
www.folsommontessori.com

February 25, 2022

Application #4

To Whom It May Concern:

I am sharing my experiences working with Kimberly Austin in her role as Kimberly Klown. My daughters each attended the Folsom Montessori School for about 2 and half years. They were first introduced to Kimberly Klown at the end of school year party. It was an event that was looked forward to as the year end celebration. Kimberly was able to create a clown character that did not scare little children but excited them and made the end of year party fun. She had just the right amount of costume and fun to pull them in. She also knew just the right amount of makeup and hair to keep the human friendly face so young children immediately took to her.

The children that attended the school often had birthday parties that Kimberly Klown hosted. These were the best parties for both kids and parents. Kimberly took over the fun festivities and made sure that all the kids were included and had fun. There were magic tricks, creative activities and of course, cake. Even after leaving the school, my children would still attend or have their own parties that included Kimberly Klown.

On a personal note, I came to know Kimberly outside of her work. I did not realize that my daughter was unaware that Kimberly Klown was dressing up as a character. Because she was so good with children and connected with them, she didn't see this as an act. One day, my daughter saw Kimberly in her regular clothes. She asked me, "why is she dressed like that?" I understand the confusion. Kimberly was always genuine in her connection with children and her ability to understand and see what children need. She exudes great warmth and kindness that cannot be faked.

Susan Brauns

Susan Brauns-McVicar
(530) 651-3346

Letter from Cheryl Gleason

Cheryl Gleason <cheryl@cordovacouncil.org>
To: Kimberly Austin
Fri, Mar 4 at 11:19 AM
I would be happy to help you.
And we are having a local published artists book event in October - you could talk about the upcoming book.

Cheryl Gleason
Art Director / Curator

Gallery Address
10191 Mills Station Rd.
Rancho Cordova, Ca. 95827

Mailing Address
2729 Prospect Park Drive, Suite 117
Rancho Cordova, CA 95670

Application #4

www.rcmacc.org
www.cordovacouncil.org/rancho-cordova-arts
O: 916-273-5712
C: 916-225-7800

Letter from Brandy Dionne Parks Dept

Cheryl Gleason <cheryl@cordovacouncil.org>
To: Kimberly Austin
Fri, Mar 4 at 11:19 AM
I would be happy to help you.
And we are having a local published artists book event in October - you could talk about the upcoming book.

Cheryl Gleason
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www.cordovacouncil.org/rancho-cordova-arts
O: 916-273-5712
C: 916-225-7800

Application #4

FCUSD

February 28, 2022

Dear Mayor and City Council,

My name is Chris Clark, and I represent area 4 of the Folsom Cordova Unified School District. I am writing this letter in support for the Community Enhancement & Investment fund grant that will be submitted on behalf of Kimberly Austin.

Mrs. Austin and her husband have lived in the same house in Rancho Cordova for 26 years. She is a 54 year old grandma of 4 beautiful grandchildren. When her 3 children were growing up, she was a PTO president at Cordova Meadows elementary school, a member of the PTA at Mitchell Middle School and in later years volunteered for the mentorship program at Cordova High School. She has worked as a reading assistant at White Rock Elementary School and donated countless volunteer hours at Cordova Meadows after school program helping 3rd graders to read for several years. She has also and donated a hanging mural to the Rancho Cordova library that stayed up for many years until it was remodeled.

During the pandemic, she has transformed her front yard into Little Glory's Animal Rock Garden. The landscape is all rock, shrubs, trees and bushes. She has created several painted rock animals. She engaged in this project so the children in the neighborhood would have a "free art museum of sorts" something to enjoy during the Pandemic. Also during the pandemic, she has written a children's educational picture book and called it “Little Glory and the Wamdemic!” It will feature the neighborhood's multi- cultural members, rock animals, trees, shrubs and succulents.

Funding from this grant will help pay for the illustration and publication of the book, also to purchase copies of the book to give away to kids in the immediate neighborhood at underserved schools in Rancho Cordova, and to pay for plants to give away after her reading engagements in our local schools.

Sincerely,

Christopher B. Clark
Board Member
Folsom Cordova Unified School District
cbclark@fcusd.org
916-370-3383

Application #4

Hello Principle Christierson, Hutchin, Bliss, Fontaine and Wilkerson, my name is Kimberly Austin. I have attached a pre-written letter if choose to use it and pictures of my front yard rock garden. Thank you in advance for taking the time to read my letter.

My story is a little long to share in an email, but I will give you the shortest version I can provide with the most details as possible for you to get to know me as a person and story teller in a hurry LOL. I have been a Licensed Covered CA health insurance, Medicare and life insurance agent for the past 8 years. My license number is 0G82912. To be licensed in the state of California you must have an extensive background and credit check. I had my first and second Covid vaccine and would be perfectly willing to wear a I-95 face mask and take recent finger prints to participate on the school grounds.

In my past, when my kids were very young, I wore many hats. My husband and I have lived in the same house in Rancho Cordova for 26 years. I am a 54 year old grandma of 4 beautiful grandchildren, that roll is my crown and glory. :-) When my 3 children were growing up, I was PTO president at Cordova Meadows elementary school, a member of the PTA at Mitchell Middle School and in later years volunteered for the mentorship program at Cordova High School. I worked as a reading assistant at White Rock Elementary School and donated countless volunteer hours at Cordova Meadows after school program helping 3rd graders to read for several years. I was Kimberly the Klown for many years and was featured on a 2pg. spread in the local newspaper Time and Money. I also had an enjoyable career painting children's murals in homes throughout Northern CA. I volunteered at Shriner's Hospital doing face painting and donated a hanging mural to the Rancho Cordova library that stayed up for many years until it was remodeled. I donated those same paintings to a day care in Rancho Cordova where they hang today.

Turning the hands of time to 2022. During the pandemic, I transformed my front yard into Little Glory's Animal Rock Garden. The landscape is all rock, shrubs, trees and bushes. I created several painted rock animals. I engaged in this project so the children in the neighborhood would have a "free art museum of sorts" something to enjoy during the Pandemic. I grew up in a poor neighborhood in Los Angeles. Just 2 blocks from my home was a place called St. Elmo's Village. Artist painted the sidewalks and created random sculptures made of junk. The small, shabby surrounding properties were painted with bright wild colors and designs. Walking through St. Elmo's village is one of my fondest childhood memories and no doubt contributed to who I am today. Now, children of all ages are stopping by my house to enjoy what I have created for them. I told my girlfriend about what I was doing and she said it sound like a children's book to her. Sooooo....I wrote a children's educational picture book and called it Little Glory and the Wamdemic! I chose this title because the Pandemic hit me like WHAM! Life as I knew it came to a screeching holt! This book is mostly a true story about how Kimberly and a little girl name Glory learned to cope with the isolation of the pandemic and turned lemons into lemonade. It features the neighborhood's multi- cultural people, painted rock animals, trees, shrubs and succulents. The book takes about 12 minutes to read out loud.

I am submitting an application for the Community Enhancement & Investment fund grant. I must attach an endorsement form signed by the Super Intendent of Schools Dr. Sarah Koligian. This guideline was communicated to me by Randi Kay Stephens, MPA Community Enhancement & Investment and is a requirement of the grant application. In order to get her endorsement, I must write all the principles of the elementary schools I intend to volunteer at and get their approval to volunteer at their schools.

I am asking for the grant to help pay for the illustration and publication of my children’s book, to purchase copies of the book to give away to the children I am reading to and to provide them with one small potted succulent plant.

Application #4

I will sign a written commitment to volunteer at 5 schools in my area and the Hagen Park Rec Center here in Rancho Cordova for one year and do 1 story telling event every 3 weeks between them.

After reading the book to the group of children, I will talk about water conservation, how little Glory and Mrs. Kimberly overcame anger and depression from being shut in during the Pandemic by channeling that negative energy into a creative expression by making something wonderful. I will share how a community of different nationalities come together in one place to enjoy the rock garden. I will have an open question and answer time to engage with the children about the book and what they did during the pandemic to create a more positive environment for themselves. I will ask them questions about what trees and shrub names they remember. The back of the book will have a question & answer page for the parents to interact with their child or children. At the end of story telling, I will give away a book and a small potted succulent for them to feel like a part of the story. The child could paint the pot and water their little plant to awaken their own creative, nurturing side. This is my first book and I am thrilled to share my experience through this book with my community. I am just fine with reading outdoors if it makes people more comfortable.

I need to send in my information and submit the grant in approximately 8 days. I will give you a call to discuss if you want me to volunteer at your school. Perhaps we can meet in person, do a screen sharing on join me or simply talk over the phone. Whatever would work best for you and your schedule would be greatly appreciated. If you agree with me volunteering at your school as a story teller, it will most likely not happen until next year 2023. Please draft a short letter saying you agree, or you can sign my pre-drafter letter I have attached and email it back to me or I can come by the school and pick up the letter personally.

Attached is the pre-drafter letter and a pictures of my front yard, Little Glory's Animal Rock Garden.

Thank you in advance.

Sincerely,

Kimberly Austin

916-601-0867

To whom it may concern,
My name is John Blair, Principal of Cordova Gardens Elementary. We are excited to work with Kimberly next year, 22-23
John P. Blair 3/1/22

Application #4

March 4, 2022—An account of our child's experience with Gloria's Rock Garden starting in 2020

To whom it concerns,

I wanted to take a moment to write about the impact of Kimberly Austin's Rock Garden on our lives.

Our eldest daughter was two years old when we discovered the rock garden on one of our neighborhood walks. The rock lizard, with it's rich green body and bright orange spots captured her attention immediately. The gem-like scales covering its rock-based body ignited her imagination so that it was the only thing she would talk about for hours at the time.



"We have to see the lizard!"

"The lizard has gems on its back."

"Daddy can see the lizard."

We've been to visit the rock garden more times than I can count. For a long while, it was our mandatory morning walk. It's a walk I've taken holding her chubby little hands as she toddled along side me. We've gone on that walk in the early bake of midsummer heat, in the dusky light of evening, and probably in the rain. I did that walk (waddle) in the third trimester of pregnancy, carrying little sister along for the ride, and then with her wrapped against my chest, trying to hurry before it was too hot to be outside.

It started with the lizard, but soon her joy encompassed the other creatures hidden in the artfully scaped garden. The turtle with the red bird on their back—three little bunnies nested in a patch of grass—a delightfully round and welcoming frog and a cat sunning itself on a log. The rock garden became a cornerstone in our family's journey through our daughters first medical crisis since coming home from the NICU, and then through the pandemic that stretched out longer than any of us could have expected or imagined.

The world is full of adventure, curiosity and beautiful little discoveries to fill the minds of children. It also happens that those very things can be found a dozen houses away from us, on the corner of our morning walk, tucked away amidst the rocks and shoots of grass in our wonderful neighbor's front yard.

Sincerely,

Jill Davies (with the full support of Charlie, now 4 years old)

Application #4

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Little Glory and the Wamdemic! (Reading to the children)

Name of Organization: N/A

Name of Applicant and Title: Kimberly Jacqueline Austin

Applicant's Phone: 916-601-0867 **Applicant's Email:** Kimberlyaustin5678@yahoo.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: Brandi Dionne, Recreation Supervisor

Date: 3/3/22

Comments (Optional): Signing on behalf of Cristina James

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Application #4

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Little Glory and the Wamdemic! Education Through Story Telling

Name of Organization: Kimberly Austin, Individual

Name of Applicant and Title: Kimberly Austin

Applicant's Phone: 916-601-0867 **Applicant's Email:** kimberlyaustin5678@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given — No - We invite the requestor to develop integrated programming with

Endorsement Withheld — identified school administration in advance of the next school year.

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #4

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 4, 2022 4:33 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1510685
IP Address:	23.115.158.44
Submission Date:	03/04/2022 4:33
Survey Time:	33 minutes, 14 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Cordova Youth Spotlight Orchestra (CYSO) Expansion

Project Synopsis

This project builds on students' progress in 2021-2022, the pilot year of the CYSO. It expands student membership from 24 students to 32. It opens beginning strings classes to all elementary grades. Based on learnings from the pilot, this project increases the frequency of classes from once to twice a week and seeks funds to pay all students' tuition and supplies.

Project Description

This project builds on students' progress in 2021-2022, the pilot year of the Cordova Youth Spotlight Orchestra. Twenty-four scholarship students completed one year of instruction: 11 in orchestra and 13 in beginning strings. These students want and need to continue developing their skills, and new students are needed to expand the orchestra by 30% to 32 members or more. This project extends the beginning strings class to all elementary grades with parent participation required for students in grades 1 through 3 and encouraged for grades 4 through 6. In 2021 almost half of the CYSO applicants were elementary students who had no experience playing a musical instrument. SPAC accommodated them by adding a beginning strings class. By the end of the year, four beginning students were promoted to the orchestra, and beginning strings students outnumbered orchestra students. Students will receive one hour of instruction twice a week for 34 weeks beginning September 8, 2022, and ending May 25, 2023. One of the learnings from the pilot project was that students did not progress quickly enough with only one hour of instruction per week. Like the pilot project, students will perform at least two Spring concerts, possibly in public parks, for the Rancho Cordova community in the Spring. Additional mini concerts were held in the Fall of the pilot project and are likely to be held again. With a second year of instruction, less interference from COVID, and more class hours, students will be better prepared to perform classical masterpieces with confidence and excellence.

Project Team

The Sacramento Performing Arts Conservatory (SPAC) is responsible for the development and delivery of this project. SPAC is a nonprofit 501 c3 organization governed by a volunteer CEO, CFO, and a distinguished 12-member Board of Directors. SPAC has been bringing violin, piano, orchestra, and art classes and events to schools and communities in the Sacramento area since 2005. Leveraging a large inventory of musical instruments and ongoing partnerships with schools, businesses, and community groups,

SPAC has enabled hundreds of disadvantaged youths to learn to play an instrument and perform before public audiences. More information is available at the SPAC website www.sacramentoconservatory.com.

Project Goals

The project will be successful if the following goals are met: - CYSO enrollees increase to at least 30. - 80% of enrolled students complete the year of instruction and perform in two concerts. - At least two public concerts are performed in Rancho Cordova. - Concerts are attended by a total of 300 Rancho Cordova residents/commuters. - Students' intonation, rhythm, and technical skills improve by a measurable degree based on semi-annual assessments. - 90% of students and parents give classes an Excellent or Good rating in year-end evaluations - Average class attendance is 80%, evidenced by sign-in sheets - The project is completed within budget

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$25,345

Estimated breakdown of project expenditures

$6,120 Instructor/conductor fees $5,000 Symphonic arrangement fees (9 classical compositions x 10 levels) $8,100 Rent $2,125 Insurance $1,000 Concert venue fees $2,000 advertising $1,000 supplies and materials (music sheets, shoulder rests, music stands, books, rosin, bows, tuners, etc.)

Matching Funds

TBD

Include any other funding contributions

$3,345 from SPAC

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$22,000

Is this a multiyear request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

As the deleterious economic effects of the pandemic fade and the economy improves and as the reputation of CYSO grows, less financial support will be needed and the more sustainable the program will become. More students will be able to pay tuition, and special performances will be able to generate income. It is unlikely, however, that the CYSO will ever be completely self-sustained, especially because it is SPAC's mission to make music instruction available to students whose families cannot afford private lessons.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

- Grants from public agencies, including Sacramento County, Sacramento Office of Arts and Culture, Sacramento Regional Community Foundation - Private donations - Community and corporate contributions

Project Schedule, Timeliness and Adaptability

Project Schedule

August 20, 2022: Advertise on Peach Jar and begin registering students. September 8: Begin weekly classes and begin planning for December concert, December 13-14: Perform first concert. December 29: Assess performance, attendance, and production services against objectives. January 2, 2023: Advertise for and register second semester students February 6: Begin planning for April and

May concerts April - May: Perform two culminating public concerts. May 27: Assess performance, attendance, and production services. June 15: End 2022-2023 program.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The class schedule follows the school calendar of the Folsom-Cordova USD. The project begins, ends, and takes weeks off according to the school calendar.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The project will adjust to public and school health orders as it has in the past. Classes can be broken up into small groups and held outdoors as needed. On the other hand, as health orders become less restrictive and the risk of spreading disease diminishes, the orchestra can incorporate wind and brass instruments.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10124 Coloma Road
Rancho Cordovq, CA 95670

Other physical addresses if project/program is at multiple sites

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a park/park facility

Which school district is the public K-12 school site located in?

Other: No K-12 school site will be used.

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Joanna Baisden

Title

Board President, SPAC

Submitting as

Non-Profit

Phone

9166357728

Application #5

Email

joanna.spac@live.com

Organization's legal name, if applicable

Sacramento Performing Arts Conservatory

Mailing Address of Submitter

P. O. Box 72
Rancho Cordova, CA 95741-0072

Signatory's Name

Dr. Oxalis Nguyen

Signatory's Title

CEO and Director

Signatory's Phone

9163082307

Signatory's Email Address

oxalis.spac@live.com

Signatory's Mailing Address

P.O. Box 72
Rancho Cordova, CA 95741-0072

Attach any additional documents here

MACC.jpg
Violin class.1.jpg
kpPhoto1.jpg

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #5

March 14, 2022

Joanna Baisden, Ph.D.

Board Chair

Sacramento Performing Arts Conservatory

Dear Joanna Baisden,

The Rancho Cordova Moose Lodge is pleased to offer the Cordova Youth Spotlight Orchestra the use of our facilities, from 4:30 p.m. to 6:30 p.m., two evenings a week to hold music classes for local elementary through high school students. It has long been the mission of all Moose Lodges throughout the United States to help provide aid within their own communities, so we are extremely grateful that our lodge has the opportunity to help enhance the lives of students within our local area.

Our lodge offers its full support to the CYSO in its goal of expanding the musical repertoire of local students, and in its continued success of encouraging the talented youth of Rancho Cordova. Please feel free to let us know if we can be of help in any other way.

Sincerely,

John Ingrim

Administrator

Rancho Cordova Moose Lodge #2357

916-362-6667

Application #5

Come for the Music - Stay for the Movie

BODACIOUS BOWS SEPTET

Live Upstairs at the MACC

August 20 at 5:30 pm





Friday Night at the MACC

Application #5



Application #5



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Cordova Youth Spotlight Orchestra Expansion

Name of Organization: Sacramento Performing Arts Conservatory

Name of Applicant and Title: Joanna Baisden, SPAC Board President

Applicant's Phone: 916-635-7728 **Applicant's Email:** joanna.spac@live.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

Endorsement Given

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES

Date: 3/7/22

Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Application #5

#6 Withdrawn by Applicant

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Tuesday, March 15, 2022 7:13 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1530382
IP Address: 174.137.100.216
Submission Date: 03/15/2022 7:13
Survey Time: 37 minutes, 41 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Imperial Winds (Indoor Winter Winds Ensemble)

Project Synopsis

The unexpected switch from in-person to on-line classes that occurred during Covid19 has been difficult for many students. Although they saw each other on screen during the school day, social interaction was limited by the subject matter and lack of personal contact. Upon return to the classroom, many teachers have voiced concerns that this lack of personal contact between students has accompanied a decrease in overall morale and a sense of uncertainty. Bringing people together in musical ensembles can tap into individual and mutual interests, motivate musical expression, and create a venue for contributing ideas across generations and cultures. The experience reinforces that music-making and musical creativity are open to all because music brings people together, creates a sense of belonging and purpose, and celebrates diversity of expression (Source: Campbell, 2018; Donovan & Pascale, 2012). “Winter Percussion” (featuring drums & mallet instruments) and “Winter Guard” (featuring color guard with flags and sabers) are nationally recognized programs which have provided a venue for young people to achieve the extraordinary through performance and competition since 1993. Similar to marching band/drum corps, students are the focal point of the performance. However, instead of performing on a football field, winter winds performs in a basketball gym or arena. Typically more theatrical than marching band/drum corps, the performers are much closer to the audience. In 2015, Winter Winds (featuring brass and woodwind instruments) was created as a natural extension of these existing indoor divisions. Although Winter Guard and Winter Percussion programs are locally available, to date, no Winter Winds programs exist in the City of Rancho Cordova. To fill this gap, Mandarins has developed “Imperial Winds", a program which will introduce brass and woodwind students to an indoor, high-energy, performance-based musical activity featuring brass and woodwind instruments.

Project Description

Mandarins proposes to introduce “Imperial Winds”, a winter performing arts ensemble focusing on brass and woodwind instruments, to be based in Rancho Cordova. Winter Winds Performing Art ensembles present an original show each year, approximately 8–10 minutes in length, and refines it throughout the winter season. Shows are performed on basketball arenas or gyms and are judged in various musical and visual categories, or "captions". Musical repertoires vary widely among corps and include symphonic, jazz, big band, contemporary, rock, wind band, vocal, rap, Broadway, and Latin music, among other genres. Winter Winds ensembles do not have any required instrumentation. In fact, there are purposely less regulations and restrictions

Application #7

against winds groups, in regard to instrumentation. These less stringent rules exist in order to encourage experimentation and freedom of expression. One winds group may be entirely comprised brass, another only of woodwind instruments, and yet another a mixture of both woodwinds and brass. Winds groups also often incorporate percussion elements and guard elements into their performances, resulting in a unique mix of electric synergy. Imperial Winds will address a current need in the community – high schools in Rancho Cordova only offer Winter Percussion and Winter Guard programs and Sacramento State only offers an independent Winter Percussion/Guard group. Imperial Winds will be open to all interested woodwind and brass player between the ages of 16 – 23 years of age. Experience camps will be held in November and December during which students will have the opportunity to hone the musical skills and learn basic movements used in the performances. In January, any interest student is eligible to audition for the forty (40) available competitive openings in the ensemble. Thereafter, the ensemble will continue to practice and perfect their music and visual performance as a team.

Project Team

Daniel Fong: Dan Fong marched nine years with the Sacramento Mandarins as a soprano and mellophone soloist and one season with the Seattle Imperials. Dan wrote every Mandarins field show brass chart from 1982 until 2011 and was Mandarins' Brass Caption Head from 1982-1993, from 2005-2008, and from 2012- 2016. He currently arranges music for the Mandarins Brass Academy, a program that teaches brass students of all skill levels in the Sacramento region. Santiago Sabato: Santiago Sabato joined Mandarins Drum Corps as a trumpet player in 2006 and 2007 to 2009 as Drum Major. He pursued and achieved a Masters of Music in Instrumental Wind Conducting, a Bachelor of Music in Music Education and Trumpet Performance from Sacramento State University and a Teaching Credential in Music. He has taught all grade levels from kindergarten through college and is currently the Director of Athletic Bands at Sacramento State University where he runs the Marching Band, Indoor Percussion Ensemble, Winter Guard, and Pep Band. Ryan Lee: Ryan Lee marched in the Mandarins Drum Corps on trumpet, baritone and euphonium and has performed with Mandarins Entertainment, He has taught Mandarins educational programs and is a visual instructor for the drum corps. In addition, he has worked with over thirty music programs at the middle school, high school, collegiate and independent levels, in several states and in a variety of capacities. He also adjudicates marching arts and pageantry competitions across the country. Ryan holds a B.S. in Business Administration with a Human Resource Management & Organizational Behavior Concentration (Minor in Music) and an MBA in Entrepreneurship & Global Business from CSU Sacramento. He also has an Ethical Leadership Certification from NASBA Center for the Public Trust. It brings a strong sense of fulfilment to combine his passions for music and business in his role with the Mandarins.

Project Goals

The goal of Mandarins is to offer students an experience which challenges and stimulates growth on many levels through an activity that promotes musical growth and development by involving a variety of core musical skills, standards, and abilities. Imperial Winds goals include: • To perform instrumental compositions representing various genres, styles, and cultures. • Performing with expression, technical accuracy, sound quality, and articulation. • Perform in solo settings, with small segmental ensembles, and as part of a greater overall ensemble production. • Physically: improve muscle tone, conditioned response with/to music and other stimuli, simultaneous coordination of head, arms, legs, body stature as well as poise and control while experiencing physical and mental pressure. • Mentally: improve multi-levels of thought organization such as reading music, blending sound with other musicians, portrayal of moods harmonious with other performers and musicians, an understanding of how and why they execute each move, and advance awareness of what the next move/note/step will be and why it is there. • Socially: improve functioning in a group situation by setting common goals, cooperating, and striving for success as a team. The cumulative result is a student with deeper feelings of understanding, a more disciplined focus (which finds its way into study habits in scholastic efforts), and a higher level of self-confidence. Mandarins will showcase the finished program at a free community event in Rancho Cordova during the season. The program will further benefit the Rancho Cordova community as there are many outlets (other than the anticipated competitions) for performances available to a winds ensemble, including rallies, community showcases, or school assemblies which can showcase the activity to the community. Students and faculty will be introduced to the program and the audiences enjoy the show for its entertainment value.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$115,700

Estimated Breakdown of Project Expenditures

(Please Refer to attached projected budget for complete breakdown of costs) Music Arrangement/License for Use $2,100 Drill Writer/Show Coordinator $1,800 Instructors (3) $7,500 Instruments: (40 Brass and Woodwind instruments, including trumpet, $75,000 trombone, baritone, euphonium, mellophone, contrabass, clarinet, saxophone, and flute) Vinyl Floor: Required to prevent

damage at performance venues. $1500 Painted each year to enhance the design of the show. Floor must be cleaned and repainted each year. Costumes: $250 each x 40 performers. Per Covid 19 protocols $10,000 Costumes are not reusable and become the property of the performer at the end of the season. Props $3,000 Music/Drill sheets $400 Insurance $1500 Transportation: Includes rental of truck and fuel for transportation $8,000 of props, floor, instruments to and from exhibitions, competitive venues and rehearsal site. Also includes transportation of staff via separate vehicles. Entry fees $800 T-Shirts for members and staff $2,500 Miscellaneous Office Supplies $600 Employer paid payroll taxes (FICA, FUTA) and payroll services $1000 TOTAL $115,700

Matching Funds

N/A

Include Any Other Funding Contributions

Music Arrangement/License for Use $1,050 Drill Writer/Show Coordinator $900 Instructors (3) $3,750 Vinyl Floor: $750 Costumes: $5,000 Props $1,500 Music/Drill sheets $200 Insurance $750 Transportation: $4,000 Entry fees $400 T-Shirts for members and staff $1,250 Miscellaneous Office Supplies $600 Employer paid payroll taxes (FICA, FUTA) and payroll services $500 TOTAL $20,650 **Instruments will be provided by KHS America pursuant to sponsorship agreement. This sponsorship is valued at $75,000. Total $95,650

Ongoing Operations and Maintenance Costs (if applicable)

Instruments: Miscellaneous repairs and padding necessary each year. Replacement every 4-8 years Vinyl Floor: Floor must be cleaned and repainted each year and replace after five years. Painted each year to enhance the design of the show. Costumes: For sanitary reasons, costumes are not reusable and become the property of the performer at the end of the season. Props: Frames for props are reusable but props are rebuild and designed each year. Insurance: Liability and comprehensive policy to cover injury and loss of instruments is a yearly expense

Total Community Enhancement & Investment Funds Requested

$20,050

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

Mandarins intends to offer this program to young people between 16-22 years of age each year. The program occurs each year from November through April and is fully competed by April of each year. However, Mandarins is only seeking a grant for the inaugural season on 2022/23, after which membership fees and other funding sources should cover ongoing costs. However, if unforeseen circumstances arise, such as additional mandated shut down, Mandarins may request supplemental funding at a future date.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

Mandarins uses a variety of fundraisers each year for its programs and will incorporate the same strategies for Imperial Winds as follows: • Member fees and tuition for experience camps will be charged to help defray ongoing costs; • A portion of the profits from Mandarins annual fundraising activities (DCI Capital Classic Drum Corps Show hosted by the Mandarins, Bingo, online souvenir sales, Mandarins birthday bash, and events held at the Mandarins Music Center will be earmarked for Imperial Winds; • A partnership with KHS America for use of instruments for the Winter Arts season; • Continue ongoing fundraising programs of donor campaigns, additional grants, charging admission for specified musical performances and events, challenges, used equipment sales, and virtual events. • Sponsorships from local businesses.

Project Schedule, Timeliness and Adaptability

Project Schedule

The “Winter Winds” season runs from early November to end of April each year. Rehearsals, will not be held every weekend in the beginning, but become more frequent as the season progresses. For example, in November and December, Mandarins plans to meet on Sundays two times each month with auditions in early January. Beginning in January through February, rehearsals will be held every Sunday. During March and April, rehearsals may further increase to both Saturday and Sunday, if needed. Additional rehearsals may be held during winter break from school. Rehearsals time can range from four (4) to six (6) hours each session, increasing in time as music is combines with movements and drill patterns. Competitions typically start late January and culminate in

the Championships held in late April. Mandarins anticipates participating in at least three (3) competitions during the 2022/23 inaugural season. The competitive schedule will be released in January of each year by the event coordinators. A typical performance starts with the crew (typically the parents) rolling out a large printed or painted vinyl tarp across the gym floor to serve as the stage for the show. Props are also utilized depending on the theme of the show. Possible additional exhibition performances may occur between February and April.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The Imperial Winds will follow the rules and guidelines set out by the Winter Guard International (WGI) Sport of the Arts. WGI is the nation's premier organization producing indoor color guard, percussion, and winds competitions. A non-profit youth organization, WGI serves as the governing body for the indoor color guard, percussion, and winds activities. Similar to sports schedules, WGI follows a set season lasting from November to April each year. The season culminates in April, when winter ensembles meet in a championship competition. In 2022/23 Mandarins will follow the WGI schedule beginning the first experience camp in November 2022 and completing the program in April of 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Mandarins mantra since the emergence of Covid19 has been "Safety is our highest priority". Mandarins also recognizes a lack of social interaction may have a profound effect of the mental health of the young people we serve, our alumni, volunteers and patrons. Mandarins can and will adjust the Imperial Winds ensemble if California Public Health and/or Sacramento County Health Orders change as follows: • If pandemic restrictions preclude in-person gatherings, Mandarins will pivot to a virtual classroom, offering virtual workshops for performers. Students may be treated to guest instruction by renowned and talented artists and will create and participate in "Zoom performances". • If indoor gatherings are prevented, then Imperial Winds will move out-of-doors and rehearse in the parking lot of Mandarins Music Center. • Even without further restrictions, Mandarins has purchased and will use a commercial portable Surface Sanitation System at the event center to slow or stop the spread of Covid19; • Social distancing and hand sanitation practices will continue to be required at all rehearsals and competitions. • Instruments will be assigned and sanitized after use. Mandarins Health and Safety Team will work with the Director and staff of the Imperial Winds, providing an open line of communication and sharing up-to-date information and protocols from the World Health Organization, the State of California, and the Centers for Disease Control and Prevention.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Mandarins Music Center 9792 Business Park Drive
SACRAMENTO, CA 95827

Other Physical Addresses (if project/program is at multiple sites)

Exhibitions and competitive performances are held at venues contracted by Winter Guard International (WGI) and/or the Northern California Percussion Alliance (NCPA). These venues are typically held at high school gymnasiums in northern California, including Sacramento County, and are exclusively chosen by WGI and NCPA. Mandarins does not determine where these venues occur. All show sites for the Spring 2023 season will be determined in late December 2022 or January 2023.

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Imerial Winds Rehearal Space.pages.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Kathleen Bakergumprecht Davies

Title

Vice Chair, Mandarins Board of Directors

Submitting As

Non-Profit

Phone

5592605847

Email Address

kathleen@mandarins.org

Organization's Legal Name (if applicable)

MANDARINS OF SACRAMENTO, INC.

Mailing Address of Submitter

P. O. Box 22297
SACRAMENTO, CALIFORNIA 95822

Signatory's Name

Dr. Daniel Fong

Signatory's Title

President and CEO

Signatory's Phone

9169560948

Signatory's Email Address

Dan.Fong@mandarins.org

Signatory's Mailing Address

PO BOX 22297
Sacramento, CALIFORNIA 95822

Attach Any Additional Documents Here

PROPOSED BUDGET IMPERIAL WINDS.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #7

PROPOSED BUDGET
MANDARINS IMPERIAL WINDS

Project Requirements	Total Cost	Grant Request	Matching Funds	Other Funding	Ongoing Expenses
Music Arrangement/License for Use	2,100	1,050	1,050		
Drill Writer/Show Coordinator	1,800	900	900		
Instructors (2) at $3,500 each	7,000	3,500	3,500		
Instruments (40 Brass and Woodwind instruments, including trumpet, trombone, baritone, euphonium, mellophone, contrabass, clarinet, saxophone, and flute)	75,000	-0-	-0-	Instruments will be provided by KHS America pursuant to sponsorship agreement	Miscellaneous repairs and padding necessary each year. Replacement every 4-8 years
Vinyl Floor (Required to prevent damage at performance venues.) Painted each year to enhance the design of the show.	1,500	750	750		Floor must be cleaned and repainted each year.
Costumes ($250 each x 40 performers)	10,000	5,000	5,000		For sanitary reasons, costumes are not reusable and become the property of the performer at the end of the season.
Props	3,000	1,500	1,500		Frames for props are reusable but prop are rebuild and designed each year.
Music/Drill sheets	400	200	200		
Insurance	1,500	750	750		Liability and comprehensive policy to cover injury and loss of instruments
Transportation: Includes rental of truck and fuel for transportation of props, floor, instruments to and from exhibitions, competitive venues and rehearsal site. Also includes transportation of staff via separate vehicles	8,000	4,000	4,000		
Entry fees	800	400	400		
T-Shirts for members and staff	2,500	1,250	1,250	Any additional T-shirts will be available on the Mandarins online store with proceeds to be earmarked for the program.	
Miscellaneous Office Supplies	600	-0-	600		
Employer paid payroll taxes (FICA, FUTA) and payroll services	1000	500	500		
TOTALS	**$115,700**	**$20,050**	**$20,650**	**$75,000**	**TBD**

Application #7

Mandarins of Sacramento Inc.
P.O. Box 22297 • Sacramento • California • 95822

City of Rancho Cordova
2729 Prospect Park Dr.
Rancho Cordova, CA 95670

March 10, 2022

RE: Verification of Rehearsal Location

To whom may concern:

On behalf of the Mandarins of Sacramento Inc., The Mandarins Pilot Project, The Imperial Winds, Shall have use of the Mandarins Music Center located at 9792 Business Park Drive, Sacramento, CA., For all planned rehearsals.

Please feel free to contact me should any questions arise.

Joseph N. Fong
Chair - Board of Directors
Director - Mandarins Music Center

Application #7

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Tuesday, March 15, 2022 7:17 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1532444
IP Address:	64.21.195.66
Submission Date:	03/15/2022 7:17
Survey Time:	1 minute, 45 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Sacramento Theatre Company After-School Musical Production and In-Class Theatre Arts Integration Program (STC-SPP)

Project Synopsis

STC teaching artists work alongside classroom teachers, they will introduce theatre arts integration concepts and techniques that will also enhance the teachers' ability to teach their students. This program also engages parent and community participation with set building days, creating props and costumes, and helping with publicity. The format of this program provides a multitude of positive student, educator, and community benefits. Decades of research demonstrates participation in theatre arts offers students a toolbox of fundamental skills that will enhance their ability to succeed in school and beyond. The benefits of theatre arts education for low-income children are especially profound. Specifically, studies have shown that theatre arts instruction and the creative process associated with theatre helps students to better succeed at school as they garner new ways of learning, creating, and focusing.

Project Description

This is a semester long, after-school theatre arts program that is organized and taught by professional STC teaching artists as well as an increased number of Theatre Arts Integration Classes during the school day in every classroom (5 sessions in each classroom whereas least year we provided 3 in each classroom.) The project proposal includes professional development for the teachers in Theatre Arts Integration strategies for the classroom. In the 2021-2022 School year STC was funded at White Rock Elementary School through the City of Rancho Cordova Enhancement Fund and funding would ensure our presence for another year. The program begins with theatre classes in every classroom for the purpose of engaging student interest in theatre arts prior to the start of the after-school program as well as to provide alternative arts integration methods to teach math, English and science through the arts to reach multiple learning styles. They also gain life skills such as enhanced empathy, greater sense of confidence, a deeper understanding of their identity which for many, has the impact of alleviating mental health issues. Since theatre instruction nurtures creative thinking, it encourages students to unlock possibilities and to foster innovations toward solutions in all areas of their life. Students also become more proficient at many skills that will help them later in the job market, including; Public Speaking, Time Management, Project Management Skills, Communication and Collaboration Skills. By getting children involved in theatre at a young age, they better understand their world and the value of theatre in developing common values within the context of their

Application #8

community. Moreover, studies have shown that theatre not only provides our children with positive after-school activities but also leads to other responsible civic engagement and has a direct correlation to a reduction of crime and delinquency.

Project Team

Miranda D. Lawson is a Florida native who has worked and traveled across the country working in the arts field. She studied a BFA in music with a concentration in musical theatre and began her career in the film and tv industry. After moving to Sacramento she began working at the Sacramento Theatre Company and moved her way up in the ranks as a performer, teaching artist, director/choreographer, Associate Artist, and YPC Program and Adult Education Manager. STC is her home and her passion, and being able to impact the community by bringing the arts to them and nurturing the next generations of artists is her life's work and she is so pleased to have the opportunity to do so. Lyn Alessandra graduated from UC Davis in 2016 with a B.A. in Dramatic Arts and minors in Managerial Economics and French. She has worked as a stage manager in various cities, including in Dallas, Los Angeles, and here in Sacramento at Broadway at Music Circus in the summers. She has also toured as a union stage hand on Dr. Seuss's How the Grinch Stole Christmas. Lyn has a passion for theatre, and loves to share it with students of all ages. She enjoys teaching and inspiring students to delve into every topic theater can offer them. She is a proud member of Actor's Equity Association. When she isn't in rehearsals, she is playing with her two dogs or baking. Lisa Dillon has been dancing, in some form or another, since she was 4. She trained in Sacramento, Lake Tahoe and Santa Barbara. She performed locally for many years in Best of Broadway and periodically in Music Circus, Garbeau's Dinner Theater, Davis Musical Theater Company and others. She taught tap and jazz at Broadway Academy of Performing Arts and currently teaches dance/fitness fusion. Her passion is in Children's Musical Theater where she has worked as Director, Choreographer, Technical Director and Producer. Lisa started working for STC in January 2017 with Schools Partnership and is overjoyed to continue to teach and grow with STC.

Project Goals

In addition to professional productions, STC School of the Arts offers a host of theatre arts training and engagement opportunities that reach over 5000 students annually. With STC's School Partnership Program currently in 12 schools, it is one of the most notable programs in California. In 2016, STC's School Partnership Program was selected as one of the top arts humanities based programs in the country and in recognition, received a National Arts and Humanities youth Program Finalist Award. To maintain our high standards, we are committed to continually assessing and evaluating the services we provide to the students and educators in our community. STC's SPP goals for White Rock Elementary are to train and offer professional development to teachers on theatre arts intelligences and teach core subjects: Social Studies, Science, ELA through theatre arts strategies. STC's School Partnership Program has a goal to provide students with a comprehensive after-school theatre program to help them become more proficient at many job skills. Student involvement in the program provides students with fundamental building blocks for success in school and beyond. STC teaching artists measure impact through the observation and documentation at the beginning and end of the residency. School site and classroom teachers are also involved in the evaluation process through a written survey. The impact of STC-SPP's previous evaluations indicate that students are increasing their writing, listening and oral expression skills. These evaluations indicate that students are increasing their ability to concentrate and make helpful learning connections between their theatre lessons and other academic areas. Consequently, students are building key academic and social emotional skills that have led to a positive impact on their oral and written development, especially for English Language learners and students with special needs and learning disabilities.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

22520

Estimated Breakdown of Project Expenditures

AFTER SCHOOL PROGRAM Expenses 1. Artistic: Teaching Artists 2-3 teaching artists per site includes planning sessions for TA's and school staff. Rate of Pay $30-40 per hour for each: STC professional teaching artist/music director/choreographer 1 TA @ rehearsal/instruction x 68 hours total (for 17 weeks @ 2 hrs. per) per site = $5,440 1 Choreographer @ 2-3x per week @ 17 weeks per site = $2,040 1 Musical Director @ 2-3x per week @ 17 weeks per site = $2,040 Pay Rate Total: $9,520.00 2. Administrative: Education Director Show and Arts Integration School Partnership Program Manager = $2,000 $(x) Full Time Staff, 10% of annual salary on this project = $5,000 School Partnership Program Production costs to include lights, sound, design, teaching supplies, etc. Administrative Total: $7,000.00 3. Technical: School Partnership Production costs to include lights, sound, design, teaching supplies, etc. $1,000 per site Technical Total = $1,000 After School Expenses TOTAL: $17,520.00 ARTS INTEGRATION DURING SCHOOL DAY 1 Artistic Art Integrative Teaching Artists 2-3 Teaching Artists per site, & prep meetings $30-40/rehearsal hr x 5 sessions in 18 classrooms per site@125 hours total School Day Expenses TOTAL: $5,000.00 Program Total 22,520.00 Less Matching Funds 2,520.00 TOTAL FUNDING REQUEST $20,000.00

Matching Funds

Matching funds $2520 Curtains Up fundraiser (including any in-kind contributions)

Include Any Other Funding Contributions

no

Ongoing Operations and Maintenance Costs (if applicable)

no

Total Community Enhancement & Investment Funds Requested

20,000

Is this a multi-year request?

No

How many years have you received funding for this project?

3

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

none

Project Schedule, Timeliness and Adaptability

Project Schedule

The workshops and the entire program will be at no cost to the student and is open to every student in the school in accordance with the following schedule organized by Sacramento Theatre Company's SPP. After school program: October – meet with school principal and after-school programming personnel to work out scheduling, space, show title and overall curriculum. November/December – STC/SPP provides 3 theatre workshops/classes in every classroom to: 1) introduce the program to all students to generate excitement and interest, 2) after school theatre workshops on how to audition, 3) information about the STC/SPP theatre residency. KINDER classes begin (STC teaching artists go into the Kinder classrooms once a week for a theatre class throughout the residency). The workshops and entire program will be at no cost to the student and open to all students. STC/SPP solicits parent/community engagement with organized parent meetings that are held to explain program details, rehearsal schedules, time commitment, and to solicit parent engagement (community building). September – STC/SPP organizes and oversees student registration and auditions. October-January – STC/SPP oversees: student rehearsals, 3-4 days a week. After school, 3-4 day a week for 1-2 hours each day. Community and parent engagement by actively getting them involved in building sets, creating costumes and props and helping with publicity. Final production in Jan/Feb. STC/SPP oversees dress and tech rehearsals, final presentation, performance and assessments. Theatre Arts Integration classes during the school day (5 classes for each classroom) at White Rock Elementary, the principal is committed to bringing arts integration to the school. This school does not have the on—going resources to fund arts integration, so this grant will help fund a continuation of STC's after school program to include the time during school. There is no cost to students. STC has been providing Sacramento area schools with theatre

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This program is designed to be completed within the academic year. Step 1: Sept. Teacher Training. 1 session. Includes a professional development seminar on arts integration and why it is effective in engaging students in both the standard educational and art forms. We hold teacher meetings to establish and discuss standards for the classroom that teachers would like addressed through the theatre arts integration experience. Step 2: Oct-Dec. Lessons. 3 sessions with each class. Created by the teaching artist, lessons will describe the activities and what the teaching artists, students and classroom teachers will be doing throughout the course of the program. The lesson plan will also list the standards addressed (ELA, math/science/civics/VAPA) as well as describe the formative assessments as well as a rubric to specify the goals of the learning outcomes. Step 3. Dec. Evaluation. 1 Session. After the lessons are completed, the students and teachers will be asked to fill out evaluation forms. Throughout the process, the teaching artist will weave formative assessments into the lessons. Activities during lessons depend on grade level and classroom topics and include a combination of the following; physical and vocal exercises. Improvisation games and music games, songs to teach rhythm, notes, key

signatures, etc. Creative movement and blocking to bring text/music to life. Discussion led by the teaching artists on the text for understanding plot points, character objectives, beat changes, emotional inner life of the characters and character relationships. Theatricalizing a story or piece of history the class is studying. Bringing a poem/text to life by reciting and adding movement.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The program is prepared to pivot and adjust to any public health situation. We are capable of performing virtual programming as well as hybrid.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10487 White Rock Road
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

WRE letter of support.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified
Sacramento City Unified
Other: River Delta Unified School District

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Dawn Spinella

Title

Development Manager

Submitting As

Individual

Phone

9164467501 ext. 105

Application #8

Email Address

development@sactheatre.org

Organization's Legal Name (if applicable)

Sacramento Theatre Company

Mailing Address of Submitter

1419 H Street
Sacramento, CA 95814

Signatory's Name

Executive Director Michael Laun

Signatory's Title

Michael Laun

Signatory's Phone

9164467501 ext. 109

Signatory's Email Address

development@sactheatre.org

Signatory's Mailing Address

1419 H Street
Sacramento, CA 95814

Attach Any Additional Documents Here

WRE budget and feedback.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #8

WHITE ROCK ELEMENTARY
10487 White Rock Road

WHERE EVERY STUDENT EXCELS

Rancho Cordova, CA 95670 Phone 916-294-9180
Fax 916-294-9072 CANEN PETERSON, PRINCIPAL

March 5, 2020

To whom it may concern:

I am writing to express our support for continuing and expanding arts integration here at White Rock Elementary School. We have had the pleasure of having Sacramento Theater Company for the last few **years a**nd it has been just amazing. I am writing to let the City of Rancho Cor**dova know that we are** committed to provide resources and support to both sustain and build on our efforts in bringing the arts to White Rock Elementary School.

The response to STC over the last coup**le years with our teachers a**nd our community h **reviews f**or not just their dedication for the arts but the support and the nurturing aspect that the arts brings to our students. The teach**ers have seen th**at bringing the arts into our school deepens the concepts thatthey are trying to teach in their class. It has opened up their world in terms of understanding the terms and vocabulary that the arts bring.
In closing Sacramento Theater Compan**y has become a much needed and very much appreciated** component of White Rock **Elementary experience. Whatever** additional funding the City of Rancho Cordova can provide STC to expand the services will directly support high **needs students who are excited and grateful for the experience.**

Best Regards,

Canen Peterson
Principal White Rock Elementary

Application #8

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Sacramento Theatre Company After-School Musical Production

Name of Organization: Sacramento Theatre Company

Name of Applicant and Title: Dawn Spinella

Applicant's Phone: 916-446-7501 ext 105 **Applicant's Email:** development@sactheatre.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given No

Endorsement Withheld App received after the due date

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah KeCigian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #8

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 3:48 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Categories: CEF

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1536857
IP Address:	63.192.169.76
Submission Date:	03/17/2022 3:47
Survey Time:	42 minutes, 53 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

The “Swing Sweet Home” Project

Project Synopsis

The Western Swing Society (WSS) “Swing Sweet Home” Project is to engage the community of Rancho Cordova and nation-wide about the preservation of Western Swing Music, traditional dance, and history. The goal is to expand our outreach further into the Rancho Cordova Community by posting our monthly concerts from our dancehall in Rancho Cordova and post so others affected by COVID-19 precautions, senior centers, or enthusiasts from all around can see the activities going on in the heart of Rancho Cordova. “Swing Sweet Home” project offers monthly free virtual footage footage of our concerts to the community of Rancho Cordova and beyond showcasing Western Swing music, county dance, and tidbits of Country music history that stemmed from the greater Sacramento area & making it accessible right into your home. We hold monthly dances every 1st Sunday of the month that showcase a featured guest band, our house band, and are enjoyed by our dancers who take to the dance floor. Recording live performances from our dances of classic tunes everyone knows and loves and being able to have them available online for the community to enjoy is the purpose.

Project Description

Our monthly dances are scheduled with 2 live bands performing from the hours of 1pm-5pm. The musical talent is strictly volunteer driven. Along with the music comes the dancing from our members and guests who are in attendance. During the duration of our monthly dances this project will record songs from our talented performers and post them on social media. This grant will allow us the privilege of having the proper equipment to record various clips of our musical performances that we host in Rancho Cordova and posting them on Facebook, youtube, Instagram, and our website for everyone to enjoy for free. The online presence will allow us to reach out to the Rancho Cordova community and entertain our many community members with our traditional country/western music sound ,celebrate our wide range of diversity of our members, and show appreciation for our Rancho Cordova community. For those who aren’t able to travel to Rancho Cordova, due to health precautions or transportation issues, the virtual option will allow us to entertain our community-free of charge and allow them a virtual concert for their enjoyment.

Project Team

The organization involved is the Western Swing Society that has been run by volunteers for over 30+ years. The team is spearheaded by Meghan Enriquez (Mae McCoy) who is not only a performer but a board member in community relations. During her time working with Rancho Cordova Police Department she brought a senior program alliance with Esktaton in July of 2021. The project team goes as follows: Mae McCoy (M. Meghan Enriquez): “Swing Sweet Home” Project Manager /Social Media will communicate with community members and others via social media to keep them engaged. She will notate any song requests from our community members and be the liaison to the band leaders. Part of her position is to encourage community engagement via social media. Mrs. Enriquez will oversee the project as a whole for quality and record keeping. Rex Barnes: President of the Western Swing Society is involved in the set-up of the stage and the optics of the project. Ronnie Elkan: Vice President/Musical Director of Western Swing also doubles as musical director and will make sure the guest band is booked for the virtual concert clips every month. Gary Blodgett: Sound Engineer & Equipment Director will be in charge of musical direction of the project ensuring sound quality to the concerts. Mr. Blodgett also secures our equipment.

Project Goals

Facebook Page growth from engagement- Metrics from “likes” would reflect the progression of our outreach. Currently at 1K followers, we hope for that number to steadily grow as we add video clips to our posting on a regularly basis Youtube Channel development that will give us metrics on how many people we are reaching and our engage with our “ Swing Sweet Home” project. Website our website http://www.westernswingsociety.net will post the videos clips and keep a link of the various clips we accumulate Memberships: We anticipate a rise of membership to the Western Swing Society once the community is aware of the existence of such a preservationist organization.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$7,272.84

Estimated Breakdown of Project Expenditures

*Electronic Sound Board iPAD Pro, Apple iPad Pro 12.9” 2TB (5th Gen) Subtotal: $2,099.99 Shipping: $4.99 Tax $152.61 Total: $2,257.59 *Soundboard, Behringer X Air XR18 18-channel Tablet-Controlled Digital Mixer Subtotal: $699.00 Shipping: 0 Tax: $50.58 Total: $749.68 *Speakers X2, QSC KW152 1000W 15 inch Powered Speaker Subtotal: $1,629.99 (X2) $3,259.98 Tax: $287.03 Total: $3,547.01 *Camera, GoPRO HERO9 Subtotal: $339.99 Tax: $24.65 Total: $ 364.64 External Hard Drive, ioSafe SOLO G3 4TB External Hard Drive Subtotal: $329.99 Tax: $23.93 Total: $ 353.92 Grand Total: $7,272.84

Matching Funds

NA

Include Any Other Funding Contributions

Concert Equipment Storage: $ 117.00 per month Facility Rental: $700 per month Monthly Advertising/Design $ 3.00 per month Website Maintenance: $438.00 annual

Ongoing Operations and Maintenance Costs (if applicable)

NA

Total Community Enhancement & Investment Funds Requested

$7,272.84

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 2023

Do you plan to ask annually for funding?

No

Application #9

What other funding will you seek to support your project?

Annual Memberships Monthly dance admission Food sales Merchandise Sales Public donations

Project Schedule, Timeliness and Adaptability

Project Schedule

"Swing Sweet Home" will begin at the purchase & delivery of equipment required to launch which is anticipated by Sunday, September 3rd, 2022. And continue thereafter recording the 1st Sunday of the month (w/exception to October 2022 During our Hall of Fame Weekend.) The virtual concert clips will be posted within one between the 2 and 3rd week of every month. During the Hall of Fame Weekend in October we will provide more clips of our 3-day long festivities, online, free of charge.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

As previously mentioned, our "Swing Sweet Home" concern clips will be recorded every 1st Sunday of the month and posted within 1-2 weeks of recording on our social media outlets free of charge. This project will continue on that said timeline.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The "Swing Sweet Home" project is designed to weather the changes that may occur with the California Public Health and/or Sacramento County Health Orders. The program is predicated on providing free online viewership of our performances. In the event of a drastic shift in health orders, our performers can record their music from home and the Western Swing Society can continue to post "Swing Sweet Home" without procuring additional fees. "Swing Sweet Home" is designed for the connection between local entertainers and community members through these uncertain times.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

The Machinist Hall - 2749 sunrise Blvd
Rancho Cordova, CA 95742

Other Physical Addresses (if project/program is at multiple sites)

NA

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

M. Meghan Enriquez

Title

The Western Swing Society

Submitting As

Non-Profit

Phone

9168732023

Email Address

maemccoy@gmail.com

Organization's Legal Name (if applicable)

The Western Swing Society

Mailing Address of Submitter

PO BOX: 639, Lincoln, CA, 95648
Lincoln, CA 95648

Signatory's Name

Mrs. M. Meghan Enriquez

Signatory's Title

Board of Directs- Community Outreach

Signatory's Phone

9168732023

Signatory's Email Address

maemccoy@gmail.com

Signatory's Mailing Address

PO BOX: 639, Lincoln, CA, 95648
Lincoln, CA 95648

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 9:49 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: CEF

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537334
IP Address:	99.28.218.48
Submission Date:	03/17/2022 9:48
Survey Time:	20 minutes, 54 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

RANCHO CORDOVA RISE-UP THEATRE COMPANY'S DEVELOPMENT AND CONSTRUCTION PROJECT

Project Synopsis

This project will provide funds to Rancho Cordova Rise Up Theatre Company (RCRUT) for the continuing development of a high-quality, thriving theatre company and the construction of a 99-seat theatre complex in the arts section of Rancho Cordova for the benefit of RCRUT and other Rancho Cordova non-profit performing arts organizations.

Project Description

This grant will provide funds to RCRUT to implement Phase III & IV of RCRUT's 18-month Development and Construction Plan ("Plan"). For details of the extensive 18-Month Development and Construction Plan see Attachment A. Please note that Attachment A is the proprietary property of RCRUT, prepared by its counsel and Executive Producer and is not for dissemination or publication. Phase I & II of the Plan have already been, or will be, accomplished through private donations, volunteerism and fundraising events/productions that have taken place. Briefly, RCRUT has already finalized its non-profit status, drafted and approved a full development and construction plan, organized its board and committees, launched its website, partnered with already existing Rancho Cordova non-profits, performing arts groups, businesses and fraternal organizations and produced eight productions and events at the MACC. The goal of Phase III & IV of RCRUT's Plan is to: (1) Continue the development of an on-going, high quality, Rancho Cordova theatre company; (2) Construct a permanent 99-seat performance complex for that RCRUT company to be used for performances and rehearsals; (3) Share that complex with other already existing and thriving Rancho Cordova performing arts entities (Orchestras, Choirs, Dance Companies and other Theatre Companies); and (4) Continue to bring together, for mutual support, Rancho Cordova performing arts groups and thereby help Rancho Cordova in its continuing goal of becoming a community where theatre, music and all performing arts are prominent. The creation of a theatre company and the construction of a theatre

complex, even in an existing structure, is a long term project. Moreover the financing of this endeavor by a non-profit organization through fundraising events and productions adds to the gargantuan tasks and takes thousands of volunteer hours. This grant will allow the completion of this task within the 18-month timeline set forth in the RCRUT 4-phase.

Project Team

Courtney Conklin, President and Artistic Director- Courtney, a mother and resident of Rancho Cordova is the founder of Rise Up Theatre Company, has a 20-year award winning history of producing, directing, and distributing, both artistically and financially profitable, live theatrical and film productions. Mary Gorak, Vice President and Executive Producer- Mary holds a Juris Doctorate with 30-years'experience in civil and entertainment law and over 50-years' theatrical experience, including starting multiple theatres for municipalities, producing over 40 individual productions, including an award winning Off Broadway musical currently in preparation for its Broadway run, and training Tony award winning actors. Carrie DeHerrera, Secretary and Managing Director-Carrie, a mother and disabled veteran, holds a Bachelors in Management, Masters in Business Administration, and a Doctorates in Organizational Leadership with 20-years' experience leading Government Organizations. Gian Montesini, Chairman and Producer-Gian has been involved in theatre in many capacities since the 80's. Originally from Brazil, he moved to California in the late 90's and continued to pursue his passion for the arts, organizing amateur and professional theatre groups like Big Idea Theatre, Scaramelo, Rebels Without Applause and, more recently, helping with Rise Up Theatre Co. Ann Pierson, Treasurer-Ann is a local resident in Rancho Cordova, has a 40-year history in financial accounting. Her primary expertise lies within the healthcare industry, budgeting, Tax needs and legal matters, she has worked with companies both private, nonprofit and state owned. Ann is an avid arts enthusiast and participates in The Polar Express, Wine Tours, Train events and more across the Sacramento Region. Walt Pierson, Technical Director. Josh Pierson, Photograph, Film, and Graphics. Talen Andersen, Musical Director. **See Attachment for Additional Project Team, Partners, and Community Support)

Project Goals

Goal #1 Increase community appreciation for and participation in the arts. Rise Up Theatre Company is striving to not only provide quality theatrical performances for citizens to participate in and enjoy, but by constructing a complex for other non-profit organizations to use as performance and rehearsal space inside the city limits, RCRUT is increasing the communities access to music, choral, dance and film. The access to all these performing arts forms to citizens, who may not be able to access such events outside Rancho Cordova, will now make them available within our community. Goal #2 Enhance community pride and the image of Rancho Cordova as a community where theatre, music, dance and film are prominent. Rancho Cordova Rise Up Theatre Company's constructing a complex in Rancho Cordova where citizens can see, on an ongoing and permanent basis, high quality performing arts will instill community pride and encourage residents to call Rancho Cordova their home. Goal #3 Promote the quality of life and civic engagement for citizens of Rancho Cordova. Theatre and the arts provide audiences and participants with not only emotional feelings of enjoyment and well-being; they expand their world view and mutual understanding. In addition, the construction of a permanent performing arts complex to be used by Rancho Cordova non-profit performing arts companies, orchestras, bands and choirs will bring a continuing stream of audiences and participants into a single location in the city of Rancho Cordova. This steady stream of arts patrons will attract and support businesses such as dining and transportation.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$500,000

Estimated Breakdown of Project Expenditures

Phase III and IV of the Plan Cost: $300,000.00 Phase III and IV coincide with the Community Enhancement & Investment 12 Month Funding Period (July 1, 2022 – June 30, 2023) 50% of the costs of Phase III & IV ($150.000) will be funded by private donations, funding events, theatrical productions and in-kind volunteerism. The other 50% of Phase II & IV, ($150.000) is the funding requested from the Community Enhancement and Investment fund.

Matching Funds

Rancho Cordova Rise Up Theatre Company was founded by three high-power professionals who each are providing Professional In-Kind Services and $10,000.00 seed money each. Moreover, even though they are acting as the Company's Administration, the Equity Board is not seeking, and has pledged not to take, any payment or remittance of any kind for the hundreds of hours of work provided until the theatre company and theatre complex are completely self-sustaining. They have made this pledge and investment of time and personal funds because of their ultimate goal: creating a professional theatre company and theatre facility that helps build and maintain Rancho Cordova, their home's, position and reputation as a center for the arts. President and Artistic Director, Courtney Conklin has a 20 year award winning history of producing, directing and distributing financially profitable live theatrical and

film productions. She bills between $3,000 and $5,000 per production and has made a personal investment pledge of $10,000.00. Secretary and Managing Director, Carrie DeHerrera, PhD, holds a Doctorate in Organizational Leadership and is the founder and CEO of a successful for-profit company. She bills $150.00 per hour for her professional services and has made a personal investment pledge of $10,000.00. Vice President and Executive Producer, Mary Gorak, J.D. has 30 years in civil and entertainment law, holds a Masters in Theatrical Producing with over 50 years experience producing theatre and has created theatre companies for municipalities including: Milpitas, CA; Healdsburg, CA; Santa Rosa, CA and Lebanon, Ohio. She bills $375.00 per hour for legal services, $10,000 to $20.000 for Theatrical Development Plans and has pledged $10,000.00.

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$150,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

Rancho Cordova Rise Up Theatre Company has never sought or received any previous funding from the Community Enhancement & Investment Fund. All previous funding has been provided by the Executive Board, has come from profits from performances or has been raised through fundraising events. Going forward RCRUT will continue to raise funds through direct donations, ticket sales, fundraising events and corporate and municipal grants. This specific request to help fund RCRUT's Development and Construction Plan is a single year request and all funds will be used in fiscal year 2022/2023, unless, as outlined above, construction is halted and then funds will be kept in a trust fund until completion. However, historically live theatre and the arts receive only about 50-60% of their operational funds through ticket sales, fundraising events and private donations: grants have always been a vital piece of funding. Once RCRUT's Development and Construction plan is fully realized and the needs of the company and complex are defined, RCRUT will seek additional Community Enhancement & Investment grant funds to maintain a high quality theatre company and a thriving performance complex in Rancho Cordova.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

Phase I and II of the Plan Cost: $200,000.00 Phase I and II will be completed by July 1, 2022, prior to the receipt of any Community Enhancement & Investment Funds The costs of Phase I & II have been or will be accomplished from fundraising events, theatrical productions, private donations and monetary pledges from the Executive Board. Phase III and IV of the Plan Cost: $300,000.00 Phase III and IV coincide with the Community Enhancement & Investment 12 Month Funding Period (July 1, 2022 – June 30, 2023) 50% of the costs of Phase III & IV ($150.000) will be funded by private donations, funding events, theatrical productions and in-kind volunteerism. The other 50% of Phase II & IV, ($150.000) is the funding requested from the Community Enhancement and Investment fund.

Project Schedule, Timeliness and Adaptability

Project Schedule

Theatrical Productions and Fundraising Events, which will be funded in part by Community Enhancement & Investment Fund Grant, will take place from July 1, 2022 through June 30, 2023. All such productions and events are in Phase II and IV of Rancho Cordova Rise Up Theatre Company's Development and Construction Plan. Please note that productions and events in Phase I & II will have been completed prior to grant funding. The design and construction of the 99-seat theatrical complex in the Rancho Cordova Arts District will be begun and completed between July 1, 2022 and June 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This project begins with a major advantage that ensures timeliness: Phase I & II of the Development and Construction Plan will have been funded independently through outside sources and completed by a board and management team already in place prior to the

2022/2023 fiscal year. This team will already function successfully. They will have developed a method of theatrical and fundraising events utilizing Rancho Cordova facilities, community and support. They will have established partnerships with Rancho Cordova non-profits and have begun to build an audience. They will also be well on the way to finalizing the survey for an already existing building to renovate and adapt into a 99-seat theatre complex.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Rancho Cordova Rise Up Theatre Company Plan is prepared to adapt. A large portion of theatrical productions and fundraising events can be filmed and streamed. In fact Rancho Cordova Rise Up Theatre Company has already provided for such adjustments. Board Member Josh Pierson is the owner/operator of a successful film company and has, and will provide streaming services if necessary. Contract negotiation with contractors and architects for the theatre complex construction can go forward via zoom and email even in a shut down as can the design and permit process. It is highly unlikely that construction will be halted due to health restriction: even in the height of the 2020 pandemic shutdown construction projects went forward. However, it there is a complete work stoppage, all funding from this grant as well as funds raised independently for the complex construction can be carried over into the next fiscal year in an attorney trust fund.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10468 Neiretto Court
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Rancho Cordova Rise Up Theatre Company has partnered and made arrangements with two non-profit organizations who have agreed to allow the Theatre Company to use their facilities free of charge for rehearsal and performances. Letters of Support memorializing these agreements are included with this application. These are: Mills Station Arts & Culture Center in Rancho Cordova (MACC): In the last three months RCRUT has produced at the MACC the comedy, “The Do-gooder Debacle”, a reader’s theatre fundraising event “A Radio Play” and is currently scheduled for another fundraiser “Photos with the Easter Bunny” and a full scale Broadway musical in the next three months. Both RCRUT and MACC look forward to a long partnership. Summerset Senior Living Facility, Rancho Cordova/Gold River (Summerset Facility): Summerset Facility Residents were provided free tickets to performances at the MACC. After a group of resident seniors attended plays, Summerset Staff felt a mutually beneficial relationship was possible. RCRUT has and will continue to use a portion of Summerset Facility for auditions and rehearsal, and residents will be able to enjoy those rehearsals and be provided free tickets to performances.

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Rise Up Theatre Letter CEIF (The MACC).pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Courtney Conklin

Title

President and Artistic Director

Submitting As

Non-Profit

Phone

5305752447

Email Address

riseuptheatreco@gmail.com

Organization's Legal Name (if applicable)

Phoenix Productions

Mailing Address of Submitter

10468 Neiretto Court
Rancho Cordova, CA 95670

Signatory's Name

Mrs. Mary Gorak

Signatory's Title

Vice-President, Executive Director, and Attorney at Law

Signatory's Phone

7074864829

Signatory's Email Address

goraklaw@gmail.com

Signatory's Mailing Address

4801 Dover Lane
507
Sacramento, CA 95847

Attach Any Additional Documents Here

Rise Up Theatre Binder.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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COMMUNITY INCLUSION AND GROWTH

Application #10

PROJECT PLAN

PROJECT NAME

RANCHO CORDOVA RISE-UP THEATRE COMPANY'S DEVELOPMENT AND CONSTRUCTION PROJECT

PROJECT SYNOPSIS

This project will provide funds to Rancho Cordova Rise Up Theatre Company (RCRUT) for the continuing development of a high-quality, thriving theatre company and the construction of a 99-seat theatre complex in the arts section of Rancho Cordova for the benefit of RCRUT and other Rancho Cordova non-profit performing arts organizations.

PROJECT DESCRIPTION

This grant will provide funds to Rancho Cordova Rise Up Theatre Company to implement Phase III & IV of RCRUT's 18-month Development and Construction Plan ("Plan"). ***For details of the extensive 18-Month Development and Construction Plan see Attachment A. Please note that Attachment A is the proprietary property of Rancho Cordova Rise Up Theatre, prepared by its counsel and Executive Producer and is not for dissemination or publication.***

Phase I & II of the Plan have already been, or will be, accomplished through private donations, volunteerism and fundraising events/productions that have taken place. Briefly, RCRUT has already finalized its non-profit status, drafted and approved a full development and construction plan, organized its board and committees, launched its website, partnered with already existing Rancho Cordova non-profits, performing arts groups, businesses and fraternal organizations and produced eight productions and events at the MACC.

The goal of Phase III & IV of RCRUT's Plan is to: (1) Continue the development of an on-going, high quality, Rancho Cordova theatre company; (2) Construct a permanent 99-seat performance complex for that RCRUT company to be used for performances and rehearsals; (3) Share that complex with other already existing and thriving Rancho Cordova performing arts entities (Orchestras, Choirs, Dance Companies and other Theatre Companies); and (4) Continue to bring together, for mutual support, Rancho Cordova performing arts groups and thereby help Rancho Cordova in its continuing goal of becoming a community where theatre, music and all performing arts are prominent.

The creation of a theatre company and the construction of a theatre complex, even in an existing structure, is a long term project. Moreover the financing of this endeavor by a non-profit organization through fundraising events and productions adds to the gargantuan tasks and literally takes hundreds of thousands

of volunteer hours. This grant will allow the completion of this task within the 18-month timeline set forth in the RCRUT 4-phase plan and will create for the city of Rancho Cordova a high quality theatre company and thriving theatre complex.

Application #10

PROJECT TEAM

Rancho Cordova Rise Up Theatre Company's Team



Courtney Conklin
President and Artistic Director

Courtney, a mother and resident of Rancho Cordova is the founder of Rise Up Theatre Company, has a 20-year award winning history of producing, directing, and distributing, both artistically and financially profitable, live theatrical and film productions.



Mary Gorak
Vice President and Executive Producer

Mary holds a Juris Doctorate with 30-years'experience in civil and entertainment law and over 50-years' theatrical experience, including starting multiple theatres for municipalities, producing over 40 individual productions, including an award winning Off Broadway musical currently in preparation for its Broadway run, and training Tony award winning actors.



Carrie DeHerrera
Secretary and Managing Director

Carrie, a mother and disabled veteran, holds a Bachelors in Management, Masters in Business Administration, and a Doctorates in Organizational Leadership with 20-years' experience leading Government Organizations.

Application #10



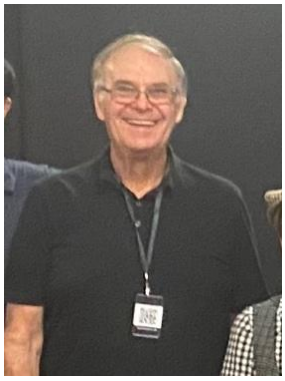
Gian Montesini
Chairman and Producer

Gian has been involved in theatre in many capacities since the 80's. Originally from Brazil, he moved to California in the late 90's and continued to pursue his passion for the arts, organizing amateur and professional theatre groups like Big Idea Theatre, Scaramelo, Rebels Without Applause and, more recently, helping with Rise Up Theatre Co. Gian is also an avid musician and can be seen performing with his jazz band "Foreign & Domestic" at local wineries and breweries.



Ann Pierson
Treasurer

Ann is a local resident in Rancho Cordova, has a 40-year history in financial accounting. Her primary expertise lies within the healthcare industry, budgeting, Tax needs and legal matters, she has worked with companies both private, nonprofit and state owned. Ann is an avid arts enthusiast and participates in The Polar Express, Wine Tours, Train events and more across the Sacramento Region.



Walter Pierson
Technical Director

Walt is a Local Rancho Cordova homeowner, who went to school and received a certificate as a recording engineer, spent several years working in the musical industry as a DJ, and progressed his knowledge in the technical arts by doing event work including owning his own successful production company called "Magical Memories". In his later years he is known for his production work on community events and productions such as The Polar Express in James Town as well as Train productions and Wine Tours.

Application #10



Josh Pierson
Photography, Film and Graphics

Josh, a father and Rancho Cordova homeowner, is a respected, award-winning filmmaker. The founder and operator of a successful film production company and freelance photography business also works full-time for VSP here in Rancho Cordova as a Sr. Video Producer/Digital Media Specialist. He has won two regional advertising awards and one national advertising award for video work. With his deep roots in film, music, and photography with a feature film on many streaming platforms, photos and articles published in worldwide and regional magazines he is invaluable for digital media marketing as well as live production.



Talen Andersen
Musical Director

Talen Andersen is a performer, composer, and educator based out of the Sacramento area. He has been involved in the performing arts for over a decade, and received his B.A. in Music with a concentration in Music Education from William Jessup University. He currently teaches private music lessons at Music Institute of Roseville, and teaches general music and drama at Bradshaw Christian School. He believes in the life enriching qualities of the performing arts for all who dedicate the passion for it.

COMMUNITY SUPPORT

Rancho Cordova's Rise Up Theatre community support.

Cheryl Gleason
MACC Curator

Jay Evans
Producer and Radio Play Organization

Tom Seaton
Conductor for RCRCCB

Fred Radford
Set Design and Building
Well known for the set design and building for William Jessup Productions.

Claire Radford
Props and Set Decoration

Terri Harris
Liscenced General Contractor
SHECAN2
Commercial and private property renovation and construction.

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PROJECT PARTNERS

Rancho Cordova Rise Up Theatre Company's Project Partner

PROJECTS GOALS

Goal #1 *Increase community appreciation for and participation in the arts.* Rise Up Theatre Company is striving to not only provide quality theatrical performances for citizens to participate in and enjoy, but by constructing a complex for other non-profit organizations to use as performance and rehearsal space inside the city limits, RCRUT is increasing the communities access to music, choral, dance and film. The access to all these performing arts forms to citizens, who may not be able to access such events outside Rancho Cordova, will now make them available within our community.

Goal #2 *Enhance community pride and the image of Rancho Cordova as a community where theatre, music, dance and film are prominent.* Rancho Cordova Rise Up Theatre Company's constructing a complex in Rancho Cordova where citizens can see, on an ongoing and permanent basis, high quality performing arts will instill community pride and encourage residents to call Rancho Cordova their home.

Goal #3 *Promote the quality of life and civic engagement for citizens of Rancho Cordova.* Theatre and the arts provide audiences and participants with not only emotional feelings of enjoyment and well-being; they expand their world view and mutual understanding. In addition, the construction of a permanent performing arts complex to be used by Rancho Cordova non-profit performing arts companies, orchestras, bands and choirs will bring a continuing stream of audiences and participants into a single location in the city of Rancho Cordova. This steady stream of arts patrons will attract and support businesses such as dining and transportation.

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GOALS	METRICS
Goal #1 *Increase community appreciation for and participation in the arts.* Rise Up Theatre Company is striving to not only provide quality theatrical performances for citizens to participate in and enjoy, but by constructing a complex for other non-profit organizations to use as performance and rehearsal space inside the city limits, RCRUT is increasing the communities access to music, choral, dance and film. The access to all these performing arts forms to citizens, who may not be able to access such events outside Rancho Cordova, will now make them available within our community.	Participation will be measured by: ● Participants in Rise Up's plays and musicals by individual performers & staff; ● Audience attendance at and reaction to performances and fundraisers; ● Participation by other Rancho Cordova non-profit performing entities in Rise Up's productions ● Use of the complex by other Rancho Cordova non-profit performing arts groups ● Feedback from participants and audiences
Goal #2 *Enhance community pride and the image of Rancho Cordova as a community where theatre, music, dance and film are prominent.* Rancho Cordova Rise Up Theatre Company's constructing a complex in Rancho Cordova where citizens can see, on an ongoing and permanent basis, high quality performing arts will instill community pride and encourage residents to call Rancho Cordova their home.	Enhancement of pride and image will be measured by: ● Print and Television Press Coverage ● Internet Pod and Press Coverage ● Internal Business and Fraternal Organization Coverage ● Public Survey Responses
Goal #3 *Promote the quality of life and civic engagement for citizens of Rancho Cordova.* Theatre and the arts provide audiences and participants with not only emotional feelings of enjoyment and well-being, the construction of a permanent performing arts complex to be used by Rancho Cordova non-profit performing arts companies, orchestras, bands and choirs will bring a continuing stream of audiences and participants into a single location in the city of Rancho Cordova. This steady stream of individuals will attract businesses that support arts patrons such as dining and transportation.	Promotion and engagement will be measured by: ● Audience surveys of use of other Rancho Cordova Businesses and Services ● Survey of Rancho Cordova Business in arts district ● Agreements with Rancho Cordova Business for package offers to Audience Participants ● Anecdotal Reports from Participants and Businesses.

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FUNDING REQUEST

EQUITY BOARD FUNDING PLEDGE

Rancho Cordova Rise Up Theatre Company was founded by three high-power professionals who each are providing Professional In-Kind Services and $10,000.00 seed money each. Moreover, even though they are acting as the Company's Administration, the Equity Board is not seeking, and has pledged not to take, any payment or remittance of any kind for the hundreds of hours of work provided until the theatre company and theatre complex are completely self-sustaining. They have made this pledge and investment of time and personal funds because of their ultimate goal: creating a professional theatre company and theatre facility that helps build and maintain Rancho Cordova, their home's, position and reputation as a center for the arts.

Executive Board Administrative Positions, In-Kind & Monetary Investment:

- President and Artistic Director, Courtney Conklin has a 20 year award winning history of producing, directing and distributing financially profitable live theatrical and film productions. She bills between $3,000 and $5,000 per production and has made a personal investment pledge of $10,000.00.
- Secretary and Managing Director, Carrie DeHerrera, PhD, holds a Doctorate in Organizational Leadership and is the founder and CEO of a successful for-profit company. She bills $150.00 per hour for her professional services and has made a personal investment pledge of $10,000.00.
- Vice President and Executive Producer, Mary Gorak, J.D. has 30 years in civil and entertainment law, holds a Masters in Theatrical Producing with over 50 years experience producing theatre and has created theatre companies for municipalities including: Milpitas, CA; Healdsburg, CA; Santa Rosa, CA and Lebanon, Ohio. She bills $375.00 per hour for legal services, $10,000 to $20.000 for Theatrical Development Plans and has pledged $10,000.00.

REQUEST FROM COMMUNITY ENHANCEMENT & INVESTMENT FUND: <u>$150,000.00</u>
FOR 50% OF PHASE III & IV OF THE DEVELOPMENT AND CONSTRUCTION PLAN

<u>FUNDING SUMMARY</u>:

Total Project Cost: $500,000.00

This total project cost is for the entire 18-Month Development and Construction Plan ("Plan"): Phase I, II, III & IV. The 18-month time period begins January 1, 2020 and ends June 30, 2023.

Phase I and II of the Plan Cost: $200,000.00

<u>Phase I and II will be completed by July 1, 2022, prior to the receipt of any Community Enhancement & Investment Funds</u> The costs of Phase I & II have been

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or will be accomplished from fundraising events, theatrical productions, private donations and monetary pledges from the Executive Board.

Phase III and IV of the Plan Cost: $300,000.00

Phase III and IV coincide with the Community Enhancement & Investment 12 Month Funding Period (July 1, 2022 – June 30, 2023) 50% of the costs of Phase III & IV ($150.000) will be funded by private donations, funding events, theatrical productions and in-kind volunteerism. The other 50% of Phase II & IV, (**$150.000) is the funding requested from the Community Enhancement and Investment fund.**

BREAKDOWN OF TOTAL PROJECT EXPENDITURES

Expenditure	Cost	Phase I & II Already Funded & Accomplished Prior To Grant Funding	Phase III & IV 50% of Funding Requested From Community Enhancement & Investment Fund
Non-Profit 501(c)3 Preparation/Fees	**$5,000**	**Consultant Funded or Service Provided by Executive Board**	
Logo & Web Site Designed/Launch	**$5,000**	**Consultant Funded or Service Provided by Executive Board**	
Development/Construction Plan	**$20,000**	**Consultant Funded or Service Provided by Executive Board**	
Outreach Programs Researched, Designed & Initiated	**$15,000**	**Consultant Funded or Service Provided by Executive Board**	
Brochure/Media Material Designer & Printed	**$5,000**	**Consultant Funded or Service Provided by Executive Board**	
4 Fundraising Events ● **Easter Bunny Photos** ● **Backer's Night** ● **Progressive Dinner** ● **Event Booth/Crowdfunding**	**$20,000 ($5,000 each)**	**All Funding Provided by Executive Board, Private Donations and In-Kind Volunteers**	
3 Theatrical Productions Plays (*Do Gooder Debauchee; Radio Show; Exit the Body* ● **Royalties** ● **Staff/Designers/Technicians** ● **Sets/Costumes/Props** ● **Advertising/Outreach** ● **Performance & Rehearsal Space Rental**	**$60,000 ($20,000 each)**	**All Funding Provided by Executive Board, Private Donations and In-Kind Volunteers**	

• **Actors**			
1 Theatrical Production: Musical • **Royalties** • **Staff/Designers/Technicians** • **Sets/Costumes/Props** • **Advertising/Outreach** • **Performance & Rehearsal Space Rental** • **Actors & Musicians**	**$70,000**		
PHASE I & II TOTAL COSTS	**$200,000**	**$200,000 ALREADY FUNDED AND IN-KIND SERVICES PROVIDED ****	
12 Months Company Administration: **3 Equity Board Members** • **Executive Director, Board Chair, Funding Campaign Chair** • **Produce & Direct Productions and Events** • **Chair Outreach, Grant, Corporate & Construction Committees**	**$20,000**		**All Funding and Hours Provided by Executive Board**
3 Plays: • **Royalties** • **Staff/Designers/Technicians** • **Sets/Costumes/Props** • **Advertising/Outreach** • **Performance & Rehearsal Space Rental** • **Actors**	**$60,000** **$20,000 each)**		**Actual Cost:** **In Kind**
2 Musicals • **Royalties** • **Admin Staff** • **Production Staff** • **Technicians**	**$100,000 ($50,000 each)**		**Actual Cost:** **In Kind**

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Major Fundraising Events • **Auction** • **Jail & Bail** • **Black & White Ball**	**$15,000 ($5,000 each)**		**Actual Cost:** **In Kind**
Small Fundraising Events • **Name-The-Theatre** • **Buy-A-Theatre Seat** • **Event Booths** • **Raffle** • **Photo with Santa**	**$5,000 ($1,000 each)**		**Actual Cost:** **In Kind Actual Cost:** **In Kind**
Theatre Complex Construction • **Architectural Services ($10,000)** • **General Contractor (10,000)** • **Fees & Permits ($5,000)** • **Carpentry, Drywall & Paint ($20,000)** • **Electrical Base + Finish ($10,000)** • **Plumbing & Restrooms ($5,000)** • **Theatre Seats & Drapes) (10,000)** • **Stage Lights/Sound (boards, speakers, panels, instruments, cable, slotted steel, connectors) $30,000)**	**$100,000**		**Actual Cost:** **In Kind Actual Cost:**
PHASE III & IV TOTAL	**$300,000**		**ACTUAL COST:** **IN-KIND*, FUNDRAISING & DONATION:**

****In-Kind California Volunteer Hourly Rate is $33.61 (Independent Sector www.independentsector.org)**

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	MUSICAL PRODUCTION	PLAY PRODUCTION
	The following is an estimated cost breakdown for a 50-99 seat venue per show:	The following is an estimated cost breakdown for a 50-99 seat venue per show:
Show Requirements	**Estimated Costs**	**Estimated Costs**
Royalties	**$3,500-$7,000**	**$1,500-$2,500**
Set/Set Designer	**$8,000-$10,000**	**$3,000-$4,000**
Set Designer/Construction	**$5,000-$7,000**	**$3,000-$4,000**
Technicians	**1= $500** **4= $2,000**	**$1,000**
Technical Director	**$1,500**	**$1,500**
Props	**$1,500**	**$1,000**
Costumes	**$3,000**	**$2,000**
Costume Designer	**$1,500**	**$1,500**
Musicians	**1= $500** **10= $5,000**	**Not Applicable**
Choreographer	**$1,500**	**Not Applicable**
Director	**$1,500**	**$1,000**
Musical Director	**$1,500**	**$1,000**
Digital Media Specialist	**$1,000**	**$1,000**

Advertisement/Outreach	**$2,000**	**$2,000**
Space Rental	**1 day= $50-$300** **45 days=$2,250-$13,500**	

****Show needs vary drastically**

PROJECT SCHEDULE

Theatrical Productions and Fundraising Events, which will be funded in part by Community Enhancement & Investment Fund Grant, will take place from July 1, 2022 through June 30, 2023. All such productions and events are in Phase II and IV of Rancho Cordova Rise Up Theatre Company's Development and Construction Plan. Please note that productions and events in Phase I & II will have been completed prior to grant funding. The design and construction of the 99-seat theatrical complex in the Rancho Cordova Arts District will be begun and completed between July 1, 2022 and June 30, 2023.

PROJECT TIMELINESS

This project begins with a major advantage that ensures timeliness: Phase I & II of the Development and Construction Plan will have been funded independently through outside sources and completed by a board and management team already in place prior to the 2022/2023 fiscal year. This team will already function successfully. They will have developed a method of theatrical and fundraising events utilizing Rancho Cordova facilities, community and support. They will have established partnerships with Rancho Cordova non-profits and have begun to build an audience. They will also be well on the way to finalizing the survey for an already existing building to renovate and adapt into a 99-seat theatre complex.

PROJECT ADAPTABILITY

Rancho Cordova Rise Up Theatre Company Plan is prepared to adapt. A large portion of theatrical productions and fundraising events can be filmed and streamed. In fact Rancho Cordova Rise Up Theatre Company has already provided for such adjustments. Board Member Josh Pierson is the owner/operator of a successful film company and has, and will provide streaming services if necessary. Contract negotiation with contractors and architects for the theatre complex construction can go forward via zoom and email even in a shut down as can the design and permit process. It is highly unlikely that construction will be halted due to health restriction: even in the height of the 2020 pandemic shutdown construction projects went forward. However, it there is a complete work stoppage, all funding from this grant as well as funds raised independently for the complex construction can be carried over into the next fiscal year in an attorney trust fund.

PROJECT PREVIOUS/ONGOING FUNDING

Rancho Cordova Rise Up Theatre Company has never sought or received any previous funding from the Community Enhancement & Investment Fund. All previous funding has been provided by the

Executive Board, has come from profits from performances or has been raised through fundraising events. Going forward RCRUT will continue to raise funds through direct donations, ticket sales, fundraising events and corporate and municipal grants.

This specific request to help fund RCRUT's Development and Construction Plan is a single year request and all funds will be used in fiscal year 2022/2023, unless, as outlined above, construction is halted and then funds will be kept in a trust fund until completion.

However, historically live theatre and the arts receive only about 50-60% of their operational funds through ticket sales, fundraising events and private donations: grants have always been a vital piece of funding. Once RCRUT's Development and Construction plan is fully realized and the needs of the company and complex are defined, RCRUT will seek additional Community Enhancement & Investment grant funds to maintain a high quality theatre company and a thriving performance complex in Rancho Cordova.

PROJECT LOCATION/FACILITY USE

Rancho Cordova Rise Up Theatre Company's office and mailing address is: Rancho Cordova Rise Up Theatre Company, 10468 Neiretto Court, Rancho Cordova, CA 95670. The legal office and agent for service of process is: The Law Offices of Mary J. Gorak, 4801 Dover Lane #507, Sacramento, CA 95842.

Currently no Rancho Cordova Rise Up Theatre Company Theatrical Productions or Fundraising Events are scheduled to take place at any school sites or parks in Rancho Cordova. However, if at any time appropriate sites become available, letters of approval and support will be submitted.

Rancho Cordova Rise Up Theatre Company has partnered and made arrangements with two non-profit organizations who have agreed to allow the Theatre Company to use their facilities free of charge for rehearsal and performances. Letters of Support memorializing these agreements are included with this application. These are:

- Mills Station Arts & Culture Center in Rancho Cordova (MACC): In the last three months RCRUT has produced at the MACC the comedy, "The Do-gooder Debacle", a reader's theatre fundraising event "A Radio Play" and is currently scheduled for another fundraiser "Photos with the Easter Bunny" and a full scale Broadway musical in the next three months. Both RCRUT and MACC look forward to a long partnership.

- Summerset Senior Living Facility, Rancho Cordova/Gold River (Summerset Facility): Summerset Facility Residents were provided free tickets to performances at the MACC. After a group of resident seniors attended plays, Summerset Staff felt a mutually beneficial relationship was possible. RCRUT has and will continue to use a portion of Summerset Facility for auditions and rehearsal, and residents will be able to enjoy those rehearsals and be provided free tickets to performances.

CLOSING REMARKS

The creation of the Company is the result of an alliance of the business, civic, education and artistic communities, which feeds back to the community by making a financial, educational and artistic contribution.

BUSINESS

- Attract tourism by being marketed broadly to draw an audience.
- Cooperates with the city and the chamber of commerce in promoting the city as a destination.
- Ties in with other events, points of interest in the area, and local products and services.
- Is a "quality of life" asset to encourage businesses to locate in the city.
- Brings significant business to local hotels and inns, restaurants, retail stores, and historical sites.

CIVIC

- Helps to maintain the city position and reputation as the center of the arts.
- Becomes a city institution synonymous with the town.
- The standard of excellence is a source of civic pride.
- Fosters community team spirit. Similar to the city parade: half the people in town participate and the other half watches and cheers.
- Symbolically mirrors the quality of life seen in the city.
- Ties in with other non-profit civic organizations such as the Museum and Orchestra.

EDUCATION

- Provides training and apprenticeship programs in all aspects of theater production.
- Assist performers and others in obtaining Union membership for career advancement.
- Affiliates with the school system in many ways: artist-in-residences, special performances and backstage tours for children, programs designed for at-risk youth and a fully equipped theater space for performances.

ARTISTIC

- Establishes professional opportunities for talented city performers and artists.
- Maintains the highest standards of professional excellence achieved by the use of seasoned professionals in the field as well as the training of local participants.
- Showcases a broad spectrum of performers in the most collaborative of art forms: actors, dancers, singers, and musicians.
- Has broad appeal to the local as well as the out of town audience, older and younger audiences, sophisticated as well as inexperienced theatre goers.
- Because of the high production values, it gives the audience excellent value for its entertainment dollar.
- Embodies an artistic vehicle –the traditional American musical enthusiasm, optimism and the best of our ideals.

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RANCHO CORDOVA RISE UP THEATRE COMPANY



The Rise Up Theatre Company is a performing arts company led by Founding Member and Artistic Director, Courtney Conklin



and Managing Director, Carrie DeHerrera.

Rise Up Theatre anticipates producing up to 12 plays and musical each year ranging from the best current work to re-invigorated classic plays, to new plays by contemporary writers.

The Rise Up Theatre Company engages theatre artists of every discipline – actors, designers, composers, playwrights – who work on individual productions throughout each season.



Rise Up Theatre Company

(530) 575-2447

riseuptheatreco@gmail.com
@instagram
@facebook
www.riseuptheatreco.com

RANCHO CORDOVA
RISE UP
THEATRE COMPANY

Phoenix Productions
www.riseuptheatreco.com

DONATIONS

Ticket sales only cover about 50% of RUT's costs. To bridge that gap, we depend on the support of generous people, like you, who are inspired by what we do and want to see more people entertained, enriched, engaged, and educated through performing arts and community theatre.

As a non-profit (501c3) organization, we depend on the generosity of our patrons and volunteers. Your donations provide the means for Rise Up Theatre Company to grow and further the arts as an integral part of the community.

If you would like to support our growing theatre company you may donate through Venmo:

Please make checks payable to: Rise Up Theatre Company.

MISSION

Here at Rise Up Theatre, it is our mission to bring the community together one production at a time through quality community theatre and visual performing arts, with integrity, honesty, and inclusion.

We rise by lifting others.

The Company hopes to reach over 20,000 people each year through its performance and fundraising programs. We value and promote diversity and inclusion in every aspect of our business.

VOLUNTEERS

Whether it is on the stage or behind the scenes there are always opportunities available! Experience is not required to fulfill a position. We are happy to teach and learn as we go. As a non-profit company, we rely on donations of time and money from the community to accomplish our goals.

RUT is made up of members of the community who support RUT with their time, their talents, and their treasure. If you are interested in being a part of RUT's success and growth and would like more information on how you can become a member of this dynamic group of highly-engaged individuals, Please visit www.riseuptheatreco.com for more information.

Potential Partners

Company Name	Address	Contact Number
Ships and Trips Travel		916-276-4310
Kaleidoscope Holistic Learning Center		916-905-0575
Folsom Telegraph / Folsom Lake Entertainer	921 Sutter Street	916-351-3750
California Inn and Suites	10800 Olson Drive	916-638-2500
Security Park Storage	3920 Security Park Drive	916-985-8505
Brookfields Restaurant	11135 Folsom Blvd	916-638-0733
Your Fitness Genie		916-768-8767
Rancho Cordova Travel and Tourism	10969 Trade Center Drive, Suite 100	916-460-8201
Mother Lode Van & Storage, Inc.	11255 Pyrites Way, #400	916-631-4285
Cal-Vintage Roofing Co, Inc	11257 Coloma Road, #A-3	916-635-8320
Sacramento Legal Documents	2377 Gold Meadow Way, #30	916-335-3740
Affinity Performance Inc. (dba Affinity Automotive, Inc.)	3221 Fitzgerald Road	916-760-7406
InterCoast College	9738 Lincoln Village Drive, #120	916-714-5400
Heritage Community Credit Union	2155 Golden Centre Lane	916-364-3822
Quick Quack Car Wash	3050 Sunrise Blvd	916-971-3274
The Salvation Army Rancho Cordova	10370 Old Placerville Rd, #107	408-781-9079
Business Computer Services of Sacramento	11344 Coloma Road, #349	1-844-253-5510
Performance Physical Therapy	10390 Coloma Road, #7	916-858-0950
Bell Brothers Plumbing, Heating & Air	10555 Norden Avenue	916-444-1234
WeEmbrace		510-386-6842
Al-Noor Indian Cuisine	3151 Zinfandel Drive, #1	916-476-6565
Pocket Deli	11210 Sun Center Drive	916-635-9808
Sacramento Marriott Rancho Cordova Hotel	11211 Point East Drive	916-638-1100
Ethno FM 87.7 FM		916-705-0739
Tri Counties Bank	25025 Blue Ravine Road	916-984-2029
Siemens Industry, Inc.	2969 Prospect Park Drive, #100	916-553-4444
Honorable Siri Pulipati	2729 Prospect Park Drive	916-851-8700
Fort Rock Brewing, LLC	12401 Folsom Blvd, #110	916-956-0544
Massage Kneads	9915 Fair Oaks Blvd, #D Salon Nouveau	916-257-8269
Planet Auto Wholesale	11355 White Rock Road	916-638-2277
Experis - IT	3101 Zinfandel Drive, #240	916-638-6252
Ose Properties	2399 American River Drive	916-972-1414
Benzeen Auto Parts	3811 Recycle Rd	916-403-7901
American River Bank - Gold River	11220 Gold Express Drive, #401	916-231-6224
National Business Furniture		877-437-5246
Volunteers of America	10630 Schirra Avenue	916-706-3017
Moulding Base		916-917-5701
Release & Refocus Massage		916-539-2795
West Coast Gas Co. Inc.	9203 Beatty Drive	916-364-4100
California Capital Airshow	10425 Norden Avenue	916-876-7568
Turning Point Community Programs	10850 Gold Center Drive, #325	916-364-8395x2011
Crete Crush, LLC	12584 White Rock Road	916-985-2700
KP International Market	10971 Olson Drive	916-853-8000
Sims Metal	11320 Dismantle Court	916-636-7900x7992
Nor Cal Kitchen & Bath Cabinetry	11367 Trade Center Drive, #105	916-575-9777
Eskaton Lodge Gold River	11390 Coloma Road	916-852-7900
Ross Video, Inc.	11370 Sunrise Park Drive	916-669-7408
McClernon General Engineering, Inc.	2941 Sunrise Blvd, #105	916-233-4664
Comcast Business		916-201-0797
Five Star Restoration & Construction, Inc.	2372 Gold River Road	916-631-1693
Hall's Window Center, Inc.	11297 White Rock Road	916-669-1469
All Ways Learning, LLC		510-305-4509
Hyatt Place	10744 Gold Center Drive	916-635-4799x5104
American Dream Kitchen	1851 Heritage Lane, #141-B	916-944-9609
Precision Garage Door Sacramento Valley	8175 Alpine Avenue, #C	916-864-9100
Healing Touch Home Health Care, Inc.	2893 Sunrise Blvd, #209	916-476-5870
Folsom Ready Mix, Inc.	3401 Fitzgerald Road	916-851-8300
Burger Physical Therapy	3187 Zinfandel	916-932-7707
Folsom Cordova Unified School District	1965 Birkmont Drive	916-294-9000
Beyond The Village, Inc.	9912 Business Park Drive, #170	916-750-2881
Capital Label Company	11336 Sunco Drive, #D	916-767-7055
Pacful, Inc.	11311 White Rock Road	916-233-1488
Evergreen Home Loans	4359 Town Center Blvd, #112	916-761-5605
DoubleTree Suites by Hilton	11260 Point East Drive	916-638-4141x406
California Apartment Association	980 Ninth Street, #1430	916-449-6456
Zak's Bar and Grill	10750 Olson Drive	916-226-3480
T3 Toner, LLC	2583 Mercantile Drive	916-851-1099
San Juan Soccer Club		916-365-2801
Art of Marketing	3246 Ramos Circle, #B	916-852-5933

Rancho Cordova HART	4687 Fairbrook Court	916-677-6642
Cafe Dolce	3140 Gold Camp Dr #190	916-476-6027
Wingpros, Inc.	3195 Zinfandel Drive, #3	916-635-9464
CCHAT Center	11100 Coloma Road	916-361-7290
Sacramento Children's Museum	2701 Prospect Park Drive, #120	916-730-5079
Rancho Cordova Food Locker	10497 Coloma Road	916-364-8973
Gold River Distillery	11460 Sunrise Gold Circle, #C	916-476-3868
KCM, Inc.	3140 Gold Camp Drive, #150	916-638-3890
The Mimosa House	3155 Zinfandel Drive, #100	916-476-4599
California Electronic Asset Recovery	3678 LeMay Street	916-388-1777
APS Painting, Inc.	10916 Pluma Court	916-858-8586
Access Corporate Housing	11306 Sunco Drive, #4	916-638-8288
English Garden Care, Inc.	3294 Luyung Drive	916-635-4275
Go 4 Pizza	4036 Sunrise Blvd, #100	916-353-2700
Superbike Showroom	11135 Trade Center Drive, #110	916-345-3115
B & J Body Shop	11000 Folsom Blvd	916-635-4400
Spainhower Chiropractic	11015 Olson Drive, #6	916-635-0344
KP Karaoke/Sports Bar	10971 Olson Drive	916-853-2006
Kylee Doyle Photography	4074 Pinoche Peak Way	916-520-9150
Animal Rehabilitation Center	3017 Gold Canal Dr	916-526-0701
Jacobs Law Corporation	11246 Gold Express Drive, #108	916-853-5500
Ralph Opfer Floors, Inc.	3330 Mather Field Road	916-366-1672
Mather Golf Course	4103 Zinfandel Drive	916-364-4354x8
The EstablishMint	11088 Olson Drive, Suite A	916-635-2744
TRUE COLOR LITHO		530-409-1140
California Capital Arts Foundation	9841 Horn Road, #100	916-706-2000
SYNBYO	11275 Sunrise Gold Circle, #J	916-432-0741
St. John Vianney School	10499 Coloma Road	916-363-4610
Real Estate America	2880 Sunrise Blvd, #121	916-852-5100
Merlone Geier Management	3191 Zinfandel Drive, #23	916-853-1540
DP Global Solutions LLC	12051 Mallard Lake Way	571-215-2338
Les Schwab Tire Center	2838 Sunrise Blvd.	916-858-8666
SFC Leasing, LP	3430 Luyung Drive	916-638-5364
FS Medical Technology	11300 Sanders Drive, #1	916-853-1222
Cox Black and White Lab, Inc.	2933 Gold Pan Court, #C	916-631-7275
Chamberlain University	10971 Sun Center Drive, #100	916-330-3410
Haulaway Storage Containers	11421 White Rock Road	916-464-1300
Bee Embroidered	10821 Segovia Way	916-635-7467
4 Paws 2 Freedom	2376 Zinfandel Dr	916-966-6758
Mr. Electric of Rancho Cordova	11423 Sunrise Gold Circle, #10	916-635-2755
Fairfield Inn & Suites	10745 Gold Center Drive	916-858-8680
JG Graphics	11470 Sunrise Gold Circle, #1	916-400-0638
Intercept Security	10416 Investment Circle	916-685-9221
U.S. Lawns of Sacramento	3655 Omec Park Drive	916-837-6722
Courtyard by Marriott Sacramento Rancho Cordova	10683 White Rock Road	916-638-3800
Petali	3101 Zinfandel Drive, #128	916-330-1595
Mailing Systems, Inc.	2431 Mercantile Drive, #A	916-631-7400
Advance Auto Parts	10899 Folsom Blvd	916-503-2716
SMUD (Sacramento Municipal Utility District)	6301 S Street, Mail Stop A102	916-732-7349
Parkwest Casino Cordova (The Lodge)	2801 Prospect Park Drive	916-293-7484
Cattlemens Restaurant	12409 Folsom Blvd	916-985-3030
3D Technology Services	11365 Sunrise Gold Circle	916-859-9111
National University	10901 Gold Center Drive	916-855-4247
California Sunrooms	3160 Gold Valley Drive #300	916-631-8186
Total Education Solutions	3320 Data Drive Suite 400	916-246-4484
Soil Born Farms	2140 Chase Drive	916-363-9685
MeMe Marketplace	12189 Folsom Blvd	916-351-4343
Power & Staging	2704 Mercantile Drive	916-941-5280
Save the Day Seasonings - Gripstics	2930 Weston Way	916-208-2977
VSP Global	3333 Quality Drive	916-851-5057
Baguette Up	2320 Sunrise Blvd	916-858-1500
Dogtopia of Sacramento - Nimbus Winery	12401 Folsom Blvd, #120	916-764-3647
Tony's Sons Moving and Storage	2419 Mercantile Drive, #D	916-638-1888
Folsom Cordova Community Partnership	10665 Coloma Road	916-361-8684
The Heart Craft Studio	3054 Sunrise Blvd Suite G	916-706-2206
DesCor Builders, Inc.	3164 Gold Camp Drive, #250	916-463-0191
Melissa Sahaj with EXP Realty	3326 Brolio Ct	916-612-9575
Morningside Florist, Inc.	11170 Sun Center Drive #110	916-635-9891
Smart Axe	11151 Trade Center Drive, #106	916-389-0178
Atlas Disposal Industries	3035 Prospect Park #40	916-455-2800
Straw Hat Pizza	2929 Mather Field Road	916-363-5050
Golden State Water	3005 Gold Canal Drive	916-853-3600

Fox Family Heating and Air Conditioning	3337 Sunrise Blvd, #6	916-877-1577
Explore Rancho Cordova	2729 Prospect Park Drive, #117	916-273-5711
1-800 Water Damage	11355 Pyrites Way, #A-6	916-594-7752
Wells Fargo Bank	400 Capitol Mall, #2150	916-440-4363
Sacramento Jet Center	10510 Superfortress Avenue	916-428-8292x4
Summerset Senior Living	2341 Vehicle Drive	916-330-1300
Rancho Cordova Whisker Warriors	3368 Cristom Drive	916-747-7534
Alphagraphics	11225 Trade Center Drive, #175	916-221-4333
Cook Engineering, Inc.	3203 Fitzgerald Road	916-631-1365
American River Raft Rentals	11257 South Bridge Street	916-635-6400
Chick-fil-A	2354 Sunrise Blvd.	916-853-9100
Light Bulbs Plus, Inc.	2689 Citrus Road, #C	916-635-1127
Cordova Medical Institute	2890 La Loma Dr	916-701-2025
Five Star Bank	3100 Zinfandel Drive, #100	916-851-5440
Sublime Digital Marketing Group, Inc.	11230 Gold Express Dr., #310-273	916-507-0764
Schnitzer Steel Industries, Inc.	12000 Folsom Blvd	916-985-4810
Holiday Inn Rancho Cordova	11269 Point East Drive	916-635-4040
Burgerim	4040 Sunrise Blvd	916-351-0105
Staples, Inc.	2690 Sunrise Blvd	916-858-1868
LogOff Brewing	3054 Sunrise Blvd, #J	916-531-2430
Parkwest Casino Cordova	2801 Prospect Park Drive	916-293-7478
Costco Warehouse	11260 White Rock Road	916-631-7665
Sacramento Imaging	1995 Zinfandel Drive Suite 103	916-905-5363
Crusader Fence Company	3115 Gold Valley Drive, #B	916-631-9191
The Red Alcove/Korean BBQ Restaurant	10971 Olson Drive	916-400-3252
Frontline Metal	3236 Fitzgerald Road Suite A	916-693-7066
Gold River Self Storage	11280 Coloma Road	916-635-7867
Ideas In Promotions	10888 Nederland Way	916-873-5708
Homewood Suites	10700 White Rock Road	916-589-1332
Audio 916	3068 Sunrise Blvd, #C	916-936-1001
Sonny's Market	3291 Mather Field Road	916-362-1151
EyeOn Promotions Inc	11121 Sun Center Drive, #L	916-376-7802
US Bank	3217 Zinfandel Drive	916-631-4456
Gianelli's Appliances & Supplies	10855 Folsom Blvd	916-366-1342
BSK Associates	3140 Gold Camp Drive, #160	916-853-9293
San Joaquin Valley College	11000 Olson Drive, #100	916-638-7582
Womens Theatre Collective	148 Tomlinson Dr, Folsom, CA, 95630-7402	
Hummingbird Theatre Company	Rancho Cordova, Sacramento County 95670	
Del Oro Orchestra	P.O. Box 1793, Rancho Cordova, CA 95670	916-341-9938
The Elks Lodge	11440 Elk Circle, Rancho Cordova, CA	916-635-8038
The Moose Lodge	10124 Coloma Rd, Rancho Cordova, CA 95670	916-362-6667
VSW		

Application #10

BYLAWS

OF

PHOENIX PRODUCTION COMPANY

DBA'S THEREWITHIN

A CALIFORNIA PUBLIC BENEFIT CORPORATION

Application #10

ARTICLE I

GENERAL PROVISIONS

SECTION 1. PRINCIPAL OFFICE

The principal office of the corporation for the transaction of its business is located in Rancho Cordova, California.

SECTION 2. OTHER OFFICES

The Board may at any time establish branch or subordinate offices at any place or places within or without the State of California, where it is qualified to do business.

SECTION 3. CHANGE OF ADDRESS

The county of the corporation's principal office can be changed only by amendment of these Bylaws and not otherwise. The Board of Directors may, however, change the principal office from one location to another within the named county by noting the changed address and effective date below, and such changes of address shall not be deemed an amendment of these Bylaws:

_____ Dated: _____
_____ Dated: _____
_____ Dated: _____

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

ARTICLE II

OBJECTIVE AND PURPOSES

SECTION 1. OBJECTIVES AND PURPOSES

The Corporation is a nonprofit public benefit corporation and is not organized for the private gain of any organization or person. The specific purposes of the corporation are to provide public performances and instruction in theatrical forms including without limitation (i) fostering and stimulating interest in classic and contemporary works including but not limited to; Comedy, Drama, Musicals, Improvisations, dance and film medias; (ii) to provide instruction in theatrical and film methods such acting, directing, improvisation, dancing, script writing, playwriting, production, and technical skills; (iii) to sponsor special events involving the public performance of any or all of the above art forms as well as other performing arts by the corporation's performing troupe as well as by other community performing arts groups; and (iv) to directly engage in and to provide facilities for others to engage in the promotion of the arts; (v) with the intent of developing the abilities and interests of the company and community at large while uniting persons interested in the participation of the foregoing activities.

ARTICLE III
BOARD OF DIRECTORS

SECTION 1. NUMBER

The corporation shall have consist of not less than five (5) directors and not more than eleven (11) Directors, the exact number to be fixed by resolution of the Board from time to time. Collectively they shall be known as the Board of Directors. One of the Directors shall be the President of the corporation. The remaining Directors shall be elected by a majority of the Directors. The Directors other than the President of the Corporation shall serve a three (3) year term, provided that an appointment or election to fill the vacancy shall be for the unexpired term of the office in which the vacancy occurs. The Directors shall continue to hold office until their successors are elected and qualified.

SECTION 2. POWERS

(a) *General Corporation Powers.* Subject to the provisions of the California Nonprofit Public Benefit Corporation law and any limitations in the Articles of Incorporation and Bylaws relating to action required or permitted to be taken or approved by the members, if any, of this corporation, the activities and affairs of this corporation shall be conducted, and all corporate powers shall be exercised by or under the direction of the Board of Directors.

(b) Specific Powers. The Directors shall have the power to; (i) select and remove all officers, agents, and employees at the corporation; (ii) prescribe any powers and duties for them that is consistent with the law and fix their compensation.

(c) Self-Dealing Transactions. The Board of Directors shall not approve any transaction to which one or more of its directors has a material or financial interest.

SECTION 3. DUTIES

It shall be the duty of the directors to:

(a) Perform any and all duties imposed on them collectively or individually by law, by the Articles of Incorporation of this corporation, or by these Bylaws;

(b) Appoint and remove, employ and discharge, and, except as otherwise provided in these Bylaws, prescribe the duties and fix the compensation, if any, of all officers, agents and employees of the corporation;

(c) Supervise all officers, agents and employees of the corporation to assure that their duties are performed properly;

(d) Meet at such times and places as required by these Bylaws;

SECTION 4. FEES AND COMPENSATION OF DIRECTORS

Directors and members of committees may receive such compensation, if any, for their services and such reimbursement for expenses incurred on behalf of the corporation as may be fixed or determined by resolution of the Board of Directors; provided, however, that such compensation shall be reasonable, and shall be comparable to the compensation paid for a like position by similar nonprofit organizations; and provided further that a Director may not vote on matters relating to his or her compensation in a capacity other than as a Director.

SECTION 5. REPRESENTATION OF SHARES OF OTHER CORPORATION

The Board of Directors and/or the Executive Committee shall have full and sole power to authorize and direct the President and (1) The Secretary or (2) any Assistant Secretary of the Corporation to vote, represent, and exercise on behalf of the corporation, (i) all rights incident to any and all shares of any other corporation or a corporation standing in the name of the corporation and to specify the particular actions to be taken with respect to such shares provided that the officers of the corporation have the authority to vote, represent, and exercise on behalf of the corporation all rights and such shares if such shares constitute less than 10% of the assets of the corporation.

SECTION 6. RESTRICTION REGARDING INTERESTED DIRECTORS

The property of this corporation is irrevocably dedicated to charitable and social welfare purposes and no part of the net earnings, contributions, or assets of the corporation shall ever inure to the benefit of any of its directors or officers, or to the benefit of any private person, except the corporation shall be authorized and empowered to pay reasonable compensation for services rendered and to make payments and distributions in furtherance of the purposes set forth in its articles of incorporation and otherwise in the amended and restated Bylaws (the “Bylaws”).
The corporations shall not participate in or intervene in any political campaign (including the publishing or distribution of statements) on behalf of or in opposition to any candidate for public office.

SECTION 7. SPECIAL MEETINGS

Meetings shall be held at the principal office of the corporation unless otherwise provided by the board or at such place within or without the State of California which

has been designated from time to time by resolution of the Board of Directors. In the absence of such designation, any meeting not held at the principal office of the corporation shall be valid only if held after all board members have been given written notice of the meeting as hereinafter provided for special meetings of the board.
Any meeting may be held by conference telephone, electronic video screen communication, or other communications equipment. Participation in a meeting through use of conference telephone constitutes presence in person at that meeting so long as all directors participating in the meeting are able to hear one another. Participation in a meeting through use of electronic video screen communication or other communications equipment (other than conference telephone) constitutes presence in person at that meeting if all of the following apply; (i) Each director participating in the meeting can communicate with all of the other directors concurrently; (ii) Each director is provide the means of participating in all matters before the board, including, without limitation, the capacity to propose, or to interpose an objection to, a specific action to be taken by the corporation; (iii) The corporation adopts and implements some means of verifying that all persons participating in the meeting are directors of the corporation or are otherwise entitled to participate in the meeting; and that all actions of, or votes by, the board are taken and cast only by directors and not by persons who are not directors.

SECTION 8. REGULAR AND ANNUAL MEETINGS

(a) *Annual Meetings.* The annual meeting of directors shall be held on the first Tuesday following a Monday in October, directors shall be elected by the Board of Directors in accordance with this section. Cumulative voting by directors for the election of directors shall not be permitted. The candidates receiving the highest number of votes up to the number of directors to be elected shall be elected. Each director shall cast one vote, with voting being by ballot only.

(b) *Regular Meetings.* In addition to the annual meeting, regular meetings shall be held once each calendar quarter, the first Tuesday following a Monday of the following months; (i) February, (ii) May, (iii) August and (iv) December.

SECTION 9. SPECIAL MEETINGS

Special meetings of the Board of Directors may be called by the Chairperson of the board, the President, the Vice President, the Secretary, or by any two directors, and such meetings shall be held at the place, within or without the State of California, designated by the person or persons calling the meeting, and in the absence of such designation, at the principal office of the corporation.

SECTION 10. NOTICE OF MEETINGS

Regular meetings of the board may be held without notice. Special meetings of the board shall be held upon four (4) days' notice by first-class mail or forty-eight (48) hours' notice delivered personally or by telephone or email. If sent by mail or email, the notice shall be deemed to be delivered on its deposit in the mails or on its delivery to the service provider. Such notices shall be addressed to each director at his or her address as shown on the books of the corporation. Notice of the time and place of holding an adjourned meeting need not be given to absent directors if the time and place of the adjourned meeting are fixed at the meeting adjourned and if such adjourned meeting is held no more than twenty-four (24) hours from the time of the original meeting. Notice shall be given of any adjourned regular or special meetings to directors absent from the original meeting if the adjourned meeting is held more than twenty-four (24) hours from the time of the original meeting.

SECTION 11. CONTENTS OF NOTICE

Notice of meetings not herein dispensed with shall specify the place, day and hour of the meeting. The purpose of any board meeting need not be specified in the notice.

SECTION 12. WAIVER OF NOTICE AND CONSENT TO HOLDING MEETINGS

(a) Meetings. The transactions of any meeting of the board, however called and noticed or wherever held, are as valid as though the meeting had been duly held after proper call and notice, provided a quorum, as hereinafter defined, is present and provided that either before or after the meeting each director not present signs a waiver of notice, a consent to holding the meeting, or an approval of the minutes thereof. All such waivers, consents, or approvals shall be filed with the corporate records or made a part of the minutes of the meeting.
(b) Action. Any action required or permitted to be taken by the Board may be taken without a meeting, if all members of the Board, individually or collectively consent in writing to such action. Any and all written consents shall be filed with the minutes of the proceedings of the Board.

SECTION 13. QUORUM FOR MEETINGS

A quorum shall consist of a majority of the Board of Directors. Except as otherwise provided in these Bylaws or in the Articles of Incorporation of this corporation, or by law, no business shall be considered by the board at any meeting at which a quorum, as hereinafter defined, is not present, and the only motion which the Chair shall entertain at such meeting is a motion to adjourn. However, a majority of the directors present at such meeting may adjourn from time to time until the time fixed for the next regular meeting of the board.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

When a meeting is adjourned for lack of a quorum, it shall not be necessary to give any notice of the time and place of the adjourned meeting or of the business to be transacted at such meeting, other than by announcement at the meeting at which the adjournment is taken, except as provided in Section 9 of this Article.

The directors present at a duly called and held meeting at which a quorum is initially present may continue to do business notwithstanding the loss of a quorum at the meeting due to a withdrawal of directors from the meeting, provided that any action thereafter taken must be approved by at least a majority of the required quorum for such meeting or such greater percentage as may be required by law, or the Articles of Incorporation or Bylaws of this corporation.

SECTION 14. MAJORITY ACTION AS BOARD ACTION

Every act or decision done or made by a majority of the directors present at a meeting duly held at which a quorum is present is the act of the Board of Directors, unless the Articles of Incorporation or Bylaws of this corporation, or provisions of the California Nonprofit Public Benefit Corporation Law.

SECTION 15. CONDUCT OF MEETINGS

Meetings of the Board of Directors shall be presided over by the Chairman or, if no such person has been so designated or, in his or her absence, the President of the corporation or, in his or her absence, by the Artistic Director or, in the absence of each of these persons, by a Chairperson chosen by a majority of the directors present at the meeting. The Secretary of the corporation shall act as secretary of all meetings of the board, provided that, in his or her absence, the presiding officer shall appoint another person to act as Secretary of the Meeting.

Meetings shall be governed by Roberts' Rules Of Order, as such rules may be revised from time to time, insofar as such rules are not inconsistent with or in conflict with these Bylaws, with the Articles of Incorporation of this corporation, or with provisions of law.

SECTION 16. VACANCIES

Vacancies on the Board of Directors shall exist (1) on the death, resignation or removal of any director, and (2) whenever the number of authorized directors is increased. The Board of Directors may declare vacant the office of a director who has been declared of unsound mind by a final order of court, or convicted of a felony, or been found by a final order or judgment of any court to have breached any duty under Section 5230 and following of the California Nonprofit Public Benefit Corporation Law. Directors may be removed without cause by a majority of the directors then in office.

Vacancies on the board may be filled by approval of the board or, if the number of directors, then in office is less than a quorum, by (1) the unanimous written consent of the directors then in office, (2) the affirmative vote of a majority of the directors then in office at a meeting held pursuant to notice or waivers of notice complying with this Article of these Bylaws, or (3) a sole remaining director. A person elected to fill a vacancy as provided by this Section shall hold office until the next annual election of the Board of Directors or until his or her death, resignation or removal from office.

SECTION 17. RESIGNATIONS

Any director may resign effective upon giving written notice to the Chairperson of the Board, the President, the Secretary, or the Board of Directors, unless the notice specifies a later time for the effectiveness of such resignation. No director may resign if the corporation would then be left without a duly elected director or directors in charge of its affairs, except upon notice to the Attorney General.
A director who is absent without reasonable cause from one-third or more of board meetings during any year of that members term shall be deemed to have automatically resigned from the board unless voted otherwise by a Quorum.

SECTION 18. NON-LIABILITY OF DIRECTORS

The directors shall not be personally liable for the debts, liabilities, or other obligations of the corporation.

SECTION 19. INDEMNIFICATION BY CORPORATION OF DIRECTORS, OFFICERS, EMPLOYEES AND OTHER AGENTS

To the extent that a person who is, or was, a director, officer, employee or other agent of this corporation has been successful on the merits in defense of any civil, criminal, administrative or investigative proceeding brought to procure a judgment against such person by reason of the fact that he or she is, or was, an agent of the corporation, or has been successful in defense of any claim, issue or matter, therein, such person shall be indemnified against expenses actually and reasonably incurred by the person in connection with such proceeding.

If such person either settles any such claim or sustains a judgment against him or her, then indemnification against expenses, judgments, fines, settlements and other amounts reasonably incurred in connection with such proceedings shall be provided by this corporation but only to the extent allowed by, and in accordance with the requirements of, Section 5238 of the California Nonprofit Public Benefit Corporation Law.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

SECTION 20. INSURANCE FOR CORPORATE AGENTS

The Board of Directors may adopt a resolution authorizing the purchase and maintenance of insurance on behalf of any agent of the corporation (including a director, officer, employee or other agent of the corporation) against any liability other than for violating provisions of law relating to self-dealing (Section 5233 of the California Nonprofit Public Benefit Corporation Law) asserted against or incurred by the agent in such capacity or arising out of the agent's status as such, whether or not the corporation would have the power to indemnify the agent against such liability under the provisions of Section 5238 of the California Nonprofit Public Benefit Corporation Law.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

ARTICLE IV
OFFICERS

SECTION 1. OFFICERS

The officers of the corporation shall be a President, a Secretary, and a Chief Financial Officer who shall be designated the Treasurer. The corporation may also have, as determined by the Board of Directors, a Chairperson of the Board, one or more Vice Presidents, Assistant Secretaries, Assistant Treasurers, or other officers. Any number of offices may be held by the same person except that neither the Secretary nor the Treasurer may serve as the President or Chairperson of the Board.

SECTION 2. QUALIFICATION, ELECTION, AND TERM OF OFFICE

Any person may serve as officer of this corporation. Officers shall be elected by the Board of Directors, at any time, and each officer shall hold office until he or she resigns or is removed or is otherwise disqualified to serve, or until his or her successor shall be elected and qualified, whichever occurs first.

SECTION 3. SUBORDINATE OFFICERS

The Board of Directors may appoint such other officers or agents as it may deem desirable, and such officers shall serve such terms, have such authority, and perform such duties as may be prescribed from time to time by the Board of Directors.

SECTION 4. REMOVAL AND RESIGNATION

Any officer may be removed, either with or without cause, by the majority of the Board of Directors, at any time. Any officer may resign at any time by giving written notice to the Board of Directors or to the President or Secretary of the corporation. Any such resignation shall take effect at the date of receipt of such notice or at any later date specified therein, and, unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective. The above provisions of this Section shall be superseded by any conflicting terms of a contract which has been approved or ratified by the Board of Directors relating to the employment of any officer of the corporation.

SECTION 5. VACANCIES

Any vacancy caused by the death, resignation, removal, disqualification, or otherwise, of any officer shall be filled by the Board of Directors. In the event of a vacancy in any office other than that of President, such vacancy may be filled temporarily by appointment by the President until such time as the Board shall fill the vacancy.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

Vacancies occurring in offices of officers appointed at the discretion of the board may or may not be filled as the board shall determine.

SECTION 6. PRESIDENT

The President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, supervise and control the affairs of the corporation and the activities of the officers. He or she shall perform all duties incident to his or her office and such other duties as may be required by law, by the Articles of Incorporation of this corporation, or by these Bylaws, or which may be prescribed from time to time by the Board of Directors. Unless another person is specifically appointed as Chairperson of the Board of Directors, he or she shall preside at all meetings of the Board of Directors. If applicable, the President shall preside at all meetings of the members. Except as otherwise expressly provided by law, by the Articles of Incorporation, or by these Bylaws, he or she shall, in the name of the corporation, execute such deeds, mortgages, bonds, contracts, checks, or other instruments which may from time to time be authorized by the Board of Directors.

SECTION 7. VICE PRESIDENT

In the absence of the President, or in the event of his or her inability or refusal to act, the Vice President shall perform all the duties of the President, and when so acting shall have all the powers of, and be subject to all the restrictions on, the President. The Vice President shall have other powers and perform such other duties as may be prescribed by law, by the Articles of Incorporation, or by these Bylaws, or as may be prescribed by the Board of Directors.

SECTION 8. SECRETARY

The Secretary shall (i) Certify and keep at the principal office of the corporation the original, or a copy of these Bylaws as amended or otherwise altered to date; (ii) Keep at the principal office of the corporation or at such other place as the board may determine, a book of minutes of all meetings of the directors, and, if applicable, meetings of committees of directors and of members, recording therein the time and place of holding, whether regular or special, how called, how notice thereof was given, the names of those present or represented at the meeting, and the proceedings thereof; (iii) See that all notices are duly given in accordance with the provisions of these Bylaws or as required by law; (iv) Be custodian of the records and of the seal of the corporation and see that the seal is affixed to all duly executed documents, the execution of which on behalf of the corporation under its seal is authorized by law or these Bylaws; (v) Keep at the principal office of the corporation a membership book containing the name and address of each and any members, and, in the case where any membership has been terminated, he or she shall record such fact in the membership book together with the date on which such membership ceased; (vi) Exhibit at all reasonable times to any

director of the corporation, or to his or her agent or attorney, on request therefor, the Bylaws, the membership book, and the minutes of the proceedings of the directors of the corporation; (vii) In general, perform all duties incident to the office of Secretary and such other duties as may be required by law, by the Articles of Incorporation of this corporation, or by these Bylaws, or which may be assigned to him or her from time to time by the Board of Directors.

SECTION 9. TREASURER

Subject to the provisions of these Bylaws relating to the "Execution of Instruments, Deposits and Funds," the Treasurer shall (i) Have charge and custody of, and be responsible for, all funds and securities of the corporation, and deposit all such funds in the name of the corporation in such banks, trust companies, or other depositories as shall be selected by the Board of Directors; (ii) Receive, and give receipt for, monies due and payable to the corporation from any source whatsoever; (iii) Disburse, or cause to be disbursed, the funds of the corporation as may be directed by the Board of Directors, taking proper vouchers for such disbursements; (iv) Keep and maintain adequate and correct accounts of the corporation's properties and business transactions, including accounts of its assets, liabilities, receipts, disbursements, gains and losses; (v) Exhibit at all reasonable times the books of account and financial records to any director of the corporation, or to his or her agent or attorney, on request therefor; (vi) Render to the President and directors, whenever requested, an account of any or all of his or her transactions as Treasurer and of the financial condition of the corporation (vii) Prepare, or cause to be prepared, and certify, or cause to be certified, the financial statements to be included in any required reports.
In general, perform all duties incident to the office of Treasurer and such other duties as may be required by law, by the Articles of Incorporation of the corporation, or by these Bylaws, or which may be assigned to him or her from time to time by the Board of Directors.

SECTION 10. CHAIRPERSON

The chair of the board shall, if present; (i) Preside at all Regular Board Meetings. They may call special meetings, including special meetings of committees whenever they deem it necessary; (ii) The chair of the board shall exercise and perform such other powers and duties as may from time to time be assigned by the board or prescribed by the bylaws; (iii) The chair of the board shall also preside over the annual meeting.

ARTICLE V
COMMITTEES

SECTION 1. EXECUTIVE COMMITTEE

(a) The Board of Directors may, by a majority vote of directors, designate two (2) or more of its members (who may also be serving as officers of this corporation) to constitute an Executive Committee and delegate to such Committee any of the powers and authority of the board in the management of the business and affairs of the corporation, except with respect to; (i) The approval of any action which, under law or the provisions of these Bylaws, requires the approval of the members or of a majority of all of the members; (ii) The filling of vacancies on the board or on any committee which has the authority of the board; (iii) The fixing of compensation of the directors for serving on the board or on any committee; (iv) The amendment or repeal of Bylaws or the adoption of new Bylaws; (v) The amendment or repeal or any resolution of the board which by its express terms is not so amendable or repeal able; (v) The appointment of committees of the board or the members thereof; (vi) The expenditure of corporate funds to support a nominee for director after there are more people nominated for director than can be elected; (vii) The approval of any transaction to which this corporation is a party and in which one or more of the directors has a material financial interest, except as expressly provided in Section 5233(d)(3) of the California Nonprofit Public Benefit Corporation Law.

(b) By a majority vote of its members then in office, the board may at any time revoke or modify any or all of the authority so delegated, increase or decrease but not below two (2) the number of its members, and fill vacancies therein from the members of the board. The Committee shall keep regular minutes of its proceedings, cause them to be filed with the corporate records, and report the same to the board from time to time as the board may require.

SECTION 2. OTHER COMMITTEES

The corporation shall have such other committees as may from time to time be designated by resolution of the Board of Directors. Such other committees may consist of persons who are not also members of the board. These additional committees shall act in an advisory capacity only to the board and shall be clearly titled as "advisory" committees.

SECTION 3. MEETINGS AND ACTION OF COMMITTEES

Meetings and action of committees shall be governed by, noticed, held and taken in accordance with the provisions of these Bylaws concerning meetings of the Board of Directors, with such changes in the context of such Bylaw provisions as are necessary to substitute the committee and its members for the Board of Directors and its members, except that the time for regular meetings of committees may be fixed by resolution of the Board of Directors or by the committee. The time for special meetings of committees may also be fixed by the Board of Directors. The Board of Directors may also adopt rules and regulations pertaining to the conduct of meetings of committees to the extent that such rules and regulations are inconsistent with the provisions of these Bylaws.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

ARTICLE VI

EXECUTION OF INSTRUMENTS, DEPOSITS AND FUNDS

SECTION 1. EXECUTION OF INSTRUMENTS

The Board of Directors, except as otherwise provided in these Bylaws, may by resolution authorize any officer or agent of the corporation to enter into any contract or execute and deliver any instrument in the name of and on behalf of the corporation, and such authority may be general or confined to specific instances. Unless so authorized, no officer, agent, or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable monetarily for any purpose or in any amount.

SECTION 2. CHECKS AND NOTES

Except as otherwise specifically determined by resolution of the Board of Directors, or as otherwise required by law, checks, drafts, promissory notes, orders for the payment of money, and other evidence of indebtedness of the corporation shall be signed by the Treasurer and countersigned by the President of the corporation.

SECTION 3. DEPOSITS

All funds of the corporation shall be deposited from time to time to the credit of the corporation in such banks, trust companies, or other depositories as the Board of Directors may select.

SECTION 4. GIFTS

The Board of Directors may accept on behalf of the corporation any contribution, gift, bequest, or devise for the charitable or public purposes of this corporation.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

ARTICLE VII

CORPORATE RECORDS, REPORTS AND SEAL

SECTION 1. MAINTENANCE OF CORPORATE RECORDS

The corporation shall keep at its principal office in the State of California:

(a) Minutes of all meetings of directors, committees of the board and, if this corporation has members, of all meetings of members, indicating the time and place of holding such meetings, whether regular or special, how called, the notice given, and the names of those present and the proceedings thereof;

(b) Adequate and correct books and records of account, including accounts of its properties and business transactions and accounts of its assets, liabilities, receipts, disbursements, gains and losses;

(c) A record of its members, if any, indicating their names and addresses and, if applicable, the class of membership held by each member and the termination date of any membership;

(d) A copy of the corporation's Articles of Incorporation and Bylaws as amended to date, which shall be open to inspection by the members, if any, of the corporation at all reasonable times during office hours.

SECTION 2. CORPORATE SEAL

The Board of Directors may adopt, use, and at will alter, a corporate seal. Such seal shall be kept at the principal office of the corporation. Failure to affix the seal to corporate instruments, however, shall not affect the validity of any such instrument.

SECTION 3. DIRECTORS' INSPECTION RIGHTS

Every director shall have the absolute right at any reasonable time to inspect and copy all books, records and documents of every kind and to inspect the physical properties of the corporation.

SECTION 4. RIGHT TO COPY AND MAKE EXTRACTS

Any inspection under the provisions of this Article may be made in person or by agent or attorney and the right to inspection includes the right to copy and make extracts.

SECTION 5. ANNUAL REPORT

The board shall cause an annual report to be furnished not later than one hundred and twenty (120) days after the close of the corporation's fiscal year to all directors of the corporation and, if this corporation has members, to any member who requests it in writing, which report shall contain the following information in appropriate detail; (i) The assets and liabilities, including the trust funds, of the corporation as of the end of the fiscal year; (ii) The principal changes in assets and liabilities, including trust funds, during the fiscal year; (iii) The revenue or receipts of the corporation , both unrestricted and restricted to particular purposes, for the fiscal year; (iv) The expenses or disbursements of the corporation, for both general and restricted purposes, during the fiscal year.

The annual report shall be accompanied by any report thereon of independent accountants, or, if there is no such report, the certificate of an authorized officer of the corporation that such statements were prepared without audit from the books and records of the corporation.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

ARTICLE XIII

FISCAL YEAR

SECTION 1. FISCAL YEAR OF THE CORPORATION

The fiscal year of the corporation shall begin on the first day of January and end on the thirty first day of December in each year.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

ARTICLE VIIII

AMENDMENT OF BYLAWS

SECTION 1. AMENDMENT

(a) *Amendment.* Subject to any provision of law applicable to the amendment of Bylaws of public benefit nonprofit corporations, these Bylaws, or any of them, may be altered, amended, or repealed and new Bylaws adopted as follows; (i) Subject to the power of members, if any, to change or repeal these Bylaws under Section 5150 of the Corporations Code, by approval of the Board of Directors unless the Bylaw amendment would materially and adversely affect the rights of members, if any, as to voting or transfer, provided, however, if this corporation has admitted any members, then a Bylaw specifying or changing the fixed number of directors of the corporation, the maximum or minimum number of directors, or changing from a fixed to variable board or vice versa, may not be adopted, amended, or repealed (ii) By approval of the majority of members, if any, of this corporation.

(b) *Certain Amendment.* Notwithstanding the above sections of this Article, this corporation shall not amend its Articles of Incorporation to alter any statement which appears in the original Articles of Incorporation of the names and addresses of the first directors of this corporation, nor the name and address of its initial agent, except to correct an error in such statement or to delete such statement after the corporation has filed a "Statement by a Domestic Non-Profit Corporation" pursuant to Section 6210 of the California Nonprofit Corporation Law.

ARTICLE X

PROHIBITION AGAINST SHARING CORPORATE PROFITS AND ASSETS

SECTION 1. PROHIBITION AGAINST SHARING CORPORATE PROFITS AND ASSETS

No member, director, officer, employee, or other person connected with this corporation, or any private individual, shall receive at any time any of the net earnings or pecuniary profit from the operations of the corporation, provided, however, that this provision shall not prevent payment to any such person of reasonable compensation for services performed for the corporation in effecting any of its public or charitable purposes, provided that such compensation is otherwise permitted by these Bylaws and is fixed by resolution of the Board of Directors; and no such person or persons shall be entitled to share in the distribution of, and shall not receive, any of the corporate assets on dissolution of the corporation. All members, if any, of the corporation shall be deemed to have expressly consented and agreed that on such dissolution or winding up of the affairs of the corporation, whether voluntarily or involuntarily, the assets of the corporation, after all debts have been satisfied, shall be distributed as required by the Articles of Incorporation of this corporation and not otherwise.

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

WRITTEN CONSENT OF DIRECTORS ADOPTING BYLAWS

We, the undersigned, are all of the person(s) named as the initial directors in the Articles of Incorporation of Phoenix Production Company, and DBAs therewithin a California nonprofit corporation, and, pursuant to the authority granted to the directors by these Bylaws to act by unanimous written consent without a meeting, consent to, and hereby do, adopt the foregoing Bylaws, consisting of 22 pages. This is to certify that the foregoing is a true and correct copy of the Bylaws of the corporation named in the title thereto and that such Bylaws were duly adopted by the Board of Directors of said corporation on the date set forth on October 4, 2021.

_____
Courtney Conklin, President

_____
Mary Gorak, Vice President

_____
Carrie DeHerrera, Secretary

_____
Anna Pierson, Treasurer

_____
Gian Montesini, Chairman

Initials:

___ President ___Vice President ___Secretary ___Treasurer ___Chairperson

Department of the Treasury
Internal Revenue Service
Tax Exempt and Government Entities
P.O. Box 2508
Cincinnati, OH 45201

PHOENIX PRODUCTION COMPANY
C/O COURTNEY CONKLIN
10468 NEIRETTO CT
RANCHO CORDOVA, CA 95670

Date:
01/04/2022
Employer ID number:
87-3039291
Person to contact:
Name: Customer Service
ID number: 31954
Telephone: 877-829-5500
Accounting period ending:
December 31
Public charity status:
509(a)(2)
Form 990 / 990-EZ / 990-N required:
Yes
Effective date of exemption:
October 11, 2021
Contribution deductibility:
Yes
Addendum applies:
No
DLN:
26053688002781

Dear Applicant:

We're pleased to tell you we determined you're exempt from federal income tax under Internal Revenue Code (IRC) Section 501(c)(3). Donors can deduct contributions they make to you under IRC Section 170. You're also qualified to receive tax deductible bequests, devises, transfers or gifts under Section 2055, 2106, or 2522. This letter could help resolve questions on your exempt status. Please keep it for your records.

Organizations exempt under IRC Section 501(c)(3) are further classified as either public charities or private foundations. We determined you're a public charity under the IRC Section listed at the top of this letter.

If we indicated at the top of this letter that you're required to file Form 990/990-EZ/990-N, our records show you're required to file an annual information return (Form 990 or Form 990-EZ) or electronic notice (Form 990-N, the e-Postcard). If you don't file a required return or notice for three consecutive years, your exempt status will be automatically revoked.

If we indicated at the top of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

For important information about your responsibilities as a tax-exempt organization, go to www.irs.gov/charities. Enter "4221-PC" in the search bar to view Publication 4221-PC, Compliance Guide for 501(c)(3) Public Charities, which describes your recordkeeping, reporting, and disclosure requirements.

Sincerely,

Stephen A. Martin
Director, Exempt Organizations
Rulings and Agreements

Letter 947 (Rev. 2-2020)
Catalog Number 35152P

March 11, 2022

City Of Rancho Cordova
Attn: Community Enhancement & Investment Fund Division
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Dear Committee Members,

As the Art Director at the Mills Station Arts & Culture Center (MACC), I am personally happy to provide this support letter for Rancho Cordova Rise Up Theatre Company.

As the grant committee is well aware, the MACC serves the community by providing high-quality exhibits focusing on history, diverse cultures and promotes local artists. By having cultural entertainment centers we enhance the quality of life in the community and , provide the arts as a positive outlet for self-discovery and promote community pride here in Rancho Cordova. Since the start of covid we have expanded programing with the use of the upstairs gallery to spotlight local artists, and still maintain our lectures, movies and other events to increase attendance at the MACC.

Rancho Cordova Rise Up Theatre Company's use of the MACC upstairs as a site for theatrical productions and fundraising events directly supports our goals. By working with Rise Up Theatre, we reaching out and connecting more of the community both to the exhibits and to the theater performances.

Since January of this year, RCRUT has produced the comedy, "The Do-gooder Debacle" and a reader's theatre fundraising event "A Radio Play". Both productions had nearly full houses and brought audiences that might not otherwise have come to the MACC. Moreover, since these events occurred at night, when the MACC is not open to the public, and RCRUT provided all production funds for these performances, their partnership with the MACC was a great return on our investment. I can not speak highly enough about Rise Up Theatre group with their desire and care of the MACC, always leaving it just as they found it.

Three events are currently scheduled for the next four months. RCRUT will be presenting the fundraising event "Photos with the Easter Bunny". The fundraiser will be over six days and will bring a large number of families to the MACC. RCRUT will also present a full comedic play over three weekends in May, followed by a full-scale Broadway musical. This musical will be partnered with the Rancho Cordova River City Concert Band thereby meeting another of the MACC goals, bringing together non-profits in Rancho Cordova. As with past events and performances the photos and musical will be scheduled subject to MACC availability and no MACC funds will be expended. A real "Win Win Situation".

We look forward to a long partnership with Rancho Cordova Rise Up Theatre Company and believe this worthwhile organization is a perfect beneficiary for Rancho Cordova Community Enhancement & Investment Fund Grant funding.

Warm Regards,

Cheryl Gleason
Art Director / Curator
Mills Station Arts & Culture Center

Application #10

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 8:01 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537777
IP Address:	206.15.249.230
Submission Date:	03/18/2022 8:01
Survey Time:	12 minutes, 2 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Mills Middle School Drumline

Project Synopsis

Drumline intends to teach students how to become active members in a working and performing Percussion Ensemble. This course intends to attract those students who are less apt to sign-up for traditional Band/Orchestra courses, while continuing to offer the same fundamental musical training that motivates and inspires positive creativity. This creativity will be used to instill school and community pride in local parades and our sporting events.

Project Description

Drumline students learn to become active members in a working and performing arts percussion ensemble. All students will learn to play and will be expected to demonstrate competency on battery percussion (snare/bass/tenor-drums), and orchestral percussion (marimba/xylophone/bells/timpani etc.). Grades are based on participation, attendance, practice, and rehearsal technique. Drumline performs at concerts, assemblies, school rallies and sporting events throughout the school year. Our sporting events attract members of the Rancho Cordova Community who will hear, see, and experience the community pride represented by our Mills Performance drumline. Drumline shows are cross-curricular in that they incorporate dance and movement, theatrical performance, and artistic set-design to create a narrative or explore a theme. Such productions are a reflection of the opportunities to celebrate and exchange ideas and interests unique to community culture, demonstrating Positive Personal and Cultural Awareness. Drumline will aid in creating repertoire for school and community building such as pep-rallies and athletic events, which promotes Social Responsibility.

Project Team

Drumline Team (Music Director: Jimmie Adams), Administrator (Dana Carrigan), Clerk (Robin Dowty)

Project Goals

1. To create an award winning performance drumline 2. Performs at school rallies, assemblies and athletic events 3. Perform at local community events, parades, and special events

Funding Request

Application #11

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$15,000

Estimated Breakdown of Project Expenditures

Battery Percussion/Drum Cost Breakdown Snare Drums (Battery Percussion-$6,500) *10-13” High Tension Marching Snare Drums *10-Marching Snare Drum Carriers Bass Drums (Battery Percussion-$5,000) *1-16” Marching Bass Drum/Carrier *1-18” Marching Bass Drum/Carrier *1-20” Marching Bass Drum/Carrier *1- 22” Marching Bass Drum/Carrier *1-24” Marching Bass Drum/Carrier Tenor Drums (Battery Percussion-$3,000) *2- Sets of Tenor drums *2- Tenor drum carriers Mallets/Sticks-($500) *30 pair- Ralph Hardiman marching sticks *5 pair-Bass drum mallets *5 pair-mallets *2 pair-Tenor drum mallets *10 practice pads

Matching Funds

N/A

Include Any Other Funding Contributions

$1,000 (Fundraising and Title I)

Ongoing Operations and Maintenance Costs (if applicable)

Annual budget to operate program-$1,500.00 -Replacement Drum heads -Percussion Mallets/Sticks - Replacement parts

Total Community Enhancement & Investment Funds Requested

$19,500.00 (over three years; initial $15,000 start up and 3 annual installments of $1,500 for maintenance/repair costs.

Is this a multi-year request?

Yes

Number of Years

4

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

It will take two years to build the drumline into a performance ready unit that will be able to perform at community events etc. This jumpstart request will allow us time to build to the point where we are self sufficient and able to raise our annual maintenance and repair budget through community events and annual concerts.

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

5 years

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Local community support

Project Schedule, Timeliness and Adaptability

Project Schedule

Drumline is on-going every school year and follows the Folsom Cordova school calendar. Beginning in August 2022 through May 2023. Subsequent years will be August 2023--May 2024, August 2024--May 2025, etc.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Our initial purchase will be of the necessary equipment to run this project, which is a one-time purchase. This includes Battery Percussion Instruments, Mallets, sticks, etc. The project will run during the school year, with the first year ending in May of 2023.

Application #11

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, Mills drumline will be able to adjust our program for the 2022-2023 school year should closure be necessary. Instruction can continue online and practice/rehearsals can be conducted outdoors on-site, adhering to all California Public Health and/or Sacramento County Health orders/protocol.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10439 Coloma Road
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

N/A

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Mills Middle School Drumline Supplemental Endorsement form (2).pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Jimmie Adams`

Title

Mills Middle School Music Director (Teacher)

Submitting As

Public Agency

Phone

9162949045 ext. 71201

Email Address

jadams@fcusd.org

Organization's Legal Name (if applicable)

Folsom Cordova Unified School District

Application #11

Mailing Address of Submitter

1965 Birkmont Dr
Rancho Cordova, CA 95742

Signatory's Name

Dr Sarah Koligian

Signatory's Title

Superintendent

Signatory's Phone

9162949001

Signatory's Email Address

skoligian@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Mills Music Grant Request Support letter (1).pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

CORDOVA HIGH SCHOOL
2239 Chase Drive , Rancho Cordova, CA 95670
916-294-2450
Folsom Cordova Unified School District

Jerad Hyden
Principal

Ann Botsford
Michele Brown
Michele Cooper
Joel Francisco
Assistant Principals

Heidy Naderi
Admin. Assistant

Josh Creeger
Activities Director

Mark Beamish
Athletic Director

Kitty White
Head Counselor

Zandi Llanos
IB DP Coordinator

Grace Martinez
IB MYP Coordinator

Chris Mahaffey
IB CP Coordinator

Erin Muse
ELD Program Monitor

TO: Measure H Grant Selection Committee
FROM: Kevin Sims
RE: Mills Middle School Music Program Grant Application
DATE: March 2, 2022

The Mills Middle School administration have historically supported its music program. Principal Carrigan's vision of a drumline class to me is a great idea! I know that the Mills and Cordova High School's band programs will benefit from FCUSD's only drumline class. And they have the right person to pull it off!

Jimmie Adams has made quite an impression in his short time as the music teacher at Mills Middle School. His excitement and energy is infectious! When we worked together earlier this year and I was able to witness how well his students respond to his instruction. His personality has had a positive impact in his groups. I see how respectful they are of him. His expertise as a percussionist and educator is on full display in his development of the new 2022-23 middle school drumline curriculum.

Percussionist require separate instruction unique to the instrument. Those techniques are usually only taught when the music requires it. We have a separate percussion instructor that only works with our section during the fall and winter seasons. What gets me excited is that Mr. Adams will focus those teachings in one class, but he needs more than the support of his administration. That's where Measure H can come through for the kids.

At Cordova High, we have an award-winning music program that has suffered greatly during the COVID school years of 2019-21. Retention has been challenging due partly to the "new normal" of not having activities outside of the school day, so it looks less appealing to our students. Our drumline is a big part of our program, from: field shows and parades in the fall, to winter percussion ensemble. (Winter percussion is a group that performs a "field-show type" of choreographed routine in a gym.) The Mills drumline class could help us as we rebuild our band program, which will take years.

I ask that the City of Rancho Cordova to join me in supporting and investing in the Mills Middle School Music Program's grant request. Your approval will make a positive impact on our music program and the next generation of band members.

Respectfully,



Kevin Sims
Instrumental Music Director
(916) 294-2450 x810861
ksims@fcusd.org

Application #11



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Mills Middle School Drumline

Name of Organization: Mills Middle School (Folsom Cordova Unified School District)

Name of Applicant and Title: Jimmie Adams (Mills Middle School Music Director)

Applicant's Phone: 916-294-9045 ext. 710201 **Applicant's Email:** jadams@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #11

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 1:07 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1538670
IP Address: 73.116.203.213
Submission Date: 03/18/2022 1:06
Survey Time: 33 minutes, 57 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

"XOXO: An Exhibit About Love & Forgiveness" - A New Interactive Exhibit About Emotions at Sacramento Children's Museum

Project Synopsis

Sacramento Children's Museum requests $46,450 for a new exhibit called "XOXO: An Exhibit About Love & Forgiveness," to debut in Fall 2022. This exhibit will help children explore their feelings and learn how we emotionally connect with others. Funding also will provide free admission to Rancho Cordova families on Sundays.

Project Description

Sacramento Children's Museum (SCM) is requesting $46,450 in funding support to bring a new exhibit to our Museum called "XOXO: An Exhibit About Love & Forgiveness" in Fall 2022. Originally developed by Children's Museum of Pittsburgh, this exhibit encourages children to play, act silly, and consider what makes them sad, mad, and happy through interactive experiences. Families can also explore how we learn about love and forgiveness together through simple activities that get us to feel and talk about these emotions. For example, in this exhibit, visitors can hold hands with someone to illuminate a hidden message about love; build and explore a variety of facial expressions using Empathy Blocks; and draw what makes them angry or sad and crank it through a paper shredder and turn it into art. This 1,500-square-foot exhibit will be located in our newly renovated expansion space and will be available to all Museum visitors from September 17, 2022 to December 31, 2022. In addition, support from the Rancho Cordova Community Enhancement & Investment Fund will allow SCM to offer free Museum admission for Rancho Cordova residents on Sundays for the duration of the exhibit. This exhibit benefits the community in many ways. First, this exhibit helps foster children's healthy social and emotional development – a goal that aligns with the City's dedication to supporting the growth and development of children and youth. The XOXO Exhibit provides a safe place for children to learn how to recognize and express the range of feelings they have and to share these feelings. Second, because this exhibit will only be at the Museum for a limited time, we expect it to attract more families and school groups – bringing more visitors to the Museum and to the City of Rancho Cordova. Lastly, about 1,500 children and adults from Rancho Cordova will be able to visit the Museum for free during this three-month time frame.

Project Team

The Children's Museum of Pittsburgh is the original exhibit developer. The following SCM staff will be responsible for overseeing the installation and presentation of the exhibit: Sharon Stone Smith - SCM Executive Director; Meghan Toland - SCM Deputy Director; Rachelle Ahmad - SCM Education Manager; and Mia Wilson - SCM Facilities Maintainer.

Project Goals

Through the "XOXO: An Exhibit About Love & Forgiveness" Exhibit, SCM aims to achieve the following goals: 1) Help foster children's emotion awareness skills; 2) Empower parents, teachers, and other caregivers with tools to support children's healthy social and emotional development; and 3) Increase Museum attendance by 15 percent. We will measure the success of the exhibit in meeting these goals through feedback from visiting families, questionnaires sent to teachers of school field trip groups, and attendance data.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$54,200

Estimated Breakdown of Project Expenditures

$16,000 - Exhibit rental fee; $5,000 - Travel and set-up expenses; $4,000 - Marketing costs; $12,750 - Complimentary Sunday admission for Rancho Cordova residents (estimated at 100 tickets per week); $1,750 - Lost revenue due to reduced earnings from Museums for All tickets (estimated 18 low-income discounted tickets per week); $9,700 - Additional floor staffing/security per rental agreement; $5,000 - Administrative fee for staff coordination in set-up, producing programs, maintenance, and tear down.

Matching Funds

N/A

Include Any Other Funding Contributions

SCM will contribute the $6,000 deposit and discounted access to low-income families using Museums for All Program.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$46,450

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

SCM has received a 50% discount off the exhibit from Children's Museum of Pittsburgh due to our sharing the exhibit with San Francisco-based Children's Creativity Museum.

Project Schedule, Timeliness and Adaptability

Project Schedule

Exhibit delivery date to SCM: September 10, 2022. Installation dates: September 10-17, 2022. Grand opening date: September 17, 2022. Exhibit end date: December 31, 2022.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

SCM has a fixed rental period for this exhibit. The exhibit dates are scheduled for September 17, 2022 to December 31, 2022.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

SCM will be able to create videos and at-home kits that would coordinate with the exhibit if the Museum was forced to close due to California Health and/or Sacramento County Health Orders. This traveling exhibit will be located in a separate space from the regular operations of the Museum, allowing us to easily control capacity reductions.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Sherry Anne Dayag

Title

Grants Coordinator

Submitting As

Non-Profit

Phone

9167305079

Email Address

grants@sackids.org

Organization's Legal Name (if applicable)

Sacramento Children's Museum

Mailing Address of Submitter

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Signatory's Name

Sharon Stone Smith

Signatory's Title

Executive Director

Signatory's Phone

9167305079

Signatory's Email Address

sharon@sackids.org

Signatory's Mailing Address

2701 Prospect Park Dr
Rancho Cordova, CA 95670

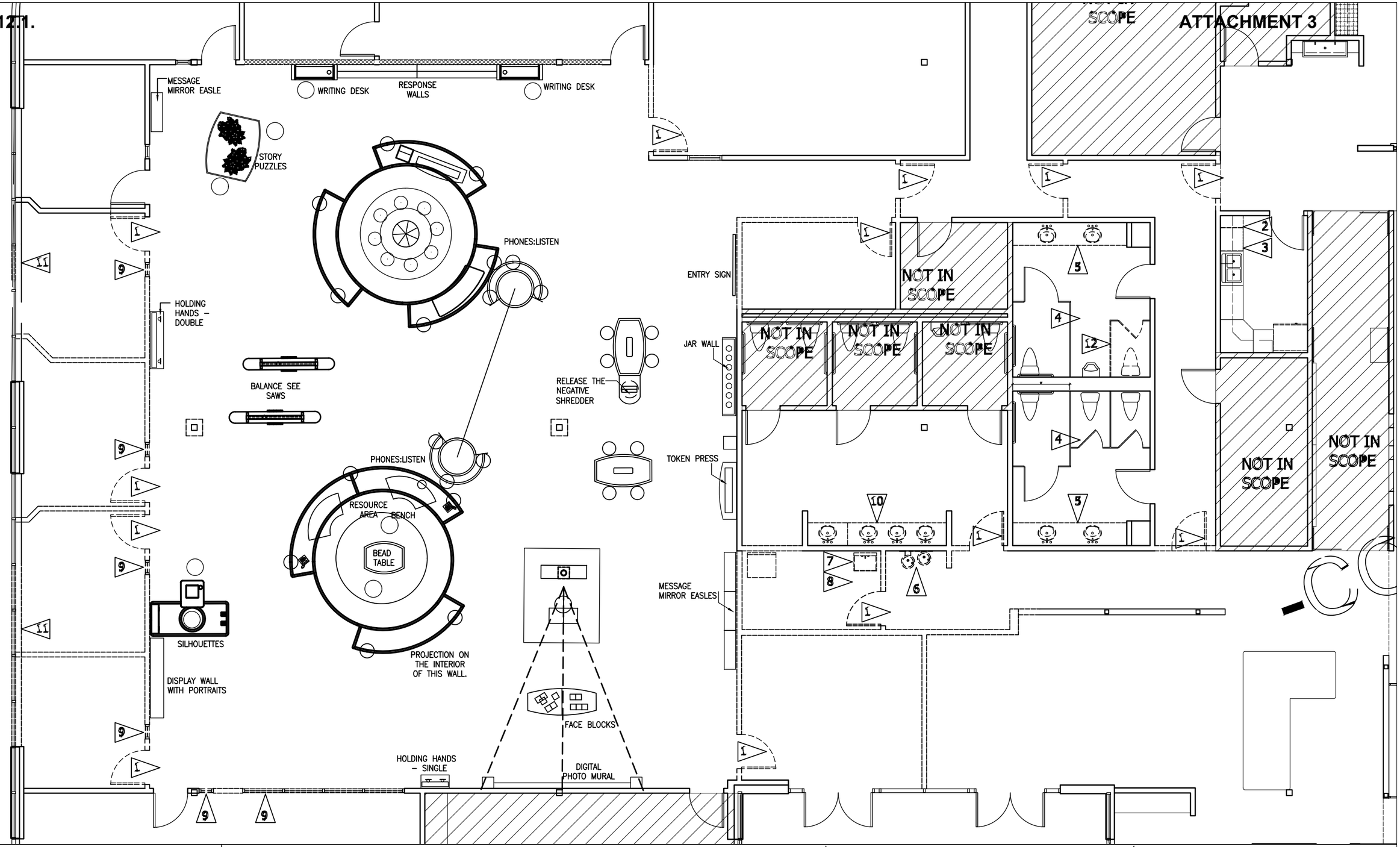
Attach Any Additional Documents Here

SCM_XOXO Exhibit Docs.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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children's museum pittsburgh

OWNER

EXHIBIT

XOXO: An Exhibit About Love and Forgiveness for SAC Kids

Application #12

VENUE

SCALE $\frac{1}{8}$" = 1'-0"

DATE 11-29-2021



Application #12



YOU ARE ABOUT TO ENTER AN EXHIBIT ABOUT FEELINGS

This will be fun and sometimes, scary.

You will play, act silly, and consider what makes you sad, mad and happy, think about love and think about forgiveness.

You'll also ask questions, listen, and learn more about the people with you. You might reveal a secret or discover a forgotten memory. You will definitely share, connect, converse, think and feel.

So take a deep breath, and explore these powerful feelings and the effects they have on yourself and others.

Go on. Take a risk. Be brave.

Application #12

“EVERYONE LONGS TO BE LOVED. AND THE GREATEST THING WE CAN DO IS LET PEOPLE KNOW THAT THEY ARE LOVED AND CAPABLE OF LOVING.”

-Fred Rogers



Application #12







HOLDING HANDS

Some things are impossible to do alone. Hold hands and touch the sensors to complete the circuit and reveal the message. Holding hands is a universal demonstration of friendship, trust and compassion.

Application #12

RESPONSE WALLS

Writing is an important way to express your emotions. Answer questions about love and forgiveness, and then tie them to a wall for others to read. The result is a constantly changing collection of tags that form an emotional narrative of thoughts and feelings.









EMPATHY BLOCKS

Create unique faces and build a variety of expressions by combining a variety of diverse eyes, noses and mouths in multiple configurations. The facial features are printed directly onto hand-made wooden blocks, adding to the personal experience of looking carefully at another person's face.



STORY PUZZLE

Words and symbols are used to tell stories, make connections and stimulate conversation. The two puzzle shapes fit together to form paths, shapes and patterns, while also expressing key themes of love and forgiveness. A large tabletop allows several groups to work at the same time, letting them create their own unique puzzles, or perhaps join with another to form one big shared story.







BALANCE

Sit on the teeter totter and work together to balance a ball encased in a long, clear tube. Balance is achieved when the ball is centralized. This unique interpretation of a classic playground experience requires teamwork, communication and cooperation as both participants much work in tandem to succeed.



EMBRACE

When embraced or hugged, each egg shaped sculpture responds with its own positive sound – ahhh, mmmm, chirping, cooing or laughing.

Application #12









RELEASE THE NEGATIVE

Write or draw something that makes them angry, sad or afraid on a piece of paper. Then, place it into a slot and turn the crank to manually shred the paper. Shredding the paper helps to release the negative thoughts or feelings and turns the negative into something positive – a colorful display wall of patterns, created using clear jars filled with the shredded paper.

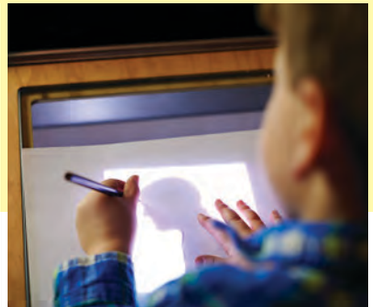


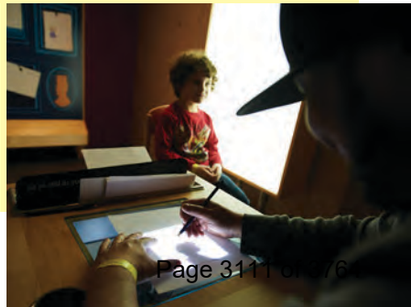
Application #12

SILHOUETTES

Trace a friend's profile, also known as a silhouette, onto a sheet of paper. Or sit still as you have your silhouette drawn. Tracing requires concentration and careful attention to the person sitting for the portrait. Once drawn, silhouettes can be displayed and compared – allowing participants to note the similarities and differences in each other. A unique set up of light boxes make the process accessible to all ages and abilities.











TONE PHONES

What you say is important, but how you say it is just as important. Speak into the telephone handset and watch as your voice changes the shapes on projected on the screen. How is a loud, angry tone different from a soft, kind tone? Tone of voice conveys emotions that impact how our words are heard and understood.

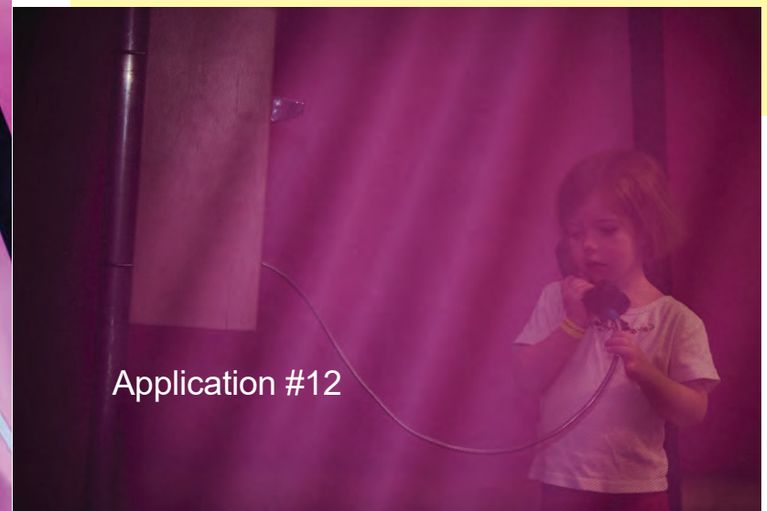






PHONE BOOTHS

The sound of someone's voice conveys feelings and emotions that a text message can't. Talk to someone you know or meet a new friends using custom designed telephones housed in round tent-like booths, which provide a comfortable setting to have a private conversation.







REFLECTION TABLE

Manipulate colorful granulated material across an internally lit sculpted landscape – covering and uncovering the surface of the table. As certain areas are uncovered, soothing music is played. Once covered, the music fades away and other areas and sounds are discovered in the table.









ART MAKING STATION

The act of making and giving is a way to express love, admiration, and caring. Die cut and personalize a special box or envelope, use your silhouette drawing to create a card or silkscreen print, make a necklace using their token, or write letters to loved ones. Rotating activities will allow for new experiences and programming throughout the course of the exhibit.

Application #12







ENVIRONMENT

XOXO is a flexible space that uses color and materials to create an inviting setting to explore the themes of the exhibit. The exhibit is organized around two sets of tensile fabric pavilions, allowing for both separation of activities and good visibility throughout the space. Flexible seating can be arranged to accommodate multiple purposes, such as special programmed performances, tot yoga and story time.

All furnishing are built of solid wood. A portable floor is also provided to complete the exhibit space. The graphics package includes a set of double-sided, wood sign holders, graphic files for entry and accent scenic graphics, and a paint color guide.

The design team will assist with planning, including gallery layout and art direction.







Another organizing element for the exhibit is a set of mirrored easels. Each easel has a carefully selected inspirational quote about either love or forgiveness. This theme of looking at oneself and those we love closely is carried throughout the exhibit. Another set of easels are matched with specific components to complement the narrative of the experience.



TAKE A PICTURE

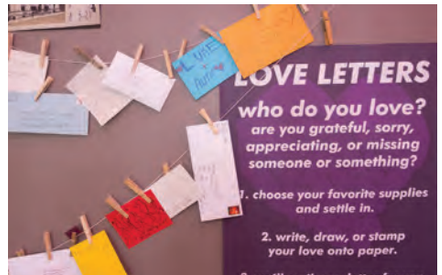
Use frames and words to record a memory of your visit, start a conversation or follow up on ideas experienced in the exhibit. Provided words and phrases, include “I love you” and “I’m sorry”, can help people express feelings that may be hard in other situations. This is an optional addition for host venues. Use your own cameras and phones, or plan a formal program around this interactive experience.

STORY TIME

Slow down and relax with songs, stretches, and stories brought to life by educators and guest performers by participating in Story Time. A special collection of books and music is provided to support and enhance the content of XOXO. The reading area can be used for additional programs provided by host venues.







LOVE LETTERS

Where will you send a message of love, gratitude, forgiveness, understanding, humor, curiosity, or joy?

Using traditional hand letter writing materials including postcards, stamps, and even a manual typewriter, craft a message or image to someone or something you love.

This program was developed by artist Dalia Shevin to explore the magic of snail mail, the wonders of writing by hand, and the delight of discovering how much love our words can hold.

This experience is an optional addition for host venues.

PUBLIC PROGRAMMING

Programming is a great way to energize and deepen exhibit experiences, cultivate new audiences, and build valuable partnerships. For the exhibit, each host museum will be able to modify public programming suggestions to fit their community.

THEATRICAL PERFORMANCE

THE GIFT tells the story of a heartwarming couple, one dollar and eighty-seven cents, and the very first wedding anniversary of young performers. Based loosely on O. Henry's classic tale The Gift of the Magi, THE GIFT uses physical theatre, masks, participatory theatre, and circus to explore the role of gift giving in expressing and creating love. An original theatrical performance conceived and crafted to bring XOXO: An Exhibit About Love & Forgiveness to life can be adapted or performed at your museum.

MUSICIANS & PERFORMERS

Children's Museum of Pittsburgh works with educational musicians and performers, whose workshops and songs can be customized to relate to themes related to love and forgiveness. Various styles of songwriting and personal experiences in an educational and heartfelt program are easily customizable for a wide range of audiences.

AUDIO CARDS

Museum partner, Saturday Light Brigade, helps kids record an interview, greeting, or song onto a CD that can be decorated and affixed to a special card and given to a loved one. This program has been done for Mother's Day and Father's Day. Hosting museums can reach out to their local radio station and see if a similar program could be offered to their visitors.

YOGA

This program encourages participants to take a break and learn some yoga poses with their toddler, including stretching, breathing and meditating exercises. By introducing our youngest visitors to the practice of Yoga, we are imparting a method for managing stress and achieving personal awareness that they can carry with them into adulthood.

AND MORE!

Children's Museum of Pittsburgh continues to develop more one-of-a-kind programs that will be available for host museums to adapt and execute with local professionals.

RENTAL INFORMATION

COST:

$30,000 for 3-month rental

SIZE:

1,500 - 2,000 square feet

SCHEDULE:

Available Fall 2014 and beyond

CONTACT:

Rachel Mastromarino
E: rmastromarino@pittsburghkids.org
T: 412-322-5058 ext 229

Application #12



Fetzer Institute

This exhibit is made possible by the Fetzer Institute, which works to better awareness of the power of love and forgivenss in the emerging global community.

children's museum
pittsburgh

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 1:51 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538815
IP Address:	73.192.193.146
Submission Date:	03/18/2022 1:51
Survey Time:	51 minutes, 20 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Symphony d'Oro Rancho Cordova, Community Enhancement & Investment Project - Season 2022-23

Project Synopsis

This project will provide funding to the Symphony d'Oro Rancho Cordova to be expended for music, performance venue rental, recording fees, guest performing artist/composer fees and related expenses to continue and expand world class orchestral music offerings in traditional and non-traditional venues in the City of Rancho Cordova. The Symphony takes pride in sponsoring young local talented performers and composers who bring original compositions to the community in concerts.

Project Description

The Symphony d'Oro is a versatile orchestral ensemble which has entertained audiences in Rancho Cordova, the Sacramento region, and worldwide, with concerts and productions featuring all types and styles of music including: classical; jazz; pop; cinematic; Broadway; patriotic; modern; cabaret style and even a drag show. We perform any kind of good music – and good music is everywhere. Our project continues this Rancho Cordova tradition with a season oof free concerts by the full orchestra and supporting performances at Rancho /Cordova events by our small ensembles.

Project Team

The Symphony d'Oro Rancho Cordova (formerly the Rancho Cordova Civic Light Orchestra, incorporated in July 2013) is a 501(c)(3) tax exempt, amateur orchestra serving the citizens of Rancho Cordova. It is an informal-audition, developmental orchestra with a mission to entertain and educate Rancho Cordova community audiences by providing high quality, free musical performances. Individually, the implementing team will be led by Pete Nowlen, Conductor; Lorraine Crozier, President (and point of contact); and the Board of Directors of the Symphony d'Oro Rancho Cordova. Members of the ensemble, consisting of 50+ musicians, will jointly implement the project.The Symphony d'Oro will manage financial transactions in support of this grant, provide oversight for the expenditure of funds and be responsible for reporting requirements of the grant.

Project Goals

Goal #1 Open the world of high-quality, high variety, orchestral music to Rancho Cordova citizens and visitors; Goal #2 Further the Rancho Cordova Arts goal of making the city an arts destination; Goal #3 Engage the community and enhance community pride Goal #4 Improve the image of Rancho Cordova and continue to reach an expanded audience This project meets several criteria set forth

for Community Enhancement grants: • Civic Engagement: Bring classical musical arts to families within the city free of charge either online or in approachable locations within the city. Free concerts allow families with children to attend concerts without undue cost. We plan to continue some online performance outreach each season as it serves those who are unable or unwilling to attend live events in person. We expect that there may be some concerns in older or health challenged persons going forward and an online presence serves these citizens. • Community Pride: A symphony orchestra provides a focus for, and support of, community gatherings and is a source of pride and accomplishment for Rancho Cordova. • Quality of Life: Provide family arts experiences not otherwise available to the families of Rancho Cordova, uplifting all. • Arts and Culture: This is an arts outreach project aimed at Rancho Cordova families and businesses, and social groups, and volunteer organizations. • Children and Youth: Educating and inspiring children with musical arts experiences within their community. • Education: The Symphony's "down to earth" presentation style and variety of performances demystifies classical music and allows for enjoyment by everyone. Music speaks to everyone and doesn't require formal training to be enjoyed. Additional information including measuring metrics is included in the attachment to this application.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$56,000 projected total costs for the season. $26,000 grant request

Estimated Breakdown of Project Expenditures

Grant funding request expenses: Storage rental charges $3,600; Equipment Transportation/Rental, or rehearsal technical support $2,500; Online, Social Media Development and Advertising $1,000; Funding for guest artists and composers $6,500; Concert Venue and rehearsal space fees $8,000; Music Purchases and Rental $2,000; Ensemble Video Recording $2,400 Expenditures paid by other sources: Payroll $18,000; Insurance $6000; Accounting $1000; Musician Fees $3000; $1000 advertising; Miscellaneous $1000 See attachment to this application for a detailed explanation of the need for the funding request.

Matching Funds

In-kind contributions Orchestra members contribute a conservatively-estimated 5,100 hours annually to bring music to the City of Rancho Cordova. They volunteer their time in private practice, rehearsals, performances (including setting up, taking down, and transporting equipment, often in their own vehicles), board meetings, and interfacing with venue owners, the press, and city government. They serve as a member of the Cordova Community Council Board of Directors, and additionally on its Arts Advisory Board. In addition to full-orchestra concerts, they perform in numerous small ensembles at Rancho Cordova Artist Receptions, Rancho Cordova Chamber of Commerce luncheons and they are looking forward to a return to the holiday offering at the MACC supporting the visual artists in Rancho Cordova. Despite the mandatory health restrictions imposed this year, our musicians showed up for rehearsal and recorded numerous pieces of music, including those with guest artists, for our YouTube concerts. Symphony Board Directors continued regular (and special) meetings continuing to plan and implement a season of music and entertainment for the community. The Independent Sector of the "Do Good Institute" valued a volunteer service hour at $28.54 on April 20, 2021. Based on that value, the volunteer contribution of the Symphony d'Oro Rancho Cordova is $145,554.00. Each Symphony musician contributes $100 in dues per year, with exceptions for full-time students.

Include Any Other Funding Contributions

The Symphony is sponsored by the Cordova Council Community Foundation in the amount of $10,000 this year; Big Day of Giving estimate $5000; Online donations and dues $3000; Fundraising Concert est. net $6000 - this number is speculative.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$26,000

Is this a multi-year request?

No

How many years have you received funding for this project?

7

When will your request for funding sunset for ongoing programs?

Application #13

The Symphony's mission is to provide high quality, free concerts to the citizens of Rancho Cordova and its visitors. Since we do not charge for our concerts we anticipate applying for funding annually.The Symphony is committed to performing free concerts and providing high quality musical access to all members of the community, but particularly to our families. It is financially difficult for a family with three to four children to bring them to a musical event. The need for rehearsal and performance venue fees, transportation and technical recording expertise, as well as funding for guest artists and commissioned music is not something which the Symphony can afford to provide on its own without charging for attendance at events. Thus, we do expect to make an appropriate request in the following grant period.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Funding sources are listed above and are anticipated in these amounts.

Project Schedule, Timeliness and Adaptability

Project Schedule

All acquisitions and performances covered under this application would take place between July 1, 2022 and June 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The Symphony's annual seasons dovetails the grant funding period. We begin our season each year with a fall concert; a holiday concert in December; an early spring concert and a late frying concert. Thus, all funds for performance venues, artists and composers (which are the largest expenditures) and expended during the grant period. This season we anticipate the following concerts:Our programming for the 2022-23 season is stellar and is projected to include: a performance to a silent comedy movie and cartoons in a concert called “Hurray for Hollywood”, a live concert featuring pianist Carlos McMillan-Fuentes, and compositions by largely unrecognized female composers. We will offer a free holiday concert at the Performing Arts Theater featuring vocalists performing parts of “Hansel and Gretel”.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes!T he 2021-22 season has been highly successful despite the uncertainty of knowing when live performances could resume. We are truly looking forward to our first live performance in nearly two years on April 9, 2022, and then finishing off our season with a stellar offering “Beethoven and Beatles”, a concert devoted entirely to the two biggest rock stars in the music world. However prior to this we recorded two concerts which we broadcast on the Symphony's YouTube channel - "Mozart Madness" and "Winter Rhapsody". Both featured our composer in residence Carlos McMillan-Fuentes at the piano with the Symphony. Winter Rhapsody featured a fantastic original composition by Mr. Fuentes which was orchestrated especially for the symphony and was a world premiere performance. Funds which we have requested in the categories of performance venue rental will be repurposed if needed to record and broadcast concerts to the public . The recorded concerts have been highly successful and each has garnered nearly 1000 views won YouTube. They have also played to a world wide audience!

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

9792 Business Park Drive
Sacramento, CA 95827

Other Physical Addresses (if project/program is at multiple sites)

The Symphony has a signed lease with the Mandarins for rehearsal space. This lease is a two year lease and is currently paid for by another Community Enhancement and Investment Grant which is administered by the Cordova Community Council on behalf of the Symphony and the River City Concert Band. Otherwise we don't have a physical address or office. A copy of the lease is available upon request.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Lorraine Crozier

Title

President

Submitting As

Non-Profit

Phone

9167184375

Email Address

lwcrozier@hotmail.com

Organization's Legal Name (if applicable)

Symphony d'Oro Rancho Cordova

Mailing Address of Submitter

2426 G Street
Saacramento, CA 95816

Signatory's Name

Lorraine Crozier

Signatory's Title

President

Signatory's Phone

9167184375

Signatory's Email Address

lwcrozier@hotmail.com

Signatory's Mailing Address

2426 G Street
Sacramento, CA 95816

Attach Any Additional Documents Here

Symphony 2022-23 Measure H.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #13

SYMPHONY d'ORO
rancho cordova

DISTINGUISHED 2019 Volunteer SERVICE ORGANIZATION AWARD RANCHO CORDOVA

Symphony d'Oro Rancho Cordova
2022-2023 Community Enhancement & Investment Fund Application

Application Submitted by:

Lorraine Crozier
President, Symphony d'Oro Rancho Cordova
(916) 718-4375
lwcrozier@hotmail.com
2426 G Street
Sacramento, CA 95816

Type of Applicant: Non-Profit

Signatory

Lorraine Crozier
President, Symphony d'Oro Rancho Cordova
(916) 718-4375
lwcrozier@hotmail.com
2426 G Street
Sacramento, CA 95816

Type of Signatory: Non-Profit

Application #13

SYMPHONY d'ORO
rancho cordova

DISTINGUISHED 2019 Volunteer SERVICE ORGANIZATION ★ AWARD ★ RANCHO CORDOVA

Symphony d'Oro Rancho Cordova, Community Enhancement & Investment Project – Season 2022-2023

Project Description

This project will provide funding to the Symphony d'Oro Rancho Cordova to be expended for music, performance venue rental, recording fees, guest performing artist/composer fees and related expenses to continue and expand orchestral music offerings in traditional and non-traditional venues in the City of Rancho Cordova. The Symphony d'Oro is a versatile orchestral ensemble which has entertained audiences in Rancho Cordova, the Sacramento region, and worldwide, with concerts and productions featuring all types and styles of music including: classical; jazz; pop; cinematic; Broadway; patriotic; modern; cabaret style and even a drag show. We perform any kind of good music – and good music is everywhere.

In the spirit of bringing live music to unusual places to engage the public, the Symphony has frequently performed in the "public square" of the Koreana Plaza Food Court, and is finally able to resume live performances in this venue in 2022-2023. Additionally, the Symphony's numerous small ensembles have performed at art galleries, City Hall, museums, churches, and civic buildings in Rancho Cordova and the greater Sacramento Metropolitan area.

Despite the pandemic induced difficulties of the 2021-22 season, the Symphony continues to perform and achieve high levels of support from, and integration with, the community of Rancho Cordova. As noted in previous applications, this support is remarkable. The Symphony has enjoyed an outstanding level of support for its first two recorded concerts this season. Our composer in residence, Carlos McMillen-Fuentes, performed spectacular solos with the ensemble in the Mozart concert and also composed an original piece for solo piano and orchestra "A Winter Rhapsody" which was also recorded and streamed on YouTube for the Christmas holiday. Each of these concerts has nearly 1000 views on YouTube, which is a terrific result.

Rancho Cordova continues to be justifiably proud of its support for the arts and its musical performing organizations, including the Symphony d'Oro. Musicians outside of Rancho Cordova are impressed with the support Rancho Cordova provides to the Symphony. The Symphony is confident that its partnership with Rancho Cordova will continue for many years to come.

Application #13

This request seeks to maintain and improve the quality and frequency of music performed, by providing the means to perform high quality performances in community venues such as the performing arts theater at Cordova High School, Rancho Cordova City Hall, and Koreana Plaza. Each venue has unique cost requirements for rents, transport and/or rental of performance equipment, and insurance. Similarly, each venue serves a different type of audience and supports different varieties and styles of music. This allows the symphony to continue to provide and educate the community with an unlimited variety of music, and bring in superior local musicians to perform with, and compose for, the orchestra. Alternatively, funds from this grant will provide the means to record and broadcast concerts if live performances are not feasible due to health restrictions.

The Symphony carries out its mission with a high level of support from, and integration with the Cordova Community Council Foundation.

Project Team

The Symphony d'Oro Rancho Cordova (formerly the Rancho Cordova Civic Light Orchestra, incorporated in July 2013) is a 501(c)(3) tax exempt, amateur orchestra serving the citizens of Rancho Cordova. It is an informal-audition, developmental orchestra with a mission to entertain and educate Rancho Cordova community audiences by providing high quality, free musical performances. The Symphony has performed for audiences that collectively total in the thousands of residents, and will continue to seek innovative ways to bring music to the community. The 2021-22 season has been highly successful despite the uncertainty of knowing when live performances could resume. We are truly looking forward to our first live performance in nearly two years on April 9, 2022, and then finishing off our season with a stellar offering "Beethoven and Beatles", a concert devoted entirely to the two biggest rock stars in the music world.

Individually, the implementing team will be led by Pete Nowlen, Conductor; Lorraine Crozier, President (and point of contact); and the Board of Directors of the Symphony d'Oro Rancho Cordova. Members of the ensemble, consisting of 50+ musicians, will jointly implement the project.

The Symphony d'Oro will manage financial transactions in support of this grant, provide oversight for the expenditure of funds and be responsible for reporting requirements of the grant.

Project Goals

Goal #1 Open the world of high-quality, high variety, orchestral music to Rancho Cordova citizens and visitors;
Goal #2 Further the Rancho Cordova Arts goal of making the city an arts destination;
Goal #3 Engage the community and enhance community pride
Goal #4 Improve the image of Rancho Cordova and continue to reach an expanded audience

This project meets several criteria set forth for Community Enhancement grants:

- **Civic Engagement:** Bring classical musical arts to families within the city free of charge either online or in approachable locations within the city. Free concerts allow families with children to attend concerts without undue cost. We plan to continue some online performance outreach each season as it serves those who are unable or unwilling to attend

live events in person. We expect that there may be some concerns in older or health challenged persons going forward and an online presence serves these citizens.

- **Community Pride:** A symphony orchestra provides a focus for, and support of, community gatherings and is a source of pride and accomplishment for Rancho Cordova.
- **Quality of Life:** Provide family arts experiences not otherwise available to the families of Rancho Cordova, uplifting all.
- **Arts and Culture:** This is an arts outreach project aimed at Rancho Cordova families and businesses, and social groups, and volunteer organizations.
- **Children and Youth:** Educating and inspiring children with musical arts experiences within their community.
- **Education:** The Symphony's "down to earth" presentation style and variety of performances demystifies classical music and allows for enjoyment by everyone. Music speaks to everyone and doesn't require formal training to be enjoyed.

Prioritization Criteria

- **Leverage:** This project leverages existing event organization expertise of the Cordova Community Council and volunteer contributions by Rancho Cordova Arts where needed and the artistic expertise of the Symphony d'Oro team.
- **Return on Investment:** With proper promotion, the value of positive publicity brought to Rancho Cordova as it positions itself as a place that cares about art could easily exceed costs. The Symphony receives regular recognition from regional print, radio and television media.
- **Capacity:** The project team will be led by the Symphony d'Oro Rancho Cordova which has a proven track record and well documented capacity for delivery of a project of this scope.

Project Metrics

Goal	Metrics
Goal #1 Open the world of high-quality orchestral music to all Rancho Cordova citizens and visitors	Quality musical experiences are presented during a schedule of free concerts by the full orchestra and small ensembles. Online YouTube performances will be substituted when needed due to mandated county health requirements.
Goal #2 Further the Rancho Cordova Arts goal of making the city an arts destination	Rancho Cordova's deliberate actions as a cutting-edge arts community is enhanced and recognized measured by community attendance, feedback and news coverage. Online performances and presentations have continued throughout the pandemic shutdown.

Goal #3 Engage the community and enhance community pride – work in tandem with other volunteer organizations	Rancho Cordova's deliberate actions as a cutting-edge arts community is enhanced and recognized measured by community attendance at symphony performances and by Symphony and small ensemble performances in support of other organizations such as Whisker Warriors; Food Locker; Rancho Cordova Arts; Rancho Cordova Chamber of Commerce.
Goal #4 Improve the image of Rancho Cordova	Amenities such as a community orchestra are well-documented as improving the image of the communities in which they are located

Funding request

Total Measure H funds requested: $26,000

Description/breakdown of proposed expenditures

Storage rental charges	$3,600
Equipment Transportation/Rental, or rehearsal technical support*	$2,500
Online, Social Media Development and Advertising	$1,000
Funding for guest artists and composers	$6,500
Concert Venue and rehearsal space fees**	$8,000
Music Purchases and Rental	$2,000
Ensemble Video Recording	$2,400

Specific Justification for the Request

Storage Rental Charges: We rent climate-controlled storage space on Coloma Road, allowing us to keep all equipment and other assets in one protected environment. As we upgrade our equipment and continue each year to acquire fresh, new music, we believe it is money well spent bringing long-term benefits to the Symphony and community.

***Equipment Transportation and Rental, Technical Support*:** Each of our performance sites have special requirements and provide different amenities. As such transportation of chairs and music stands is often required for performances. One of our most successful and enjoyable performance venues is Koreana Plaza. We have typically performed twice per season at this venue and when we do so we hire a moving crew and rent a vehicle for transporting the heavy equipment, including keyboard, portable organ, chairs and stands for all musicians, percussion cabinet and equipment, timpani and other electronic equipment to the performance site. This is a significant logistical cost. The same cost would apply to performances going forward at City Hall. Without the equipment we cannot perform our concerts and it is important that the equipment be transported, set up and returned to storage in a way which preserves the equipment and our investment. Occasionally, we need to rent specific equipment (typically instrumental such as expensive percussion equipment which we do not own).

*As an alternative – should county health requirements prohibit us from rehearsing live these funds would be repurposed and used to pay a technician to monitor our rehearsals and collect recordings for online distribution.

Funding for Guest Artists and Composers: We have been extremely fortunate in our ability to bring local world class performers (pianists, singers, violinists, a performer on the Native American flute, and a gifted drag queen) to our concerts, providing a rare treat to Rancho Cordova audiences. We have now presented **four** world premiere compositions since our inception. Three of the compositions were created specifically for the Symphony and were composed by local musicians who were raised in the Rancho Cordova community. The funding we seek will allow us to continue bringing these artists to the community. Our programming for the 2022-23 season is stellar and is projected to include: a performance to a silent comedy movie and cartoons in a concert called "Hurray for Hollywood", a live concert featuring pianist Carlos McMillan-Fuentes, and compositions by largely unrecognized female composers. We will offer a free holiday concert at the Performing Arts Theater featuring vocalists performing parts of "Hansel and Gretel".

Concert & Rehearsal Venue Fees**: Rancho Cordova has a limited number of concert-quality facilities, and with the exception of the "public square" Koreana Plaza, and Rancho Cordova's City Hall, there are significant charges to use the performance venue. The state of the art Performing Arts Center is a wonderful place to bring music to the community, but it is expensive -- (the charges average $2,500.00 for performances, including rehearsals) and we plan to perform there four times during the term of this grant. Shows like "Hurray for Hollywood" and "Hansel and Gretel" require a stage and screen for appropriate audience viewing, lighting and the sophisticated sound management which is available only at the theater.

**As an alternative to live performance these monies may be repurposed and used to hire a technician to edit and assemble concerts for online presentation. This would occur in the event county health mandates prohibit live concert gatherings. Should a live concert not be feasible due to health restrictions we will record and broadcast our concerts on the Symphony YouTube channel.

Social Media and Technical Outreach Development and Advertising
An attractive and relevant online presence is essential for any enterprise. We wish to continue in this vein next season by reaching higher numbers of people through Google advertising, emailing, and social media.

Music Rentals and Purchases
A critical component of any performing musical ensemble is acquiring music. Without a library of music, we cannot perform. We continue building our library so that when we are asked to perform, we are ready to go with old favorites and fresh new repertoire. Occasionally, there is a piece we wish to perform but it is not available for purchase and must be rented. This coming season, assuming live concerts at the Performing Arts Theater are allowed, we plan to rent the rights to a silent movie and cartoons and feature the symphony performing music to the films.

Video Recordings
We want to maintain our very popular recording program by video recording at least one concert each season going forward. This allows us to reach a much larger audience and further promote the community of Rancho Cordova. The pandemic taught us that there is more than one way to put on a successful concert. Recorded concerts allow us to reach shut ins, people who struggle with transportation or illness. Additionally, it promotes Rancho Cordova arts programs to a significantly wider audience, enhancing the city's reputation.

In-kind contributions

Orchestra members contribute a conservatively-estimated 5,100 hours annually to bring music to the City of Rancho Cordova. They volunteer their time in private practice, rehearsals, performances (including setting up, taking down, and transporting equipment, often in their own vehicles), board meetings, and interfacing with venue owners, the press, and city government. They serve as a member of the Cordova Community Council Board of Directors, and additionally on its Arts Advisory Board. In addition to full-orchestra concerts, they perform in numerous small ensembles at Rancho Cordova Artist Receptions, Rancho Cordova Chamber of Commerce luncheons and they are looking forward to a return to the holiday offering at the MACC supporting the visual artists in Rancho Cordova. Despite the mandatory health restrictions imposed this year, our musicians showed up for rehearsal and recorded numerous pieces of music, including those with guest artists, for our YouTube concerts. Symphony Board Directors continued regular (and special) meetings continuing to plan and implement a season of music and entertainment for the community.

The Independent Sector of the "Do Good Institute" valued a volunteer service hour at $28,54 on April 20, 2021. Based on that value, the **volunteer contribution of the Symphony d'Oro Rancho Cordova is $145,554.00.**

Each Symphony musician contributes $100 in dues per year, with exceptions for full-time students.

Additional Funding

The Symphony participates in the Sacramento region Big Day of Giving campaign each May, and produces annual creative fundraisers which not only offset expenses but also bring the name of Rancho Cordova to the fore as a center for the Arts in the region.

Unfortunately, the Covid-19 pandemic caused all live performances to be cancelled so the Symphony is in a delicate financial circumstance, as are all arts groups. The basic cost of doing business has increased substantially in the past two years particularly in the area of insurance, and costs of video recording and performance venues.

Prior Grant Funding

Symphony d'Oro has participated in the Measure H grant program since the inception of the program. We are certain that it has helped us to grow rapidly into a well-managed, high-quality, and versatile musical ensemble. The program has allowed us to become integrated into the City of Rancho Cordova in service to the community. Specific numerical information is available upon request.

When Will Request Sunset?

The Symphony is committed to performing free concerts and providing high quality musical access to all members of the community, but particularly to our families. It is financially difficult for a family with three to four children to bring them to a musical event. The need for rehearsal and performance venue fees, transportation and technical recording expertise, as well as funding for guest artists and commissioned music is not something which the Symphony can afford to provide on its own without charging for attendance at events. Thus, we do expect to make an appropriate request in the following grant period.

Annual Funding
The symphony anticipates an annual request for funding under the enhancement and investment fund.

Project schedule

All acquisitions and performances covered under this application would take place between July 1, 2022 and June 30, 2023.

Adaptability

As indicated in the preceding discussion points, the Symphony has planned for a flexible 2022-23 season. We plan to continue in person rehearsals at the Mandarin facility in Rancho Cordova, and eagerly look forward to live performances this season in April and June.

Should Covid-19 health restrictions be reimposed the Symphony is planning a flexible season for 2022-23. During its 2021-22 season the Symphony demonstrated its flexibility by video recording professional level performances and broadcasting them via its own YouTube channel not only to Rancho Cordova but to a world-wide audience. While performing live is the preference the Symphony is well able to adjust to health restrictions and satisfy its contractual obligations with recorded concerts to the public. The Symphony has returned to live rehearsal this season and developed strategies for rehearsal while keeping musicians healthy and able to perform. In short, we will remain flexible, but will continue to provide music to Rancho Cordovans regardless of any health res

Respectfully submitted,

Lorraine Crozier

Lorraine Crozier
President, Symphony d'Oro

Dated: March 17, 2022

Lorraine Crozier

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 2:02 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538840
IP Address:	73.116.203.213
Submission Date:	03/18/2022 2:01
Survey Time:	50 minutes, 55 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Sacramento Children's Museum General Operations Support

Project Synopsis

Sacramento Children's Museum requests $150,000 per year for three years to support our rebuilding efforts so that we can create more engaging and innovative learning experiences for children. Funding will ensure our stability as we move forward in rehiring staff, increasing hours and capacity, and bringing back community events.

Project Description

For the past 10 years, Sacramento Children's Museum (SCM) has been a cornerstone educational and community resource in Rancho Cordova, providing children ages birth-8 with exciting, hands-on learning opportunities. Children learn STEM, art and literacy concepts through play in our 15 exhibit areas; create meaningful family experiences at our community events; and benefit from our social service programs. Unfortunately, the COVID-19 pandemic has impacted the Museum's operations in all areas, including finances, staffing, and programming. We are asking for your help to support our rebuilding efforts so that we can create more engaging and innovative educational experiences for children in our community. SCM is requesting general operations funding of $150,000 per year over the next three years to ensure the Museum's stability as we move forward in rehiring staff, increasing hours and capacity, and bringing back events, educational programming, and community outreach. A grant from the Community Enhancement & Investment Fund will support the following: 1) Annual Family-Friendly Events: The City of Rancho Cordova will be a title sponsor for our annual events for each year of funding. These events are: Summer Family Game Nights, Princesses and Pirates Ball, Trick or Treat at SCM, Holiday Party, Free Museum Day, Dogs with Jobs, Earth Day, and Pride Festival. Many of these events are free for guests. 2) Staffing: We are currently open by reservation only for reduced capacity and at reduced hours, and most of our classes and school programs are on hold. Your support will help SCM return to pre-COVID staffing levels so we can serve more children and open the Museum fully. 3) Increased Cleaning and Safety Measures: Ensuring the health and safety of our guests is one of our top priorities, especially since many of our guests are 5 and under and cannot be vaccinated. Grant funding will enable us to keep up with updated COVID-19 cleaning and sanitation standards.

Project Team

Sharon Stone Smith - SCM Executive Director; Meghan Toland - SCM Deputy Director; and Rachelle Ahmad - SCM Education Manager.

Project Goals

With funding support, we aim to achieve the following goals: 1) Increase Education Staffing by 1 FTE (full-time equivalent), and maintain in subsequent years; 2) Hire Marketing staff to 1 FTE, and maintain in subsequent years; 3) Implement a retention plan for current staff, and implement in subsequent years; and 4) Host 6 large special events annually, with 50% of events to be provided at no cost to visitors. We will measure our success in meeting these goals by whether or not we fill each of these open positions; develop and implement a retention plan; and host a minimum of six community events per year.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$150,000 per year

Estimated Breakdown of Project Expenditures

100% staff salaries and wages

Matching Funds

N/A

Include Any Other Funding Contributions

Earned revenue from ticket sales

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$150,000 per year

Is this a multi-year request?

Yes

Number of Years

3

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

Although this project is viable as a single-year request, SCM is seeking multi-year support to ensure we have the resources and staffing needed to recover from a devastating suspension due to the COVID-19 pandemic. During the pandemic, SCM's earned revenue dropped to zero, and philanthropy has not made up the difference. As the COVID-19 pandemic enters its third year, the only certainty is that nothing is certain. SCM seeks multi-year funding to ensure stability as we move forward in rehiring staff, increasing hours and capacity, and bringing back events, educational programming and community outreach. The viability of Museum operations will come from increased Museum admission and program support.

How many years have you received funding for this project?

2

When will your request for funding sunset for ongoing programs?

Funds requested are for ongoing support of Museum operations. Therefore, there is not a specific start and end date.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

SCM generates income from admissions, group sales, sponsorships, and store sales. SCM regularly seeks grants and community support.

Application #14

Project Schedule, Timeliness and Adaptability

Project Schedule

We expect to fill the Marketing Position by September 1, 2022, and hire Education Staff by January 1, 2023. We plan to develop our Retention Plan by January 1, 2023, and implement it on an ongoing basis afterward. There is not a specific start and end date for the community events and cleaning measures, as these are ongoing.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Funds requested are for ongoing support of Museum operations. Therefore, there is not a specific start and end date for the Museum's regular hours. Specific dates will be available for the annual family-friendly events.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

During the last three years, our Museum has pivoted our programming so that we would be able to offer consistent programming. We will continue to offer drive-thru, outdoor, and online options as needed. In addition, we will create in-home education kits if local health ordinances change. Further, if Sacramento County Health orders change, in-person events will be postponed until in-person meetings are allowed.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Sherry Anne Dayag

Title

Grants Coordinator

Submitting As

Non-Profit

Phone

Application #14

9167305079

Email Address

grants@sackids.org

Organization's Legal Name (if applicable)

Sacramento Children's Museum

Mailing Address of Submitter

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Signatory's Name

Sharon Stone Smith

Signatory's Title

Executive Director

Signatory's Phone

9167305079

Signatory's Email Address

sharon@sackids.org

Signatory's Mailing Address

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #14

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 2:13 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538872
IP Address:	96.77.220.9
Submission Date:	03/18/2022 2:12
Survey Time:	39 minutes, 45 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Sacramento Philharmonic & Opera – Rancho Cordova Pop-Up Concerts

Project Synopsis

With funding from the Rancho Cordova Community Enhancement & Investment Fund, the Sacramento Philharmonic & Opera would be able to again produce and perform at least five (5) small pop-up concerts for individuals in Rancho Cordova to enjoy for free, in an accessible manner, throughout the community.

Project Description

With funding from the Community Enhancement Fund, the Sacramento Philharmonic & Opera would be able to again present a free concert series (at least five concerts, depending on the number of musicians) in locations throughout Rancho Cordova to enrich community members' lives and expand our music's impact in the city. As in 21-22, these concerts would take place in different venues throughout Rancho Cordova and would feature small groups of musicians (4-6) who could perform a variety of classical, pops, and other styles of music. Due to the flexible nature of these concerts, we could tailor each presentation to make it most engaging for the intended audience and for the location. For these performances, we would look to again collaborate and communicate with established partners to assess dates and times for performances, festivals (such as Kids Day in the Park, iFest International Festival, etc.) that we could perform in conjunction with, and potential new opportunities for concerts that would be impactful for the community (and with these new opportunities, we would be more than willing to work with the City Council and staff on coordination). As with this previous year, Rancho Cordova community members would be able to attend the performances free of charge, and we would be sure to thank the Community Enhancement Fund publicly at each concert for their support in making it possible. Fostering community is a core part of our mission and engaging our community members through music accessibly, in a manner that works for them, is incredibly important to our work. We would love the opportunity to again give back to Rancho Cordova via these performances and allow residents the chance to hear and interact with our music. Funding from the Community Enhancement Fund can help make this a possibility for our community.

Project Team

Sacramento Philharmonic & Opera staff would be responsible for producing these concerts. Specifically, Director of Operations and Community Engagement Charla Jeanne Lawson, Executive Director Giuliano Kornberg, and the SP&O Operations team would be

responsible for: collaborating with Rancho community partners and the City of Rancho Cordova on selecting performance sites, dates, and times; hiring musicians; and working with the musicians to select appropriate repertoire for that location.

Project Goals

Our vision is to be a collaborative leader in the cultural growth of the Greater Sacramento region and take the necessary steps to ensure that the SP&O represents, and is accessible to, our regional community. Our pop-up concerts are one of the main ways that we work to achieve this, and we greatly look forward to continuing to give the people of the Rancho Cordova community free, accessible experiences outside the concert hall. Through this project, we also hope to foster deeper relationships with individuals and organizations that we currently collaborating with (such as the MACC, Children's Museum, etc.) and strive to use next year's concerts as a springboard for further engagement with the Rancho Cordova community going forward. We additionally are more than willing to collaborate with City Council members, to try and ensure that we are performing in high-impact areas and locations that achieve their objectives. Lastly, during and after these performances, we would look to gather testimonials from attendees, partnering organizations, and City staff, and use this feedback to make sure that future concerts would serve the Rancho Cordova community.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$15,000

Estimated Breakdown of Project Expenditures

$10,000 – Musician wages and fringe benefits $2,000 – Soloist Fees (will be allocated to musician wages if no soloists are ultimately deemed necessary for concerts) $750 – Musician travel, parking, cartage, and other travel expenses $2,250 – Administrative Overhead

Matching Funds

N/A

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$15,000

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

In addition to collaborating with community partners in Rancho Cordova, we would look to develop relationships with Rancho Cordova-based individuals and corporations/foundations who could be willing to fund and underwrite further performances. Once these individuals and institutions are identified, we would make sure that we reached out to them to let them know about the concert schedule, so that they could attend and see the impact that our music has on the community. After attending the concerts, we would then seek to have conversations with them about our plans for further concerts, and additionally see if they had any ideas or recommendations on where we could perform. Through these conversations, we would assess if they were interested in a potential donation or sponsorship – and with this support, along with potential continued support from the Community Enhancement & Investment Fund, we could perform more concerts in and throughout Rancho Cordova.

Project Schedule, Timeliness and Adaptability

Project Schedule

The concerts for this project will take place periodically from July 2022 to June 2023, with the exact performance schedule determined by location, availability, and what works best for the community partners that we'd collaborate with.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

We have spent the bulk of our time this year (FY2022) establishing relationships with key individuals such as Shelly Blanchard, Cheryl Gleason, and Randi Kay Stephens, and organizations such as the Children's Museum and the MACC. With these relationships in-tact, we would begin planning for the concerts in the summer of 2022, so that we could have enough time to schedule these performances and give ourselves sufficient time to complete the project by June 30, 2023 most effectively.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes – if/as health and safety requirements change, we would look to program and perform these concerts in only outdoor locations, in areas where adequate social distancing could be observed.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10191 Mills Station Rd
Sacramento, CA 95827

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Giuliano Kornberg

Title

Executive Director

Submitting As

Non-Profit

Phone

6128659198

Email Address

gkornberg@sacphilopera.org

Organization's Legal Name (if applicable)

Sacramento Region Performing Arts Alliance

Mailing Address of Submitter

1110 2nd St
Sacramento, CA 95814

Signatory's Name

Giuliano Kornberg

Signatory's Title

Executive Director

Signatory's Phone

6128659198

Signatory's Email Address

gkornberg@sacphilopera.org

Signatory's Mailing Address

1110 2nd St
Sacramento, CA 95814

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 2:50 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538950
IP Address:	107.219.41.66
Submission Date:	03/18/2022 2:49
Survey Time:	17 minutes, 20 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Hummingbird Theatre Company's 2022-2023 Season

Project Synopsis

As Rancho Cordova's leading Theatre Company we want to make theatre accessible to the people. We believe in engaging audiences with performances that not only make them reflect thoughtfully, laugh longer, and feel more, but also inspire pride in their Hometown of Rancho Cordova.

Project Description

Please replace the submission referenced here with this new one: Submission #: 1510688 IP Address: 153.48.247.250 Submission Date: 03/04/2022 4:36 Project Name Hummingbird Theatre Company's 2022-2023 Season This season we would like to bring some laughter and cheer to the children of Rancho Cordova by presenting our "From the Page to the Stage" Literary Adaptation Children's Show in either November or December of 2022. This This production would be a one-hour touring show suited for all ages, where we would bring Classic children's stories and tales to life by adapting and performing them onstage, helping create an interest in both reading and the performing arts in local children. Our spring show in April, would be geared towards the whole family, as we would like to present "The Greatest Showcase" – a Musical Theatre Broadway Review. This show would feature local talented performers singing, dancing, and acting out songs from musical theatre favorites, such as Phantom of the Opera, Shrek the Musical, Hamilton, and Rent.

Project Team

Hummingbird Theatre: Danielle Mercado, Director. Sarah Feuerbach, Assistant Director. Beth Beam, Concept Designer and Fabricator. Jennifer Reeves, Prop Master. Tom Colburn, Sound. Carolyn Duncan, Tay Winslow, Jarod Wiggins, Company members, etc.

Project Goals

Our mission is to bring quality Performing Arts Theatre performances to the community of Rancho Cordova. Our goal is to make this amazing art form accessible to all, and to provide our audiences with an artistic and emotional experience they won't forget.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$29,800

Estimated Breakdown of Project Expenditures

“FROM PAGE TO STAGE” A TOURING CHILDREN’S SHOW Nov/ Dec 2022 at touring locations in Rancho Cordova. Expenditures Rehearsal Space 4 days a week, 3 hours a day for 10 weeks = 120 hrs. of rehearsal x $25 an hour = $2400 $3000 Production Space Public show- $600 $600 Play rights Free adaptations $0 Staff Producer: $800 Costumer: $500 Director: $500 Choreographer: $200 Master Carpenter: $200 Set Designer/Main Builder: $300 Actor Stipend: approx. 15 cast members at $100 = $1500 $4,000 Production expenses Costume Budget: $500 Sets and Lights: $1000 Sound Engineer: $400 Props: $200 $2,100 Miscellaneous expenses Advertising- signage, ads, photos, social media boosts-$300 Print: Programs, Posters, Scripts, Tickets $300 $600 Total Estimated Expenses $ 10,300 Revenues Ticket Sales 0 0 “THE GREATEST SHOW” MUSICAL THEATRE CABARET April 2023 at Building 1 at Hagan Community Center Expenditures Rehearsal Space 4 days a week, 3 hours a day for 12 weeks= 144 hrs. of rehearsal x $25 an hour = $3600 $3600 Production Space $4000 Musical Rights Free as per Cabaret rules 0 Staff Producer: $1000 Costumer: $800 Director: $800 Choreographer: $800 Musical Director: $800 Sound Engineer: $800 Actor Stipend: 10 at $200= $2000 $7000 Production Expenses Costume Budget: $1500 Lights: $1500 Props: $300 Sets: $400 $3700 Miscellaneous Expenses Advertising: $600 Print: $300 Music: $300 $1200 Total Estimated Expenditures $19,500 Revenues Ticket Sales 6 performances of 75 audience members 450 adults x $15 adults = $6750 $6750

Matching Funds

Donation of Rehearsal Space Assumes commitment of Cal Cap Studios or other vacant commercial space Donation of Producing/Advising by Rebecca Sloan 10 hours/month at $50/hour= $6,000 Donation of Professional Services Producing 400 hrs at $50/ hr = $20,000 Directing 310 hrs at $50/hr= $15,500 Dramaturgy 39 hrs at $50/hr= $1,950 Costuming 210 hrs at $50/hr= $10,500 Sewing 140 hrs at $25/hr= $3,500 Musical Directing 130 hrs at $50/hr= $6,500 Choreography 130 hrs at $50/hr= $6,500 Carpenter 70 hrs at $50/hr= $3,500 Set/Lighting Designer 75 hrs at $60/hr = $4,500 Skilled Building 212 hrs at $40/hr= $8,500 Fabricating Props/Sets 42 hrs at $60/hr= $2500 Acting $15/hr Musical- $2,700 per actor x 17 actors = $45,900 Children’s Tour- $1,230 per actor x 14 actors = $17,220 TOTAL ACTING = $63,120 Sound Design/Engineer 300 hrs at $25/hr= $7500 Advertising 68 hrs at $50/hr= $3,400 Graphic Design 40 hrs at $60/hr= $2,400 Print 133 hrs at $18/hr= $2,400 Secretarial 130 hrs at $20/hr= $2,600 Tech/ Manual Labor 115 hrs at $20/hr= $2,300 per person 4 on Musical, 2 on all other productions = $6,200 TOTAL IN KIND = $171,070 - $9200 budgeted for Staff Stipends

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

29,800

Is this a multi-year request?

No

How many years have you received funding for this project?

2

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

N/A

Project Schedule, Timeliness and Adaptability

Project Schedule

Application #16

“From the Page to the Stage” Literary Adaptation Children’s Show: -Auditions at the End of July 2022 -Rehearsals during August through October 2022 -Performances in November/December 2022 "The Greatest Showcase" Musical Theatre Broadway Review: -Auditions: Early January 2023 -Rehearsals: January through March 2023 -Performances: April 2023

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

We have our second show wrapping up in April 2023, and even if it had to be pushed back due to Covid-19 or some other outstanding reason, we still have plenty of time to have everything completed by June 30, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. We have faced this before, and we are able to use face masks and social distancing in our favor, we have rescheduled when absolutely necessary, and we could also potentially make at least part of our productions virtual.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2197 Chase Dr
Rancho Cordova, Ca 95670

Other Physical Addresses (if project/program is at multiple sites)

3141 Bridgeway Drive, Rancho Cordova, Ca 95670

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a park/park facility

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Danielle Mercado

Title

Hummingbird Theatre Company's Artistic Director

Submitting As

Other

Phone

5303064182

Email Address

hummingbirdtheatreco@gmail.com

Organization's Legal Name (if applicable)

Mailing Address of Submitter

3141 Minturn Way
Rancho Cordova, Ca 95670

Signatory's Name

Danielle Mercado

Signatory's Title

Artistic Director

Signatory's Phone

5303064182

Signatory's Email Address

hummingbirdtheatreco@gmail.com

Signatory's Mailing Address

3141 Minturn Way
Rancho Cordova, Ca 95670

Attach Any Additional Documents Here

2022:2023 GRANTPROPSALHUMMINGBIRD.docx

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #16

Rancho Cordova Community Enhancement Fund
Proposal for Hummingbird Theatre Company 2022/2023 Season

OVERVIEW We are requesting $29,800 in Community Enhancement Funds to provide a full theatrical season offered to the citizens of Rancho Cordova. The program will be located in the City of Rancho Cordova at various locations, and will offer entertainment, culture and nightlife to the residents of Rancho Cordova. Young adults as well as older performers from all over the Sacramento and Rancho Cordova areas will participate in helping bring this vision to life.

This program serves two main purposes:

- To expand access to theater arts opportunities for local performers in dance, music, and acting with coaching from expert and professional actors, directors, and dance instructors supporting the development of artistic and technical skills; and
- To engage the community in artistic programming and civic engagement, culminating in performances open to the public.

BACKGROUND Hummingbird Theatre Company was established in Rancho Cordova in 2017 by longtime resident, Danielle Mercado. Mercado holds her Master of Arts in Theatre Directing from Roosevelt University- Chicago College of Performing Arts. Prior to that, she obtained her Bachelor of Arts degree in Theatre Arts from Sacramento State University. She also taught theatre and ran the Theatre Program at Bradshaw Christian School for six years. She began Hummingbird as a passion project, merely wanting to put on a Shakespeare in the Park style show at the amphitheater just 200 feet from her house. Her first year, she put on "A Midsummer Night's Dream" with 30 cast members, costumes, choreography, and over 800 people attending over two weekends. Hummingbird has grown since putting on other plays at the MACC in addition to a Musical Theatre Gala and a Traveling Children's Hospital Touring Show. With Community Enhancement Fund support, Hummingbird can sustain a broader community theatre presence and grow larger audiences.

PURPOSE The purpose of this project is to provide high-quality, professional level entertainment to the residents of Rancho Cordova, as well as make a name for our town artistically, which will increase arts engagement in our City. Hummingbird Theatre currently generates program funding by teaching classes at the Cordova Recreation & Park District and doing face-painting booths at community events. As a result, we must wait a long time in between performances in order to save the funds necessary to do a show. We cannot plan a season in advance as we do not have the means to finance it. We are also forced to do our sets, costumes, tech and other production needs as cheap as possible. This undermines the quality of our performances and can reflect poorly on our community's artistic abilities.

Our grant proposal will strengthen Rancho Cordova's only community theatre with a fully funded season. This would help attract high numbers of audiences, create exceptional quality performing arts, and entice some of the greater Sacramento area's best talent to come play

here in Rancho Cordova. We are also offering a variety of shows: A children's literary adaptation touring show, a musical theatre Broadway review show, and a historical drama. We can capture input from our audiences and assess what types of performances best fit the needs of our community.

PROGRAM ELEMENTS

"From the Page to the Stage" Literary Adaptation Children's Show- Nov/ Dec 2022
Classic children's stories and tales adapted and written for the stage. A one-hour touring show suited for all ages. Performed by actors 15+ who stay in character and interact with audience members.

Musical Theatre Broadway Review – April 2023
Our Musical Theatre Cabaret features talented performers singing, dancing, and acting out songs from musical theatre favorites, such as Phantom of the Opera, Hamilton, and Rent. This is a multi- weekend ticketed event that includes appetizers and drinks.

PROGRAM GOALS AND COMMUNITY BENEFITS

This program brings expanded access to performing arts and a broader vision to our community.

The goal is to model community performing arts programs in Folsom, El Dorado Hills and Elk Grove. Each of the cities listed above have established community and/or youth theatre programs that are well known and a huge draw to the public. By investing in live theatre programs, the City of Rancho Cordova sends a message that art is important to our community. With this investment, minds are changed and hearts won as they make their way into Rancho Cordova to see what we have created. Our city becomes more attractive to buyers, investors, and by reputation.

A city-funded theatre program shows support of artists, who will come from all over the Sacramento area in order to be involved with any of Hummingbird's productions. Their friends and family will come see them perform. By providing stipends for key roles, we can make for more talented casts and by default, better live shows. The community benefits from competition amongst actors for the best roles and we can afford to pick the best actors we can, therefore, making the experience better for everyone involved.

We will also have the means to provide our audiences with elevated sets, sound, lights, props, costumes, and special effects. This will enhance the experience as a whole and keep our fans coming back and clamoring for more. This will drive business into the community, as people coming here for rehearsal or shows will spend money on restaurants and recreational shopping.

Our productions will also use residents within Rancho Cordova as cast members, including youth and seniors. Our specialty is "bridging the gap" between high school and college, giving

young adults a purpose and sense of belonging in the theatre group. This creates a civically engaged youth that is not turning to more illicit means to fill their time. Seniors are the largest growing segment of our community. Providing opportunities for them to stay civically engaged brings vibrancy to our community and enhances their overall health.

Hummingbird Theatre Company will provide a summary report of the program goals and impacts. Our outcomes will include an assessment of:

- o Number of people participating and demographic information
- o Number of hours of additional coaching (acting, voice, movement, and technical theater skills)
- o Number of audience members attending
- o Number of volunteers and hours participating
- o Summary of outreach and marketing strategies
- o Summary report of lessons learned and any leveraged opportunities with partners

Production revenues and program savings will be used to support future community performances including additional dance, acting and voice coaching. The production photos will be used in promotions by program partners and bring greater exposure to the culturally diverse talent in the Rancho Cordova community. Program outcomes may also be used to advance other grant opportunities expanding on the benefits to the performing arts community.

PARTNER COMMITMENTS

Each of the partners and participating professionals will bring unique expertise to the production and the opportunity for actor and audience skill development.

The program is a collaborative effort between the City of Rancho Cordova, Cal Cap Studios, The Rancho Cordova Dept of Parks and Recreation, The Rancho Cordova City Library, theatre professionals from the greater Sacramento area, and Hummingbird Theatre Company.

The partners who helped develop the proposal and program for the 2020-21 season include: Rebecca Sloan (Executive Producer - Cordova Accelerated Performing Arts); Shelly Blanchard (Executive Director - Cordova Community Council); Diane Standring (Musical Director); Natalie Quilici (Choreographer); Tom Colburn (Sound Engineer); Danielle Mercado (Director); Sarah Feuerbach (Director/ Costumer); Beth Beam (Set and Lighting Designer); and Jennifer Reeves,

Tay Marchelle, Jarod Wiggins, Carolyn Duncan (Acting Company Members- Hummingbird Theatre Company).

Danielle Mercado is Hummingbird Theatre Company's Founder and Mainstage Director. She has been directing shows for over a decade and is an expert at working with all ages. She will lead the season as she has for many years, being the main contact for all communication and leading all productions. Mercado holds a Master of Arts in Directing from Roosevelt University Chicago College of Performing Arts, Bachelor of Arts in Theatre Arts Sacramento State University, Imagination Theatre Director Scholarship, Capital Stage Assistant Director- Sacramento State University Teaching Artist and Assistant Director, Miss Sacramento County Board of Directors, Bradshaw Christian School Drama Teacher and Director from 2010-2015.

Rebecca Sloan will provide management support including serving as liaison to the City, CRPD, FCUSD, SCUSD, and EGUSD. Sloan will assist with budget management, outcomes reporting, and community engagement/outreach to expand community participation. Sloan was the Executive Producer for the Cordova Accelerated Performing Arts youth summer program in 2019. Sloan also served as the Measure P (School) bond campaign co-chair and was a parent volunteer in the Folsom High School Theater Program from 2012-2016. Sloan has a Bachelor of Arts in Communications/ Minor in Drama and a Master of Arts in Public Policy and Administration.

FINANCIAL ASSUMPTIONS

Expenditures	Estimate	Total
Rehearsal Space	Assumes rehearsal space costs $25/hr. If we are able to secure donated space, the program will realize savings.	$6600
Production Space	Rental of the Village Green Park Amphitheater, Building 1 at the Hagan Community Center or a similarly-priced location for the Cabaret, Rancho Cordova Library Performance- Free	$4600
Staff		$11,000
Production Expenses		$5800
Miscellaneous Expenses		$1800
Estimated Expenses		$29,800
Revenues	Estimate	Total
City of Rancho Cordova Grant		$29,800
Donation of Rehearsal Space Assumes commitment of Cal Cap Studios or other vacant commercial space		*$10,000 in kind*
Donation of Producing/Advising by Rebecca Sloan	10 hours/month at $50/hour= $6,000	*$6,000 in kind*
Donation of Professional Services	Producing 400 hrs at $50/ hr = $20,000 Directing 310 hrs at $50/hr= $15,500 Dramaturgy 39 hrs at $50/hr= $1,950 Costuming 210 hrs at $50/hr= $10,500 Sewing 140 hrs at $25/hr= $3,500 Musical Directing 130 hrs at $50/hr= $6,500 Choreography 130 hrs at $50/hr= $6,500 Carpenter 70 hrs at $50/hr= $3,500 Set/Lighting Designer 75 hrs at $60/hr = $4,500 Skilled Building 212 hrs at $40/hr= $8,500 Fabricating Props/Sets 42 hrs at $60/hr= $2500 Acting $15/hr Musical- $2,700 per actor x 17 actors = $45,900 Children's Tour- $1,230 per actor x 14 actors = $17,220 TOTAL ACTING = $63,120	*$161,870 in kind*

	Sound Design/Engineer 300 hrs at $25/hr= $7500 Advertising 68 hrs at $50/hr= $3,400 Graphic Design 40 hrs at $60/hr= $2,400 Print 133 hrs at $18/hr= $2,400 Secretarial 130 hrs at $20/hr= $2,600 Tech/ Manual Labor 115 hrs at $20/hr= $2,300 per person 4 on Musical, 2 on all other productions = $6,200 TOTAL IN KIND = $171,070 - $9200 budgeted for Staff Stipends	
Production Revenues	(Ticket and concession sales) Musical Theatre Cabaret = Est. $6750 Children's Theatre Tour = $0 **Number will actually be less because of credit card and online processing fees* ***assumes ticket sales to support additional actor stipends and coaching classes.*	$6750*
Estimated Total Revenues		$36,550

Hummingbird Theatre Company Community Enhancement Fund proposal is flexible with multiple program elements across the 12-month year. The proposal includes individual program elements and individual budgets for each community production. The City can decide to grant funding for any or all program proposals. The planning funding is essential to growing a sustainable community theatre program supported by community volunteers and audiences. Ticket revenues are not assumed for now to create the flexibility to provide for free performances for the community or reduced-price tickets to help expand audiences. An assessment of audience demand would allow for better revenue forecasts for future year budgeting.

FINANCIAL BREAKDOWN

Project Name: Hummingbird Theatre Company 2022/2023 Season

PLANNING

Community engagement, partnership and relationship building including FCUSD, EGUSD, SCUSD, CRPD, Cordova Community Council, Arts Council, other Cordova community organizations and professional theatre community to establish performing arts presence in the Rancho Cordova community. The planning element includes the Managing Program Director working in collaboration with the Managing Program Producer. The producer's time is estimated at 120 hours/annually as an in-kind contribution.

Total Planning Costs: $6,000

"FROM PAGE TO STAGE" A TOURING CHILDREN'S SHOW

Nov/ Dec 2022 at touring locations in Rancho Cordova.

Expenditures		
Rehearsal Space	4 days a week, 3 hours a day for 10 weeks = 120 hrs. of rehearsal x $25 an hour = $2400	$3000
Production Space	Public show- $600	$600
Play rights	Free adaptations	$0
Staff	Producer: $800 Costumer: $500 Director: $500 Choreographer: $200 Master Carpenter: $200 Set Designer/Main Builder: $300 Actor Stipend: approx. 15 cast members at $100 = $1500	$4,000
Production expenses	Costume Budget: $500 Sets and Lights: $1000 Sound Engineer: $400 Props: $200	$2,100
Miscellaneous expenses	Advertising- signage, ads, photos, social media boosts- $300 Print: Programs, Posters, Scripts, Tickets $300	$600
Total Estimated Expenses		$ 10,300
Revenues		
Ticket Sales	0	0

"THE GREATEST SHOW" MUSICAL THEATRE CABARET

April 2023 at Building 1 at Hagan Community Center

Expenditures		
Rehearsal Space	4 days a week, 3 hours a day for 12 weeks= 144 hrs. of rehearsal x $25 an hour = $3600	$3600
Production Space		$4000
Musical Rights	Free as per Cabaret rules	0
Staff	Producer: $1000 Costumer: $800 Director: $800 Choreographer: $800 Musical Director: $800 Sound Engineer: $800 Actor Stipend: 10 at $200= $2000	$7000
Production Expenses	Costume Budget: $1500 Lights: $1500 Props: $300 Sets: $400	$3700
Miscellaneous Expenses	Advertising: $600 Print: $300 Music: $300	$1200
Total Estimated Expenditures		$19,500
Revenues		
Ticket Sales *6 performances of 75 audience members* *450 adults x $15 adults = $6750*		$6750

TOTAL SEASON COST $29,800

City Council can decide to fund any or all projects. We also ask for 5% of whatever budget allotted to compensate the Cordova Community Council to act as our Fiscal Agent and Non-Profit Partner.

TEAM

Danielle Mercado
Managing Program Director & Theatre Director
hummingbirdtheatreco@gmail.com
(530) 306-4182

Rebecca Thornton Sloan
Managing Program Producer
rebeccatsloan@gmail.com
(916) 798-0777

Shelly Blanchard
Fiscal agent and Non-Profit Partner
shelly@cordovacouncil.org
(916) 273-5704

Sarah Feuerbach
Costumer & Assistant Director
sarah.feuerbach@live.com
(916) 960-7733

Beth Beam
Set/Lighting Designer, Artisan and Fabricator
bethbeam@rocketmail.com
(530) 368-0808

Hummingbird Theatre Company Members

Jennifer Reeves
Tay Marchelle
Jarod Wiggins
Cole Winslow
Carolyn Duncan
Contact information available upon request

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Hummingbird Theatre Company 2022/2023 Season

Name of Organization: Hummingbird Theatre Company

Name of Applicant and Title: Danielle Mercado - Managing Program Director & Theatre Director

Applicant's Phone: 530-306-4182 **Applicant's Email:** hummingbirdtheatreco@gmail.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

Endorsement Given

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES

Date: 3/7/22

Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Application #16

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 3:25 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539020
IP Address:	174.50.166.106
Submission Date:	03/18/2022 3:24
Survey Time:	40 minutes, 10 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Cordova Youth Poet Laureate

Project Synopsis

The project would provide funds to the Cordova Community Council to further develop and conduct a Youth Poet Laureate program for the City of Rancho Cordova which is in alignment with the National Youth Poet Laureate program.

Project Description

A Youth Poet Laureate program meets several criteria used in evaluating CEIF projects, including: (1) supports arts and culture as a positive outlet for self-discovery; (2) Supports the growth and development of youth; (3) promotes opportunities for youth civic engagement; (4) provides an opportunity to increase community pride by showcasing outstanding youth; (5) encourages enhancement of education in the areas of literature and poetry; (6) and provides an enhancement to quality of life for youth in the community. Using a timeline that aligns with the National Youth Poet Laureate program, the CCCC would design a Rancho Cordova schedule and program which would eventually put local contestants in line to compete for the national title. The CCC inherited this project late in 2021-22, too late to engage in the national program. By extending the project into 2022-23, the CCC believes a local program can align with the curriculum and standards developed for the national program and launch with the cooperation of local schools and teen organizations. The National Youth Poet Laureate program celebrates the nation's top youth poets who are committed to artistic excellence, civic engagement and social justice. As part of this national framework, which CCC has joined, the national organization works with local youth literary arts organizations to identify and celebrate exceptional youth poets who use their voice to inspire change. In the early months of our investigation, it was discovered that Rancho Cordova youth literary groups and organizations are rare and therefore it will take some foundation-building to bring this to fruition. Extending into 2022-23 will allow CCC to plan for the work it will take to make this a success.

Project Team

Cordova Community Council, Shelly Blanchard, Executive Director Cheryl Gleason, Curator and Coordinator of the Mills Station Arts and Culture Center

Project Goals

Goal #1 To develop a year-long timeline and schedule of local outreach and activity that is in alignment with proven national models Metric: Success measured by participation Goal #2: Select a Rancho Cordova Youth Poet Laureate in an open process that is standardized to assure fairness and wide participation Metric: Success measured by participation Goal #3: Provide Rancho Cordova Youth Poet Laureate honoree with a reliable schedule of events at which to showcase talent Metric: Schedule of events is developed which assures exposure to a combined total of no less than 500 audience members Goal #4: Increase knowledge about Youth Poet Laureate activities among Rancho Cordova youth, setting the stage for future growth of the program Metric: Measured by participation in preliminary activities and competition events

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$10,000

Estimated Breakdown of Project Expenditures

$1000 National Urban Word Membership and training materials $2000 Publicity and outreach to community youth $2000 Guest speakers and leaders for training workshops, plus food and beverage and other support materials $1000 Prizes and materials for Rancho Cordova competitions $3500 Labor and administrative services, including planning and execution of activities, bookkeeping, monitoring and reporting. $500 Miscellaneous supplies and expenses

Matching Funds

No cash match is included in this project at this time. In-kind donations include: integration into CCC activities which would support the project, such as MACC integrations and public speaking opportunities; publicity assistance utilizing CCC communications tools; leadership and support of CCC staff in the development and delivery of the project.

Include Any Other Funding Contributions

None

Ongoing Operations and Maintenance Costs (if applicable)

None

Total Community Enhancement & Investment Funds Requested

$10,000

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

Unknown

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Unknown

Project Schedule, Timeliness and Adaptability

Project Schedule

July 2022: Finalize funding agreement August 2022: Begin outreach to high school students September 2022: Offer workshops and practice opportunities for local students October 2022: Competition and naming of one or more Rancho Cordova Youth Poet Laureates October-November 2022: Applications open for regional and national competition *** Four Youth Poet Laureate Regional Ambassadors will be chosen, one from each of the 4 regions of the nation, with Rancho Cordova located in the WEST region. They will be selected by a panel of judges. The candidate must have held the Youth Poet Laureate Title through an official National Youth Poet Laureate Program in their city to apply. November 2022: Performance at opening of 2022 State of the City event January 2023: Selections for National Poet Laureate Competition announced April 2023: National Youth Poet Laureate Commencement April 2023:

Performance at a MACC Student Art Event at the MACC, City Council meeting, Board of Supervisors meeting May 2023: Performance at iFest and Rancho Cordova Community Council Luncheon, possibly others.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This project timeline is driven by the national competition schedule and traditional school calendar. Assuming interest on the part of students, these calendars will dictate deadlines for completion.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

If public health orders make in-person events impossible, this project could be shifted to a virtual protocol, however participation rates would likely be affected and is therefore not preferred.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10191 Mills Station Road, the Mills Station Arts and Culture Center
Suite 117
Rancho Cordova, CA 95827

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Shelly Blanchard

Title

Executive Director

Submitting As

Non-Profit

Phone

9167174408

Email Address

shelly@cordovacouncil.org

Organization's Legal Name (if applicable)

Cordova Community Council Foundation

Mailing Address of Submitter

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Signatory's Name

Cordova Community Council Foundation Shelly Blanchard

Signatory's Title

Executive Director

Signatory's Phone

9167174408

Signatory's Email Address

shelly@cordovacouncil.org

Signatory's Mailing Address

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 8:52 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539390
IP Address:	24.193.76.62
Submission Date:	03/18/2022 8:51
Survey Time:	27 minutes, 31 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Department of Sound Valley Producer Pop-Ups

Project Synopsis

Department Of Sound provides opportunities to youth through music and podcasting education, recognizing access to music and sound to be a universal right, not a luxury. We seek to hold 10 Valley Producer Pop-Up events throughout Rancho Cordova to engage young people in the community through music and podcast production.

Project Description

Dept. Of Sound is a Sacramento-based 501(c)(3) providing opportunities to youth through music and podcasting education, focused on students aged 11-24 in under-serviced communities. We've served 5,000+ students globally through school programs and virtual, hybrid, and in-person offerings. As of 2022, we've partnered with 13 schools in 4 districts in Northern California and trained 25+ teachers to smoothly integrate our programs into classrooms. If funded, we aim to hold 10 Valley Producer Pop-up events in Rancho Cordova from July '22 - June '23 to engage community youth and introduce music and podcast production. We aim to join recurring events such as street fairs and festivals to connect with community members over time and build rapport with students. In addition to our existing ecosystem of partners, we seek to collaborate with other local organizations such as Unseen Heroes' NeighborGood Market, Robert Family Development Center Pop-Up Events, Anatolia Community Center, the Rancho Cordova iFest, Creative Kids Craft Fair, and the Chamber of Commerce Business Expo & Job Fair. Our Pop-Ups include Music Production Petting Zoos featuring musical instruments, audio equipment, and production software for participants of all ages to experiment with and create content. Pop-Ups also include Beat Showcases, in which students share their music and podcast projects with the community. We are also launching a Pop-Up series featuring Native Music Artists from the Yocha Dehe Wintun Nation showcasing traditional Indigenous music, instruments, culture, and contemporary expressions. The need for accessible music education is essential to foster youth development and strengthen communities. The benefits of music and sound include mental health benefits, improved social skills, attendance, and academic performance, and potential economic opportunities in the music and entertainment industry, as well as a sense of belonging for students through shared experiences of creativity.

Project Team

John Hamilton, Founder & Chief Executive Officer 15 years music industry experience, internationally touring DJ, producer & engineer with award-winning collaborators / Marquee, Webster Hall, Coachella, & Golden 1 Center / Valley One Entertainment, The DNA Project, Resident DJ & producer for the Sacramento Kings NBA Lori Divine, Chief Financial Officer 30 years CFO experience in not-for-profit organizations / The Child Abuse Prevention Council, The Boundless Freedom Project, WRMA, CalLife, SMUD Satya Celeste, Chief Operations Officer 15 years experience in not-for-profit management and content production / PRASAD Project, Lentil As Anything, SYDA Foundation, Kevin Anderson & Associates Benwar Shepard, Director of Education Award-winning music educator with 20 years experience teaching in schools, communities, and private lessons / Executive Director of Bigger Than Us Arts, Sacramento Youth Bands, Element Brass Band, Sacramento Brass Band Collective Sabina Palmieri, Marketing Lead 8 years experience in marketing and media spearheading digital content production, brand partnerships, digital marketing & social media / REVOLT TV, Next Level Marketing, RED Distribution Christian Avila, Multimedia Lead Emmy-nominated editor with 10 years of video production experience. Directed and produced short films and music videos for major hip hop artists. Produced videos at the Sacramento Kings. Worked on the Property Brothers Bigger Than Us Arts Sacramento-based Arts Education organization bringing music, visual, and performing arts directly to the community, working with schools, after-school programs, churches, neighborhood associations, community leaders, and other arts organizations The Library of MusicLandria Sacramento-based Musical Instrument Library, breaking down barriers to creativity through hands-on learning

Project Goals

Overall Goal: From July 2022 to June 2023 - Host 10 live Valley Producer Pop-Ups at existing community events in partnership with 2-3 local organizations and reach 1000-1500 people in the Rancho Cordova community. Impact numbers will be gathered at all events and participants will be encouraged to complete feedback surveys. Project Goal #1: By July 15, 2022 - Outreach potential partners with our existing local partners, Bigger Than Us Arts, Musiclandria, Yocha Dehe Wintun Nation, and SMUD. Contact 10 organizations, local fairs, festivals, or other existing events, including Unseen Heroes' NeighborGood Market, Robert Family Development Center Pop-Up Events, Anatolia Community Center, Rancho Cordova iFest, Creative Kids Craft Fair, and Chamber of Commerce Business Expo & Job Fair.. Project Goal #2: July - August 2022 - Confirm partnerships with 2-3 Rancho Cordova-based organizations and provide letters of support based on negotiated locations. Project Goal #3: August 2022 - June 2023 - Prior to each upcoming event, post social media campaigns geo-targeted to Rancho Cordova, aiming to reach 1500 community youth. Project Goal #4: August-November 2022 - Coordinate and hold 4 monthly events in Rancho Cordova, documenting attendance and community engagement, to be reported in December 2022 Project Goal #5: April-June 2023 - Coordinate and hold 6 bi-monthly events in Rancho Cordova, documenting attendance and community engagement, to be reported in June 2023 Project Goal #6: Engage with young people and introduce potential new students to music and podcast production while spreading awareness about the importance of music and arts in the Rancho Cordova community. Project Goal #7: August 2022-June 2023 - Connect with potential new partners aligned with our work, such as school administrators, media representatives, Sacramento Public Library representatives, local corporate sponsors and partners, and independent organizations, venues, and community centers.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

80,823.75

Estimated Breakdown of Project Expenditures

Live Event Coordination: 5 hrs per event @ $50/hr = $250 per event Live Event Music Teacher Staffing: 5 hrs per event, plus 1 hr prep and 1 hr breakdown @ $75/hr = $1575 per event Marketing & Social Media Outreach: 2 hrs per event @ $45 = $90 per event Event Registration Costs: estimated $350 per event Videography & Documentation: $300 per event Subtotal: $2565 per event Admin & Operations: $2565 x 25% = $641.25 per event Contingency: $3206.25 x 10% = $320.62 Subtotal: $3526.88 per event Total: $35,268.80 for 10 events in Rancho Cordova

Matching Funds

Blavatnik Family Foundation - $35,268.80

Include Any Other Funding Contributions

Yocha Dehe Wintun Nation Community Fund (confirmed) - $25,000 to Live Events SMUD (exact figure pending, confirmed 3-Year Partner) - $20,555 to Live Events

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$35,268.80

Is this a multi-year request?

Yes

Number of Years

2

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

We have received funds from the Blavatnik Family Foundation to support Valley Producer Pop-Ups for 2022 and 2023, as well as funds from our partner Yocha Dehe Wintun Nation for 2022. We have also requested funds for Live Events from our existing 3-year partner, SMUD, and we expect to hear a response before May 2022. While this project is viable as a single year request, the value of Valley Producer Pop-Ups is exponential when ongoing relationships can be forged with parents and community members and young people can be encouraged to participate in our free, in-depth programming.

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

November 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We anticipate raising additional funds through grants; city, county, state and federal stimulus funding; contracts with schools and community centers; and donations from local businesses and other sponsors. Given our proactive approach involving diverse revenue streams and our fundraising success in the past three years, we are confident that we will be able to raise sufficient funding for this project.

Project Schedule, Timeliness and Adaptability

Project Schedule

Year One: By July 15, 2022 - Outreach potential partners; contact 10 organizations, local fairs, festivals, or other existing events July - August 2022 - Confirm partnerships with 2-3 Rancho Cordova-based organizations and provide letters of support based on negotiated locations. August 2022 - June 2023 - Post social media campaigns geo-targeted to Rancho Cordova in the two weeks prior to each live event August-November 2022 - Coordinate and hold 4 monthly events in Rancho Cordova December 2022 - Report on first 4 Live Events April-June 2023 - Coordinate and hold 6 bi-monthly events in Rancho Cordova June 2023 - Report on final 6 Live Events for Year One Year Two: August 2022-June 2023 - Strengthen the community by connecting with potential new partners at Live Events, such as school administrators, media representatives, Sacramento Public Library representatives, local corporate sponsors and partners, and independent organizations, venues, and community centers. July 2023 - Confirm plans for Year Two events, preferably continuing with existing partners August 2023- June 2024 - Post social media campaigns geo-targeted to Rancho Cordova in the two weeks prior to each live event for Year Two August-November 2023 - Coordinate and hold 5 bi-monthly events in Rancho Cordova December 2023 - Report on first 5 Live Events April-June 2024 - Coordinate and hold 5 bi-monthly events in Rancho Cordova June 2024 - Report on final 5 Live Events for Year Two

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

We currently hold Valley Producer Pop-Ups throughout the Sacramento area, and based on our experience hosting these events in 2021 and 2022, we are confident we will be able to successfully coordinate and host 10 events per year in Rancho Cordova. Events are led by Director of Education, Benwar Shepard, with coordination support from the Department Of Sound team and teaching support from graduates of our Valley Producer Fellowship program and BTU Arts instructors. Footage from each event will also be used to create social media assets to assist in outreaching young people to attend future events.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

We design as much of our programming as possible to be flexible and responsive to changing COVID-19 protocols, including our Live Events. In 2020 in response to COVID-19, we began offering virtual resources and events, and we have since developed our hybrid model options for programming. We are intentionally planning the Rancho Cordova Valley Producer Pop-Up events based on when it is likely to be safer to have outdoor activities, as historically shown with COVID spikes occurring more in winter months with indoor activities. We currently implement and monitor standard COVID protocols for our events, including providing hand sanitizer for all participants before and after the Music Production Petting Zoos, socially distanced stations, masks, and sanitizing protocol for each station between participants. In the event we find ourselves unable to hold live events planning, we will continue to outreach and engage students in conjunction with our partners, and encourage students to participate in our regular Virtual Beat Showcases, specifically designed to connect and engage students COVID-lockdowns, and we would encourage them to participate in our online, self-paced music and podcast production course, the Valley Producer Program, which includes virtual office hours with music instructors.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2514 Chinatown Alley
Sacramento, CA 95816

Other Physical Addresses (if project/program is at multiple sites)

Specific sites for Valley Producer Pop-Ups yet to be determined with collaborators

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Satya Celeste

Title

COO

Submitting As

Non-Profit

Phone

8457017516

Email Address

grants@deptofsound.org

Organization's Legal Name (if applicable) Application #18

Department Of Sound

Mailing Address of Submitter

2514 Chinatown Alley
Sacramento, CA 95816

Signatory's Name

Mr. John Hamilton

Signatory's Title

Co-Founder & CEO

Signatory's Phone

9169962999

Signatory's Email Address

john.hamilton@deptofsound.org

Signatory's Mailing Address

2514 Chinatown Alley
Sacramento, CA 95816

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Tuesday, March 1, 2022 5:45:09 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1503148
IP Address: 75.45.47.55
Submission Date: 03/01/2022 5:45
Survey Time: 35 minutes, 57 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Festival of Knowledge: Basant Panchami

Project Synopsis

To celebrate and promote art and culture in our community and hence to bring harmony, unity and integrity among youth and adults.

Project Description

Festival of Knowledge: One whole day/night event, symbolizing and celebrating education, arts, and culture. Everybody is invited and welcome to attend. The event displays the talent that Kids and Adults have in various Arts and Cultural fields. This includes Essay Competition, Music, Dance Performances, Drawing Exhibitions, Public Speaking, External Artist Performances etc. This event provides a platform for kids and adults to showcase their talents and creativity. It boosts confidence to face the public and motivates them to improve and be more creative.

Project Team

Ankur consist of 4 Board Members as follows: Atanu De: President Sreetama Mookherjee: Vice President Shovick Bhattacharya: Treasurer Debashis Maity: Secretary. Apart from them there is a Community Council Member, and 22 Committee Members.

Project Goals

Goal 1: To organize cultural events and festivals for promoting culture, history and tradition. Goal 2: Provide entertainment, while building self confidence in kids. Goal 3: Bring Community Pride: Our event received an overwhelming popularity enticing other entities to show high interest in associating themselves with us. Goal 4: To foster creativity and literary skills.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$15,524

Estimated breakdown of project expenditures

1. Rental charges for the Event facility $1,534 2. External Artist for Musical Performance $1,000 3. Event Promotion (Flyers, Video, Photography, Website updates) $250 4. Event Setup (Decoration, Sound, Lighting, etc.) $750 5. Insurance Compliance $700 6. Festive Dinner $2,000 7. Festive Lunch and Snacks $1,100 8. Cultural Program $1,200 9. Storage and Delivery Logistics $5,500 10. Event Cleanup $500 11. COVID Specific Social Distancing and sanitizing Kits for ensuring Protection : $700 12. Live Streaming Technician and Zoom Subscription : $290

Matching Funds

$2000

Include any other funding contributions

$1000

Ongoing operations and maintenance costs (if applicable)

None

Total Community Enhancement & Investment Funds requested

$12,500

Is this a multiyear request?

No

How many years have you received funding for this project?

4

When will your request for funding sunset for ongoing programs?

We expect to request for funding sunset by year 2026. We are requesting only partial funding. Our events makes use of existing funding, resources, and partnerships, which includes: • Individual annual membership; • Corporate grants for volunteer hours and employee donation match; • Requesting grants; • Fundraising activities like Picnic etc. • . Advertisement revenue from Vendors, Business owners for providing space during our Cultural events and on our website.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will reach out to other local sponsors and organizations for funding. We will also seek corporate matching. We will organize fundraising events as well.

Project Schedule, Timeliness and Adaptability

Project Schedule

Event Rehearsals: September 2022 till January 2023. Festival of Knowledge Event: January 28th, 2023, Saturday.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

We have already started planning for Festival of Knowledge 2023. Rehearsals for cultural events will start around September 2022. To adhere to the timeliness of the project/event we have identified and formed committees with specific responsibilities. We have also reached out to Hagan Park Community Center to reserve their facility for the specific date (Jan 28th 2023). Keeping the pandemic situation(if any) in mind, we will ensure to follow the state/county guidelines at the time of the event.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

As stated above (Timeliness Section), if ANKUR cannot hold the event indoor due to COVID or any other restrictions, then we will do the following : 1. Have virtual workshops over Zoom with our Volunteers and Cultural Team for rehearsals. 2. Invest on pre-recorded programs leveraging Quality Recording and Live Digital Tools. 3. Multiple Vendors along with Volunteers will be engaged so that we can produce a quality virtual program. From 2020 we have had a great experience in conducting our events both in-person and virtual. We will use best practices and lessons learned from these events to ensure that we continue to hold our events per City, County, State and Federal health and safety guidelines. Alternatively if California Public Health and/or Sacramento County Health Orders permit then we have also planned to have the event outdoor using Open Auditorium and/or Social Distancing. At this moment we are keeping all our options open and will plan accordingly.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

Hagan Community Center
2197 Chase Dr
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Applicant and Signatory

Application submitted by

Sreetama Mookherjee

Title

Vice President

Submitting as

Non-Profit

Phone

9165243056

Email

sreetama.mookherjee@gmail.com

Organization's legal name, if applicable

Mailing Address of Submitter

6601 Coyle Avenue
Carmichael, CALIFORNIA 95608

Signatory's Name

Mr. Atanu De

Signatory's Title

Application #19

President

Signatory's Phone

2012868507

Signatory's Email Address

rememberatanu@gmail.com

Signatory's Mailing Address

6601 Coyle Avenue
Carmichael, CA 95608

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

From: Ankur Sacramento
To: CEIFGrants
Cc: Atanu De; Sreetama Bhattacharyya; Stacy Delaney; Randi Kay Stephens
Subject: Special Request From Ankur Inc. for a higher amount of Grant for Financial Year 2022 - 2023
Date: Friday, March 4, 2022 2:06:01 PM

Hello

On behalf of Ankur Inc.(a non-profit organization), I would like to thank the "City of Rancho Cordova" for supporting us for our noble cause over the past several years. With your continuous help and support, we are truly encouraged to continue our mission of fostering the skills in the area of arts and culture, hence imparting positivity, harmony and creativity among kids, youth and adults.

In this regard, I would like to bring to your kind attention that in recent times, during the pandemic, we lost a few members who were big sponsors, and as well as our source of funding from a few local sponsors got challenged. Besides that, due to the recent spike in inflation, we are experiencing a significant rise in expenses across all categories. While we will continue reaching other sources (local sponsors, members and corporates), we would like to sincerely request you to please evaluate if a higher amount of grant can be arranged for the upcoming financial year 2022 - 2023. If you require any details to justify this additional funding, we will be happy to provide the details.

Looking forward to your consideration on this request. Thank you once again, in advance!

Atanu De
President - Ankur Inc.
http://www.ankurinc.org

Support ANKUR by shopping at Amazon:
*If you are using Amazon for your personal purchases, request you to bookmark and use Amazon Smile (URL: **https://smile.amazon.com/ch/26-2948609**) and designate Ankur Inc as choice of charity. Your donation can make a difference.*

Ankur is your organization and Ankur board continues to seek your feedback on what we do well and areas of improvements to build a stronger organization. If you have any question, comment, concern or feedback, please contact any Ankur Board member or email to ankursacpr08@gmail.com

CONFIDENTIALITY NOTICE: This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, distribution, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication. Thank you.

DISCLAIMER: As applicable within the context of this email, Ankur Inc will try its best, and in good faith, to inform all the email recipients regarding any event or opportunity about art, culture, education, internship or employment, that may be of interest to the community at large. However, none of the members or anyone else connected with Ankur Inc, in any way

whatsoever, can be responsible for your use of the information contained in or linked from these web pages/URLs, and the actual content of the external web pages.

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Festival Of Knowledge - Basant Panchami

Name of Organization: Ankur Inc.

Name of Applicant and Title: Sreetama Mookherjee - Vice President

Applicant's Phone: 9165243056 **Applicant's Email:** ankursacpr08@gmail.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

(Endorsement Given)

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA James

Date: 3/7/22

Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 10, 2022 9:56 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1523410
IP Address:	98.224.81.77
Submission Date:	03/10/2022 9:56
Survey Time:	21 minutes, 59 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Marathi Mandal Sacramento - Ganesh Festival

Project Synopsis

Marathi Mandal Sacramento (MMSAC) is an initiative to bring together Marathi speaking families in the Greater Sacramento area. We are a non-profit and charitable organization. Our mission is to celebrate the Maharashtrian culture (Maharashtra is a state in India), its traditions and customs amongst the community in Sacramento and surrounding areas. We achieve this by organizing regular activities and events that will reflect the spirit of our community. Typically in a calendar year, MMSAC celebrate 5 main events.

Project Description

Ganesh Festival is an auspicious Hindu festival which generally falls in mid-August to September. It marks the birthday of the beloved elephant-headed Lord Ganesha. Ganesha is known as the God of wealth, sciences, knowledge, wisdom and prosperity, and that's why most Hindus remember him and seek his blessings before starting any important work

Project Team

MMSAC Executive Committee - Hrishikesh Shende (President) - Prashant Mengshetti (Secretary) - Pritam Bhosle (Joint Secretary) - Shilpa Joshi (Treasurer)

Project Goals

1. Celebrate the Ganesh Festival in a location where we can gather and celebrate this auspicious occasion 2. Location where we can hang some decorations and serve food 3. Bring together the Marathi community and celebrate the Maharashtrian culture NOTE: MMSAC has previously organized this celebration in Rancho Cordova in the past, therefore would like to seek the same location. The venue was loved by the community members.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

estimated 2000$

Estimated breakdown of project expenditures

$1200 for food $800 for decorations

Matching Funds

None

Include any other funding contributions

MMSAC savings from previous year

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$3000

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

N/A

Project Schedule, Timeliness and Adaptability

Project Schedule

August or September

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Project is only for a day

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, if there are restrictions due to covid, we will do it virtually

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

2729 prospect park dr
rancho cordova, CA 95670

Other physical addresses if project/program is at multiple sites

Application #20

N/A

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Shilpa Joshi

Title

Treasure, MMSac

Submitting as

Non-Profit

Phone

9199497597

Email

mmsac.treasurer@gmail.com

Organization's legal name, if applicable

Marathi Mandal Sacramento

Mailing Address of Submitter

636 Henry Street
Folsom, CA 95630

Signatory's Name

Hrishikesh Shende

Signatory's Title

President, MMSac

Signatory's Phone

2088502010

Signatory's Email Address

mmsac.committee@gmail.com

Signatory's Mailing Address

4687 Flagstaff Dr
Folsom, CA 95630

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant

to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Sunday, March 13, 2022 4:00 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1527039
IP Address:	165.253.34.70
Submission Date:	03/13/2022 3:59
Survey Time:	14 minutes, 21 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Festival of Flowers (Multicultural Integration Project)

Project Synopsis

Thank you for the opportunity to apply for the community enhancement fund grants program for the fiscal year 2022/2023. City of Rancho Cordova support to the Festival of Flowers will contribute towards achieving our common goal of promoting the City of Rancho Cordova image in terms community pride, Civic engagement, and quality of life. This festival became a huge cultural attraction in the region and making the city as a cultural Capitol of the region with multicultural integration

Project Description

Sacramento Telangana Association is a Non-Profit organization committed to persevere and promote the culture and arts of India and bridge the gap between the multiethnic and integrate the multiple cultures into the community by active civic engagement. Every year during the September - October timeframe Sacramento Telangana Association organizes the festival called "Bathukamma"-Festival of Flowers which celebrates the inherent relationship between earth, water, plants, flowers, and the human beings in a community to integrate and live-in harmony. The festival heralds the beauty of nature, collective spirit of people, the indomitable spirit of women folks and the scientific approach of the agrarian people towards preserving the resources of nature in a celebrative way. Sacramento Telangana Association request community enhancement grant funds to celebrate festival of flowers. This festival encourages and helping active civic engagement and provides a strong sense of place for residents through the arts, music, culture, education, and entertainment and in last 6 years this festival become medium of integration for different cultures into the community. For the year 2022 we are partnering with other nonprofits and faith organizations for wider community outreach. In the last 7 years during celebration, we were able to invite, attract approximately ~12000 community members to participate and to part of this festival from different ethnic and culture backgrounds, which includes elected representatives, public officials, business leaders and community leaders and volunteers. The Measure H grants would allow us to help progress, educate and organize this unique festival in the center of the City of Rancho Cordova. Bathukamma –Festival of Flowers can become major touristic attractions and promote the image of a City of Rancho Cordova as a cultural capitol.

Project Team

Application #21

Sacramento Telangana Association board has leadership and skill to organize the event with help of dedicated community volunteers, our team contains members from various professionals, doctors, business owners, educators, and community leaders. 1. Satish Pasupulati – Sr. Engineer/Entrepreneur/Community Leader-Founder 2. Laxma Legala – IT Professional/Community Volunteer 3. Anil Reddy – Community Volunteer 4. Srinivas Reddy Kumbam –Entrepreneur 5. Srinath Babu – Sr.Engineer,State of California 6. Dr.Venu Bellum, MD Kaiserpermanete, Rancho Cordova 7. Dr.Nataraj Podishetty - Plant Sciences ,UC Davis

Project Goals

Festival of Flowers –Bathukamma, it's our goal to integrate different cultures and ethnicities of Greater Sacramento region by providing experience of arts, music, culture, education and. This festival is connecting the different sectors of the community by active civic engagement and provides a strong sense of place for residents as a community pride and promoting the community relations through the arts, music, culture, education, and entertainment. This festival is an open event and free for all the community members, it indeed remains a celebration of the women's glory the symbolic women power. This festival is the dedication to worship womanhood and nature's system through valuing the flowers. It's important to educate our future generations about different cultures, traditions, and diverse world. The world is becoming increasingly small and cultural understanding is important. Bathukamma festival helps our community children learn to accept and respect different cultures and traditions of other countries which makes them better citizens. This festival includes several exciting programs like Dancing, Art exhibition, educational workshop on making bathukamma and tasting authentic Telangana food which will be served free. This festival support Rancho Cordova community by bringing visitors from all over Sacramento area cities Folsom, Roseville, Rocklin and from Stockton, Yuba city, Fremont, San Ramon, Fresno, Modesto, and Fairfield. Which will bring new revenue to the economy and create new opportunities, partnerships to improve Rancho Cordova's quality of life.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

Total Project Cost: $25000

Estimated Breakdown of Project Expenditures

Expense Estimated breakdown Forecast -2022 Rental for Event facility $4000 Event promotion $3,000 Event Setup $4,000 Educational workshop $1,000 Festive Dinner $12,000 Cleaning after the event $1000 Total Project Cost $25000 Matching Funds $13000 Measure H grant request $12000

Matching Funds

Matching Funds: $13000

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

12000

Is this a multi-year request?

No

How many years have you received funding for this project?

4

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Organization/Community Members Contributions

Application #21

Project Schedule, Timeliness and Adaptability

Project Schedule

September 24/25th 2022 3PM -10PM

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

N/A

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

yes

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Navigator Elementary School
10679 Bear Hollow Dr
RNCHO CORDOVA, CA Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

CRPD Parks

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a park/park facility
Yes, at a public K-12 school site

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Anil Kondakrindi

Title

Co Founder

Submitting As

Non-Profit

Phone

9165885900

Email Address

anilkondakrindi@gmail.com

Organization's Legal Name (if applicable)

Sacramento Telangana Association (STA)

Mailing Address of Submitter

3722 Rockdale Dr
Rancho Cordova, CA 95742

Signatory's Name

Mr Anil kondakrindi

Signatory's Title

Co Founder

Signatory's Phone

9165885900

Signatory's Email Address

anilkondakrindi@gmail.com

Signatory's Mailing Address

3722 Rockdale Dr
RNCHO CORDOVA, CA 95742-8078

Attach Any Additional Documents Here

Measure H-Festival of Flowers-Multicultural Integration Project-2022.docx

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

March 04, 2022
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Dear Stacy Delaney,

Thank you for the opportunity to apply for the community enhancement fund grants program for the fiscal year 2022/2023. City of Rancho Cordova support to the Festival of Flowers will contribute towards achieving our common goal of promoting the City of Rancho Cordova image in terms community pride, Civic engagement, and quality of life. This festival became a huge cultural attraction in the region and making the city as a cultural Capitol of the region with multicultural integration.

I would like to invite to all our fellow citizens of community to participate in our yearly cultural art Festival -Festival of Flowers.

Thank You for your consideration, should you have any question please feel free to contact me at 916-588-5900.

Sincerely,
Anil Reddy
Co -Founder
Sacramento Telangana Association

Application #21

Measure H Grant Application City of Rancho Cordova

Fiscal Year 2022-2023

Name of the Organization	: Sacramento Telangana Association (STA)
501(c) Number	: 46-5556147
Address	: 3722 Rockdale Dr, Rancho Cordova, CA 95742
Phone no	: 916-588-5900
Email	: anilkondakrindi@gmail.com
Contact Person	: Anil Reddy, Cofounder
Total Project Cost -2022	: **$25000**
Matching Funds -2022	: **$13000**
Measure H Grant Amount Requested -2022	: **$12000**
Project Title	: Festival of Flowers (Multicultural Integration Project)
Project Timeframe	: September 24th or 25Th 2022
Project Location	: Navigator Elementary School/CRPD Parks

Project Description

Sacramento Telangana Association is a Non-Profit organization committed to persevere and promote the culture and arts of India and bridge the gap between the multiethnic and integrate the multiple cultures into the community by active civic engagement.

Every year during the September - October timeframe Sacramento Telangana Association organizes the festival called "Bathukamma"-Festival of Flowers which celebrates the inherent relationship between earth, water, plants, flowers, and the human beings in a community to integrate and live-in harmony.

The festival heralds the beauty of nature, collective spirit of people, the indomitable spirit of women folks and the scientific approach of the agrarian people towards preserving the resources of nature in a celebrative way.

Sacramento Telangana Association request community enhancement grant funds to celebrate festival of flowers. This festival encourages and helping active civic engagement and provides a strong sense of place for residents through the arts, music, culture, education, and entertainment and in last 6 years this festival become medium of integration for different cultures into the community.

For the year 2022 we are partnering with other nonprofits and faith organizations for wider community outreach.

In the last 7 years during celebration, we were able to invite, attract approximately ~12000 community members to participate and to part of this festival from different ethnic and culture backgrounds, which includes elected representatives, public officials, business leaders and community leaders and volunteers. The Measure H grants would allow us to help progress, educate and organize this unique festival in the center of the City of Rancho Cordova.

Application #21

Bathukamma –Festival of Flowers can become major touristic attractions and promote the image of a City of Rancho Cordova as a cultural capitol.

Project Team

Sacramento Telangana Association board has leadership and skill to organize the event with help of dedicated community volunteers, our team contains members from various professionals, doctors, business owners, educators, and community leaders.

1. Satish Pasupulati – Sr. Engineer/Entrepreneur/Community Leader-Founder
2. Laxma Legala – IT Professional/Community Volunteer
3. Anil Reddy – Community Volunteer
4. Srinivas Reddy Kumbam –Entrepreneur
5. Srinath Babu – Sr.Engineer,State of California
6. Dr.Venu Bellum, MD Kaiserpermanete, Rancho Cordova
7. Dr.Nataraj Podishetty - Plant Sciences ,UC Davis

Project Goals

Festival of Flowers –Bathukamma, it's our goal to integrate different cultures and ethnicities of Greater Sacramento region by providing experience of arts, music, culture, education and. This festival is connecting the different sectors of the community by active civic engagement and provides a strong sense of place for residents as a community pride and promoting the community relations through the arts, music, culture, education, and entertainment.

This festival is an open event and free for all the community members, it indeed remains a celebration of the women's glory the symbolic women power. This festival is the dedication to worship womanhood and nature's system through valuing the flowers.

It's important to educate our future generations about different cultures, traditions, and diverse world. The world is becoming increasingly small and cultural understanding is important. Bathukamma festival helps our community children learn to accept and respect different cultures and traditions of other countries which makes them better citizens. This festival includes several exciting programs like Dancing, Art exhibition, educational workshop on making bathukamma and tasting authentic Telangana food which will be served free.

This festival support Rancho Cordova community by bringing visitors from all over Sacramento area cities Folsom, Roseville, Rocklin and from Stockton, Yuba city, Fremont, San Ramon, Fresno, Modesto, and Fairfield. Which will bring new revenue to the economy and create new opportunities, partnerships to improve Rancho Cordova's quality of life.

Project Cost

Estimated breakdown of project expenditures for 2022:

Total Project Cost: $25000
Matching Funds: $13000
Total Measure H Funds request for 2020: $12000

Expense	Estimated breakdown Forecast -2022
Rental for Event facility	$4000
Event promotion	$3,000
Event Setup	$4,000
Educational workshop	$1,000
Festive Dinner	$12,000
Cleaning after the event	$1000
Total Project Cost	**$25000**
Matching Funds	**$13000**
Measure H grant request	**$12000**

Project Schedule
September 24/25th 2022 3PM -10PM

Project Location
STA requested endorsement from FCUSD to take place at a public K-12 school site in Rancho Cordova City. An alternate back up location will be on one of the CRPD parks within the City of Rancho Cordova limits.

Financial Sustainability
The continued success and growth of Festival of Flowers means that places City of Rancho Cordova as cultural capital of this region and it provides the quality of life, since last 5 years our active community engagement increasing, and we can attract more business community with generous sponsorships.

Sacramento Telangana Association (STA) is developing a sustainability plan, considering the success we have experienced in last 6 years in terms of membership and events we conducted year over year which helped to forecast the anticipated growth and expansion for future.

STA Board of Directors, trustees, advisory council members and other core members of the organization developed plan and strategies helping organization with financially stability with steady source funds from various like sponsorships from business community, member community and other tickets-based events.

1. STA board of trustees contributed total of $10000 for organization.
2. STA will collect membership fee $100 per core members for 2 years terms from 50+ members
3. Enhance/Expand Non-Profit volunteer grants ($6000) from corporation like Intel, HP, Esurance, and other technology business.

4. STA will expand our vendor/sponsor base contributions ($13000) for the active marketing purpose for sponsoring the event
5. STA is committed to expand the community outreach contributions with our members and the surrounding metropolitan area
6. STA will enhance the private partnerships with corporations who are actively supporting the Non-Profit Organizations.

Sacramento Telangana Association strongly believe with the above strategy we will be self-sustainable financially in celebrating the festival of flowers in the future.

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Festival of Flowers

Name of Organization: Sacramento Telangana Assocaition

Name of Applicant and Title: Laxma Reddy Legala, President

Applicant's Phone: (916)743 6768 **Applicant's Email:** mailtolaxma@gmail.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only Yes

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Festival of Flowers/International Kite Festival/Festival of Colors

Name of Organization: Sacramento Telangana Association

Name of Applicant and Title: Laxma Reddy Legala, President

Applicant's Phone: (916)743 6768 **Applicant's Email:** mailtolaxma@gmail.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

(Endorsement Given)

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES

Date: 3/7/22

Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Sunday, March 13, 2022 4:09 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1527051
IP Address:	165.253.34.70
Submission Date:	03/13/2022 4:08
Survey Time:	7 minutes, 37 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

International Kite Festival(iKFest)

Project Synopsis

International Kite festival to the city of Rancho Cordova, across the world and USA many cities have similar festivals held annually and this kite festival attracts kite flyers from all over the world.

Project Description

Sacramento Telangana Association (STA)and Rancho Cordova Travel and Tourism (RCTT) will be partnering in introducing first ever International Kite Festival to the City of Rancho Cordova for the year 2023. We would like to bring a new International Kite festival to the city of Rancho Cordova, across the world and USA many cities have similar festivals held annually and this kite festival attracts kite flyers from all over the world. There are several internationally recognized and respected kite festivals taking place in the USA. From those voted best kite festivals in the world by Kite Trade Association International such as the Washington State International Kite Festival, to those attracting hundreds of thousands of kite enthusiasts every year, there are more kite festivals in the USA than most realize. This will be our first International Kite festival can include largest kite, smallest kite, most unique kite, highest flying kite, and most colorful kite. STA will be partnering with RCTT in promoting and working in collaboration with an objective of promoting tourism to the city of Rancho Cordova. We are anticipating greater level enthusiasm and participation. International Kite Festival is a free event open to all ages and planning to provide light snacks and refreshments for the participants.

Project Team

STA and RCTT board have leadership and skill to organize the event with help of dedicated community volunteers, our team contains members from various professionals, doctors, business owners, educators, and community leaders. 1. Marc Sapoznik – RCTT Executive Director 2. Anil Kondakrindi – Community Organizer 3. Srinath Babu -STA Board member 4. Srinivas Reddy Kumbam – Entrepreneur 5. Satish Pasupulati – Sr. Engineer/Entrepreneur/Community leader 6. Dr.Venu Bellum – Kaiser Permanente, Rancho Cordova 7. Shantha Gadam – STA Women's Committee Chairman 8. Laxma Legala – STA Board of Trustee

Project Goals

Our goal is to have 200+ colorful kite flies in City which can provide us platform to show the creativity and bringing community together. Kiting is truly a universal activity, limited only by the imagination International Kite festival helps the community to

introduce people to the fun of kite flying, the rich history of kites, the stunning artistry of kite makers, and how kites can be used as educational tools. In partnership with Rancho Cordova Travel and Tourism with an objective of promoting tourism to the city of Rancho Cordova. 1. Helps to build cultural connections 2. Community Engagement 3. Education and Entertainment

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$3550

Estimated Breakdown of Project Expenditures

Expense Estimated Expenditure Breakdown -2022 Rental for Event Facility CRPD Park $500 Kites and Spools $1500 Refreshments $1250 Event Promotion and Marketing $ 300 Total Project Cost $3550 Matching Funds $550 Measure H grant request $3000 STA will provide the matching funds of $550

Matching Funds

$550

Include Any Other Funding Contributions

$550

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

3000

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Community members contribution

Project Schedule, Timeliness and Adaptability

Project Schedule

January 15th ,2023

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

January 15th ,2023

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

yes

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Argonaut Park
11825 Herodian Dr
RNCHO CORDOVA, CA 95742-8078

Other Physical Addresses (if project/program is at multiple sites)

CRPD Parks

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a park/park facility

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Anil Kondakrindi

Title

Submitting As

Non-Profit

Phone

9165885900

Email Address

anilkondakrindi@gmail.com

Organization's Legal Name (if applicable)

Sacramento Telangana Association (STA)

Mailing Address of Submitter

3722 Rockdale Dr
Rancho Cordova, CA 95742

Signatory's Name

Mr Anil kondakrindi

Signatory's Title

Co Founder

Signatory's Phone

9165885900

Signatory's Email Address

anilkondakrindi@gmail.com

Application #22

Signatory's Mailing Address

3722 Rockdale Dr
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Community Enhancement Fund-International Kite Festival-2022.docx

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Measure H Grant Application City of Rancho Cordova

Fiscal Year 2022-2023

Name of the Organization	: Sacramento Telangana Association (STA)
501(c) Number	: 46-5556147 -STA
Address	: 3722 Rockdale Dr, CA 95742
Email	: anilkondakrindi@gmail.com
Contact Person	: AnilReddy,Co-Founder – STA
Total Project Cost	: **$3550**
Matching Funds	: **$550**
Measure H Grant Amount Requested	: **$3000**
Project Title	: International Kite Festival(iKFest)
Project Timeframe	: January 15th ,2023
Project Location	: CRPD Parks in Rancho Cordova

Project Description

Sacramento Telangana Association (STA)and Rancho Cordova Travel and Tourism (RCTT) will be partnering in introducing first ever International Kite Festival to the City of Rancho Cordova for the year 2023.

We would like to bring a new International Kite festival to the city of Rancho Cordova, across the world and USA many cities have similar festivals held annually and this kite festival attracts kite flyers from all over the world.

There are several internationally recognized and respected kite festivals taking place in the USA. From those voted best kite festivals in the world by Kite Trade Association International such as the Washington State International Kite Festival, to those attracting hundreds of thousands of kite enthusiasts every year, there are more kite festivals in the USA than most realize.

This will be our first International Kite festival can include largest kite, smallest kite, most unique kite, highest flying kite, and most colorful kite.

STA will be partnering with RCTT in promoting and working in collaboration with an objective of promoting tourism to the city of Rancho Cordova. We are anticipating greater level enthusiasm and participation.

International Kite Festival is a free event open to all ages and planning to provide light snacks and refreshments for the participants.

Project Team

STA and RCTT board have leadership and skill to organize the event with help of dedicated community volunteers, our team contains members from various professionals, doctors, business owners, educators, and community leaders.

1. Marc Sapoznik – RCTT Executive Director
2. Anil Kondakrindi – Community Organizer
3. Srinath Babu -STA Board member
4. Srinivas Reddy Kumbam –Entrepreneur
5. Satish Pasupulati – Sr. Engineer/Entrepreneur/Community leader
6. Dr.Venu Bellum – Kaiser Permanente, Rancho Cordova
7. Shantha Gadam – STA Women's Committee Chairman
8. Laxma Legala – STA Board of Trustee

Project Goals

Our goal is to have 200+ colorful kite flies in City which can provide us platform to show the creativity and bringing community together. Kiting is truly a universal activity, limited only by the imagination

International Kite festival helps the community to introduce people to the fun of kite flying, the rich history of kites, the stunning artistry of kite makers, and how kites can be used as educational tools.

In partnership with Rancho Cordova Travel and Tourism with an objective of promoting tourism to the city of Rancho Cordova.

1. Helps to build cultural connections
2. Community Engagement
3. Education and Entertainment

Project Cost

Expense	Estimated Expenditure Breakdown - 2022
Rental for Event Facility CRPD Park	$500
Kites and Spools	$1500
Refreshments	$1250
Event Promotion and Marketing	$ 300
Total Project Cost	**$3550**
Matching Funds	$550
Measure H grant request	**$3000**
STA will provide the matching funds of $550	

Project Schedule

January 15th -2023

Project Location

Any available CRPD parks with in the City of Rancho Cordova limits

Reference below of other cities in USA

Top 10 Kite Festivals in the USA(http://www.topeventsusa.com/top-kite-festivals-USA.html)

California Kite Festivals List of Events (http://www.seecalifornia.com/festivals/california-kite-festivals.html)

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Festival of Flowers/International Kite Festival/Festival of Colors

Name of Organization: Sacramento Telangana Association

Name of Applicant and Title: Laxma Reddy Legala, President

Applicant's Phone: (916)743 6768 **Applicant's Email:** mailtolaxma@gmail.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

(Endorsement Given)

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES

Date: 3/7/22

Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Application #22

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Sunday, March 13, 2022 4:23 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1527063
IP Address:	165.253.34.70
Submission Date:	03/13/2022 4:23
Survey Time:	13 minutes, 51 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Festival of Colors (Holi)

Project Synopsis

Festival of Colors(Holi) for the year 2023, this festival marks the arrival of spring

Project Description

Sacramento Telangana Association(STA) will be partnering with WeEmbrace and Other community organizations In celebrating the Festival of Colors(Holi) for the year 2023, this festival marks the arrival of spring and is a celebration of fertility, color, and love, mostly we see this festival as a time for people to get together and enjoy themselves with friends, families and communities without any concern for caste, creed region, religion, men, women, children's or ethnicity of the community which intern connects the communities of the City of Rancho Cordova. During 2018,2019,2022 this festival was celebrated with help of City of Rancho Cordova community enhancement funds, this was well received by the community and generated huge enthusiasm and encouragement. STA active partnership with WeEMBRACE serving Families of Individuals with disabilities is helping us to reaching to greater community participation, especially children in our community and for 2023 we are projecting there is greater level enthusiasm and participation. This is first time we are successfully collaborating and partnership with other community organizations and showing the results how successfully we can unify and bring the community on to a one unifying platform to promote the great civic engagement and broader community outreach.

Project Team

STA and WeEmbrace board have leadership and skill to organize the event with help of dedicated community volunteers, our team contains members from various professionals, doctors, business owners, educators, and community leaders. 1. Anil Kondakrindi – Community Organizer 2. Meena Kalyansundaram- WeEmnrace 3. Srinath Babu -STA Board member 4. Srinivas Reddy Kumbam – Entrepreneur 5. Satish Pasupulati – Sr. Engineer/Entrepreneur/Community leader 6. Dr.Venu Bellum – Kaiser Permanente, Rancho Cordova 7. Shantha Gadam – STA Women's Committee Chairman 8. Laxma Legala – STA Board of Trustee

Project Goals

City of Rancho Cordova sponsoring this color festival as part of community enhancement funds for last 3 years, during festival there were lot of kids participated and enjoyed this event at Stone Creek Park, Capitol Village and Children's Museum these years, with the

past experiences we strongly believe this festival reaching more kids in the community in providing the entertainment and education to next generations. In partnership with WeEmnrace we can spark a passion for life-long learning, entertainment, and education. This event provides a venue where children's will have opportunity to explore to the new environment and exercise both their bodies and their minds 1. Helps to build cultural connections 2. offers opportunities for children to play with colors which will help in fulfilling the sensory needs which are very important for kids over all development. 3. Community Engagement 4. Education and Entertainment This festival support Rancho Cordova community by bringing visitors from all over Sacramento area cities Folsom, Roseville, Rocklin and from Stockton, Yuba city, Fremont, San Ramon, Fresno, Modesto and Fairfield. Which will bring new revenue to the economy and create new opportunities, partnerships to improve Rancho Cordova's quality of life.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$3500

Estimated Breakdown of Project Expenditures

Expense Estimated Expenditure Breakdown -2023 Rental for Event Facility CRPD Park $500 Event promotion,Setup,Materials and Supplies $1500 Refreshments $1250 Cleaning after the event $250 Total Project Cost $3500 Matching Funds $500 Measure H grant request $3000 STA will provide the matching funds of $500

Matching Funds

500

Include Any Other Funding Contributions

500

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

3000

Is this a multi-year request?

No

How many years have you received funding for this project?

2

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Community members Contributions

Project Schedule, Timeliness and Adaptability

Project Schedule

March 11th -2023

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

March 11th -2023

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

yes

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

The Village Green
3141 Bridgeway Dr,
RNCHO CORDOVA, CA 95742-8078

Other Physical Addresses (if project/program is at multiple sites)

CRPD Parks

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a park/park facility

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Anil Kondakrindi

Title

Co Founder

Submitting As

Non-Profit

Phone

9165885900

Email Address

anilkondakrindi@gmail.com

Organization's Legal Name (if applicable)

Sacramento Telangana Association (STA)

Mailing Address of Submitter

3722 Rockdale Dr
Rancho Cordova, CA 95742

Signatory's Name

Mr Anil kondakrindi

Signatory's Title

Co Founder

Signatory's Phone

9165885900

Signatory's Email Address

anilkondakrindi@gmail.com

Signatory's Mailing Address

3722 Rockdale Dr
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Community Enhancement Fund-Festival of Colors -Holi-2022.docx

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Measure H Grant Application City of Rancho Cordova

Fiscal Year 2022-2023

Name of the Organization	: Sacramento Telangana Association (STA)
501(c) Number	: 46-5556147 -STA
Address	: 3722 Rockdale Dr, CA 95742-STA
Phone no	: Anil- 916-588-5900
Email	: anilkondakrindi@gmail.com
Contact Person	: AnilReddy,Co-Founder - STA
Total Project Cost	: **$3500**
Matching Funds	: **$500**
Measure H Grant Amount Requested	: **$3000**
Project Title	: Festival of Colors (Holi)
Project Timeframe	: March 11th, 2023
Project Location	: CRPDParks

Project Description

Sacramento Telangana Association(STA) will be partnering with WeEmbrace and Other community organizations In celebrating the Festival of Colors(Holi) for the year 2023, this festival marks the arrival of spring and is a celebration of fertility, color, and love, mostly we see this festival as a time for people to get together and enjoy themselves with friends, families and communities without any concern for caste, creed region, religion, men, women, children's or ethnicity of the community which intern connects the communities of the City of Rancho Cordova.

During 2018,2019,2022 this festival was celebrated with help of City of Rancho Cordova community enhancement funds, this was well received by the community and generated huge enthusiasm and encouragement.

STA active partnership with WeEMBRACE serving Families of Individuals with disabilities is helping us to reaching to greater community participation, especially children in our community and for 2023 we are projecting there is greater level enthusiasm and participation.

This is first time we are successfully collaborating and partnership with other community organizations and showing the results how successfully we can unify and bring the community on to a one unifying platform to promote the great civic engagement and broader community outreach.

Application #23

Festival of Colors is a free event open to all ages and planning to provide light snacks and refreshments for the participants.

Project Team

STA and WeEmbrace board have leadership and skill to organize the event with help of dedicated community volunteers, our team contains members from various professionals, doctors, business owners, educators, and community leaders.

1. Anil Kondakrindi – Community Organizer
2. Meena Kalyansundaram- WeEmnrace
3. Srinath Babu -STA Board member
4. Srinivas Reddy Kumbam –Entrepreneur
5. Satish Pasupulati – Sr. Engineer/Entrepreneur/Community leader
6. Dr.Venu Bellum – Kaiser Permanente, Rancho Cordova
7. Shantha Gadam – STA Women's Committee Chairman
8. Laxma Legala – STA Board of Trustee

Project Goals

City of Rancho Cordova sponsoring this color festival as part of community enhancement funds for last 3 years, during festival there were lot of kids participated and enjoyed this event at Stone Creek Park, Capitol Village and Children's Museum these years, with the past experiences we strongly believe this festival reaching more kids in the community in providing the entertainment and education to next generations.

In partnership with WeEmnrace we can spark a passion for life-long learning, entertainment, and education. This event provides a venue where children's will have opportunity to explore to the new environment and exercise both their bodies and their minds

1. Helps to build cultural connections
2. offers opportunities for children to play with colors which will help in fulfilling the sensory needs which are very important for kids over all development.
3. Community Engagement
4. Education and Entertainment

This festival support Rancho Cordova community by bringing visitors from all over Sacramento area cities Folsom, Roseville, Rocklin and from Stockton, Yuba city, Fremont, San Ramon, Fresno, Modesto and Fairfield. Which will bring new revenue to the economy and create new opportunities, partnerships to improve Rancho Cordova's quality of life.

Project Cost

Expense	Estimated Expenditure Breakdown - 2023
Rental for Event Facility CRPD Park	$500
Event promotion,Setup,Materials and Supplies	$1500
Refreshments	$1250
Cleaning after the event	$250
Total Project Cost	**$3500**
Matching Funds	$500
Measure H grant request	**$3000**
STA will provide the matching funds of $500	

Project Schedule

March 11th -2023

Project Location

Any available CRPD parks within the City of Rancho Cordova limits

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Festival of Flowers/International Kite Festival/Festival of Colors

Name of Organization: Sacramento Telangana Association

Name of Applicant and Title: Laxma Reddy Legala, President

Applicant's Phone: (916)743 6768 **Applicant's Email:** mailtolaxma@gmail.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

(Endorsement Given)

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES

Date: 3/7/22

Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Monday, March 14, 2022 9:52 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1528233
IP Address:	71.197.65.177
Submission Date:	03/14/2022 9:51
Survey Time:	44 minutes, 8 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Kannada Sangha of Sacramento (KSS)-2023 Multi Cultural Community Event. Festival of Arts & Culture-Ranga Vasantha 2023

Project Synopsis

Kannada Sangha of Sacramento celebrates multiple events (Indian festivals) in greater Sacramento area during the year to bring all community members on to one stage to share happiness, educate the significance of our Art & culture and encourages community involvement.

Project Description

Kannada Sangha of Sacramento is Non-Profit Organization with 501(c) (3) status, committed to preserve and promote the Art, Culture, history of India and bridge the gap between multiethnic and multi-cultural activities in the community. KSS also conducts educational and leadership workshops for the community members. Apart from the above main event, KSS conducts Camping, Sports, educational, medical awareness webinars, Charity (monthly Dinner for homeless people) and Blood drive as part of annual events. KSS also partner with other non-profit organizations to conduct 5K rum marathons. Kannada Sangha of Sacramento request Community Enhancement Funds to celebrate Ranga Vasantha which will be Festival of Art & Culture (Ranga Vasantha) in April-May 2022 - 2023. Ranga Vasantha is an event which is conducted to welcome the spring. This event will be performed in the month of April - May every year. This event showcases the Art and Culture of Multi Ethnicity. During this event we get to see people performing stage play depicting mythological characters or Indian folk dances. This also gives an opportunity for High school students to actively participate on stage and help in lighting and dialog prompting arrangements. Over the last 10 years we were able to invite over 500 people to participate or celebrate the event. This includes delegates and people from different ethnic background, Dignitaries from school districts, public officials, and different community leaders. Community Enhancement grants would allow us to help progress, educate and organize this unique festival in and around City of Rancho Cordova. Financial Year 2023, KSS is planning to conduct this event at one of the locations in FCUSD schools or Sacramento School District and will be attended by more than 500 people. The cultural program will go on for 4 hours and it will be free of cost.

Project Team

Kannada Sangha of Sacramento (KSS) board has experienced leadership and management skills to organize this event with the help of dedicated community volunteers. KSS has team of professionals and dedicated community leaders. Board of Directors: 1.

Prabhakar Rao 2. Shobha Rao 3. Gurudutt Vasudeva Murthy 4. Dilip Nayak 5. Laxmi Rao Executive Committee: 1. President: Pushpa Viswanathan. 2. Vice President: Mrudula Kulkarni 3. Secretary: Prasanna Kumar Bhat 4. Treasurer: Krishnamurthy Venkataramana 5. Joint Treasurer: Sowmya Kiran

Project Goals

The Ranga Vasantha festival supports our Rancho Cordova community by bringing visitors from Greater Sacramento Area. During this event we have booths for small business which includes Banks and real estate. This small business booths encourages people to buy the newly constructed homes. This will bring new revenue to the economy and create new opportunities, partnerships to improve Rancho Cordova value of life. Our organization actively involves in fund raising for natural disasters. We organize and participate Marathons for noble cause.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$15,000.00

Estimated Breakdown of Project Expenditures

Rental for event Facilities: $3000 Event Promotion: $2000 Event Setup: $2000 Educational Workshop: $1000 Festive Dinner: $6000 Cleaning after the event: $1000 Total Project Cost: $ 15000

Matching Funds

$3000.00

Include Any Other Funding Contributions

Corporation (Intel, Delta Dental, HP, Blue Shield) employees volunteering

Ongoing Operations and Maintenance Costs (if applicable)

Ongoing cost are usually supported by volunteers and contributions from the community members.

Total Community Enhancement & Investment Funds Requested

$12,000.00

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

6/30/2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Contributions from community members and business organizations

Project Schedule, Timeliness and Adaptability

Project Schedule

April 2nd, 2023-May 30th, 2023

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Our program schedule always runs based on calendar year. This program is scheduled to run only during these times.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. Our organization has well equipped plans and have already conducted few works shops based on Virtual platform. We use Zoom & Facebook live to broadcast the events.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Rancho Cordova High School. Performing Art Center.
2239 Chase Drive
Rancho Cordova, CA 95742

Other Physical Addresses (if project/program is at multiple sites)

N/A

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Elk Grove Unified
Folsom Cordova Unified
Sacramento City Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Prabhakar Rao

Title

Board of Director- Kannada Sangha of Sacramento

Submitting As

Non-Profit

Phone

9162815529

Email Address

prabhaker49@yahoo.com

Organization's Legal Name (if applicable)

Kannada Sangha of Sacramento (KSS)

Mailing Address of Submitter

4431 Niobe Circle
Rancho Cordova, CA 95742

Signatory's Name

Board of Director Prabhakar Rao

Signatory's Title

Board of Director

Signatory's Phone

9162815529

Signatory's Email Address

prabhaker49@yahoo.com

Signatory's Mailing Address

4431 Niobe Circle
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #24

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Ranga Vasantha

Name of Organization: Kannada Sangha of Sacramento

Name of Applicant and Title: Prabhakar Rao

Applicant's Phone: **Applicant's Email:**

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given No

Endorsement Withheld Rec'd after due date - Can apply for a facilities use permit if desired

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah K Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Ranga Vasantha- Festival of Arts & Culture

Name of Organization: Kannada Sangha of Sacramento (KSS)

Name of Applicant and Title: Prabhakar Rao, Board of Director

Applicant's Phone: 916-281-5529 **Applicant's Email:** prabhaker49@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement Withheld DiAnne Brown

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name:

Date: 3/18/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional): Rancho Cordova High School is not an SCUSD school

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 5:07 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537011
IP Address:	206.15.249.230
Submission Date:	03/17/2022 5:07
Survey Time:	15 minutes, 20 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Community Cultural Appreciation Concert

Project Synopsis

The Folsom Cordova Unified School District serves students and families from a variety of diverse cultures. Our district is a wonderful blend of people with rich heritage and cultural pride. FCUSD wishes to create an opportunity for students and our community to engage in and celebrate the diverse cultures through music.

Project Description

FCUSD would like to create an opportunity to appreciate the Armenia culture by creating an opportunity to learn about and hear folk music. The project would include working with an Armenian musical group to provide a learning opportunity for both students and the general community. The Cordova High School Performing Arts Center would be the venue for the project. The performance group, Chookasian Armenian Concert Ensemble would be secured to do a matinee performance during school for our students and on the same day, do an evening performance for the community. Both events would be free of charge to our students and the community to attend. The performances would occur during March 2023.

Project Team

Mindy Andrus, Coordinator Lisa Vaca, Administrative Assistant Mark Cornfield, CHS Theatre Teacher (TBD) Kevin Simms, CHS Music Teacher (TBD)

Project Goals

To provide a cultural experience for students and the community through showcasing an Armenian Music performing group.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$7,912.

Estimated Breakdown of Project Expenditures

Day Performance Group Matinee for students: $2,000. Evening Performance Group for the community: $3,900. Teacher Stipend: $1,141 + benefits: $1,312. Theater Technician: $ 300. Programs: $ 200. Advertising: $ 200. Total: $7,912.

Matching Funds

Cordova High School Performing Arts Center Administrative Services Ticketing Service

Include Any Other Funding Contributions

Music Teachers: Lesson development & scheduling for matinee

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$7,912.

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

May 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

N/A

Project Schedule, Timeliness and Adaptability

Project Schedule

Spring 2022 book Chookasian Armenian Concert Ensemble Spring 2022 book CHS Performing Arts Center & Add to District Calendar Fall 2022 Introduce project to secondary music and theater teachers January 2023 Provide supplemental packet with information about the performing group to teachers January-March 2023 Advertise for the community performance, setup ticket system, print programs. March 2023 Matinee student performance and evening community performance

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The concerts will take place in March of 2023. Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Should public health guidelines change, the performances could be done virtually through a Zoom Conference call. Access would be provided to students and to the community in advance of the concert.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2239 Chase Drive
RANCHO CORDOVA SACRAMENTO, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Administrative Services: 1965 Birkmont Drive, Rancho Cordova 95742

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Mindy Andrus

Title

Teacher Induction/Elementary Music, Art & PE Coordinator

Submitting As

Public Agency

Phone

9162942413

Email Address

MANDRUS@FCUSD.ORG

Organization's Legal Name (if applicable)

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr
Rancho Cordova, CA 95742

Signatory's Name

Mindy Andrus

Signatory's Title

Teacher Induction/Elementary Music, Art & PE Coordinator

Signatory's Phone

9162942413

Signatory's Email Address

MANDRUS@FCUSD.ORG

Signatory's Mailing Address

1965 Birkmont Dr

Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Community Cultural Appreciation Concert Supplemental Endorsement Form 3-4-22 (3).pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #25

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Community Cultural Appreciation Concert

Name of Organization: Folsom Cordova Unified School District

Name of Applicant and Title: Mindy Andrus, Teacher Induction/Elementary Prep Coordinator

Applicant's Phone: 916.294.2413 **Applicant's Email:** mandrus@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW
Date: Friday, March 18, 2022 1:24:13 PM

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1538729
IP Address: 155.190.3.6
Submission Date: 03/18/2022 1:24
Survey Time: 36 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Teej Festival

Project Synopsis

Teej festival is the most widely celebrated Hindu festival by women. This festival brings diverse women to a single platform to celebrate togetherness with singing, traditional dance performances, enjoying a grand feast and praying to Lord Shiva, an Indian God.

Project Description

Teej festival invites all local women and men of Indian origin and community for celebrations. This festival is a great way to celebrate diverse cultural heritage, culture and traditions. The women attend the event in colorful traditional attire. The event will have ritual prayers, diverse and vibrant cultural performances including singing and dancing and feast of food. The festival celebrations make the families and community joyful, strengthen the bonding and unites the community. The project directly meets the City's Community Enhancement Funds guidelines and selection criteria in the following ways: • Education – Teej festival provide an opportunity for Indian community to bring all the Indian origin women and men together to a single platform to celebrate and also to showcase our cultural diversity to local community. • Children and Youth – The children and youth will lean about Indian cultural traditions and how they unit the community. • Business/Economic Development – Indian community spends significant money during festival to purchase clothes, food, decoration items and jewelry, which helps local businesses.

Project Team

The Indian Association of Sacramento (IAS) is a non-profit organization that serves as the single platform to preserve the rich cultural heritage of India. At IAS, we aim to share and showcase the cultural beauty with our fellow citizens in the greater Sacramento area and keep the culture alive for future generations. IAS is responsible for development and delivery of this project. The project team consists of Indian Association of Sacramento Executive Team, Board of Trustees and volunteers. Vandna Sharma - President, Indian Association of Sacramento Ranju Verma - Vice - President, Indian Association of Sacramento Darshana Amin - Volunteer, Indian Association of Sacramento Gobi Ramasamy - Treasurer, Indian Association of Sacramento Bhavin Parikh - Trustee, Indian Association of Sacramento Bhaskar Vempati - Trustee, Indian Association of Sacramento Satheesh Nagaraj - Trustee, Indian Association of

Sacramento

Project Goals

Teej festival strengthens relationships and fosters community pride by bringing diverse Indian women and men and community together from all walks of life. Festival allows individuals to offer gratitude and prayers to the Universe and showcase their culture by dressing in traditional cultural attire, singing devotional songs, presenting cultural dances, and sharing traditional foods and learning about new tastes. Both adults and kids play together and live in a colorful world of differences. The local Indian population is over 50,000. This is a great opportunity for Indian and local community to come together to celebrate Teej Festival.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$11,000

Estimated Breakdown of Project Expenditures

Total Project Costs $11,000 Stage decoration: $2000 Music and DJ: $2000 Food and supplies: $5000 Insurance : $1000 Other Event Expenses: $1000

Matching Funds

N/A

Include Any Other Funding Contributions

$2000 from Indian Association of Sacramento funds

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$9,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

December 2022

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

We solicitate funds from local sponsors

Project Schedule, Timeliness and Adaptability

Project Schedule

The event is a day-long event and is scheduled for Sep 25 2022. The event will be set up the during previous night, Sept 24, 2022.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Indian Association of Sacramento, IAS, an umbrella organization of over 20 Indian regional organizations, organized several larger cultural events with over 5000 people and have capabilities to organize the event seamlessly. The

event is a daylong event scheduled for September 22nd, 2022. IAS will set up the event on September 21, 2022 and complete the event on September 22, 2022.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

We will follow CDC guidelines in organizing the event. If needed, we will reschedule our event date.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

3625 Spoto Dr
Rancho Cordava, California 95670

Other Physical Addresses (if project/program is at multiple sites)

We secured approval for above park location and receive the supporting letter later this month.

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a park/park facility

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Bhaskar Vempati

Title

Truestee

Submitting As

Non-Profit

Phone

9163909945

Email Address

iassacpresident@gmail.com

Organization's Legal Name (if applicable)

Indian Association of Sacramento

Mailing Address of Submitter

11057 Essey Cir
Mather, CA 95655

Signatory's Name

Mr Bhaskar Vempati

Signatory's Title

Trustee

Signatory's Phone

9163909945

Signatory's Email Address

iassacpresident@gmail.com

Signatory's Mailing Address

599 Broken Top Ct
Folsom, CA 95630

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Monday, February 28, 2022 2:29:23 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1499504
IP Address: 206.15.249.230
Submission Date: 02/28/2022 2:29
Survey Time: 42 minutes, 41 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Athletic Improvement

Project Synopsis

The Athletic Improvement grant will support for Cordova High School, Mills, and Mitchell Middle Schools.

Project Description

The Athletic Improvement Plan will support the increased opportunities for student-athletes for afterschool sports. This plan encourages physical fitness as a positive outlet for afterschool sports. This project will enhance the educational programs and athletic programs at Cordova High School, Mills Middle School and Mitchell Middle School. Evidence supports that one of the best Positive Behavior Intervention and Supports (PBIS) for students is athletics. During the COVID-19 pandemic the need to support Social Emotional Learning (SEL) for our students is greater than ever and athletics is one of the best models for SEL. Ensuring our athletic programs have the necessary equipment / supplies and means to support our students is paramount to the success of our community.

Project Team

The Team responsible for ensure that this project is implemented will be made up of site administrators and district representation. Team members: Principal Jerad Hyden, Principal Amy Strawn, Principal Dana Carrigan, along with the Athletic Directors from each school and Peter Maroon, District Director of Athletics.

Project Goals

Our goals are to ensure that students have access to after school athletic programs and remove financial barriers. State and district general funding only provide coaching stipends and funds for safety items. Working with the policies of the school district and the CIF, we want to encourage student-athletes to participate in local school sports programs. We can accomplish these goals by: - Updating equipment and supplies to maintain and improve competitive edge on an annual basis - Cover transportation cost for athletics (reducing financial barrier) - Provide a safe environment during the largest community gatherings - Provide additional funds for stipends and increase enrichment needs - Upgrade / update facilities as part of the district master plan - Promote school pride and recognition

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$200.000

Estimated breakdown of project expenditures

Use of Fund in the following areas: $4,000 Advertising / marketing $39,500 Employee salaries, taxes and benefits (including additional coaches, trainers, and enrichment staff) $3,500 Recognition awards (certificates, awards, supplies, varsity blocks, banners and championship t-shirts) $5,000 Travel and meals $10,000 Security for football games $60,000 Inventory / Sports equipment (uniforms, sports machines) $37,250 Student-Athlete Transportation Fee $40,750 Facility Improvement $200,000 Total

Matching Funds

0

Include any other funding contributions

0

Ongoing operations and maintenance costs (if applicable)

0

Total Community Enhancement & Investment Funds requested

$200,000

Is this a multiyear request?

No

How many years have you received funding for this project?

3

When will your request for funding sunset for ongoing programs?

The COVID Pandemic has created challenges that could not have been anticipated or planned for, this project will sunset when the city and the district have address all the needs.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

School based fundraising and community sponsorships.

Project Schedule, Timeliness and Adaptability

Project Schedule

The timeline for this project is from July, 2022 and to be completed by June 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Project is part progress made in previous years, funds will be used to build upon improvement plans.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Project can be adjusted as needed to ensure funds are used for purchase of equipment, uniforms or services.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

Cordova High School 2239 Chase Dr.
Rancho Cordova, California 95670

Other physical addresses if project/program is at multiple sites

Mills 10439 Coloma Rd., Mitchell 2100 Zinfandel Dr.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Peter Maroon

Title

FCUSD Director of Athletics

Submitting as

Public Agency

Phone

9162949388

Email

pmaroon@fcusd.org

Organization's legal name, if applicable

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr.
Rancho Cordova, California 95742

Signatory's Name

Mr. Sean Martin

Signatory's Title

Assistant Superintendent, Business Services

Signatory's Phone

9162949000

Application #27

Signatory's Email Address

lvenzon@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr.
Rancho Cordova, California 95742

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Athletic Improvement

Name of Organization: FCUSD Athletic Department

Name of Applicant and Title: Peter Maroon, Director of Athletics

Applicant's Phone: 916-294-9388 **Applicant's Email:** pmaroon@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 1:18:43 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1510238
IP Address: 50.73.58.110
Submission Date: 03/04/2022 1:18
Survey Time: 24 minutes, 2 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Ranch Cordova Student Athlete Coalition (RCSAC)- Cordova High School Athletic Improvement Plan

Project Synopsis

RCSAC has worked with FCUSD staff to identify academic and athletic needs at Cordova High School

Project Description

The purpose of RCSAC is to equitably and efficiently support and recognize the diverse Rancho Cordova Student Athletes while maintaining, improving, and upgrading all that is Rancho Cordova athletics. We hope to make school athletics and facilities a jewel for the City of Rancho Cordova and its citizens. See Attachments #1 & #2 for specific project items.

Project Team

President- Conrade Mayer Vice President- Jennifer Laret Secretary- Amy Wallace Treasurer- Dennis Lamantia The team responsible to ensure that all aspects of the plan are implemented will be made up of members of the RCSAC team, Cordova Hight School Principal Jerad Hyden, Vice Principal Michele Brown, Athletic Director Mark Beamish, and various Folsom Cordova Unified School District representatives. RCSAC will also be working with the Site Council at Cordova High School so we can enhance the programs that currently exists and to ensure we are not duplicating any efforts.

Project Goals

Create a year-round academic support plan for student athletes Increase the number of student athletes & reduce the number of athletes needing academic contracts Create a robust post-high school academic plan Social Media Plan- Improve community communication Marketing/Branding Plan Facility Improvements Address specific team needs Sponsor events that encourage alumni interaction and create mentorship opportunities

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

Application #28

$196,500

Estimated breakdown of project expenditures

$30,000- Tutoring Program (tutor stipends, food, tutoring company) $8,000- Educational fieldtrips to Los Rios Colleges & local universities $7,500- Advertising/Marketing (includes parent outreach) $80,000- Front Marquee & marquee by Performing Arts Center $10,000- Schoolwide updated signage including signage down Chase drive, murals on school walls down Chase drive. $10,000- General facility improvements $26,000- Employee Salaries (including additional coaches, trainers, and enrichment staff.) $25,000- Recognition awards (certificates, awards, supplies, varsity blocks, banners, championship t-shirts, and banquets.)

Matching Funds

$30,000 (fundraisers)

Include any other funding contributions

$25,000 (corporate donations)

Ongoing operations and maintenance costs (if applicable)

$25,000 (this would apply to some of the athletic equipment that would need maintenance)

Total Community Enhancement & Investment Funds requested

$196,500

Is this a multiyear request?

Yes

Number of years

5

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

RCSAC has created a booster club component. The booster club will be able to increase the fundraising efforts at Cordova High. The booster club money raised will eventually offset the measure H money requested.

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

The funds requested will sunset when Cordova High School is able to sustain a booster club to support and meet the equitable difference. Developing a booster club and securing corporate sponsorship is a top priority for RCSAC.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will be looking to do fundraising on a frequent basis with each of the teams as well as looking at school wide fundraising events.

Project Schedule, Timeliness and Adaptability

Project Schedule

The timeline for this project would start July 1, 2022 and would be completed by June 30, 2022.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The majority of the items on the list have to do with tutoring and academic assistance for the student athletes. These services would be provided during the timeline above. The physical projects identified have a working plan and budget so that they can be completed in that timeline.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The tutoring program can be adapted to a virtual platform. The marketing plan, social media development, and site improvements would still be able to be accomplished if health orders change.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

Cordova High School
2239 Chase Drive
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

RCSAC- 2022 Athletic Improvement Plan- Attachment #1.docx
RCSAC Athletic Improvement Plan Facility Priority List 2022- Attchement #2.xlsx
LOR - RC Grant (RCSAC).pdf

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Jennifer Laret

Title

Vice President of RCSAC

Submitting as

Non-Profit

Phone

9167129933

Email

jennifer@a4promo.com

Organization's legal name, if applicable

Rancho Cordova Student Athlete Coalition

Mailing Address of Submitter

3413 GRAPPA WAY
RANCHO CORDOVA, CA 95670

Signatory's Name

Mrs. Jennifer Laret

Signatory's Title

Vice President

Signatory's Phone

9167129933

Signatory's Email Address

jennifer@a4promo.com

Signatory's Mailing Address

3413 GRAPPA WAY
RANCHO CORDOVA, CA 95670

Attach any additional documents here

RCSAC- 2022 Athletic Improvement Plan- Attachment #1.docx
LOR - RC Grant (RCSAC).pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #28

Cordova High School

2239 Chase Drive, Rancho Cordova, CA 95670
Phone (916) 294-2450 http://www.fcusd.org/CHS

Folsom Cordova Unified School District

Jerad Hyden
Principal

Ann Botsford
Michele Brown
Michele Cooper
Joel Francisco
Assistant Principals

Heidy Naderi
Admin. Assistant

Erin Kaluza
ELD Program Manager

Josh Creeger
Activities Director

Mark Beamish
Athletic Director

Kitty White
Head Counselor

Grace Martinez
IB MYP Coordinator

Chris Mahaffey
IB CP Coordinator

Zandi Llanos
IB DP Coordinator

Tracey Jacobs
School Resource Officer

March 4th, 2022

To Whom It May Concern:

As the proud Principal of Cordova High School, tasked with providing opportunities for students which prepare them for post-secondary success – it is my pleasure to write this strong letter of support in continuing partner with the Rancho Cordova Student Athlete Coalition (RCSAC).

In alignment of our collective mission, supporting our most marginalized students is critical to our success. Given a diverse population of learners which include: English Language Learners, Special Education, and students from single-parent households facing incredible educational barriers – RCSAC seeks to increase year-round academic supports for student via targeted tutoring. I have continued to witness the support provided for academic assistance and the added benefit to our current existing after-school tutoring model, including college access and student recognition.

Additionally, RCSAC has worked incredibly hard to revamp our marketing and facilities plan which included extensive upgrades to our CHS campus, including: the weight room, stadium, storage facilities, and the parking area adjacent to the gym. RCSAC has created a comprehensive plan which seeks to provide upgrades, refreshed signage, and enhanced branding. Most importantly, RCSAC has helped facilitate the addition of key campus equipment, including three new golf carts, as well as provided relief for some of our deserving sport programs.

I urge you to give this application your most serious consideration. Should you or your staff have any questions regarding this letter, please do not hesitate to call. Thank you for the consideration as we partner to positively impact student outcomes.

Respectfully submitted,

Jerad A. Hyden
Principal
Cordova High School
(916) 294-2450 x810150
jhyden@fcusd.org

Application #28

RCSAC- Athletic Improvement Plan

ACADEMIC SUPPORT PLAN

Study Hall Time & Dates

- Year -Round for all students
- Tuesday 3-4:30pm- Prep for block Wednesday schedule
- Wednesday 3-4:30 pm- Prep for block Thursday schedule
- Thursdays 1:30-3:00 pm- often games/practices are not until 3:00, Student Athletes would stay on campus in study hall and would academically use this time.
- Saturday- Times and Dates TBD

Study Hall Locations

- Auxiliary Gym Classroom
- Library
- Individual Classrooms/MACH Room
- Offsite Location: PAL Community Center (purpose would be to also build a community relationship)

Staff

- CHS Teachers & Staff
- Outside Academic Support- Example: Miss Jane (math coach), retired or previous teachers, volunteers, non-CHS coaches
- All Non-CHS staff would be cleared

Grade Checks: Year-Round**One of the academic challenges is that the Student Athletes keep up the academic standards only during their sport's specific season.

- Google Classrooms set up for each sport. Coaches and RCSAC academic coordinators would be "teacher of record."
- Bi-Weekly electronic grade check through Google classroom.
- Student Athlete is responsible for their own grade check. Student Athlete would use Powerschool to record grades.

POST- HIGH SCHOOL ACADEMIC PLAN

Enhanced Coordination with Los Rios Community College District

- Robust communication plan- Enhanced Social Media and email postings on application deadlines, special financial aid meetings, and Promise Plus applications
- Per Los Rios- Current enrollment in the Promise Plus program is approximately 60-70 students. Goal would be 100 students from Cordova and Kinney High Schools.
- Start communication and education on Los Rios programs during Freshman year vs. Junior or Senior year.
- Create a focused plan educating the students on athletic opportunities within the Los Rios Community College District
- Field trips to each of the Los Rios locations beginning Freshman year. The student athlete would attend 1 field trip per year culminating in a grand total of 4 field trips by

the end of their Senior year. The field trips would specifically focus on athletic programs and facilities.
- Los Rios would like to offer college level classes at the CHS site so that students would have 9-12 units when they enroll in Los Rios.

Recognition Program for Student Athletes when they commit to a College, University, or Trade-School
- Recognition on school kiosk
- Recognition on RCSAC social media pages
- Recognition in the Rancho Cordova Grapevine
- Recognition in the Rancho Cordova city newsletter and on city social media pages

SOCIAL MEDIA PLAN

Develop a Facebook, Instagram, and possibly YouTube page
Pages would post the following:
- Game & Practice Schedules
- Athletic Accomplishments: wins, special awards, any other honors.
- Upcoming parents' meetings
- Volunteer opportunities
- Links to school gear
- Link with other Rancho Cordova social media pages to enhance community engagement and volunteerism.
- Work with CHS students to post content (specifically with student government students)

MARKETING/BRANDING PLAN

- Work with site staff to develop branding guidelines for site. Create a consistent messaging and marketing plan by having recognizable logos, colors, and uniform guidelines.
- Create a band guidebook for staff, coaches, and clubs to reference.
- Remove signage that is not consistent with brand guidelines.
- Create a new entrance into Cordova High Stadium
- Uniforms: All teams should have uniforms with the same logos and color pallet outlined in the guidebook.
- Spirit wear sales: Sales of branded gear would be available to students and families. These sales would take place online and at home games and meets.
- Create a marketing plan to attract sponsors for teams and field signage.

FACILITIES IMPROVEMENTS

Gym
- Update all current logos with new branding
- Inspirational messages installed on upper gym walls.
- Organize banners and hang most recent banners and awards.
- Repair or remove rusted screen.
- Clean out storage areas

Football Field & Field Maintenance

- Refurbish equipment.
- Find location to store equipment.
- Create a maintenance schedule.
- Work with coaches to assign volunteers to help with maintenance.

General Facility - Storage Containers (currently in production)

- Move containers within fence perimeter.
- Clean out existing containers.
- Exchange damaged and/or unusable containers for newer more secure containers.
- Move containers to more logical locations. Move containers that are not sports related to locations on the upper campus that would make sense.
- Recommend security for sports related containers.

General Facility- Future Enhancements

- New Marque- larger marque to recognize student accomplishments, post local Rancho Cordova events, and additional athletic schedules and information.
- Decorative fence around entire perimeter of school and stadium. A new fence would put CHS within the standards set forth by the City of Rancho Cordova and would tie in with the existing fence installed at Coloma and Chase as well as what is existing at Mills Middle School.
- New Entrance into Lancer Stadium. It is currently confusing where the existing entrance is. A new entrance would not only enhance the look at CHS but would make it easier for visiting teams and families to locate the entrance.
- Screen attached to fencing around Lancer Stadium. By screening the field in, it would force spectators to pay to view the games vs. watching for free through the fence.
- New Signage on Chase drive. New signage would enhance the look of CHS and would be in line with the cities' current signage initiative.
- Paint light posts black to match fencing on Chase drive
- Paint storage containers red and or black to match branding guidelines.
- Bigger kiosk and signage for performing arts theater.
- Repaint CHS Amphitheater- Repaint Block C and Class Names
- Repaint and refresh college mural: Remove Wisconsin and replace with Chico, Stanislaus, or local Los Rios Icons.
- General clean up items: Clean up boneyard, remove extra unneeded conduit, work with custodians and maintenance staff on general repairs.
- Enhanced security for athletic equipment areas.
- Motorized entrance gate into the D wing area.

SPECIFIC TEAM NEEDS

General Team Needs

- Update uniforms and warmups
- Create a uniform replacement schedule.
- General equipment needs. Inspect, refurbish, and replace equipment as needed. Refurbish and update equipment within branding guidelines.
- Update safety equipment
- Coach Training: Enroll each coach in Positive Coaching Alliance.
- Weight Training Coaches (possibly offer community work out options in addition to student athlete work outs)

EVENTS/ALUMNI/VOLUNTEERING

- Create events that encourage community participation and community pride.
- Events that honor our alumni. Alumni runs, picnics, etc.
- Participate in volunteer opportunities throughout the city. Work with the Cordova Food Locker, Interfaith Council and other Rancho Cordova groups on city wide projects and events.
- Lancer Picnic
- Cordova Beer Fest
- Student Turkey Trot

Application #28

RCSAC PRIORITY LIST	FACILITIES

NEED	
FUNDING FOR TUTORING	
LOCATION FOR TUTORING	
LOS RIOS FIELDTRIPS	
LOS RIOS OUTREACH	
WEBSITE SET UP	
FACEBOOK SET UP	
INSTAGRAM SET UP	
YOUTUBE SETUP	
SPIRITWEAR WEBSITE	
BRAND GUIDEBOOK	
MARKETING PLAN FOR SPONSORS	
TRANSPORTATION FEES- BUSES	
TRANSPORTATION FEES- VANS	
ENTRY FEES	
CREATE BUDGET PLAN FOR EACH TEAM	
CREATE UNIFORM CYCLE REPLACEMENT SCHEDULE	
FUNDRAISING INITIATIVES	
UPDATE UNIFORMS INVENTORY/CONDITION	
UPDATE WARM UPS INVENTORY/CONDITION	
UPDATE SAFETY EQUIPMENT INVENTORY/CONDITION	
UPDATE GENERAL TEAM EQUIPMENT INVENTORY/CONDITION	
COACHES TRAINING-PCA	
WEIGHT TRAINING AND CONDITIONING COACHES	
CLEAN UP BONEYARD	
CLEAN OUT EXSISTING CONTAINERS	
EXCHANGE DAMAGED CONTAINERS	
MORE CONTAINERS TO MORE LOGICAL AREAS	
REPAINT CHS AMPHITHEATER	
REPAINT COLLEGE MURAL (UPDATE TO LOCAL SCHOOLS)	
NEW SIGNAGE DOWN CHASE DRIVE	
PAINT LIGHT POSTS BLACK TO MATCH FENCING	
PAINT STORAGE CONTAINERS	
SCREEN AROUND LANCER STADIUM	
REPLACE RED/YELLOW WINDOWS IN WEIGHT ROOM	
REPLACE WINDOW FRAMES	
NEW WRESTLING ROOM SPOTLIGHT	
RESTORE TROPHY CASES	

PAINT NEW MURAL USING BRANDING GUIDELINES	
UPDATE ALL EXSISTING SIGNAGE WITH PROPER LOGOS	
INSIRATIONAL MESSAGES ON UPPER GYM WALLS	
ORGANIZE AND HANG MOST RECENT BANNER	
CLEAN OUT GYM STORAGE AREAS	
REFURBISH FIELD MAINTENANCE EQUIPMENT	
CREATE MAINTENANCE SCHEDULE FOOTBALL FIELD	
CREATE VOLUNTEER SIGN UP FOR MAINTENANCE DAYS	
MORE CONTAINERS WITHIN FENCE PERIMETER	
FIND LOCATION TO STORE EQUIPMENT	
EQUIPMENT	
Hot Water Pressure Washer	
Cyclone Power Rake	
New Projects	
NEW WROUGHT IRON PERIMETER FENCE	
PRESS BOX- COMPLIANCE WITH ADA STANDARDS	
GRAND ENTRANCE TO LANCER STADIUM	
NEW MARQUE AT SCHOOL ENTRANCE	
REDO VISITOR PARKING LOT	
LARGER SIGNAGE FOR PERFORMING ARTS CENTER	
NEW PE LOCKERS	
SECURITY FOR CONTAINERS	
GENERAL REPAIRS	
ENHANCED SECURITY FOR EQUIPMENT AREAS	
REVENUE GENERATION	
REVAMP SNACK BAR- CREATE REVENUE STREAM	
CREATE BID SYSTEM- NO CONTRACT BUYING	
ALUMNI EVENTS(RUN & PICNIC)	
LANCER PICNIC	
STUDENT TURKEY TROT	
VOLUNTEER OPPORTUNITIES	



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Rancho Cordova Student Athlete Coalition- Athletic Improvement Plan

Name of Organization: Rancho Cordova Student Athlete Coalition

Name of Applicant and Title: Jennifer Laret- Vice President

Applicant's Phone: 916-712-9933 **Applicant's Email:** jennifer@a4promo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 10:45 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1533652
IP Address:	206.15.249.237
Submission Date:	03/16/2022 10:45
Survey Time:	51 minutes, 53 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

The Rancho Cordova Track Club Implement/Equipment

Project Synopsis

To provide the youth-athletes participating in Track and Field/ Cross Country the proper tools to develop in their events.

Project Description

The implements and equipment we are seeking will make practice and competition much easier for the coaches to demonstrate to the youth-athletes; and help them perform to the best of their ability. These implements and equipment will be used for years to come and help many generations of youth-athletes. We will continue to host events and provide opportunities for youth-athletes in Rancho Cordova and the greater Sacramento area. Our Vision is to be the Track and Field, Cross Country, and Road Race destination.

Project Team

Dennis Lamentia, Anthony Davis, Danielle Davis, Jen Laret, and Josh Gruver

Project Goals

1) Provide implements and equipment for all youth-athletes that participate in The Rancho Cordova Track Club. 2) Use such equipment and implements to develop youth-athletes in track and field events. 3) Continue to host high caliber events and give opportunities to youth-athletes to perform their events with the implements and equipment.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$25,000

Estimated Breakdown of Project Expenditures

1 34121 TURNED IRON SHOT; 12LB; 108MM 2.00 EA $70.00 $140.00 2 3306 CAST IRON SHOT; 6LB 2.00 EA $18.00 $36.00 3 3394 CAST IRON SHOT; 4K 2.00 EA $25.00 $50.00 4 3312 CAST IRON SHOT; 12LB 2.00 EA $30.00 $60.00 5 3395 CAST IRON SHOT; 5K 2.00 EA $32.00 $64.00 6 3393 CAST IRON SHOT; 3K 2.00 EA $21.00 $42.00 7 3396 CAST IRON SHOT; 6K 2.00 EA $36.00 $72.00 8 VIBE16 VIBE DISCUS; 75% RIM; 1.6K 2.00 EA $118.00 $236.00 9 VIBE10 VIBE DISCUS; 75% RIM; 1K 2.00 EA $106.00 $212.00 10 75810 S58 DISCUS; 58% RIM; 1K 2.00 EA $62.00 $124.00 11 76116 S61 DISCUS; 61% RIM; 1.6K 2.00 EA $74.00 $148.00 12 733230 INTERNATIONAL IMPLEMENT COMBO CART 2.00 EA $2,235.00 $4,470.00 19 528 ELASTIC KROSSBAND 2.00 EA $21.00 $42.00 20 79300 2 DIGIT LAP COUNTER WITH BELL 1.00 EA $608.00 $608.00 25 921 HIP NUMBERS; 1-9; SETS OF 25 3.00 SET $21.00 $63.00 35 E39860 LED SCROLLING DISPLAY 1.00 EA $1,885.00 $1,885.00 38 990C03SP VICTORY PODIUM; SET OF 8; RED 1.00 EA $8,645.00 $8,645.00 39 E49720 WIRELESS SPEAKER SYSTEM; 1.0 1.00 EA $1,140.00 $1,140.00 42 35085 GILL TRU-FLIGHT-50; 800G; FLEX 8.6; 50M; UNIVERSAL 43 35064 GILL TRU-FLIGHT-40; 600G; FLEX 8.6; 40M; UNIVERSAL 2.00 EA $176.00 $352.00 2.00 EA $162.00 $324.00 44 TA1193 PETRANOFF JAVELIN; 300G STUBBY 2.00 EA $40.00 $80.00 45 TA1194 PETRANOFF JAVELIN; 400G STUBBY 2.00 EA $43.00 $86.00 46 TA1195 PETRANOFF JAVELIN; 500G LONG TOM 2.00 EA $50.00 $100.00 47 3612 TURNED IRON HAMMER; 12LB 2.00 EA $87.00 $174.00 48 3694 TURNED IRON HAMMER; 4K 2.00 EA $75.00 $150.00 49 3693 TURNED IRON HAMMER; 3K 2.00 EA $71.00 $142.00 50 3695 TURNED IRON HAMMER; 5K 2.00 EA $88.00 $176.00 51 3696 TURNED IRON HAMMER; 6K 2.00 EA $91.00 $182.00 52 TA1188 PETRANOFF JAVELIN; 800G TURBO SPIER 2.00 EA $71.00 $142.00 53 E39851 9" DIGIT RACE CLOCK 1.00 EA $1,470.00 $1,470.00 56 E39858 9" DIGIT RACE CLOCK CARRYING CASE 1.00 EA $443.00 $443.00

Matching Funds

We will be seeking community resources such as sponsors and other entities that have a vested interest in community engagement.

Include Any Other Funding Contributions

We will continue to host events to contribute funding for equipment and implements.

Ongoing Operations and Maintenance Costs (if applicable)

We will host events/ practice that these implements, and equipment will be used. Some costs for maintenance will need to occur for the implements and equipment but we will handle those costs.

Total Community Enhancement & Investment Funds Requested

$25,000

Is this a multi-year request?

Yes

Number of Years

2

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

We will continue to host events, work with community sponsors, and seek grant opportunities.

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

This is an ongoing operation as we continue grow as an organization.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will seek community sponsorships, grants and other organizations.

Project Schedule, Timeliness and Adaptability

Project Schedule

We plan to operate year-round once equipment and implements arrive.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

We will use the equipment and implements long after June 30, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we can operate under modifications and by virtual instruction.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

11230 Gold Express Drive
Rancho Cordova, California 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Josh Gruver

Title

Executive Director and Head Coach

Submitting As

Non-Profit

Phone

9167787484

Email Address

josh@rctrack.org

Organization's Legal Name (if applicable)

Rancho Cordova Track Club, Inc.

Mailing Address of Submitter

11230 Gold Express Drive
Rancho Cordova, California 95670

Signatory's Name

Mr. Josh Gruver

Application #29

Signatory's Title

Executive Director and Head Coach

Signatory's Phone

9167787484

Signatory's Email Address

josh@rctrack.org

Signatory's Mailing Address

11230 Gold Express Drive
Rancho Cordova, California 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #29

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 12:47 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1534040
IP Address:	174.50.166.106
Submission Date:	03/16/2022 12:46
Survey Time:	20 minutes, 25 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Youth Sports Fee Assistance (Rancho Cordova Athletic Association RCAA)

Project Synopsis

This project would provide funds to the Cordova Community Council for distribution by the Rancho Cordova Athletic Association to create and manage a fee assistance program for children unable to participate in youth sports programs due to family financial barriers. Cordova Community Council will work with RCAA to establish criteria for assistance, operational guidelines for distribution of funds, as well as bookkeeping and reporting operations.

Project Description

This project meets CEIF project criteria in several ways: (1) supports growth and development of children and youth; (2) improves stakeholder involvement by supporting sustainability of new and legacy youth sports organizations; (3) increases community pride by showcasing a city which cares and focuses on welfare and opportunity of all children, regardless of economic status; (4) Improves the quality of life for city residents; (5) supports sports as a positive outlet for building stronger community connections, promoting physical fitness and an enhanced participation in sporting activities.

Project Team

Cordova Community Council, Shelly Blanchard, Executive Director Rancho Cordova Athletic Association • League Leadership from: o Rancho Cordova Soccer o Rancho Cordova Little League o Rancho Cordova Girls Softball o Rancho Cordova Jr. Lancers Football and Cheer o Rancho Cordova Youth Basketball o Cordova Blue Marlins o Cordova Cordettes o Crossover Basketball o Rancho Cordova Track Club o Cordova Recreation and Park District rec leagues o Others

Project Goals

The RCAA has set a 2022 goal of increasing league participation by 5 percent over pre-COVID 2019 registration. The involvement of more children with the help of fee assistance is a component of this strategic goal. Here is how it fits in: Goal #1 Open opportunity for play to children from families who cannot afford to pay Metric: Compare with 2019 attendance and measure growth attributable to assistance program. Goal #2 Assist leagues which are offering fee assistance to the detriment of operating budgets to maintain high quality play for all children Metric: Compare league data from 2019 to 2022 Goal #3 Live up to the vision that Rancho Cordova is

an inclusive community “Where All Kids Play.” Metric: Illicit testimonials through simple survey of participants Goal #4 Build enrollment among participating leagues Metric: Compare growth from base year utilizing league data

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$22,000

Estimated Breakdown of Project Expenditures

Fee Assistance Distributions: $20,000 Cordova Community Council project administration including bookkeeping, compliance monitoring and reporting services: $2,000

Matching Funds

It is possible that this project will receive funding from the Rancho Cordova Community Golf Classic to be held on April 30. The project has received previous funding at $2500 per year, however the tournament was canceled in 2020 and 2021 due to COVID. Thus, 2022 is a rebuilding year and it is not known at time of application what the results may be.

Include Any Other Funding Contributions

This project enjoys the support of the Cordova Community Council, which offers publicity tools and other intangibles, such as translation services, graphic arts support, website services, and by integrating this project into other existing youth sports initiatives managed by the Cordova Community Council on behalf of the Rancho Cordova Athletic Association.

Ongoing Operations and Maintenance Costs (if applicable)

It is projected that ongoing support at $20,000 annually will be needed through 2025-26

Total Community Enhancement & Investment Funds Requested

$44,000

Is this a multi-year request?

Yes

Number of Years

2

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

This project is viable as a single year request. The purpose of a multi-year request is to provide flexibility needed for optimum operations as the CEIF funding cycle does not align well with youth sports leagues operations, which are planned on a calendar year, not a fiscal year.

How many years have you received funding for this project?

2

When will your request for funding sunset for ongoing programs?

We are hoping that with the development of a full-time staff professional to support the RCAA in the future, that other funding sources can be found to support underprivileged youth in the community, however that structure is currently not in place. If that can be established, it is possible that this project funding could be ready for sunset in 2025-26.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

This project currently is supported by the individual leagues at a lower level. The RCAA is watching for additional grant opportunities, however at this time there is a lack of capacity at the league and RCAA organizational level to launch a robust fund drive for this purpose. While we believe ample support for this exists elsewhere, the lack of grant and sponsorship outreach capacity is currently an issue.

Project Schedule, Timeliness and Adaptability

Application #30

Project Schedule

This is an on-going process, based on league registration calendars. All leagues have the opportunity to access the funds during their individual registration period with a reimbursement request due to the Cordova Community Council within 30 days from the close of league registration.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This is a two-year campaign that would commence upon funding approval and continue for 24 months. The RCAA has developed a schedule and system for the application and reimbursement protocols. The schedule for execution of this project is highly dependent on league schedules. Through the RCAA, some standardization of registration schedules has been accomplished in order to optimize planning to assure equal access to these funds by all participating leagues (in other words, the money does not run out too early for sports later in the year) and assure equal application opportunities and distribution of funds to families throughout the year and in multiple sports. Training has also been provided in order to encourage leagues to take advantage of this opportunity. With the fundamentals now in place, plus the return of sports league activity which has recently commenced post-COVID, it is expected this project is now ready for more optimum operations.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Youth sports leagues have a proven record of adjustments to meet health orders as they have changed over the past two years. A total cancellation of youth sports, as seen in 2020, would erase the need for this project, and thus cancel this project.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

While these sports leagues do operate on Cordova Recreation and Park District and Folsom Cordova Unified School District properties, this program is administrative in nature and has no bearing on the facilities, so all questions below will be answered in the negative.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Shelly Blanchard

Title

Executive Director

Submitting As

Non-Profit

Phone

9162735707

Email Address

shelly@cordovacouncil.org

Organization's Legal Name (if applicable)

Cordova Community Council Foundation

Mailing Address of Submitter

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Signatory's Name

Cordova Community Council Foundation Shelly Blanchard

Signatory's Title

Executive Director

Signatory's Phone

9162735707

Signatory's Email Address

shelly@cordovacouncil.org

Signatory's Mailing Address

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

RCAA Fee Assistance Policies and Rules Side 2.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Fee Assistance Program Policies and Rules

The Rancho Cordova Athletic Association Fee Assistance Program, funded by the City of Rancho Cordova Community Enhancement Fund, has been established to meet an RCAA goal of "All Kids Play." The intended outcome is to make participation in RCAA member youth sports leagues accessible to all Rancho Cordova families, especially those encountering financial barriers. Fee Assistance is available through each league until funds are exhausted.

Who is eligible?
Fee Assistance is available to eligible players age 4 through 17
The fund will pay 75% of program registration fees up to $300 per qualified player

1. Applicants must be a resident of the City of Rancho Cordova and show proof of residency or valid driver's license or California State issued identification card.
2. Funding is available for 75% of program fees. Additional funds may be requested in extreme circumstances.
3. Fee assistance must be requested at the time of registration.
4. Fee support it available to multiple children within the same family. Please fill out a separate application for each child.
5. Applicants must re-apply each season to receive assistance.
6. If there is a credit on your league account, the credit will be applied first, then the assisted amount.
7. The RCAA will make every effort to ensure confidentiality amongst applicants.
8. Information provided by applicants will only be provided to League fee assistance administrator as required and shall only be used to determine eligibility for fee assistance.
9. Approved participants will not be separately identified nor be treated any differently than any other
10. member who has paid full price. Participants shall not be discriminated
11. against because of race, sex, color, national origin, age, sexual orientation or disability.
12. In the event of a league season cancelation, only the amount paid by the participant will be refunded. League registration refund cancelation policies and apply.
13. Submittal of an application does not guarantee fee assistance.

Application and Registration Process

Persons seeking fee assistance should complete the application and submit for review and processing at the time of league registration. All supporting documentation for approval must accompany the application. If you have questions or need assistance completing the application, please contact the league. Applications will be reviewed and processed within 5-10 business days.

You must submit the following documentation at the time of submittal:

- Fee Assistance Program Application
- Proof of residency (utility bill or valid driver's license or California State issued identification card)
- Approved income verification documents (see below)
- League registration form

Once approved, program participants will be registered and any remaining balance will be collected. All funds must be paid according to league policies. All incomplete applications will be denied funding.

Acceptable Forms of Income Documentation (Submit one)

- Verification of free or reduced school lunch program participation
- PGE bill indicating enrollment in the Care Credit program
- Phone bill indicating enrollment in the Life Line program
- CalFresh/EBT statement
- Other governmental issued aid statement (i.e. Medicaid, or other)
- Documentation of foster child status

If applicant is unable to provide the documentation listed above, please consult with your League Registrar.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 6:11 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1534831
IP Address:	174.50.166.106
Submission Date:	03/16/2022 6:11
Survey Time:	13 minutes, 6 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Youth Sports Leagues Promo Campaign 2022-23

Project Synopsis

This project provides funds to the Cordova Community Council to assist the Rancho Cordova Athletic Association to continue efforts to improve and expand promotion for youth sports leagues in the City of Rancho Cordova.

Project Description

The project will utilize digital and traditional outreach efforts to boost the profile of youth sports leagues, including collaborative efforts which include mass distribution of flyers, development of high quality and effective signage and an expanded means to extend information to grow year-to-year league participation by 5 percent. The criteria addressed by this project include: (1) Supports the growth and development of children; (2) promotes opportunity for civic engagement; (3) enhances community pride; (4) improves quality of life; (5) supports sports as a positive outlet for building stronger community connections, promoting physical fitness and enhanced participation in sporting activities. This project will build upon previous upgrading of youth sports leagues digital profiles at www.rcathletics.org. The elevation of publicity for youth sports is critical to success for these leagues. During league COVID shutdowns, Rancho Cordova recreational leagues reported that many families have left their leagues to play in “pay to play” private leagues, especially among older players. Leagues will need to be rebuilt with younger players and parents with less experience in skills such as coaching and officiating. This is a nationwide challenge of the post-COVID era. This proposal would also continue to expand the outreach to schools in Rancho Cordova that are part of the Elk Grove and Sacramento City Unified school districts.

Project Team

• Cordova Community Council • Rancho Cordova Athletic Association • League Leadership from: Rancho Cordova Soccer, Rancho Cordova Little League, Rancho Cordova Girls Softball, Rancho Cordova Jr. Lancers Football and Cheer, Rancho Cordova Youth Basketball, Cordova Blue Marlins, Cordova Cordettes, Crossover Basketball, Rancho Cordova Track Club, Cordova Recreation and Park District rec leagues and possibly others.

Project Goals

Application #31

Goal #1 Grow Rancho Cordova youth sports league registration by 5 percent in calendar 2022 Metric: Measure league enrollment against base year 2019 enrollment Goal #2 Assist leagues to recover from CVOID-19 shutdown impacts to registration and enrollment Metric: Use year-to-year enrollment data to measure progress Goal #3 Improve and expand traditional forms of outreach, including signage programs, flyer distributions and improved special event participation Metric: Utilize year-to-tear enrollment data to measure effectiveness

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$42,000

Estimated Breakdown of Project Expenditures

100,000 high quality flyers for monthly distribution in city elementary schools commencing August 2022 through May 2023 (graphic design and printing) $10,000 Upgraded temporary sign program (10 rotations, 20 large format signs per rotation) (graphic design, printing and installation) $9,000 Project collateral giveaways and special events $5,000 Targeted advertising buys in social media and other available media $2,000 Website and app development and maintenance $6,000 Upgrading and replacement of outreach assets, including branded tent, tablecloths, etc. $4,000 Cordova Community Council services $6,000 TOTAL REQUEST $42,000

Matching Funds

None, however this project is an enhancement of substantial efforts carried out by individual leagues and has the in-kind support of the Cordova Community Council outreach tools including eblasts, with enhanced profiles at Cordova Community Council outreach events including Kids Day, Christmas Tree Lighting and Fourth of July parade, among others.

Include Any Other Funding Contributions

None

Ongoing Operations and Maintenance Costs (if applicable)

None

Total Community Enhancement & Investment Funds Requested

$42,000

Is this a multi-year request?

No

How many years have you received funding for this project?

5

When will your request for funding sunset for ongoing programs?

The RCAA has received support for league promotion under the Community Enhancement Grant program since 2015. During that period, the funds have been used to create and update a clearinghouse website, linking all youth sports together for improved visibility and impact. Flyers in both English and Spanish enjoyed wide distribution through the schools, supported by high quality signage posted outside schools which has enjoyed full cooperation by school leadership. In 2018, the project began tracking registration data to measure the success of the project. While there has been overall growth in youth sports participation as a result of these efforts, there is still work to be done. Growth tracking was suspended in 2020 and 2021 due to COVID, but has been rebooted in 2022 with a goal of 5 percent overall registration growth in the calendar year. Prior to the pandemic, data showed that the alarming deterioration in participation had been halted and growth was occurring, even though the Cordova Girls Softball League was operating under challenging conditions due to work on their home field and the Cordova Community Swimming Pool was closed. The COVID pandemic brought recreational youth sports to a halt in March 2020. As the pandemic continued, players with sufficient family income migrated to “pay to play” leagues which continued to operate, sometimes in defiance of local public health rules. Others have migrated to neighboring counties, where restrictions are more lenient. Overall, the deterioration of enrollment due to the pandemic was significant. This project was adversely impacted by COVID 19 and the financial/performance failure of the previous provider. However, with the assignment of additional Cordova Community Council staff resources and the return of youth sports following the pandemic, the project is once again gaining momentum.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

It is hoped that a future project to expand staff support for the RCAA will lead to increased capacity for fundraising for this project.

Project Schedule, Timeliness and Adaptability

Project Schedule

This project was adversely impacted by COVID 19 and the financial/performance failure of the previous provider. However, with the assignment of additional Cordova Community Council staff resources and the return of youth sports following the pandemic, the project is once again gaining momentum. Looking forward, this new round of activity would follow this project schedule: August 2022: Finalize funding agreement and begin online/sign/flyer program in the schools, plus in-person staffing of information booths at Rancho Cordova school "back-to-school nights." September-December 2022: Continue online/sign/flyer program in schools, activity at Christmas Tree Lighting event January-May 2023: Continue online/sign/flyer program in schools, display and activity at Kids Day in the Park June-July 2023: Continue online flyer program, modified sign program with participation at Fourth of July Parade and festival events August 2023: Resume school year operations, including online/sign/flyer program and back-to-school nights

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

After trial and error, and lots of feedback from participating leagues, the RCAA believes they have hit upon the most effective strategy given available human resources. The RCAA's new website went live in March 2022 and will be an important tool as a clearinghouse for educating parents about registration deadlines and how to access league sign-up information, and financial aid if needed.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

If all sports leagues are canceled, as occurred in 2019 and 2020, there is likely to be little the RCAA can do to continue this program until leagues are allowed to play. However, leagues have become more adept at adapting to these changing environments. This project supports them, so is therefore dependent upon them being active.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Elk Grove Unified
Folsom Cordova Unified
Sacramento City Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Shelly Blanchard

Title

Executive Director

Submitting As

Non-Profit

Phone

9167174408

Email Address

shelly@cordovacouncil.org

Organization's Legal Name (if applicable)

Cordova Community Council Foundation

Mailing Address of Submitter

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Signatory's Name

Cordova Community Council Foundation Shelly Blanchard

Signatory's Title

Executive Director

Signatory's Phone

9167174408

Signatory's Email Address

shelly@cordovacouncil.org

Signatory's Mailing Address

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Youth Sports Promotion Campaign

Name of Organization: Cordova Community Council/Rancho Cordova Athletic Association

Name of Applicant and Title: Shelly Blanchard, Executive Director

Applicant's Phone: 916-717-4408 **Applicant's Email:** shelly@cordovacouncil.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #31



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

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To be filled out by grant applicant

Project/Program Name: Youth Sports Leagues Promo Campaign 2022-23

Name of Organization: Cordova Community Council Foundation

Name of Applicant and Title: Shelly Blanchard

Applicant's Phone: 916 717 4408 **Applicant's Email:** shelly@cordovacouncil.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement (Withheld)

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Elizabeth Rueda on behalf of: Dr. Bindy Grewal

Date: 3/18/22

School District: Elk Grove Unified ■ Folsom Cordova Unified Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #31

Application #31

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Youth Sports League Promo Campaign 2022 23
Name of Organization: CCCF
Name of Applicant and Title: Shelly Blanchard
Applicant's Phone: 916 717 4409 **Applicant's Email:** Shelly@cordovacouncil.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given DiAnne Brown
Endorsement Withheld
Conditional approval of facility rental only
Superintendent's or Designee's Printed Name: DiAnne Brown
Date: 3.18.22
School District: Elk Grove Unified ☐ Folsom Cordova Unified ☐ Sacramento City Unified ☒ Other ☐
Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 8:05 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1534979
IP Address:	73.220.53.216
Submission Date:	03/16/2022 8:05
Survey Time:	54 minutes, 39 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Outdoor Synthetic Track for Rancho Cordova Track Club

Project Synopsis

Financing to build a new outdoor synthetic track on existing Rancho Cordova city owned property. Future plans would include building fields and amenities that would support additional Rancho Cordova youth leagues such as baseball, soccer, football, cheerleading, rugby, and lacrosse.

Project Description

Rancho Cordova Track Club is in need of a home track & field location for local Rancho Cordova community athletes and other track club members. New build items would include an 8 lane synthetic track, steeplechase pit, long jump pit, discus ring, and move existing hammer cage from Cordova High School to new home track location.

Project Team

Rancho Cordova Track Club Board: Dennis Lamantia- Rancho Cordova Track Club President Jennifer Laret- Rancho Cordova Track Club Vice President Josh Gruver- Race Director & Head Coach of Rancho Cordova Track Club Anthony Davis- Board Member & Coach Danielle Davis- Secretary

Project Goals

To build a multi-use sports facility that will support local sports. Sports would include but would not be limited to: track & field, soccer, baseball, football, lacrosse, rugby, etc. Current rental conditions are not conducive to youth sports leagues' current running budgets and fees. Current rental fees are hindering league growth and expansion. Facility availability is limited and current schedules for leagues are secondary to high school athletics making time availabilities late into the evening or not available at all. The hope for this location is that it would become a self-sustaining facility by hosting regional sporting events. Ultimately bring revenue into the city due to spectators staying in local hotels, eating at local restaurants, shopping at local stores, and using other local amenities.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$3,000,000.00

Estimated Breakdown of Project Expenditures

Build synthetic track, synthetic turf, concrete rings for discus, and shot put.

Matching Funds

Fundraising by local youth leagues Corporate Sponsorships

Include Any Other Funding Contributions

Fundraising by local youth leagues Corporate Sponsorships

Ongoing Operations and Maintenance Costs (if applicable)

TBD

Total Community Enhancement & Investment Funds Requested

$3,000,000.00

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

When the facility is built

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

Local sponsors, corporate sponsors, usage fees, club membership fees

Project Schedule, Timeliness and Adaptability

Project Schedule

Based on property availability and available financing.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Based on property availability and available financing.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

No

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

TBD

Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Dennis Lamantia

Title

President of Rancho Cordova Track Club

Submitting As

Non-Profit

Phone

9167653082

Email Address

dennis@rctrack.org

Organization's Legal Name (if applicable)

Rancho Cordova Track Club, Inc

Mailing Address of Submitter

11613 Sandy Bar Court
Rancho Cordova, CA 95670

Signatory's Name

Mr. Dennis Lamantia

Signatory's Title

President

Signatory's Phone

9167653082

Signatory's Email Address

dennis@rctrack.org

Signatory's Mailing Address

11613 Sandy Bar Court
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 11:56 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1536265
IP Address:	174.50.166.106
Submission Date:	03/17/2022 11:55
Survey Time:	33 minutes, 42 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Renovation and Maintenance of Youth Sports Facilities

Project Synopsis

This project provides funds to the Cordova Community Council on behalf of the Rancho Cordova Athletic Association to be expended for materials and services to improve and maintain youth sports fields and facilities located on property owned by the Folsom Cordova Unified School District and/or Cordova Recreation and Park District using labor provided by either the property owner or other approved labor source.

Project Description

The project duplicates a program already operating in the City of Rancho Cordova, wherein the school district or park district provides labor or other services for field or facility improvements and repairs on their property with material and other services costs, and volunteer effort provided by the Rancho Cordova Athletic Association (RCAA). The projects are selected by a consortium of Rancho Cordova youth sports league leaders organized under the RCAA, a project of the Cordova Community Council Foundation (CCCF). CCCF provides coordination, reporting, bookkeeping and oversight. The sports leagues which stand to benefit from this project include Rancho Cordova Little League, Cordova Girls Softball, Rancho Cordova Soccer, Rancho Cordova Track Club, Cordova Blue Marlins, Cordova Cordettes, Cordova Jr. Lancers, Rancho Cordova Track Club, and possibly others. This project meets Community Enhancement Fund criteria by advancing community pride, promoting civic engagement, improving quality of life offerings to residents, and by providing growth and education opportunities for youth and children in the community through quality sports programs. This project leverages existing community assets and previous City investments. In partnership with the Cordova Community Council Foundation, the Project Team has proven capacity to deliver the project.

Project Team

Cordova Community Council Foundation, Shelly Blanchard, Executive Director Folsom Cordova Unified School District Cordova Recreation and Park District

Project Goals

Goal #1: Continue to enhance facilities in a variety of projects, including by not limited to, addressing rodent infestations and other turf issues including insufficient play-condition dirt on playing surfaces; enhancing playing conditions in area gymnasiums with wall

padding and safety cages; curing of unsightly conditions at sports fields which generally improve the facility and are of benefit to the surrounding neighborhood; proactive efforts such as the addition of sun shades to baseball dugouts and other venues; and COVID safety enhancements, such as the addition of sanitizer dispensers; and other restoration and maintenance issues at public sports facilities in Rancho Cordova. Metric: Enhancements accomplished with the help of this fund are reported annually in a report to the City. Goal #2: Attract and retain tournament play through upgrading sports facilities Metric: Report on progress is provided in an annual report to the City, measured by participation levels. Goal #3 Improve playing conditions to retain Rancho Cordova youth athletes who are migrating to other leagues in other communities due to facility issues Metric: Report on progress in this area in an annual report to the City Council, measured by participation levels Goal #4 Leverage this fund through matching grant opportunities and in-kind contributions from the Cordova Recreation and Park District and Folsom Cordova Unified School District Metric: Measured using feedback from in-kind donors and grant success.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$50,000

Estimated Breakdown of Project Expenditures

$45,000 for materials and services match, to be determined by leagues actively participating the RCAA during monthly meetings
$5,000 for administrative, coordination, oversight and bookkeeping (Cordova Community Council)

Matching Funds

Volunteer time provided by parent coaches and volunteers in youth sports is huge. Improvements which support this volunteer pulse point further leverages an enormous community asset, and improved field conditions grows the leagues. Here are the numbers for the Rancho Cordova sports leagues represented by RCAA: o $8.086 million: 900 coaches/volunteers @ 300 hours per season o $22,462: RCAA volunteers 15 @ 50 volunteers hours per year The project also relies on in-kind contributions of labor from the Cordova Recreation and Park District and the Folsom Cordova Unified School District.

Include Any Other Funding Contributions

None

Ongoing Operations and Maintenance Costs (if applicable)

These enhancements are focused on reducing operations and maintenance costs to youth sports leagues and public agency hosts

Total Community Enhancement & Investment Funds Requested

$50,000

Is this a multi-year request?

No

How many years have you received funding for this project?

7

When will your request for funding sunset for ongoing programs?

Large projects which have replaced the Girls Softball complex at Mills Middle School, the pool at Hagan Community Park, and eventually will renovate the Rancho Cordova Little League home fields should, over time, reduce the need for renovation projects. However, new facilities also come with a higher standard of care and maintenance, and until participation growth catches up with these costs, youth leagues are likely to require continued support of this kind. During the pandemic, youth sports leagues canceled play. One unintended consequence of this has been the loss of dedicated volunteers, who have migrated to pay-to-play leagues and teams in neighboring communities in Placer and El Dorado County. The loss of these volunteers are expected to take time to rebuild, but in the meantime these facilities will need to be recovered and maintained. In addition, as the renaissance of youth sport leagues in Rancho Cordova continues, greater participation is likely to drive the need for additional space and maintenance efforts. Until some sort of equilibrium is reached wherein paid participation is able to offset these costs, it is likely some subsidy will be needed into the future. RCAA has discovered that unwinding years of neglect at many of these publicly-owned facilities has been daunting and on-going.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Local leagues depend heavily on volunteers to help maintain fields and facilities. In addition, it is the obligation of public property owners like the school and park district to provide maintenance. The enhancements which are accomplished through this grant program elevate playing conditions for Rancho Cordova children, and include the on-going support of community volunteers which reduce the need for additional cash.

Project Schedule, Timeliness and Adaptability

Project Schedule

July 2022 Contract completed August 2022 Convene RCAA to build project list September 2022 Approve preliminary project list and begin fall projects January 2023 Approve remaining projects and begin spring projects June 2023 Complete all projects

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Getting projects completed as part of this program has been challenging, especially during the pandemic, when partner organizations were often unavailable to provide the labor support that is envisioned by this partnership. The Cordova Community Council has dedicated additional staff resources to help manage these projects, providing additional leadership and follow-up to expedite these projects. However, it is an on-going challenge that grant awards are made after work schedules for partner agencies have been completed for the year, forcing RCAA projects to be inserted into work schedules on an "as available" basis.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

These projects were adversely impacted during the pandemic, particularly in the area of volunteer service. In addition, since public facilities were closed, and worker shortages were common, many planned projects could not be accomplished. There has been much progress in the area of work accommodations after two years of pandemic experience and moving forward it would be expected that adjustments would be easier. However, if there were to be a complete shutdown of youth sports, as was the situation in 2020, it would be expected that the volunteer corps would also disappear and labor shortages at public agencies would cause a slowdown or cancellation of these projects.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Various sites to be determined. Projects mainly take place at Cordova Recreation and Park District and Folsom Cordova Unified School District properties hosting youth sports league play.

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a park/park facility
Yes, at a public K-12 school site

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Shelly Blanchard

Title

Executive Director

Submitting As

Non-Profit

Phone

9167174408

Email Address

shelly@cordovacouncil.org

Organization's Legal Name (if applicable)

Cordova Community Council Foundation

Mailing Address of Submitter

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Signatory's Name

Cordova Community Council Foundation Shelly Blanchard

Signatory's Title

Executive Director

Signatory's Phone

9167174408

Signatory's Email Address

shelly@cordovacouncil.org

Signatory's Mailing Address

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #33

CORDOVA COMMUNITY COUNCIL

Renovations and Maintenance of Youth Sports Facilities

Folsom Cordova Unified School District
Cordova Recreation and Park District

Application submitted by:

Shelly Blanchard
Executive Director
(916) 273-5707
Cordova Community Council
shelly@cordovacouncil.org
2729 Prospect Park Drive Suite 117
Rancho Cordova CA 95670

Type of Applicant Non-Profit

Project Synopsis

This project provides funds to the Cordova Community Council on behalf of the Rancho Cordova Athletic Association to be expended for materials and services to improve and maintain youth sports fields and facilities located on property owned by the Folsom Cordova Unified School District and/or Cordova Recreation and Park District using labor provided by either the property owner or other approved labor source.

Project Description

The project duplicates a program already operating in the City of Rancho Cordova, wherein the school district or park district provides labor or other services for field or facility improvements and repairs on their property with material and other services costs, and volunteer effort provided by the Rancho Cordova Athletic Association (RCAA). The projects are selected by a consortium of Rancho Cordova youth sports league leaders organized under the RCAA, a project of the Cordova Community Council Foundation (CCCF). CCCF provides coordination, reporting, bookkeeping and oversight.

The sports leagues which stand to benefit from this project include Rancho Cordova Little League, Cordova Girls Softball, Rancho Cordova Soccer, Rancho Cordova Track Club, Cordova Blue Marlins, Cordova Cordettes, Cordova Jr. Lancers, Rancho Cordova Track Club, and possibly others.

Application #33

This project meets Community Enhancement Fund criteria by advancing community pride, promoting civic engagement, improving quality of life offerings to residents, and by providing growth and education opportunities for youth and children in the community through quality sports programs.

This project leverages existing community assets and previous City investments. In partnership with the Cordova Community Council Foundation, the Project Team has proven capacity to deliver the project.

Project Team

Rancho Cordova Athletic Association
Cordova Community Council Foundation
Folsom Cordova Unified School District
Cordova Recreation and Park District

Project Goals

Goal #1: Continue to enhance facilities in a variety of projects, including by not limited to, addressing rodent infestations and other turf issues including insufficient play-condition dirt on playing surfaces; enhancing playing conditions in area gymnasiums with wall padding and safety cages; curing of unsightly conditions at sports fields which generally improve the facility and are of benefit to the surrounding neighborhood; proactive efforts such as the addition of sun shades to baseball dugouts and other venues; and COVID safety enhancements, such as the addition of sanitizer dispensers; and other restoration and maintenance issues at public sports facilities in Rancho Cordova.

Goal #2: Attract and retain tournament play through upgrading sports facilities

Goal #3: Improve playing conditions to retain Rancho Cordova youth athletes who are migrating to other leagues in other communities due to facility issues

Goal #4: Recover facilities neglected due to the COVID 19 pandemic during which time volunteer activities have been curtailed and league play has been canceled.

Metrics

Goal	Metrics
Goal #1 Enhance playing conditions at Rancho Cordova facilities	Enhancements accomplished with the help of this fund are reported annually in a report to the City
Goal #2 Attract and retain tournament play through upgrading sports facilities	Report on progress in this area in an annual report to the City, measured by participation levels

Goal #3 Improve playing conditions to retain Rancho Cordova youth athletes who are migrating to other leagues in other communities due to facility issues	Report on progress in this area in an annual report to the City Council, measured by participation levels
Goal #4 Leverage this fund through matching grant opportunities benefitting youth sports	Report on progress in this area in an annual report to the City, measured by grant application activity and success

Funding Request

- **This is a one year request**
- **Funding request: $50,000**

  $45,000 for materials and services match, to be determined by leagues actively participating the RCAA

  $5,000 for administrative, coordination, oversight and bookkeeping (Cordova Community Council)
- **Matching Funds and In-Kind Contributions:** Volunteer time provided by parent coaches and volunteers in youth sports is huge. Improvements which support this volunteer pulse point further leverages an enormous community asset, and improved field conditions grows the leagues. Here are the numbers for the Rancho Cordova sports leagues represented by RCAA:
  - $8.086 million: 900 coaches/volunteers @ 300 hours per season
  - $22,462: RCAA volunteers 15 @ 50 volunteers hours per year

(Value of volunteer time calculated at $29.95 per hour in California/Independent Sector, a national membership organization that brings together the charitable community, foundations and corporations to advance the common good.)

Project Schedule and Timeliness

July 2022	Contract completed
August 2022	Convene RCAA to build project list
September 2022	Approve preliminary project list and begin fall projects
January 2023	Approve remaining projects and begin spring projects
June 2023	Complete all projects

Because facilities are utilized during prescribed athletic seasons, work is mostly completed during off-season periods and completed before a particular season begins. This creates natural deadlines for the completion of the projects and motivates leagues and volunteers to complete projects before they are needed.

One challenge which has been encountered in the past is the availability of staff at the Folsom Cordova Unified School District to participate as the leverage partner. In these cases, the projects have experienced delays. Projects leveraging labor from the Cordova Recreation and Park District have not been delayed by labor issues.

Adaptability to public health agency orders

Experience has shown that this project is not directly affected by Health Orders and other COVID 19 restrictions. However, the availability of volunteers can be affected could produce unavoidable delays.

History of support and sustainability

The RCAA has received support for sports facility improvements under the Community Enhancement Grant program since 2015. During that period, the funds have been used to correct long-neglected safety problems at facilities across the city, including recovery of the former Mills Little League site located on Dawes Street.

This project enabled both Cordova Girls Softball and Rancho Cordova Little League to continue to offer playing locations during other renovations. In particular, it sustained the Cordova Girls Softball league through the construction of their new facility. Not only have families in both leagues benefitted, but the neighborhood has benefitted, as well. The massive clean-up of the property corrected dangerous conditions created by long-neglected tree trimming, and clearing of over-growth has calmed homeless activities in the area – appreciated by the neighborhood and Cordova Gardens Elementary School community.

The minor investment in the Cordova Blue Marlins for a travel trailer has enabled that program to continue operations during the period that Hagan Park Community Pool has been unavailable. In the case of Little League, the fund has allowed for incremental improvements to their Ahlstrom Park home fields while the City of Rancho Cordova wrestles with the many challenges which need to resolved to provide for a modern, updated facility for this legacy organization.

The funds have also assisted in the long-desired launch of basketball offerings for youngsters in the elementary grades and has boosted care of turf at Stone Creek Park, home to Rancho Cordova Soccer, the largest youth sport league in Rancho Cordova which is offering excellent recreational play to more than 1,000 children each year.

The program has recently provided a small investment in the Rancho Cordova PAL Jr. Giants Program, which serves the neediest children in the community, and is expanding each year, by providing funds for a storage container for Jr. Giants program needs and equipment.

Indeed, this program has filled gaps for virtually every Rancho Cordova youth sport league and is sparking the development of new leagues. While relatively minor in terms of dollars, these

small investments in volunteer-driven recreational sports leagues which are providing the backbone for youth sports in the community have been transformative over the years, providing an excellent investment in the families of Rancho Cordova. We can think of no greater community enhancement than that.

Finally, the project represents community collaboration at its best. Because the youth sports community works together through RCAA to set spending priorities, competition for resources is replaced by a collegial and collaborative approach that considers wide community needs over a more singular perspective. The project has also built new partnerships between community taxpayers and user groups and school and park district officials, with each gaining new understanding of the challenges faced by all involved in providing recreational sports opportunities for children.

What is the future need?

Large projects which have replaced the Girls Softball complex at Mills Middle School, and eventually will renovate the Rancho Cordova Little League home fields should, over time, reduce the need for renovation projects. However, new facilities also come with a higher standard of care and maintenance, and until participation growth catches up with these costs, youth leagues are likely to require continued support of this kind.

During the pandemic, youth sports leagues canceled play. One unintended consequence of this has been the loss of dedicated volunteers, who have migrated to pay-to-play leagues and teams in neighboring communities in Placer and El Dorado County. The loss of these volunteers are expected to take time to rebuild, but in the meantime these neglected fields will need to be recovered. In the year ahead, it is expected funds from this grant will be needed to

In addition, as the renaissance of youth sport leagues in Rancho Cordova continues, greater participation is likely to drive the need for additional space and maintenance efforts. Until some sort of equilibrium is reached wherein paid participation is able to offset these costs, it is likely some subsidy will be needed into the future. RCAA has discovered that unwinding years of neglect at many of these publicly-owned facilities has been daunting and on-going.

Project Location

All projects in this program have been on property owned by the Folsom Cordova Unified School District and Cordova Recreation and Park District. Together, these two governmental agencies provide all the facilities supporting recreational youth sports leagues in the community.

Partner Endorsements

This collection of projects will require the participation of the Cordova Recreation and Park District and the Folsom Cordova Unified School District. The required supplemental endorsement document has been submitted.

I acknowledge that I have read and understand the Supplemental Endorsement Form requirements.

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Renovations and Maintenance of Youth Sports Facilities

Name of Organization: Cordova Community Council/Rancho Cordova Athletic Association

Name of Applicant and Title: Shelly Blanchard, Executive Director

Applicant's Phone: 916-273-5707 **Applicant's Email:** shelly@cordovacouncil.org

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

Endorsement Given

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES

Date: 3/7/22

Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

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Application #33

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Renovations and Maintenance of Youth Sports Facilities

Name of Organization: Cordova Community Council/Rancho Cordova Athletic Association

Name of Applicant and Title: Shelly Blanchard, Executive Director

Applicant's Phone: 916-717-4408 **Applicant's Email:** shelly@cordovacouncil.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #33

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 11:07 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538312
IP Address:	64.30.110.75
Submission Date:	03/18/2022 11:06
Survey Time:	4 minutes, 42 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Parkway Half Marathon

Project Synopsis

Continue funding the Parkway Half Marathon and Otter Run to align as a first-class major active-lifestyle event with the City of Rancho Cordova

Project Description

There are two components of the request 1. Maintain the start and finish line configuration from the previous year's grant, which considers the start line in William Pond Park (to facilitate larger volume parking accommodations) and all finish lines and the entire Kids Otter Dash within the Rancho Cordova City limits, similar to the Eppie's Great Race configuration (and what is now the Great American Triathlon). The section along the American River Parkway, from River Bend to Sunrise, is the main route for the Parkway Half Marathon, and travels through the most pristine, remote, and expansive portions of the Parkway. As such, a grant to continue the Parkway Half Marathon route and finish line within the Rancho Cordova city limits aligns the city with a major running event, as well as a meets the goal of having a community health a fitness event. The Parkway Half also raise awareness for, as well as greatly contributes and promotes, Rancho Cordova as an active lifestyle community in concert with other local jurisdictions health resources and environments. The alignment of the Parkway Half Marathon with Rancho Cordova elevates the City as a primary regional supporter of the Parkway, as proceeds from the race are donated to fund projects and improvements along the Parkway. Having the race route and finish line within the City and connected to other existing events should be beneficial to all local residents. 2. Maintain support for the Kid's 1k "Otter Dash." This is known as the Otter Run. The goal is to align this event to the morning of Kids' Day in the Park. As Kids' Day is no cost to participants, the object is to continue with keeping the Otter run at no charge to all Rancho Cordova children as well. The participants in the event have all the safety, supervision, and environmental needs of a race event. Plus they are provided with a shirt, medal, and snacks.

Project Team

Parkway Half Marathon is produced by Sacfit, a charitable non-profit 501(c)(3) organization. Tax identification number 11-3782144. The race committee is primarily volunteer experts working with industry specialists in producing race events, including Rich Hanna's Capital Road Race Management (CRRM). Sacfit, aligned with CRRM, has a track record of success for the past 13 years. The race is

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unique in that it has a separate half marathon runners' and walkers' course. There is, also, a 5k run/walker and 1k kids Otter Dash. The Parkway Half Marathon is an established, first-class race, and is the third largest in the region. Over 30,000 participants, mostly first-time half marathoners, have enjoyed the race over the past 13 years. It is the only race that provides: full color shirts, finisher medals, full lunch, more aid stations of any other half marathon, and nearly two dozen bands along the course. The finish line pavilion provides space community organizations, beer garden, music and activities for children. The primary goal of the race is to provide a positive race experience for the participants to inspire regular fitness engagement. The secondary is to help upgrade and improve the Parkway. The race has raised over $370,000, with 100% of those proceeds used to benefit the Parkway. The most recent project was a collaborative effort with the City of Rancho Cordova, the Cordova Recreation and Park District, the Rotary Club of Rancho Cordova and the Parkway Half Marathon, led the project to install an ADA accessible, dog friendly, bike safe and runner/walker useable water fountain in Hagan Community Park next to the Parkway bike and pedestrian path.

Project Goals

1. The goal of keeping the finish line inside the city limits is to provide a vehicle where the event is recognized as a city event. Provide opportunity to rebrand race. Provide the best affordable half marathon race to the community. Drive out-of-town participants to use Rancho Cordova's hospitality services. 2. The goal of sponsorship of the 1k Kids race is to provide a free event with all the excitement of a race event in concert with the existing Kids Day event in the afternoon. 3. The sponsorship of aid stations staffed by youth organizations as a direct follow through of funds from the grant to local youth programs

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

Total project cost: Approx. $85,000

Estimated Breakdown of Project Expenditures

Estimated breakdown of project expenditures: • Race Timing and Event Management - $30,000 • Aid Stations - $2,500 • Shirts - $12,000 • Medals - $15,000 • Food - $6,000 • Permits - $10,500 • Insurance - $1,000 • Marketing - $5,000 • Equipment Rental - $3,000

Matching Funds

3500 bottles of water, food samples for participants, goodie bag items.

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

Total Community Enhancement Funds requested: $15,000, same as last year's grant - $12,000 for race elements and $3,000 for marketing expenses

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

N.A

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Running related sponsors of in-kind items for the participants.

Project Schedule, Timeliness and Adaptability

Project Schedule

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Permitting with County Parks – September 2022 • Website update and registration opening – October 2022 • Recruitment of volunteers, timing management – October 2022 • Securing sponsors – October 2022 thru March 2023 • First email broadcast – October 2022 • Second email broadcast – December 2022 • Medal and shirt design – January 2023 • Securing vendors, additional permits – Jan thru March 2023 • Third email broadcast – March 2023 • Medal cast and Shirt printing – April 2023 • Race event – April 29, 2023

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This is an annual race that has been successfully conducted over the past 13 years on time and on the specified date. Because this is a major event that markets a certain date, the event must occur as advertised so that it's participants can plan and train for the event. With the resources and infrastructure, we have developed, nurtured, and grown of the years, these factors have cemented a track record of successful completion for this event.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. Having to operate this event virtually over the past two years, we have the experience, nimbleness, and infrastructure to operate virtually.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2300 Rod Beaudry Drive
Rancho Cordova, California 95827

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Ken Press

Title

race director

Submitting As

Non-Profit

Phone

9162129925

Email Address

sacfit@gmail.com

Organization's Legal Name (if applicable)

sacfit

Mailing Address of Submitter

PO box 19301
Sacramento, CA 95819

Signatory's Name

Mr. Ken Press

Signatory's Title

Race Director

Signatory's Phone

9162129925

Signatory's Email Address

sacfit@gmail.com

Signatory's Mailing Address

PO box 19301
Sacramento, CA 95819

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

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Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 1:00 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538655
IP Address:	67.161.189.71
Submission Date:	03/18/2022 1:00
Survey Time:	44 minutes, 9 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Mather Wrestling Club

Project Synopsis

Excited to be offering the Mather Wrestling Club as a youth sports and fitness club providing an outlet for youth (girls and boys) between the ages 8 to 14. The club offers the benefits of exercise in a controlled positive and fun environment during the summer months.

Project Description

The sport of wrestling is offered for girls and boys at both Mills and Mitchell Middle Schools and Cordova High School. The Mather Wrestling Club is a youth sports and fitness club providing an outlet for youth (girls and boys) between the ages 8 to 14. It will benefit the community of Rancho Cordova by creating a venue that all youth can come. The club promotes community pride and supports the growth and development of youth. Participation in the club will include an application and anticipated fee of $75. Scholarships will be made available to those who cannot afford the participation fee up to the allotted funds made available to award scholarships. Optional Competition: Club members will need USA wrestling card to compete. $40 each. https://www.usawmembership.com Tournament fees generally $10-15 each to be paid by wrestler at the venue. Tournament transportation: Parents provide. Coach will be at tournaments with pre-planning for those wishing to compete at a local event. Coach Bio: Coach Zilles has been coaching wrestling at Mitchell Middle School for the past 6 years. Coach Zilles is a certified coach by the National Federation of State High School Associations and is First Aid/CPR/Concussion recognition and prevention trained. After serving eight years in the Marine Corps, Coach Zilles returned to complete his education at Sacramento State where he earned his degree in Geologic Sciences and currently practices with a local consulting firm. Coach Zilles is a resident of Mather, works in Rancho Cordova at Kleinfelder, Inc. (engineering firm), and is a product of Rancho Cordova Schools (St. John Vianney, Mills, and Cordova). He also has 3 Children attending(ed) Folsom-Cordova Schools; Mather Heights, Mitchell Middle, and Cordova High School.

Project Team

Joe Zilles, Coach

Project Goals

Application #35

The long-term goal to this wrestling club is to offer a positive and fun environment, introduce kids to the sport, teach sportsmanship, promote enthusiasm and team spirit, and build a path for those interested to follow as they transition to Middle and High Schools. As an introductory club, we will teach basic and fundamental skills centered around three basic concepts (Takedown, Breakdown, and Pinning Combinations) that the kids can use to compete in a novice level local tournament. Each day will start with a warm-up (agility and skill) and stretching followed by instruction and practice of the element taught that day. Fun activities such as relay races, or challenge type exercises will be interjected from time to time in the curriculum. Metrics of success: Participation should grow from year to year.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$24,000

Estimated Breakdown of Project Expenditures

Printed club T-shirts $2,000 various sizes Printed Club shorts $1,000 various sizes Participatory swag: bag, water bottle, medals $200 Mat cleaner $100 Mat tape $100 Club snacks $400 First aid supplies $200 Insurance $2,000 Business license /other administration fees (County, State, Federal, website maintenance) $1,500 Wrestling Mat $12,000 Storage $1,800/yr Scholarships $2,500

Matching Funds

None at this time.

Include Any Other Funding Contributions

None at this time. Have applied for 501C status to seek donations.

Ongoing Operations and Maintenance Costs (if applicable)

Requested funds to support storage of equipment beyond the club dates. Monthly storage unit costs have been included $150/month=$1,800/year.

Total Community Enhancement & Investment Funds Requested

24,000

Is this a multi-year request?

Yes

Number of Years

3

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

The club experience is intended to build strong local interest in the sport and provide a smooth and confident transition for elementary grade kids to Middle School and High School. Since the club is intended to draw kids from all over Rancho Cordova, it is meant to supplement the Middle School wrestling programs a t Mills and Mitchell Middle Schools, as well as Cordova High School. The greater the participation, the better the chances are of success and sustainability. The first year will provide the platform from which to gauge the interest and fine tune things like instruction and take in feed back from parents and participants. The second and third years will show strong interest and participation will grow. as it grows a continued sense of success will drive re-evaluations of club curriculum, increased participation, staffing, and other needs. The club participation fees collected can be used to offset future costs of materials outlined in the cost section.

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

August 2025

Do you plan to ask annually for funding?

Yes

Application #35

What other funding will you seek to support your project?

Applied for 501C status. will seek community donations form local businesses.

Project Schedule, Timeliness and Adaptability

Project Schedule

Multi-year for first 3 years. Club dates: Mondays and Wednesdays, 5:00-6:30 Summer Start July End August

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This program is intended to support the local middle school programs prior to each school season (Nov-Feb).

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. as done recently, we had to pivot our start dates to accommodate local requirements to adhere to changing health concerns.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Mitchell Middle School, 2100 Zinfandel Dr.
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Joe Zilles

Title

Head Coach

Submitting As

Individual

Phone

9167196017

Email Address

jzilles@kleinfelder.com

Organization's Legal Name (if applicable)

Mather Wrestling Club

Mailing Address of Submitter

11126 Graeton Circle
Mather, CA 95655

Signatory's Name

Joe Zilles

Signatory's Title

Head Coach

Signatory's Phone

9167196017

Signatory's Email Address

jzilles@kleinfelder.com

Signatory's Mailing Address

11126 Graeton Circle
Mather, CA 95655

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #35

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 4:51 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539167
IP Address:	75.53.170.16
Submission Date:	03/18/2022 4:51
Survey Time:	12 minutes, 30 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Capacity Building for Community Bicycling in Rancho Cordova

Project Synopsis

Sacramento Area Bicycle Advocates (SABA) and Bicycling Advocates for Rancho Cordova (BARC) seek funding for a host of activities that encourage bicycling in Rancho Cordova. Activities include valet bicycle parking at community events, bicycle repair and maintenance clinics, social rides, bicycle education, and a bicycle apprenticeship program and outreach.

Project Description

SABA and BARC have provided experiences for Rancho Cordova community members with funds from the CEIF for the last four years. These funds have provided bicycle encouragement activities for Rancho Cordova citizens, and has built capacity in BARC, with the goal that it become a self-sufficient bicycling non-profit. Activities such as bike valet, social rides, education about bicycle mechanics and cycling skills, have all been a part of a larger community cycling program for Rancho Cordovan citizens. With the pandemic receding, more activities and events are returning to the calendar. BARC will provide valet bike parking at a full set of venues this year. BARC will kindly park your bicycle at the July 4th celebration, the Capitol Air Show and other regular events. With funding from the 2021-22 grant plus a sponsorship acquired by SABA, we supported four Rancho Cordova community members in becoming Licensed Certified Instructor's (LCI) with the League of American Bicyclists. We will provide RIDEshops - quick education and refresher skillbuilders - before social rides and BARC will organize and implement two bike rodeos. SABA will provide a senior LCI to coach the new LCI's, increasing the reach of the events. SABA's vision is to open a "Bicycle Fix-it Kitchen", a place where community members can work on their own bicycles, or have them worked on by mechanics who have completed SABA's mechanic apprenticeship program. This program teaches basic mechanic skills that are marketable and a service in Rancho Cordova where only one bike shop exists. Few families have the resources to have a bike serviced in the bike shop in town which caters to racing, leaving them with bicycles in need of basic repair. SABA's apprenticeship program will produce a cohort of bicycle mechanics who can work in the community on bicycles in need of basic repair. The result of our work doubles the impact to support residents in choosing a bicycle for daily trips or recreation.

Project Team

Application #36

SABA: Debra Banks, Executive Director, Robert Christiansen, Program Manager, Jeremiah Rohr, Office Manager BARC: Nick Buchen, Executive Director, Austin Allen, Fayzah Mughal and Karl Haas, Board Members, BARC

Project Goals

Goal 1: Continue implementation of a community cycling program in Rancho Cordova. a. BARC will provide Bike Valet services to at least five festivals in Rancho Cordova. b. BARC will hold a set (4-5) of Social Rides around Rancho Cordova that encourage and boost confidence in riding. These will be open to all residents in Rancho Cordova. c. BARC will provide two energizer activities during May is Bike Month. d. BARC & SABA will host two Bike Rodeo's. e. SABA will continue to bring lightly used bicycles in safe and good working order to events in underserved neighborhoods for community members in need. Goal 2: Build capacity in Rancho Cordova to service bicycles within the community. a. SABA and BARC will hold (8) bike repair clinics, and (4) of them will be in association with other events (Bike Valet or social rides). b. SABA will run a mechanic apprenticeship program to teach a cohort basic bicycle mechanic skills. Matched with SABA's master mechanics, this cohort will have classroom training and will service bicycles in the neighborhoods. SABA anticipates working on at least 100 bikes throughout these repair events, which keep people rolling and bicycles out of garages, basements or worse, landfills. Goal 3: Continue building capacity in BARC as a bicycle advocacy organization. a. BARC will continue to broaden its reach within Rancho Cordova by tabling at community events. Engaging the community on topics such as bicycle infrastructure, new developments in street design and other infrastructure about bicycle facilities will help deepen the community's understanding of how good street design can encourage cycling. b. BARC and SABA will distribute a variety of bicycling information. At tabling events, BARC will distribute lights for bicycles so that riders are safe in dusk lighting and tip books on cycling safety. c. Building a database of volunteers will provide credibility to BARC's advocacy, measured by the growing number of participants on its roster.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$18585

Estimated Breakdown of Project Expenditures

These are totals for each set of activities (staffing, materials (printing, promotional materials), mileage, equipment). A spreadsheet with a breakdown for each set of activities is available. Bike Valet: $ 3250 Social Rides: $ 982 Bike Mechanics: Ride Ready Repair Clinics + Apprenticeship program: $ 5402 Bike Education & Rodeos: $ 4585 BARC Capacity Building: $ 2500 Grant Management: $ 1866

Matching Funds

SABA has allocated $1663. in matching funds to strengthen the set of tools to manage and implement the Apprenticeship program.

Include Any Other Funding Contributions

SABA has two direct channels of lightly used bicycles that can be checked and equipped with lights, a lock and helmet. We expect to give away at least 30 bicycles to community members in need and who can't afford a bicycle.

Ongoing Operations and Maintenance Costs (if applicable)

We do not foresee long term maintenance costs.

Total Community Enhancement & Investment Funds Requested

$18585

Is this a multi-year request?

No

How many years have you received funding for this project?

4

When will your request for funding sunset for ongoing programs?

We expect BARC to be a self-sufficient bicycle organization in 2024.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

SABA has partnerships with the 50Corridor TMA and BikeLab to deepen and broaden this scope of activities. In addition, SABA will be hosting May is Bike Month for the entire SACOG region, which means that SABA will promote and amplify the events that BARC and SABA are hosting in Rancho Cordova-throughout May. SABA also has a relationship with the Sacramento Bike Kitchen that assists with providing lightly used bicycles for those in need and can't afford a new bicycle. We expect this partnership to assist with both bicycles and in realizing the long-range vision of a "Bicycle Fix-it Café". SABA has received a SMUD Shine grant to implement a bicycle mechanic apprenticeship program in South Sacramento. We will be using some of the tools purchased through our SHINE Grant for the Apprenticeship program. Plus, the tools that we are beginning to acquire from CEIF funds that are not disposables (cables, chains, brake pads, etc) will be purchased and then handed over to the Rancho Cordova "Bicycle Fix-it Kitchen" when realize that larger vision.

Project Schedule, Timeliness and Adaptability

Project Schedule

Spring 2022 Summer 2022 Fall 2022 Winter 2022-23 Spring 2023 BARC: Social Ride w/new LCI's BARC: Bike Valet at Kids Day &/or IFest BARC: May is Bike Month energizer activity SABA: Ride Ready Repair, Bike Mechanic Apprentice Program BARC: Social Ride w/new LCI's BARC: BikeValet: July 4th plus a Bike Mechanic SABA: Ride Ready Repair, Mechanic Apprentice Program BARC: Social Ride w/new LCI's BARC: Bike Valet: Cap City Air Show: plus a Bike Mechanic BARC: Bike Valet at Family Fall Festival BARC: May is Bike Month Bike Rodeo! SABA: Ride Ready Repair, Mechanic Apprentice Program at Mather BARC: Social Ride w/new LCI's BARC: Light's ON! 3-4 evenings to be determined once Daylight Savings time changes SABA: Ride Ready Repair, Mechanic Apprentice program at Mather BARC: Social Ride w/new LCI's BARC: Bike Valet: Kids Day and IFest. BARC: May is Bike Month energizer activities BARC: May is Bike Month Bike Rodeo! SABA: Ride Ready Repair + Apprentice program at Mather Spring 2022: BARC: Social Ride w/new LCI's; Bike Valet at Kids Day &/or IFest; May is Bike Month energizer activity; SABA will launch Ride Ready Repair, Bike Mechanic Apprentice Program. Summer 2022: BARC: Social Rides, Bike Valet & SABA: Continuation of Apprenticeship Program Fall 2022: BARC: Social Rides, Bike Valet, a Bike Rodeo & SABA: continuation of Apprenticeship program Winter 2022: BARC: Social Ride, Light distribution, & SABA: Continuation of Apprenticeship program Spring 2023: BARC: Social ride, Bike Valet, May is Bike Month Energizer & Bike Rodeo. SABA: Completion of Apprenticeship Program.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Given that all of our events are being held by two partnering organizations, we do not expect to have any challenges to execute all of the activities. The majority of events are seasonally based, with the least going in during the winter months (except Light's ON!). Many events and activities are based on either Rancho Cordova community calendar or during May (is Bike Month). We do not anticipate and problems completing by June 30, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The only activities that would be completely shuttered due to a new variant of the Coronavirus is Bike Valet. Everything else can be delivered either virtually, or on an individual basis. Ex: Social rides can be drawn up and promoted through social media channels, with earned swag to people who participate in all of them. Same is true for May is Bike Month energizer activities. The Mechanic Apprenticeship program is created to be virtual and in-person. All in-person events are held outdoors and we would adhere to the latest guidance issued by Rancho Cordova or the CDC. SABA has created a process for Ride Ready Repair clinics that is 95% touch free, with minimal contact with bicycle owners. We hope to not need to pivot for pandemic reason, but if we do indeed need to, we are ready.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Variety of locations throughout Rancho Cordova
Rancho Cordova,, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Mather Community Campus 10566 Peter A McCuen Blvd, Mather, CA 95655

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Debra Banks

Title

Executive Director

Submitting As

Non-Profit

Phone

9164446600

Email Address

deb@sacbike.org

Organization's Legal Name (if applicable)

Sacramento Area Bicycle Advocates

Mailing Address of Submitter

909 12th Street.
Ste 110
Sacramento, CA 95814

Signatory's Name

Ms. Debra Banks

Signatory's Title

Executive Director

Signatory's Phone

9164446600

Signatory's Email Address

deb@sacbike.org

Signatory's Mailing Address

909 12th St.
Ste 110
Sacramento, CA 95814

Attach Any Additional Documents Here

BARC LOS.pdf

Application #36

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #36



Bicycling Advocates for Rancho Cordova
PO Box 2733
Rancho Cordova, CA 95741
916-425-0622
bikebarc@gmail.com

March 17, 2022

Debra Banks
Executive Director
Sacramento Area Bicycle Advocates
909 12th St. Ste 110
Sacramento, CA 95814

Subject: Letter of Support for SABA's Community Enhancement and investment Fund

Dear Ms. Banks:
I am writing to express BARC's board of directors' support for the Sacramento Area Bicycle Advocates (SABA) application for Measure H Community Enhancement and Investment Funds. SABA has supported BARC in building a foundation, as well as assisting us with a path forward to organizational status as a self-sufficient bicycle advocacy group. We have learned how to independently run bike valet events, and SABA has been instrumental in supporting our organization to obtain four Licensed Certified Bicycle Instructors from the League of American Bicyclists.

SABA has remained active in the Rancho Cordova community, offering services like bicycle skills courses and bicycle repair clinics to our residents. In partnering with SABA, BARC's goal and hope is to expand outreach and service opportunities, as well as to establish an active, engaged, and proud bicycling community in the city of Rancho Cordova. BARC fully supports this request for Measure H Funds, and encourages its approval. Our partnership is vital to the growth of a community bicycling program in Rancho Cordova.

Sincerely,

Nick Buchen, Director
Bicycling Advocates for Rancho Cordova

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Tuesday, March 1, 2022 12:12 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1502138
IP Address:	50.211.126.121
Submission Date:	03/01/2022 12:12
Survey Time:	9 minutes, 37 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Find Your Voice Creative Writing Workshop Series

Project Synopsis

916 Ink will partner with classroom teachers to provide high-quality, creative writing workshops for 175 3-12 grade Rancho Cordova students. Each student will receive 18 hours of California Arts and Common Core standards-aligned instruction with trained teaching artists and become a published author in an anthology of student work.

Project Description

Find Your Voice is a semester-length, school site–based program. Each student participating in a workshop series completes 18 hours of creative writing instruction; learns effective communication skills; creatively makes decisions and solves problems; polishes three to five pieces of creative work for publication; and becomes a published author. Students generate original poetry, fiction, and creative nonfiction. 916 Ink releases one anthology of student work per school site at the conclusion of each program. During the COVID-19 pandemic, 916 Ink's staff found that students were struggling to process their feelings of anxiety and social isolation due to the shift to distance-learning and the suspension of many wraparound services that our schools provided. Using best practices in trauma-informed curriculum design, our staff pivoted quickly to design a series of creative writing lessons using the traditional storytelling arc The Hero's Journey. Each step in the journey is examined through a trauma-informed lens. Students develop social emotional learning skills through interactive writing prompts, revision-based activities, and lessons in literary devices. This helps students realize the impact of obstacles, relationships, and decisions they make. Our workshop method creates a safe environment for exploration and experimentation for participating students. The writing and sharing of stories builds empathy, increases confidence, and gives youth the agency to understand the power of their personal narratives. We structure our workshops to stimulate social emotional learning, including small group settings, peer collaboration and reflection exercises, multiple modes of response, active listening practice and peer-to-peer feedback. By participating in high-quality, arts-integrated enrichment underserved student subgroups can improve their academic attitudes, academic behaviors, and experience social-emotional development, all of which are long-term predictors of success.

Project Team

Ian Hadley, Executive Director, 916 Ink Nikki Cardoza, Director of Resources, 916 Ink Paulette Greenhouse, Program Manager, 916 Ink Emma Hoppough, Production Coordinator, 916 Ink Angela Tannehill, Creative Designer, 916 Ink Our 15 workshop facilitators are committed and passionate individuals who come from the literary and/or education communities. These teaching artists have a wide range of professional, artistic, and cultural perspectives and experiences.

Project Goals

By the end of each 12-session workshop series, we anticipate that 175 students will: complete 18 hours of ELA instruction; learn effective communication skills; creatively make decisions and solve problems critically; polish three to five pieces of creative work for publication; and become a published author. An ability to read and write is essential for thriving in our increasingly complex and literate world. Those who possess strong communication skills are equipped with the power to connect with, comprehend, and interpret the world around them. Not only does this benefit the individual but it also ultimately benefits the community at large, allowing for a dynamic and growth-oriented populace. Our pre/post evaluation results show that after successful completion of a workshop series: 84 percent of youth improve in terms of social-emotional development, with 78 percent believing they are good at using their imagination and 77 percent enjoying meeting people who are different from them. Additionally, 87 percent of students reported improved attitudes toward writing, with 70 percent looking forward to writing down their ideas and 60 percent believing the stories that they can tell matter to others. 916 Ink's evaluation toolkit includes nine data collection tools developed by a leading evaluation firm that measure immediate, intermediate, and long-term outcomes. 916 Ink utilizes a pre and post program survey to measure the program's impact on literacy skills, attitudes towards writing, reading, school, vocabulary, communication, mental health, and personal goals. Where applicable, teachers and parents are also asked to complete surveys on outcomes. Attendance is taken at each session and demographic data collected. Twenty-eight individual outcome elements are grouped into three primary domains: 1) Academic Attitudes, 2) Academic Behaviors, and 3) Social-Emotional Development.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$52,506.96

Estimated breakdown of project expenditures

Personnel 916 Ink Programming Staff $10,428.00 916 Ink Production Coordinator (10.5% FTE) $4,860.00 2 Teacher Stipend for 12 workshop sessions $8,640.00 Sub-total $23,928.00 Indirect Personnel costs $4,785.60 Total Personnel $28,713.60 Program Supplies Anthology Printing $6,000.00 Creative Design $7,200.00 Supplies and materials $3,000.00 Mileage $1,560.00 Book Release Event $900.00 Book Distribution Costs $360.00 Sub-Total Program Supplies $19,020.00 Personnel plus Program $47,733.60 Indirect Administration costs $4,773.36 Grand Total $52,506.96

Matching Funds

N/A

Include any other funding contributions

N/A

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$52,506.96

Is this a multiyear request?

No

How many years have you received funding for this project?

6

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

N/A

Project Schedule, Timeliness and Adaptability

Project Schedule

Fall semester (September 12, 2022 - December 9, 2022 Robert J. McGarvey Elementary Cordova Meadows Elementary Walnutwood High School Spring semester (January 23, 2023 - May 5, 2023) AM Winn Elementary Kinney High School George Washington Carver High School

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

916 Ink works directly with school site partners to schedule our workshop series and publication of anthologies to mirror as much as possible a typical school semester. Our program is designed with 12 sessions and is intended to take place weekly during the school year, we factor in all school holidays and in-service days for specific districts when scheduling to ensure completion of each program leaving 4-6 weeks at the end of the program to publish and distribute the student anthologies before the summer break.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

916 Ink has created a virtual version of our Find Your Voice Creative Writing Workshop Series based on best practices in on-line teaching and curriculum development. We are prepared to shift all programs to an virtual program should that be necessary. In the 2021-22 school year we hosted programs successfully in-person and virtually for Rancho Cordova students.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

2550 La Loma Dr.
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

George Washington Carver High School, 10101 Systems Pkwy, Sacramento, CA 95827 Robert J. McGarvey Elementary, 4350 Sophistry Dr, Rancho Cordova, CA 95742 Kinney High School, 2710 Kilgore Rd, Rancho Cordova, CA 95670 Walnutwood High School, 10850 Gadsten Way, Rancho Cordova, CA 95670 AM Winn Elementary, 3351 Explorer Dr, Sacramento, CA 95827

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Elk Grove Unified
Folsom Cordova Unified
Sacramento City Unifed

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Nikki Cardoza

Title

Director of Resources

Submitting as

Non-Profit

Phone

9168267323

Email

nikki@916ink.org

Organization's legal name, if applicable

916 Ink

Mailing Address of Submitter

3301 37th Ave.
Sacramento, CA 95824

Signatory's Name

Mr. Ian Hadley

Signatory's Title

Executive Director

Signatory's Phone

9168267323

Signatory's Email Address

ian@916ink.org

Signatory's Mailing Address

3301 37th Ave.
Sacramento, CA 95824

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you

have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Find Your Voice Creative Writing Workshop Series

Name of Organization: 916 Ink

Name of Applicant and Title: Nikki Cardoza, Director of Resources

Applicant's Phone: 530-417-1796 **Applicant's Email:** nikki@916ink.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.



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FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

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To be filled out by grant applicant

Project/Program Name: Find Your Voice Creative Writing Workshop Series

Name of Organization: 916 Ink

Name of Applicant and Title: Nikki Cardoza, Director of Resources

Applicant's Phone: 530-417-1796 **Applicant's Email:** nikki@916ink.org

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To be filled out by School Superintendent or designee

Endorsement (Given) Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Elizabeth Rueda on behalf of: Dr. Bindy Grewal

Date: 3/15/22

School District: Elk Grove Unified ■ Folsom Cordova Unified Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #37

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

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To be filled out by grant applicant

Project/Program Name: Find Your Voice Creative Writing Workshop Series

Name of Organization: 916 Ink

Name of Applicant and Title: Nikki Cardoza, Director of Resources

Applicant's Phone: 530-417-1796 **Applicant's Email:** nikki@916ink.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given YES - Dr Anne Brown

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr Anne Brown

Date: 3/4/22

School District: Elk Grove Unified Folsom Cordova Unified (Sacramento City Unified) Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #37

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Tuesday, March 1, 2022 2:09:55 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1502602
IP Address: 206.15.249.216
Submission Date: 03/01/2022 2:09
Survey Time: 25 minutes, 32 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Mills Middle School Positive Behavior Intervention Supports

Project Synopsis

The PBIS team at Mills Middle School supports the student engagement and the behavioral success of all students. Additionally, the program supports and promotes the climate and culture of the school. We do this through the use of reward and incentive programs as well as student engagement programs.

Project Description

Rewards / Incentives and Student Engagement: 1. Merit System: All students begin the school year with 100 merits. Students are required to maintain 96-100 merits to be eligible for participation in school social activities including but not limited to: dances, rallies, assemblies, Fun Friday rewards, Mills Scholar events, access to the blacktop at lunch, sporting events, field trips and more. The program is restorative – students may earn merits back at any time by completing Merit Recovery which includes restorative conversations, helping a teacher in the classroom, campus beautification, letters of apology, participating in conflict mediation, lunch detention, etc. Students with 96 or more merits are rewarded bi-monthly with our Fun Friday rewards. 2. Behavior Expectations: Each month Mills has a Behavior of the Month which is one of our Mustang Pride 5 P's (Positive, Polite, Productive, Prompt and Prepared) behaviors. Lessons are taught during Advisory class that promote the monthly behavior. Students may earn Mills Bills for exhibiting the positive behavior to use at our Student Store. Students are rewarded by being nominated at Mustang of the Month and/or receiving Mills Bills for demonstrating the Behavior of the Month or the Mustang Pride 5 P's. 3. Student Rewards: Mills Bills/Student Store (weekly), Fun Friday events (bi-monthly), Mega Mills Raffle (6x year) Student of the Quarter (quarterly), Mills Scholars (for students who earn a 3.0 GPA or higher and excellent attendance for the first and/or second semester) events, Behavior of the Month challenges rewards, Mustang Round Up end of the year activities. Also includes academic goal setting (iReady/Renaissance Diagnostics - 3x year) and CAASSP (State Testing Raffle & Reward). 4. Field Trips (ex. Yosemite, college visits. STEM fieldtrips, grade level fieldtrips, Mills Scholars fieldtrips)

Project Team

PBIS/Climate Team (Climate Coach: Stephanie Cecil), Administrators (Dana Carrigan & Molly Griffin), Clerk (Robin Dowty)

Application #38

Project Goals

1. Create a comprehensive Tier 1 PBIS program. Complete Tiered Fidelity Index (TFI) as program audit and re-apply for PBIS "Gold" recognition through www.pbisca.org. Received Silver level recognition in August 2021. 2. Continue to support student engagement. Using Merit system and "Fun Fridays" to track students who qualify for rewards bi-monthly. Continue to use Advisory for Merit Mondays, student and staff led behavior expectation and explanation videos for Student of the Quarter,Mills Scholars, Merit System and Push In System. 3. Increase attendance awareness and celebrations. Recognize Attendance All-Stars and Most Improved Attendance.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$20,000.00

Estimated breakdown of project expenditures

Rewards & Incentives: $15,000 (Merit Rewards/Fun Fridays, Mill Scholars Recognition Events, Student of the Quarter, Mills Bills/Student Store, Mega Mills Raffle, Mustang Round Up) Field Trips: $5,000

Matching Funds

None

Include any other funding contributions

$2,500 (Fundraising and Title 1)

Ongoing operations and maintenance costs (if applicable)

None

Total Community Enhancement & Investment Funds requested

$20,000.00

Is this a multiyear request?

Yes

Number of years

3

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

Rewards / Incentives and Student Engagement: The Mills PBIS program and Student Store has existed for 5+ years and continues to provide all students with weekly, monthly, quarterly and annual rewards for positive behavior. This results in greater school connectedness and supports academic achievement.

How many years have you received funding for this project?

2

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Fundraising, donations, site Title 1 funds

Project Schedule, Timeliness and Adaptability

Application #38

Project Schedule

PBIS is on-going every school year and follows the Folsom Cordova school calendar. Beginning in August 2022 through May 2023. Subsequent years would be August 2023 – May 2024, August 2024 – May 2025, etc.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

As the rewards, incentives and student engagement occur bi-weekly, monthly, quarterly, each semester and annually, the PBIS team will be able to manage the projects and funding throughout the 2022-2023 school year (August 2022-May 2023).

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, Mills PBIS team will be able to adjust our program for the 2022-2023 school year should school closure be necessary. Similar to the 2020-2021 and 2021-2022 school years, Mills PBIS team will be able to make adjustments to our reward programs using drive thru, mail home and grab-and-go rewards.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10439 Coloma Road
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

N/A

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Molly Griffin

Title

Assistant Principal, Mills Middle School

Submitting as

Public Agency

Phone

9162949045 ext. 71015

Email

magriffin@fcusd.org

Organization's legal name, if applicable

Mills Middle School, Folsom Cordova Unified School District

Mailing Address of Submitter

10439 Coloma Road
Rancho Cordova, CA 95670

Signatory's Name

Molly Griffin

Signatory's Title

Assistant Principal

Signatory's Phone

9162949045

Signatory's Email Address

magriffin@fcusd.org

Signatory's Mailing Address

10439 Coloma Road
Rancho Cordova, CA 95670

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Mills Middle School Positive Behavior Intervention Supports

Name of Organization: Mills Middle School

Name of Applicant and Title: Molly Griffin, Assistant Principal

Applicant's Phone: (916) 294-9045 **Applicant's Email:** magriffin@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/20

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #38

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 3, 2022 3:36 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1508209
IP Address:	73.220.20.250
Submission Date:	03/03/2022 3:35
Survey Time:	17 minutes, 32 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Mentors at Cordova High, Mills, and Mitchell

Project Synopsis

This project is to continue the Mentors at Cordova High and MACH@ Mills programs, and expand the program to Mitchell Middle School, with continued focus on promoting positive behavior, improved academics and attendance, community service involvement, and life and vocational skill development, while rewarding participants for their accomplishments.

Project Description

The MACH Program is a FREE community-based mentoring program focused on promoting positive behavior, improved academics and attendance, community service, and life and vocational skill development while rewarding participants for their accomplishments. Students identified by school staff, teachers, and the MACH program coordinator, are invited to participate in the program. Students receive guidance and direction to help get them on or keep them on a positive path. Participants earn rewards for demonstrating improvement in their attendance, grades, and/or behavior as well as for participating in community service opportunities. Rewards include Educational Experiences, School based rewards, and Social rewards. MACH participants attend weekly meetings where expectations are set, guest speakers from the community deliver life skill or vocation messages, and program participants share and celebrate their successes. Monthly Saturday Support sessions and weekly group Tutoring sessions are held to provide participants with homework support as needed. Funding is being requested for the continuation of the year-round MACH program at Cordova High School to include an increase in the funding in the educational rewards category so that we can take selected MACH members on a field trip to the Museum of Tolerance to participate in their full day Tools for Tolerance Teen workshop; for the continuation and further development of the MACH @ Mills program that was implemented in 2021; and to expand the MACH program to include Mitchell Middle School. Beyond the immediate benefit the students participating in the program receive through the rewards they earn and the successes they achieve, the community at large benefits through the reduction in behavioral issues in the community amongst participants and through their contributions as volunteers. Long term the community benefits through the outcomes achieved by the MACH program as these students continue on to become productive adults.

Project Team

Application #39

In addition to our MACH Program Coordinator Conrade Mayer, our MACH @ Mills Facilitator Eric Mejia, and our CL3 Board, our project team currently includes administration & staff members from CHS, Kinney, and Mills, CHS Alumni members, MACH Alumni, MACH parents, Rancho Cordova residents, local businessowners, and various partner organizations such as FCUSD, Cordova Community Council, City of Rancho Cordova, and RC PAL.

Project Goals

1. Ensure the continuation of the year-round CL3 MACH Program at Cordova High and Mills Middle School. 2. Establish a modified version of the MACH program at Mitchell Middle School. 3. Maintain 75 to 125 participants in the MACH Program at Cordova High, 20 to 35 participants in the MACH program at Mitchell Middle School, and 20 to 35 participants in the MACH program at Mills Middle School. 4. Promote and reward positive behavior, improved academics and attendance, community service involvement, and life and vocational skill development amongst participants. 5. Engage community members and businessowners in various roles with this mentoring program. 6. Encourage parental involvement by providing specific parent engagement activities.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

293,700

Estimated breakdown of project expenditures

MACH Program Contracted Services & Professional Support = $102,200 (includes MACH Program Coordinator $70,000 + MACH @ Mills Program Facilitator Stipend $5,000 + MACH @ Mitchell Program Facilitator Stipend $5,000 + Professional Math Tutoring Services $7,200 + School Psychologist, Counselor, PBIS support and District Interventions $15,000) + MACH Mentors = $68,000 + MACH Program Support = $90,000 [includes CHS MACH Program Support $60,000 (Educational Rewards $25,000 + School Based Rewards $7,500 + Social Rewards $20,000 + Parent Engagement Activities $5,000 + Program Materials $2,500) + MACH @ Mills Program Support $15,000 (Educational Rewards $4,000 + School Based Rewards $2,000 + Social Rewards $6,000 + Parent Engagement Activities $2,500 + Program Materials $500) + MACH @ Mitchell Program Support $15,000 (Educational Rewards $4,000 + School Based Rewards $2,000 + Social Rewards $6,000 + Parent Engagement Activities $2,500 + Program Materials $500)] + School Facility & Transportation Use = $30,000 (includes Facility Use CHS $12,000 + Facility Use Mills $6,000 + Facility Use Mitchell $6,000 + Transportation use of school vans $6,000) + Insurance = $3,500

Matching Funds

FCUSD = $45,000 estimated in kind value (includes School Psychologist, Counselor, PBIS support and District Interventions $15,000 + Facility Use CHS $12,000 + Facility Use Mills $6,000 + Facility Use Mitchell $6,000 + Transportation use of school vans $6,000) + MACH Program Coordinator = $40,000 (estimated in kind value 1143 donated hours @ $35 per hour) + Volunteer Mentors = $68,000 (estimated in kind value 2500 donated hours @ national average of $27.20 per hour) + Professional Tutor = $2,700 (estimated in kind value 60 donated hours @ $45 per hour)

Include any other funding contributions

Other Grants & Misc Donations = $20,000 + Fundraisers = $15,000

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

103,000

Is this a multiyear request?

No

How many years have you received funding for this project?

6

When will your request for funding sunset for ongoing programs?

Based on continuing need in our community to create equity and offer support services for some of our most vulnerable populations – at risk and under-performing students from single parent and low-income households, no sunset date is planned as we expect we will continue to need funding for ongoing program offerings.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Other funding will be sought from corporate grants, individual donors, and fundraisers.

Project Schedule, Timeliness and Adaptability

Project Schedule

August 1, 2022 through July 31, 2023 - Continue existing MACH Program at Cordova High and Mills Middle School - Establish modified MACH Program at Mitchell Middle School - Invite students to join both programs - Establish program calendars - Develop and implement fundraising plan - Provide mentoring on daily/weekly basis year-round for MACH and during school year for MACH at Mitchell and Mills - Host regularly scheduled support sessions - Participate in monthly community service projects in support of existing City sponsored community enhancement projects and/or community events - Participate in school-based service projects - Host a minimum of two specific parent engagement activities - Administer rewards - Provide regular updates to CHS, Mitchell & Mills Administration

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Our project timeline typically coincides with the beginning of a new school year and ends after the completion of summer school, in order to assess student progress more accurately. If needed, we can adjust our timeline to run July through June. Our ability to complete this project in the timeline laid out has been demonstrated consistently for the past six years.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. Program can operate virtually if required, with modifications also made to the types of rewards students would earn, as demonstrated during the 2019-2020 and 2020-2021 school years.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

2239 Chase Dr
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

Cordova High School 2239 Chase Dr, Rancho Cordova, CA 95670 Mills Middle School 10439 Coloma Rd, Rancho Cordova, CA 95670 Mitchell Middle School 2100 Zinfandel Dr, Rancho Cordova, CA 95670

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Conrade Mayer

Title

Board President / MACH Program Coordinator

Submitting as

Non-Profit

Phone

9162478242

Email

cl3mentees@gmail.com

Organization's legal name, if applicable

Cordova Lancers Leaders & Legends

Mailing Address of Submitter

2236 River Trails Circle
Rancho Cordova, CA 95670

Signatory's Name

Mr Conrade Mayer

Signatory's Title

Board President / MACH Program Coordinator

Signatory's Phone

9162478242

Signatory's Email Address

conrademayer@gmail.com

Signatory's Mailing Address

2236 River Trails Circle
Rancho Cordova, CA 95670

Attach any additional documents here

School Supplemental Endorsement.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023

Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Mentors at Cordova High, Mills, and Mitchell

Name of Organization: Cordova Lancers, Leaders & Legends

Name of Applicant and Title: Conrade Mayer, MACH Program Coordinator

Applicant's Phone: 916-247-8242 **Applicant's Email:** cl3mentees@gmail.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #39

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 3, 2022 4:01 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1508262
IP Address:	67.207.127.234
Submission Date:	03/03/2022 4:00
Survey Time:	51 minutes, 23 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

The Student and Landowner Education and Watershed Stewardship (SLEWS) Program with George Washington Carver School of Arts & Science

Project Synopsis

The Student and Landowner Education and Watershed Stewardship (SLEWS) engages high school students in habitat restoration through a series of hands-on field days at real projects that develop science skills and environmental stewardship in youth. Through this program we would work with students from George Washington Carver School of Arts and Science to complete a restoration project that would incorporate hands-on, place-based, environmental education activities.

Project Description

The Student and Landowner Education and Watershed Stewardship (SLEWS) Program engages high school students in meaningful environmental stewardship on local habitat restoration projects. SLEWS connects classroom learning to the real world to enhance high school education and provides students with transformative experiences in nature to increase their appreciation, commitment and respect for sustainable agriculture and the natural world. SLEWS staff recruit and train volunteers from non-profits, public agencies, and universities to mentor students throughout their SLEWS year. In the program, students “adopt” their restoration site for the duration of the school year, visiting and working on the project for three or more full-day field trips. Through hands-on activities such as water quality and bird box monitoring, students develop science and inquiry skills needed for lifelong learning. Since the program began in 2001, we have engaged more than 8,000 students & teachers in 11 counties in California. This award winning program has been recognized by national, state, & local partners for excellence in conservation education & our SLEWS Academy has trained 8 other organizations to run SLEWS Programs in their regions. Because we partner with restoration professionals from public agencies, local watershed groups, and nonprofit organizations, SLEWS projects have a real & lasting impact on the land. Since its inception, students have planted over 75,021 native trees/shrubs, 332,967 grass/forbs plugs, and installed 827 wildlife structures. By including students in habitat restoration, SLEWS addresses the needs for healthier land & more wildlife habitat, and the need to instill conservation and stewardship values in high school students. With your support, we would be able to expand the SLEWS Program to include George Washington Carver School of Arts & Science and offer Rancho Cordova youth these valuable experiences.

Project Team

Application #40

Allie Dumas - SLEWS Program Manager, Center for Land-Based Learning; TBD - Biology and Environmental Science Teacher, George Washington Carver School of Arts and Science; La Niecia H. Kobelt., Principal, George Washington Carver School of Arts and Science; Nadine Mitchell, Front Office Manager, George Washington Carver School of Arts and Science; Restoration Partner - TBD, we are in communication with the Sacramento Tree Foundation currently, but past and current partners include Solano Resource Conservation District, Yolo County Resource Conservation District, Natural Resources Conservation Service, Sacramento Tree Foundation, Sacramento Valley Conservancy, and Audubon California; Landowner - TBD, we work with our restoration partners the summer prior to the field season to select project sites for the upcoming year based on program funding and number of schools interested. Sacramento Valley SLEWS sites are typically in Yolo, Sacramento, and Solano Counties. Our 2021-2022 SLEWS season included 4 different native hedgerow projects of varying sizes; The Maples and La Tourangelle in Woodland, Free Spirit Farms in Winters, and Good Humus Farms in Capay. Each site consisted of various agricultural techniques from organic farming and vegetable growth to orchards and olive oil production.

Project Goals

The mission of the Center for Land-Based Learning is to inspire, educate, and cultivate future generations of farmers, agricultural leaders and natural resource stewards. The focus of our youth programming is to introduce students to the education and career pathways available to them in agriculture and natural resources. We equip students with the workforce development and leadership skills they need to be competitive in the job market. At the heart of our work are the experiential learning opportunities available to students that bring to life the topics they learn during field day trips. For our SLEWS Program, field day visits are critical to students as they experience firsthand the work required to become environmental stewards and restore habitats. These hands-on opportunities help students explore and build their careers in agriculture, science, and technology. Our youth programs are developing the problem-solvers needed for a healthy, robust and sustainable world. Post-field day survey results indicate 83% of students are more interested in careers related to agriculture or natural resources after participating in the SLEWS program and an impressive 94% would consider doing SLEWS activities on their own or with others outside of the program. Additionally, 66% of students shared what they learned with family and friends, demonstrating the impact of SLEWS going beyond the students themselves. In addition to our surveys, the SLEWS Program Manager conducts debriefing sessions after each field day to receive feedback from partners and mentors on the quality of the restoration work, the flow of the day's agenda, and the student and mentor experience. After the season is complete, the Manager meets with teachers and partners to assess the program as a whole and identify program strengths and areas of improvement for the following season.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$19,050

Estimated breakdown of project expenditures

SLEWS Manager Salary & Benefits: 240 hours - $32.76/hr - $7,863 total Volunteer SLEWS Mentors (5 @21 hrs each): 105 hrs - $30/hr - $3,150 total (covered by matching source) SLEWS Staff Transportation (mileage): 300 miles - $0.58/mile - $175 total Substitute Teacher: 3 days - $175 - $525 total School Transportation: 3 days - $750/day - $2,250 total Participation Fee: 3 days - $300/day - $900 total (covered by matching source) Field Day Food: 3 days - $275/day - $825 total Field Day Gear (porto potty & general supplies): 3 days - $250/day - $750 total CLBL Admin Overhead (staff, salary & benefits, insurance, printing, communications): 1 project - $2,612/project - $2,612 total

Matching Funds

We currently have funding from a variety of sources including support through the Yocha Dehe Community Partnership, SMUD Shine, NRCS, and Yolo Resource Conservation District. With this program we will be able to match $4,050.

Include any other funding contributions

Our volunteer mentors guide students through restoration tasks and allow students to develop strong personal connections with professionals in the natural resources, restoration, and agriculture fields. Volunteers donate their time and expertise as an in-kind donation ensure students receive a well rounded perspective about the field of environmental work. Additionally, we are looking to further our reach with the assistance of our in-house alumni coordinator.

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$15,000

Is this a multiyear request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

While we had previously received funding last year, we were unable to achieve the project due to the schools limitation on field trips during COVID. This would be the second year the SLEWS Program has applied for funding through the Community Enhancement Fund. This project would allow George Washington Carver students to participate in the SLEWS Program. Our goal is to secure funding from the Community Enhancement Fund in subsequent funding cycles to allow students to participate in the SLEWS Program for years to come. We are now in our 21st year of running the SLEWS Program in the Sacramento Valley and have long-established relationships with restoration partners and local high schools. Our program is funded through the receipt of foundation and corporate grants on a rolling basis and through contracts we develop with our restoration partners. Past and current funders include: Natural Resources Conservation Service, Yocha Dehe Community Fund, Yolo Community Foundation, Sacramento Municipal Utility District, Mary A. Crocker Trust, Teichert Foundation, Youth Outside, Yolo County Resource Conservation District, and Solano Resource Conservation District.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

As stated above some of our past and current funders include: Natural Resources Conservation Service, Yocha Dehe Community Fund, Yolo Community Foundation, Sacramento Municipal Utility District, Mary A. Crocker Trust, Teichert Foundation, Youth Outside, Yolo County Resource Conservation District, and Solano Resource Conservation District. We will continue to sustain these funding sources to ensure the success of our programming.

Project Schedule, Timeliness and Adaptability

Project Schedule

June - September 2022 Tour potential projects site, finalize site selection Planning meetings with George Washington Carver High School staff, restoration partners, and SLEWS Program Manager Landowner Agreement (if applicable) and Financial Agreement (with school) completed and on file September - October 2022 Mentor recruitment and training for all projects Classroom visits to recruit students to program Distribute Student Pre-Surveys and Student Applications and Waivers Site team meetings to schedule field days and outline restoration activities November - December 2022 Plan, coordinate, and implement first field day Write blog post for Youth Programs blog January - February 2023 Plan, coordinate, and implement second field day Write blog post for Youth Programs blog March - April 2023 Plan, coordinate, and implement third and final field day Write blog post for Youth Programs blog Distribute SLEWS Student Post-Survey May-June 2023 Create SLEWS 2022-23 project posters and video End of program teacher meetings and partner debriefs Program Assessment; identify program successes and areas for improvement

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

With 20 years of history and collaboration with high school teachers, restoration professionals, private landowners, state and national agencies, universities and non-profit organizations, the SLEWS Program is an established and successful approach to youth engagement. Our timeline is tried-and-true, and we typically complete between 20-25 field days annually in the Sacramento Valley and up to 50 statewide. We work with teachers and restoration partners to schedule field trips that work for both the school calendar and the restoration timeline to ensure project completion. Winter is the best season to perform the robust planting portion of our SLEWS projects, thus many of our projects finish up in March. We always aim to have all field days program-wide completed by the end of April, as student availability diminishes in May and June due to testing and finals. The timeline of our programming year and field day schedule is designed to ensure our projects are completed well before the end of June.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The SLEWS Program typically works with classes of 20-30 high school students for in-person field days. Our field days are entirely outdoors, which is advantageous when it comes to COVID-19 guidelines, but we are prepared to adjust our program to

accommodate whatever school and state guidelines are in place at the time. We have spent the last two seasons navigating the changes COVID requires and devising alternate activities when appropriate. While a virtual option is not conducive to SLEWS we have had great success during the past two seasons going above and beyond the recommended standard of protection including the requirement of vaccination for our mentors and mask requirements at all field days. In the event that our program cannot operate in a normal capacity next fall, we will work with the teacher and restoration partner to devise ways we can continue to serve students and give them a comparable experience. This may include assisting the school with arranging safer transportation options, reducing the student capacity on field days, updating cleaning procedures, connecting with classes of students virtually, hosting volunteer days to keep restoration projects on track, or even considering completing the project on a Saturday when school is not in session.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

Not yet known.
Not yet known., California Not yet known.

Other physical addresses if project/program is at multiple sites

We have not yet identified an exact location for this project, as each summer we work with our restoration partners to select appropriate SLEWS field sites for participating schools. Once we know the number of SLEWS projects that will be funded, the SLEWS Program Manager tours potential project sites with restoration partners over the summer.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Sacramento City Unifed

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Allie Dumas

Title

SLEWS Program Manager

Submitting as

Non-Profit

Phone

5307951520

Email

allie@landbasedlearning.org

Organization's legal name, if applicable

Center for Land-Based Learning

Application #40

Mailing Address of Submitter

40140 Best Ranch Road
Woodland, CA 95776

Signatory's Name

Mary Kimball

Signatory's Title

Chief Executive Officer

Signatory's Phone

5307951520

Signatory's Email Address

mary@landbasedlearning.org

Signatory's Mailing Address

40140 Best Ranch Road
Woodland, CA 95776

Attach any additional documents here

George Washington Carver Confirmation of Support.pdf
SLEWS Budget.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #40

Item Description	Quantity	Unit Cost	Total Cost	Sponsorship Needed	Match	Match Source
SLEWS Manager salary and benefits	240 hours	$32.76	$7,863	$7,863	$0	N/A
Volunteer SLEWS Mentors (5 @21 hours ea)	105 hours	$30	$3,150	$0	$3,150	Volunteer Professional Mentors
SLEWS staff transporatation (mileage)	300 miles	$0.58	$175	$175	$0	N/A
Substitute teacher reimbursement	3 days	$175	$525	$525	$0	N/A
School transportation (buses)	3 days	$750	$2,250	$2,250	$0	N/A
Participation Fee	3 days	$300	$900	$0	$900	George Washington Carver School of Arts & Science
Field day food (healthy snacks/lunches)	3 field days	$275	$825	$825	$0	N/A
Field day gear and supplies, portapotty rental	3 field days	$250	$750	$750	$0	N/A
CLBL Administrative Overhead (Admnistrative staff salary & benefits, insurance, printing, communication)	1 project	$2,612	$2,612	$2,612	$0	N/A
TOTALS			**$19,050**	**$15,000**	**$4,050**	

Application #40

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Ranga Vasantha- Festival of Arts & Culture

Name of Organization: Kannada Sangha of Sacramento (KSS)

Name of Applicant and Title: Prabhakar Rao, Board of Director

Applicant's Phone: 916-281-5529 **Applicant's Email:** prabhaker49@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement Withheld DiAnne Brown

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name:

Date: 3/18/22

School District: Elk Grove Unified ☐ Folsom Cordova Unified ■ Sacramento City Unified ☐ Other ☐

Comments (Optional): Rancho Cordova High School is not an SCUSD school

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #40

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 8:59:05 AM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1509361
IP Address: 207.166.7.207
Submission Date: 03/04/2022 8:59
Survey Time: 7 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Carver College Prep/Summer Bridge Program

Project Synopsis

The Carver College/Prep Summer Bridge Program will create a space where students from Carver and throughout Rancho Cordova can reconnect to school, make up graduation credit and prepare for the college application process. Students will be able to choose to participate in one or both of the courses available in the summer program: Summer Bridge/ College Prep.

Project Description

CARVER COLLEGE PREP PROGRAM: Based on the 2020 Rancho Cordova Education Attainment Information, gathered from the 2020 American Community survey census data and the survey from Common Core Data available for Public Elementary through Secondary Schools, and in comparison to neighboring communities such as Gold River, Fair Oaks, Mather, Carmichael, La Riviera, Rosemont and Sacramento-Roseville, Rancho with Cordova has the lowest percentage of people with a Bachelor's Degree or higher, with a 27% total. Rancho Cordova also has the smallest proportion of percent of people with an associate's Degree at 19.5%. Finally, Rancho Cordova has the smallest proportion of people with a master's degree or higher (0.9%.) More than 80% of school age children that reside in Rancho Cordova attend public high schools. Schools reopened for in person learning for the 2021- 2022 school year. Students continue to struggle with the transition to full in-person learning, especially with the ongoing interruptions caused by COVID-19/Omicron restrictions and quarantine requirements. Their challenges are multi-dimensional: they continue to lose valuable time learning in-person with their peer groups and teachers; they continue to have difficulty socially because of their previous isolation; they continue to lose opportunities to prepare for the college application process including taking college admissions tests. College application process has become very uncertain of their options and opportunities. The Carver College Prep/Summer Bridge Program will provide more guidance and access.

Project Team

• La Niecia Kobelt - Principal, George Washington Carver School of Arts and Science, • Astrid Qirko Kinn - College Advisor, Kinn College Consulting and George Washington Carver School of Arts and Science, • Credit Recovery Instructor, George Washington Carver School of Arts and Science, • Campus Monitor, George Washington Carver

School of Arts and Science

Project Goals

1. Participants in Summer Bridge, 2. Students will enroll in credit recovery courses at Carver, 3. Students will take up to two courses for credit recovery or enrichment, 4. Students will engage in social-emotional learning in every class. 5. Increase graduation and college admissions rates at Carver and the Rancho Cordova Community Participants in Carver's College Prep//Summer Bridge will prepare for, register and take the August 2022 SAT exam. All participants will complete a personal statement essay. All participants will meet at least twice on-to-one with the college adviser. All participants will complete applications for at least five (5) colleges/universities. All students will prepare for and participate in a mock interview with a college admissions representative. Metrics: We will measure the programs' success by the number of students participating in these activities. We will measure the number of credits students earn. We will also provide a pre- and post-survey of College prep success. Students will complete a survey eliciting their input on school reopening. Our goal is that everyone participating in this program will be enrolled in college by June of each year.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

The total project cost is $42,150

Estimated breakdown of project expenditures

Standardized Test Preparation Course: $5,000, Individual College Advising: $8,000 (includes at least one individual one hour meeting with college advisor and preparation of various seminars/webinars on how to apply to college/university), Personal Essay instruction: $2,000, SAT registration fee: $43.00 per 50 students: $2,150, Financial aid seminars - (Estimate: 10 one hour recorded webinars open to students and parents (Prepared and presented by College Advisor), Individual lunch for two-week period for attending students: $3,000 Miscellaneous, office supplies, paper products for advertising through flyers, hand-outs, etc. $1,000, Administration and Registrar: $3000, Credentialed Teacher: $3000, Campus monitor: $2000,

Matching Funds

Matching Funds $13,000

Include any other funding contributions

Operations Costs: Carver High School will provide three classrooms, restrooms and custodial services and all utilities for the two-week period.

Ongoing operations and maintenance costs (if applicable)

Accounted for in the matching funds: $13,000

Total Community Enhancement & Investment Funds requested

Total Community Enhancement Funds Requested $29,150

Is this a multiyear request?

Yes

Number of years

3

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

In order to prepare and recruit participants, the planning team will need to meet in mid-May to create information materials, visit local high schools and advertise for the program. The two-week program will run from Monday, August 8 to Friday, August 19, 2022. After the session has concluded, the planning team will meet in late August to

review and analyze data for results. There is an ongoing need for college prep and credit recovery opportunities for students. Therefore it is viable as a single year; however, with the current economic challenges for students and families students will require opportunities for the next few years.

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

The 2024-2025 school year.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Carver will seek charitable donations and grants if we do not receive this grant.

Project Schedule, Timeliness and Adaptability

Project Schedule

May 2nd : Planning Team meet & prepare materials, May 9th: Advertisement & Team meeting, May 16th: Recruitment / Enrollment Opens, continue advertisement through June. May 23rd: Finalize student and teacher materials August 5th-6th : Setup classrooms & materials, August 9th – 20th: College Prep/Summer Bridge Sessions, August 24th : Team meeting to review and analyze data.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Carver College Prep/Summer Bridge takes place at the beginning of the school year in August 2022. The goal is for seniors to have the work for college applications & admission completed before school starts in September of 2022.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Due to Distance Learning during the COVID Closures, the Carver College Prep/Summer Bridge Program is digital. Every student has a Chromebook; therefore, students may complete the sessions in-person or virtually. Hardcopy materials will be distributed to students the week prior to the first session.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10101 Systems Parkway
Sacramento, California 95827

Other physical addresses if project/program is at multiple sites

N/A

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Sacramento City Unifed

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

La Niecia Kobelt

Title

Principal

Submitting as

Public Agency

Phone

9163955266 ext. 60301

Email

LaNiecia-Kobelt@scusd.edu

Organization's legal name, if applicable

Sacramento Unified School District

Mailing Address of Submitter

10101 Systems Parkway
Sacramento, California 95827

Signatory's Name

Mrs. La Niecia Kobelt

Signatory's Title

Principal

Signatory's Phone

9163955266

Signatory's Email Address

LaNiecia-Kobelt@scusd.edu

Signatory's Mailing Address

10101 Systems Parkway
Sacramento, Ca 95827

Attach any additional documents here

Rancho Cordova Community Enhancement Grant Carver.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that

the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #41

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Ranga Vasantha- Festival of Arts & Culture

Name of Organization: Kannada Sangha of Sacramento (KSS)

Name of Applicant and Title: Prabhakar Rao, Board of Director

Applicant's Phone: 916-281-5529 **Applicant's Email:** prabhaker49@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement Withheld DiAnne Brown

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name:

Date: 3/18/22

School District: Elk Grove Unified ☐ Folsom Cordova Unified ▪ Sacramento City Unified ☐ Other ☐

Comments (Optional): Rancho Cordova High School is not an SCUSD school

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 10:36:33 AM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1509715
IP Address:	198.153.255.2
Submission Date:	03/04/2022 10:36
Survey Time:	15 minutes, 41 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Cordova Food, Health and Environmental Career Pathway Program

Project Synopsis

Soil Born Farms will continue to grow the impact and sustainability of Rancho Cordova's K-12 food, health and environmental career pathway. School garden support systems will be expanded, curriculum will be integrated at the district level, and students will dig into experiential learning at Soil Born Farms.

Project Description

Please see the full Project Description included as an attachment.

Project Team

Soil Born Farms is a non-profit urban agriculture and education project based in Rancho Cordova whose mission is to empower people to participate in a local food system that encourages health, nurtures the environment and grows a sustainable community. Our Youth Education programs – the Growing Together School Garden Initiative and our on-farm Roots and Wings programs – will be responsible for the proposed project. Since 2005 our Youth Ed team has worked to develop and support school garden and farm experiences that provide standards-based nutrition, science and common core education to low-income schools throughout the Sacramento region. Youth Education Manager Shannon Hardwicke will serve as project lead, coordinating partnerships, intern/volunteer/teacher training, and curriculum integration with FCUSD. Youth Educators Emily Hain and Lacey Carlson will spearhead on-farm field trips. This proposal's budget includes $27,000 for the new part-time RC Coordinator to focus exclusively on partnering with and serving Rancho Cordova School sites. This position will be created by restructuring our current staff roles or creating a new contract position. The individual filling this role will be familiar with the local community and have experience with public school systems. As a whole the project team will work in close collaboration with teachers and administrators at Rancho Cordova school sites and leadership at Folsom Cordova and Sac City Unified School Districts. Individuals actively co-creating this pathway's vision alongside Soil Born Farms include CHS Principal Jerad Hyden (letter of support attached); FCUSD Career Technical Education Coordinator Alicia Caddell (letter of support attached); FCUSD Assistant Superintendent Jim Huber; and Cordova Gardens Elementary Principal John Bliss.

Application #42

Project Goals

GOAL 1: Increase the impact of Rancho Cordova schools' Food, Health and Environmental Career Pathway through more frequent field trips to Soil Born Farms for all grade levels, benefitting 1,600 to 1,800 youth annually. Objectives: - Increase Cordova High School field trips to 35 annually (up from 22/yr currently), engaging classes from multiple subject areas and creating multiple visits per student. Begin offering Soil Born Farms to CHS teachers for class use independent of field trips. - Re-engage Mills Middle School in farm field trips, frequency TBD based on teacher needs/interest. Cultivate a new lead garden teacher for the school site. - Facilitate 3 cross-age mentoring opportunities between Cordova High School and Mills Middle/Cordova Gardens students. - Increase field trips for Rancho Cordova elementary schools to 25 annually, serving 4-6 schools (up from 13 field trips serving 3 elementary schools currently). GOAL 2: Build support systems for school garden programs that make it easy for teachers, administrators and students to utilize and sustain garden education. Objectives: - Train and place 16 college interns with Rancho Cordova Elementary Schools to provide garden lesson support throughout the 2022/23 school year. - Train 40 volunteers from partner service organizations (Habitat for Humanity, Master Gardeners), and match graduates with school sites to provide garden maintenance and technical assistance beginning spring/summer 2023. - Collaborate with FCUSD Curriculum and Instruction Department to integrate school garden curriculum into the district's existing professional development offerings. - Host 2 virtual teacher trainings, and publish weekly educational videos to support teachers and students as they learn in the garden. - Provision partner school gardens with organic plant starts and seeds for seasonal plantings 2x's per year, with varieties selected for integration with lessons.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$116,600

Estimated breakdown of project expenditures

Note: Please see budget attachment for greater detail. Requested Funds: Program Manager (.5 FTE): $20,000; RC Coordinator (.5 FTE): $22,500; Field Trip Staffing (.5 FTE): $10,000; Personnel Taxes and Benefits: $10,500; Educational Supplies: $2,500; Plant Starts for School Gardens: $750; Indirect (10%): $6,625; Total Request: $72,875

Matching Funds

The following matching funds support this proposal, totaling $43,725: - Kelly Foundation grant ($5,000) supporting staff time, supplies and scholarships for class field trips to the farm. - RCA Community Fund grant ($25,000) supporting the intern and volunteer training program, coordination with community partners, and matching volunteers with school garden sites. - $13,725 in matching funds will be secured through community donations.

Include any other funding contributions

Cordova High School's Agriculture Academy has expressed their ability to cover the cost of substitute teachers (needed during field trips to stay on campus with students who are unable to visit the farm) and support materials/supplies for career pathway curriculum.

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$72,875

Is this a multiyear request?

No

How many years have you received funding for this project?

6

When will your request for funding sunset for ongoing programs?

This request is for one year, but establishing a comprehensive food and agriculture education pathway for Rancho Cordova youth is a multi-year process. We are grateful for the City of Rancho Cordova's ongoing support of this vision. Our approach to sustainability involves empowering schools to gradually take on more ownership and responsibility for their school garden coordination, maintenance and use - while also recognizing that teacher and school resources are limited. After many years working directly in school garden development and instruction, Soil Born Farms' staff now provides a framework of support for partner schools through the provision of curriculum, seasonal garden kits and plant starts, teacher training, garden technical assistance, and garden-based extracurricular activities for youth. The activities in this proposal add to this web of support. What we and countless other school garden programs across the country have learned is that it is relatively easy to build a school garden; it takes tenacity and creativity to integrate school garden learning into the culture and structure of our education system.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Soil Born Farms pursues Youth Education Program funding from private foundations and state and federal grants. We are currently preparing a California Farm to School Incubator Grant proposal that will support further connections between our farm education center, local schools, and community organizations. We will continue to support school sites in pursuing small grants and donations to fund supplies and maintenance. Continued support from the City of Rancho Cordova and Folsom Cordova and Sac City Unified School Districts will be needed for ongoing training/technical assistance and, if desired, further expansion or deepening of school garden programs.

Project Schedule, Timeliness and Adaptability

Project Schedule

JULY - SEPTEMBER 2022: Recruit and hire new RC Coordinator position. Recruit and train college interns. Develop school garden teacher teams at school campuses. Offer initial orientation and training for teacher teams. Meet with FCUSD Curriculum and Instruction Dept. to identify partnership opportunities. Meet with teachers and admin to troubleshoot field trip barriers. Work with community partners to recruit garden support volunteers. Set up field trip schedules including elementary, junior high and high school. Start farm field trips. Students begin school garden lessons with intern and teacher support. OCTOBER - DECEMBER: Disseminate fall plants for school gardens. Offer fall teacher training. Host farm field trips. Facilitate cross-age mentorship activity. Wrap up fall interns. Host two volunteer training sessions. Continue building vision for collaboration activities with Soil Born and FCUSD. JANUARY - MARCH: Recruit and train spring interns. Host winter teacher training. Facilitate cross-age mentorship activity. Host spring teacher training. Host a planning meeting with school/district leadership. Disseminate spring plants for school gardens. Host two volunteer training sessions. APRIL - JUNE 2023: Complete school year programs. Host one final cross-age mentorship activity. Evaluate programs. Prepare gardens for summer. Assign volunteer garden care teams. Lay out partnership work plan for the fall of 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

We are confident in our team's ability to complete the proposed scope of work by June 30, 2023. Our staff's long history in school garden support, coordination and instruction provide a strong foundation for reaching program goals. Established partnerships with local school sites and districts allow us to jump into implementation feet first. School and community partners are enthusiastic to work with Soil Born Farms, and have been actively planning with our Youth Education staff about the scope of work proposed here.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Soil Born Farms' team has gained a wealth of experience adapting to shifting circumstances over the past 2 years of the pandemic. We are confident that our creativity and resolve will carry us through whatever hurdles may come, pandemic-related or otherwise. Should COVID protocol change, we would adjust using a combination of virtual lessons/farm tours/teacher trainings; in-person small group lessons in outdoor settings; and other solutions as necessary. However, we feel optimistic that activities will be able to take place in person given that FCUSD has been in session on campus since December 2020. The larger barrier to continuity is the capacity of individual teachers to commit to school garden participation amidst the requirements and stressors of COVID. The school sites we work with are determined by the receptivity of teachers and school leadership, which has been in a state of flux due to the incredible challenges of COVID and high levels of staffing changes. We will continue to work toward school garden systems that are resilient to these variables.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

2140 Chase Drive
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

The project will take place at Soil Born Farms' headquarters at the American River Ranch at 2140 Chase Drive in Rancho Cordova, as well as at multiple school sites in Rancho Cordova. Soil Born Farms has permission to operate programs at the American River Ranch site through our long-term lease with the County of Sacramento, which is on file with the City of Rancho Cordova.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified
Sacramento City Unifed

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Elizabeth Powell

Title

Grant Writer

Submitting as

Non-Profit

Phone

9163639685

Email

Application #42

grants@soilborn.org

Organization's legal name, if applicable

Soil Born Farm Urban Agriculture Project

Mailing Address of Submitter

2140 Chase Drive
Rancho Cordova, CA 95670

Signatory's Name

Mr. Shawn Harrison

Signatory's Title

Founder and Co-Director

Signatory's Phone

9163639685

Signatory's Email Address

sharrison@soilborn.org

Signatory's Mailing Address

2140 Chase Drive
Rancho Cordova, CA 95971

Attach any additional documents here

Project Description - Soil Born Farms.pdf
Letters of Support - Soil Born Farms.pdf
Budget Detail - Soil Born Farms.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Project Description – Soil Born Farms

PROPOSED SCOPE OF WORK

The proposed project will build on past years' successes and continue to grow a comprehensive, standards-based Food, Health and Environmental Career Pathway in partnership with target Rancho Cordova schools, including Cordova Gardens, White Rock, Cordova Meadows and A.M. Winn Elementary Schools; Mills Middle School; Cordova High School, and additional sites based on school interest.

A portion of requested funds will be used to establish a new Rancho Cordova Career Pathway Coordinator (RC Coordinator) position, a key step in solidifying a powerful and lasting education pathway. We have the experience, programmatic expertise, and strong relationships with local schools to fully realize this vision - one where kids from low-income urban neighborhoods receive dynamic farm- and garden-based education from kindergarten through high school graduation. The RC Coordinator will work in close partnership with Folsom Cordova Unified School District (FCUSD) to weave the pieces of this pathway into the culture and policies of the district, and to establish Soil Born Farms as a permanent education partner for targeted school sites. COVID has had a substantial impact on our Youth Education programs, with staffing levels reduced and the number of youth served still dramatically lower than pre-pandemic. But after a decade of groundwork, Soil Born Farms' team is more determined than ever to see this work through. A staff person dedicated to local schools will allow us to capitalize on this moment of regrowth, and best serve the students who share our roots in the neighborhoods of Rancho Cordova.

With support from the City of Rancho Cordova, this year Soil Born Farms' Youth Education team will collaborate with schools and community partners on three action areas:

1) Leveraging volunteers and trainees for school garden support:

Soil Born Farms will roll out a new volunteer training and placement strategy to provide on-the-ground support of school garden sites. This model creates a win-win system where volunteers are recruited by partner organizations and colleges, trained by Soil Born Farms, and matched with school garden programs to support class instruction and garden maintenance. We have established partnerships with the University of California Master Gardeners, Habitat for Humanity of Greater Sacramento, and Sacramento State College of Education - all of which maintain strong volunteer bases with a service or training hour requirement, and have missions aligned with Soil Born Farms' work.

Volunteers will complete training tracks at Soil Born Farms targeted to their area of support. Upon graduation volunteers will be matched with school garden sites, working in tandem with teachers and school staff. Habitat for Humanity volunteers will tackle garden maintenance including irrigation, tending crops in the summer, and small construction projects. Sacramento State teaching credential students will provide support to teachers during garden lessons, gaining work experience and earning college credit in the process. And UC Master Gardener volunteers will offer technical support, providing green thumb advice to help gardens thrive.

2) Integrate school garden teacher training with FCUSD professional development:

Soil Born Farms' Growing Together program offers a K-12 School Garden Curriculum, which is aligned with state standards and designed for urban school gardens in our Sacramento growing climate. Through the proposed project we will collaborate with the Folsom Cordova Unified School District Curriculum and Instruction Department to identify ways to integrate school garden curriculum with

district teacher training, with the aim of launching garden curriculum in more classrooms. Soil Born Farms will also continue offering virtual teacher training and weekly support videos on curriculum and gardening skills.

3) Increase on-farm learning as a core component of the Food, Health and Environmental Career Pathway:
Soil Born Farms' education center provides a tremendous opportunity for city kids to explore the natural world. Our 55-acre site is an organic farm, but also so much more - it is a learning laboratory that fuses experiences in nature studies, agroecology, natural resource management, health and wellness, cooking and nutrition. Students dig into field trips aligned with school curricula, bringing topics from the classroom to life in a beautiful outdoor setting.

Though many Rancho Cordova classes participate in field trips to Soil Born Farms, there is potential for more engagement across grade levels and subject areas. As mentioned, we are in the process of building our field trip program back to pre-COVID levels of service. We want to give local schools priority as we ramp up, but are in need of dedicated staff time to help under-resourced Rancho Cordova classes overcome the barriers that prevent them from visiting the farm more often. These pinch points include issues like class schedule blocks that are too short for in-depth farm field trips, and the struggle to obtain field trip permission slips for each student. Solutions are within reach, but require focused time of the proposed RC Coordinator position to collaborate with teachers and school leadership on long-term strategies for success.

Needs and opportunities for each age range include:

High School: Cordova High School neighbors Soil Born Farms, and is enthusiastic about planning and piloting the use of our education center as a frequent hands-on learning laboratory. 22 Cordova High School field trips are currently hosted at the farm annually, with opportunity for many more. This collaboration is a natural fit for the school's Agriculture and Culinary Academies, general science classes, and floriculture program. We would also like to enable teachers to host their own lessons on the farm, separate from formal field trips. These in-school interactions on the farm inspire students to participate in our related Teen Empowerment and Job Training programs, where teens develop essential life and job skills under the mentorship of Soil Born staff.

Middle School: Also within walking distance, Mills Middle School will re-engage with visits to Soil Born Farms. New teacher and student leadership will be cultivated following a recent departure of their lead garden teacher. Solutions will be sought for the limitations of the junior high schedule, with potential for day-long or club field trips. Cross-age mentoring activities between Mills Middle School and Cordova High and/or Cordova Gardens Elementary will be facilitated, with older grades receiving training and leading younger students in the garden. This activity was very successful when piloted in 2020/2021, with enthusiastic buy in from teens, younger students and school leadership. We see cross-age mentoring as a key strategy for motivating kids to stay engaged with the Career Pathway throughout their schooling.

Elementary School: Our strongest involvement in farm field trips has always come from elementary schools, momentum that we will build on through this proposal. Classes from 3 Rancho Cordova campuses are currently participating in a total of 13 field trips per year. Potential exists to at least double field trips hosted and work with 4-6 elementary school sites. Cordova Gardens Elementary in particular is located very close to our site and is eager for a higher level of on-farm engagement.

COMMUNITY BENEFIT

The Folsom Cordova Food, Health and Environmental Career Pathway Program benefits Rancho Cordova on many levels, fostering an environment at school, at home and in the community that supports academic learning, pathways to gainful employment for youth, healthy eating and physical activity, environmental stewardship, and community connection. The proposed project fulfills many of the Community Enhancement and Investment Fund criteria:

Children and Youth / Education: Garden-based education integrates experiential learning with common core standards, supporting a child's academic achievement, health, and social-emotional learning.
Community Pride: Youth develop pride in their campus by caring for school gardens. Field trips to Soil Born Farms help students develop connection to place, and appreciate the ecosystems of the American River Parkway and the agrarian history of the Sacramento Valley.
Quality of Life: School gardens inspire students and their families to grow and eat fresh food for improved mental and physical health. Studies confirm that children are eager to eat vegetables when they have participated in growing them. Farm and garden experiences allow kids to explore outdoors, interact with peers, and make a difference in their community - all healthy additions to the 4 to 9+ hours of screen time that adolescents consume daily.
Culture: Garden curriculum and crops celebrate the diverse ethnicities of our community. As kids plant, harvest and cook, they learn about different agricultural and culinary traditions, connecting to their own heritage and those of their classmates.
Business/Economic Development: The suite of garden-based learning opportunities within this Career Pathway provides students with concrete job, life and leadership skills that prepare them for future employment or post-secondary education, with a focus on the booming food, health, environment and agriculture sectors of the Sacramento region. Experiences in these areas of study position students to make informed decisions as they chart a course toward higher education and living wage careers. California's $50 billion agriculture sector is the largest in the country by far, supported by a host of professionals in agronomy, engineering, finance, business management, mechanics, inspections, processing, etc. Related work in health and wellness and natural resource management provide hundreds of additional career prospects. On the heels of the economic upheaval of the pandemic, we believe the Food, Health and Environmental Career Pathway is more relevant than ever, and will position young people for essential work that is perennially in demand.

LEVERAGE and SUSTAINABILITY

Our approach to delivering high-quality education leverages many resources including university interns, community volunteers, grant funding, donations, school staff time, school district funding, and the energy of youth working and learning in the gardens. The work proposed here is part of our broader sustainability strategy for school garden programs, the longevity of which is challenged by limited school budgets, heavy teacher workloads, changes in school leadership, and the need for summertime garden upkeep. We continue to build solutions for long term viability. Additional strategies are in play at Soil Born Farms that support school garden sustainability (closely related to but not included in this funding request):

- Developing an MOU that details FCUSD and Soil Born Farms' educational partnership, and will maintain the continuity of agricultural education regardless of future teacher or administrative staffing changes. This process is underway and a first iteration of the MOU is expected to be completed 2022/23.
- Providing extracurricular opportunities at Soil Born Farms that complement school garden learning, including year-round paid teen job training, an after school teen empowerment program, summer day camps for youth of all ages, and family-centered activities on the farm.

- Partnering with school districts on joint funding opportunities, including an upcoming CA Farm to School Incubation Program grant.

OUTCOMES

The proposed work will create support structures that make it easy for overburdened teachers to conduct school garden lessons, and for students to dig into hands-on garden learning at every stage of their education. Schools will receive help finding solutions to logistical challenges, so that field trips to Soil Born Farms become an easy, frequent and prominent part of Rancho Cordova students' educational career. And Soil Born Farms will become a fully integrated partner in FCUSD's delivery of hands-on food, health and environmental education. Stepping back for a wide angle view, our intention is that by engaging youth at many points throughout their education, a new generation of young people will seek meaningful careers in food systems, health and environmental stewardship, and will sustain the work of growing equitable urban food systems at an even broader level.

Cordova High School

2239 Chase Drive, Rancho Cordova, CA 95670
Phone (916) 294-2450 http://www.fcusd.org/CHS

Folsom Cordova Unified School District

Jerad Hyden
Principal

Ann Botsford
Michele Brown
Michele Cooper
Joel Francisco
Assistant Principals

Heidy Naderi
Admin. Assistant

Erin Kaluza
ELD Program Manager

Josh Creeger
Activities Director

Mark Beamish
Athletic Director

Kitty White
Head Counselor

Grace Martinez
IB MYP Coordinator

Chris Mahaffey
IB CP Coordinator

Zandi Llanos
IB DP Coordinator

Tracey Jacobs
School Resource Officer

March 2nd, 2022

To Whom It May Concern:

As the proud Principal of Cordova High School, tasked with providing opportunities for students which prepare them for post-secondary success – it is my pleasure to write this strong letter of support in continuing to build our Sustainable Agriculture Pathway through our comprehensive Career Technical Education Department with Soil Born Farms.

In alignment of our collective mission, supporting our most marginalized students is critical to our success. Given a diverse population of learners which include: English Language Learners, Special Education, and students from single-parent households facing incredible educational barriers – the Agriculture Pathway is a rigorous and engaging program which provides direct access for these deserving group of students.

A partnership with Soil Born Farms through their Youth Education would leverage much-needed hands-on resources and experiences for our students and would allow us to articulate in creating more enriching curricular and instructional opportunities for our students. Additionally, the ongoing collaboration would articulate with our current capstone course (*Greenhouse Management*), while improving both our ornamental horticulture and animal sciences courses utilizing a cross-curricular articulation with culinary to facilitate campus sustainability through the *farm-to-fork* movement. With access to Soil Born Farm, including the added materials and equipment, such as the greenhouse, tool shed, and urban cultivation; we will provide student exposure and opportunities for viable careers right out of high school, as well as the acquisition of required skills and knowledge to be successful in post-secondary options towards earning a relevant degree.

I urge you to give this application your most serious consideration. Should you or your staff have any questions regarding this letter, please do not hesitate to call. Thank you for the consideration as we partner to positively impact student outcomes.

Respectfully submitted,

Jerad A. Hyden
Principal
Cordova High School
(916) 294-2450 x810150
jhyden@fcusd.org

Application #42

Alicia Caddell, CTE Coordinator
acaddell@fcusd.org

FCUSD

Office of Secondary Instruction

Soil Born Farms
2140 Chase Drive
Rancho Cordova, CA 95670
Attn: Mr. Shawn Harrison

March 3, 2022

Dear Mr. Harrison,
I am writing to offer my support of the Measure H grant application for a MOU with the Folsom Cordova Unified School District and our Rancho Cordova schools.

The proposed MOU to create student participation, STEAM education programs and matriculation from Cordova Gardens Elementary School, Mills Middle School and Cordova High School is supported. This includes field trips, working in the gardens, student internships and student use of the Soil Born facilities for high school and FFA projects.

I appreciate the collaboration with Soil Born Farms for our students and Career Technical Education Programs and look forward to the development of future opportunities and growth.

Sincerely,

Alicia Caddell, M.A.
CTE Coordinator

Application #42

Community Enhancement & Investment Fund

Soil Born Farms : Youth Career Pathway Request 2022-23

Staffing	**FTE**	**Total**	**Request to CEIF**	**Matching**
Program Manager	0.5	$ 40,000	$ 20,000	$ 20,000
RC Program Coordinator	0.5	$ 22,500	$ 22,500	
Field Trip Support	0.5	$ 20,000	$ 10,000	$ 10,000
Benefits		$ 16,500	$ 10,500	$ 6,000
		$ 99,000	$ 63,000	$ 36,000
Supplies:				
Educational Supplies		$ 5,000	$ 2,500	$ 2,500
Plants for gardens		$ 2,000	$ 750	$ 1,250
		$ 7,000	$ 3,250	$ 3,750
Indirect (10%)		$ 10,600	$ 6,625	$ 3,975
Total		**$ 116,600**	**$ 72,875**	**$ 43,725**

Application #42

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Rancho Cordova Food, Health and Environmental Career Pathway Program

Name of Organization: Soil Born Farms Urban Agriculture and Education Project

Name of Applicant and Title: Shawn Harrison, Founder and Co-Director

Applicant's Phone: 916-363-9685 **Applicant's Email:** grants@soilborn.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

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To be filled out by grant applicant

Project/Program Name: Ranga Vasantha- Festival of Arts & Culture

Name of Organization: Kannada Sangha of Sacramento (KSS)

Name of Applicant and Title: Prabhakar Rao, Board of Director

Applicant's Phone: 916-281-5529 **Applicant's Email:** prabhaker49@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement Withheld DiAnne Brown

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name:

Date: 3/18/22

School District: Elk Grove Unified ☐ Folsom Cordova Unified ▪ Sacramento City Unified ☐ Other ☐

Comments (Optional): Rancho Cordova High School is not an SCUSD school

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #42

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 10:51:50 AM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1509776
IP Address:	206.15.249.230
Submission Date:	03/04/2022 10:51
Survey Time:	20 minutes, 28 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Physical Education Enhancement

Project Synopsis

Enhancing the Physical Education programs at each of our school sites in Rancho Cordova to promote a healthy active lifestyle and lifelong exercise learners.

Project Description

The Physical Education Enhancement project will allow school sites the opportunities to update equipment and accessories to provide students with a more robust fitness experience. Ensuring our physical education programs have the necessary equipment / supplies and means to support our students is paramount to the success of our community and developing lifelong learners. Due to the pandemic, our school site PTO/PTA's have not been able to operate and provide support for the past two years. Traditionally our physical education programs have gained support from our parent organizations and site funds. This has not been available for various reason at this time. Evidence supports that one of the best Positive Behavior Intervention and Supports (PBIS) for students is physical fitness. During the COVID-19 pandemic the need to support Social Emotional Learning (SEL) for our students is greater than ever and physical education is one of the best models for SEL.

Project Team

The Team responsible for ensure that this project is implemented will be made up of site administrators and district representation. Site principals, physical education teachers, FCUSD Director of Athletics and Physical Education.

Project Goals

Our goal is to ensure that all of our students have access to updated equipment and accessories at each school site. To promote lifelong learning about exercise and healthy lifestyles. And to ensure our schools have the most up to date equipment for our students.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Application #43

Total project cost

$110,000

Estimated breakdown of project expenditures

Grant funds will be used at all FCUSD sites in Rancho Cordova. -Elementary sites: $2000 x 10 = $20,000 -Preschool sites: $1,000 -Middle school sites: $12,000 x 2 = $24,000 -High school site: $64,000 -Alternative site: $1,000

Matching Funds

0

Include any other funding contributions

0

Ongoing operations and maintenance costs (if applicable)

0

Total Community Enhancement & Investment Funds requested

$110,000

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

July 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

School based fundraising and sponsorships.

Project Schedule, Timeliness and Adaptability

Project Schedule

The timeline for this project is from July, 2022 and to be completed by June 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

All sites will submit equipment and accessories itemized requests to be purchased by mid October in order to ensure products are delivered prior to June 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Project can be adjusted as needed to ensure funds are used for purchase of equipment or services.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

FCUSD 1965 Birkmont Drive

Application #43

Rancho Cordova, California 95742

Other physical addresses if project/program is at multiple sites

-Gardens - 2400 Dawes St. -CLC - 2460 Cordova Lane -Meadows - 2550 La Loma Dr. -Villa - 10359 S. White Rock Rd. -Mather Heights - 4370 School Rd. -Navigator - 10679 Bear Hollow Dr. -P.J. Shields - 10434 Georgetown Dr. -RC Elem. - 2562 Chassella Way -Riverview - 10700 Ambassador Dr. -White Rock - 10487 White Rock Rd. -Williamson - 2275 Benita Dr. -Mills MS - 10439 Coloma Rd. -Mitchell MS - 2100 Zinfandel Dr. -CHS, 2239 Chase Dr. -Kinney 2710 Kilgore Rd.

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Peter Maroon

Title

FCUSD Director of Athletics and Physical Education

Submitting as

Public Agency

Phone

9162949388

Email

pmaroon@fcusd.org

Organization's legal name, if applicable

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr.
Rancho Cordova, California 95742

Signatory's Name

Mr. Sean Martin

Signatory's Title

Assistant Superintendent, Business Services

Signatory's Phone

9162949000

Signatory's Email Address

lvenzon@fucsd.org

Signatory's Mailing Address

1965 Birkmont Dr.
Rancho Cordova, California 95742

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #43

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Physical Education Enhancement

Name of Organization: FCUSD Physcial Education

Name of Applicant and Title: Peter Maroon, Director of Athletics and Physical Education

Applicant's Phone: 916-294-9388 **Applicant's Email:** pmaroon@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 1:28:30 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1510268
IP Address:	50.213.98.150
Submission Date:	03/04/2022 1:28
Survey Time:	18 minutes, 13 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

PRO Youth - Governments Engaging Youth in the City of Rancho Cordova

Project Synopsis

Youth@City Council and Summer@City Hall provide Rancho Cordova youth opportunities to learn about city functions and civic processes. Participants gain a unique perspective into City Hall affairs as they interact with city staff and leaders while also gaining valuable skills that support their success as students and community leaders.

Project Description

PRO Youth and Families is proposing to provide a two-pronged approach for 60 youth (ages 13-18) to engage in government and civic education in the City of Rancho Cordova through the Youth @ City Council Program and Summer @ City Hall program. A Community Investment Project will also be included in both programs. Each of these programs provides high-quality, meaningful and engaging opportunities for youth to become civically-engaged city advocates and develop skills to grow into innovators, business owners, employees, neighbors, and leaders. The proposed programs and projects will allow Rancho Cordova's youth to learn more about the robust, proud history of Rancho Cordova and be provided with opportunities to share their views and suggestions for continuing to improve community relationships by making the city a welcome and safe place for all. Youth participants will meet and interact with local and regional leaders in the private, public, and non-profit sectors to learn about these leaders' views of the business/economic climate in Rancho Cordova and share their own views on innovative and creative ways the city can thrive. Please see attached Grant Proposal for additional information.

Project Team

David Augusto, Program Manager, is adept at working with youth in the Sacramento region in support of their professional and educational goals. He is committed to educating young people on the importance of civic engagement and advocacy through leadership, life skills, and professional development. Last year he ran the first virtual Summer @ City Hall and a hybrid model of Youth @City Council in Rancho Cordova. He also manages the implementation of mentoring, civic engagement, and advocacy programs across SCUSD, EGUSD, SJUSD. David has a Bachelor's Degree in Sociology and a Minor in Urban Studies and Planning from CSU Long Beach. David will be assisted by Program Coordinators, Nick Soliz, who has a Bachelors from CSU Sacramento in Political Science and is also a former Youth@City Council alumni, and Samreen Siddiqui, who has a Bachelor's Degree from UCLA in

Sociology and Labor Studies as well as experience in youth development.

Project Goals

The goals for these programs are to: (1) build civically engaged young people who become involved stakeholders in the success of Rancho Cordova, (2) support the healthy development of youth in the city, and (3) develop employable young people. The goals were established to create environments where youth feel safe, are encouraged to make healthy decisions, be productive citizens, and become connected to their schools and communities.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$81,168

Estimated breakdown of project expenditures

Personnel: (Program Coordinators (2 @ .40 FTE), Program Manager (.20 FTE), Program Director (.20 FTE)) $60,409 Statutory Taxes & Benefits @ 10% of personnel $ 6,041 Intern Stipends (15 @ $400/each) $ 6,000 Participant Stipends (45 @ $100/each) $ 4,500 Travel – Mileage (3,000 @ $0.585) $1,775 Indirect @ 5% of Personnel & Benefits $ 2,463 Total Request $81,168

Matching Funds

Total Matching Funds: $20,463 In-kind contributions Nutritious Snacks $ 3,000 Program & Office Supplies $ 3,000 Rent $12,000 Indirect @ 5% of Personnel & Benefits – In-kind $ 2,463

Include any other funding contributions

$20,463

Ongoing operations and maintenance costs (if applicable)

$0

Total Community Enhancement & Investment Funds requested

$81,168

Is this a multiyear request?

No

How many years have you received funding for this project?

4

When will your request for funding sunset for ongoing programs?

9/30/2022

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

PRO Youth has a diversified funding portfolio including grants/contracts from federal, state, county, city, school districts, and private foundations as well as individual giving revenue. PRO Youth has proven sustainable for 40 years and has a comprehensive, board-approved strategic business plan to guide programming and funding.

Project Schedule, Timeliness and Adaptability

Project Schedule

October 3, 2022 - September 29, 2023. Evaluations will be complete and available by October 31, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your

project by June 30, 2023.

In the years that PRO Youth & Families has implemented the Youth @City Council and Summer @ City Hall programs in the City of Rancho Cordova, we have continued to find ways to increase access and remove barriers for youth to participate in these programs and accomplish project goals within the funding period. Our timeline is structured with pre-and-post work to allow us to adjust to any changes in the K-12 school year calendar, adjust for Summer, and meet the project completion date.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The program team has demonstrated success in administering programs in virtual/hybrid models via Zoom and is equipped to continue virtual/hybrid programming in order to comply with any local health and safety protocols from October 3, 2022, to September 29, 2023. Although the program can be implemented through a virtual/hybrid model the program team is actively transitioning back to in-person with guidance from local and public health authorities continuously assuring all partners are compliant with California Public Health and/or Sacramento County Health recommendations. The health, safety, and well-being of the Rancho Cordova community is of the utmost importance to PRO Youth and Families.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

2729 Prospect Park Drive, Rancho Cordova, CA / Rancho Cordova City Hall
Rancho Cordova, California 95670

Other physical addresses if project/program is at multiple sites

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Elk Grove Unified
Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Staci Anderson

Title

President and CEO

Submitting as

Non-Profit

Phone

9165763300

Email

stacia@proyouthandfamilies.org

Organization's legal name, if applicable

PRO Youth & Families

Mailing Address of Submitter

3780 Rosin Court
Suite 120
Sacramento, CA 95834

Signatory's Name

Staci Anderson

Signatory's Title

President and CEO

Signatory's Phone

9165763300

Signatory's Email Address

stacia@proyouthandfamilies.org

Signatory's Mailing Address

3780 Rosin Court
Suite 120
Sacramento, CA 95834

Attach any additional documents here

Grant Proposal_Community Enhancement & Investment Fund_2022.pdf
PRO Youth_Supplemental Endorsement_Community Enhancement & Investment Fund_22-23.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
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Thank you,
City of Rancho Cordova

Application #44

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PROPOSAL

GOVERNMENTS ENGAGING YOUTH IN THE CITY OF RANCHO CORDOVA

YOUTH @ CITY COUNCIL - SUMMER @ CITY HALL - COMMUNITY INVESTMENT PROJECT

A. Project Name: PRO Youth - Governments Engaging Youth in the City of Rancho Cordova

B. Project Synopsis: Youth@City Council and Summer@City Hall provide Rancho Cordova youth opportunities to learn about city functions and civic processes. Participants gain a unique perspective into City Hall affairs as they interact with city staff and leaders while also gaining valuable skills that support their success as students and community leaders.

C. Project Description: PRO Youth and Families is proposing to provide a two-pronged approach for 60 youth (ages 13-18) to engage in government and civic education in the City of Rancho Cordova through the Youth @ City Council Program and Summer @ City Hall program. A Community Investment Project will also be included in both programs. Each of these programs provides high-quality, meaningful and engaging opportunities for youth to become civically-engaged city advocates and develop skills to grow into innovators, business owners, employees, neighbors, and leaders.

The proposed programs and projects will allow Rancho Cordova's youth to learn more about the robust, proud history of Rancho Cordova and be provided with opportunities to share their views and suggestions for continuing to improve community relationships by making the city a welcome and safe place for all. Youth participants will meet and interact with local and regional leaders in the private, public, and non-profit sectors to learn about these leaders' views of the business/economic climate in Rancho Cordova and share their own views on innovative and creative ways the city can thrive.

Youth @ City Council is a civic engagement program designed to develop young leaders and foster civic engagement. The program provides education related to the values of democracy and local, county and state government. It utilizes a wide range of first-hand opportunities, including participating in City Council meetings. Participants initiate and develop a culminating project which requires each of them to identify an issue which they research, compose a legislative proposal for and present that proposal during a program graduation ceremony. At the completion of the program and successful presentation of legislative proposals, student participants receive a $100 stipend. Providing stipends to youth is becoming a best-practice, particularly for programming that requires high levels of engagement and leadership from youth. Providing stipends helps support equity, overcome barriers to participation, and demonstrate the value of their time, commitment to learning, and service to the community. This program takes place throughout the academic school year.

Summer @ City Hall is a four-week intensive summer program where youth learn about local government, careers in local government, and how to advocate for community change. It includes classes and field trips to city facilities. Fifteen to twenty participants will earn a paid internship three afternoons each week during which they will job shadow a city employee. Student interns with at least 90% attendance receive a $400 stipend at the end of the four weeks. Participants who are not matched with an internship, but complete at least 90% attendance at the end of the four weeks will receive a $100 stipend. As mentioned previously, providing stipends for participants is important to address equity, overcome barriers, and demonstrate the value of their time, commitment to learning, and service to the community. Financial literacy modules will also be included as a component of the program.

The Community Investment Project is a youth-led project designed to empower youth with networking skills and motivation to leverage their voice and become strong advocates for positive change. Students will have the opportunity to research, analyze, and advocate issues that affect their families, schools, and neighborhoods. In the outreach phase youth will be presented with a community survey to revise and administer in the city of Rancho Cordova. Data collected from the survey will inform participants on civic engagement and advocacy project areas that might be of interest to explore. Both programs will complete one youth-driven advocacy project.

D. Project Team: David Augusto, Program Manager, is adept at working with youth in the Sacramento region in support of their professional and educational goals. He is committed to educating young people on the importance of civic engagement and advocacy through leadership, life skills, and professional development. Last year he ran the first virtual Summer @ City Hall and a hybrid model of Youth @City Council in Rancho Cordova. He also manages the implementation of mentoring, civic engagement, and advocacy programs across SCUSD, EGUSD, SJUSD. David has a Bachelor's Degree in Sociology and a Minor in Urban Studies and Planning from CSU Long Beach. David will be assisted by Program Coordinators, Nick Soliz, who has a Bachelors from CSU Sacramento in Political Science and is also a former Youth@City Council alumni, and Samreen Siddiqui, who has a Bachelor's Degree from UCLA in Sociology and Labor Studies as well as experience in youth development.

E. Project Goals: The goals for these programs are to: (1) build civically engaged young people who become involved stakeholders in the success of Rancho Cordova, (2) support the healthy development of youth in the city, and (3) develop employable young people. The goals were established to create environments where youth feel safe, are encouraged to make healthy decisions, be productive citizens, and become connected to their schools and communities.

F. Funding Request: $81,168

1. **Estimated breakdown of project expenditures:**

Personnel: (Program Coordinators (2 @ .40 FTE), Program Manager (.20 FTE), Program Director (.20 FTE))	$60,409
Statutory Taxes & Benefits @ 10% of personnel	$ 6,041
Intern Stipends (15 @ $400/each)	$ 6,000
Participant Stipends (45 @ $100/each)	$ 4,500
Travel – Mileage (3,000 @ $0.585)	$1,775
Indirect @ 5% of Personnel & Benefits	$ 2,463
Total Request	$81,168
In-kind contributions	
Nutritious Snacks	$ 3,000
Program & Office Supplies	$ 3,000
Rent	$12,000
Indirect @ 5% of Personnel & Benefits – In-kind	$ 2,463
Total In-kind	$20,463

2. **Matching Funds:** $20,463
3. **Include any other funding contributions:** $20,463
4. **Ongoing operations and maintenance cost if applicable:** $0
5. **Total community enhancement funds requested:** $81,168
6. **Is this a multi-year request?** No

7. **Number of years:** N/A
8. **If you answered yes above, describe your plan.** N/A
9. **How many years have you received funding for this project?** 4
10. **When will your request for funding sunset for ongoing program?** 9/30/2022

G. **Project Schedule:** October 3, 2022 - September 29, 2023. Evaluations will be complete and available by October 31, 2023.

In the years that PRO Youth & Families has implemented the Youth @City Council and Summer @ City Hall programs in the City of Rancho Cordova, we have continued to find ways to increase access and remove barriers for youth to participate in these programs and accomplish project goals within the funding period. Our timeline is structured with pre-and-post work to allow us to adjust to any changes in the K-12 school year calendar, adjust for Summer, and meet the project completion date.

H. **Timelines: Overview of Y@CC and S@CH program calendars.**

Youth @ City Council

- October - Material creation for program recruitment and outreach.
- November - Recruitment and outreach phase.
- December - Application screening and applicant meet and greet through Mock Interviews
- January - May
    - Y@CC programming will occur once a week for 1.5 hours.
    - Students will be preparing to present their community project proposals in a Mock City Council format during the last month of programming.

Summer @ City Hall

- April - Material creation for program recruitment and outreach.
- May - Recruitment and outreach phase.
- June - Application screening and applicant meet and greet through Mock Interviews.
    - If internships are available, competitive interviews will be conducted for limited spots.
- July - August - S@CH Programming. 2-hour sessions Monday through Thursday, for 4-weeks.
    - Participants will have completed a Community Investment Project in collaboration with the City of Rancho Cordova.
- August- Post program survey and data review.

I. **Adaptability:** The program team has demonstrated success in administering programs in virtual/hybrid models via Zoom and is equipped to continue virtual/hybrid programming in order to comply with any local health and safety protocols from October 3, 2022, to September 29, 2023. Although the program can be implemented through a virtual/hybrid model the program team is actively transitioning back to in-person with guidance from local and public health authorities continuously assuring all partners are compliant with California Public Health and/or Sacramento County Health recommendations. The health, safety, and well-being of the Rancho Cordova community is of the utmost importance to PRO Youth and Families.

J. **Project Location:** Rancho Cordova City Hall, 2729 Prospect Park Drive, Rancho Cordova, CA

K. **Submitted by:** This application is submitted on behalf of PRO Youth and Families: a nonprofit agency with a 40-year history in the Sacramento region. PRO's President/CEO is Staci Anderson and the signatory for this project PRO's CFO, Phyllis Deats. PRO Youth and Families is located at 3780 Rosin Court Suite #120, Sacramento, CA 95834. For questions or comments, please contact Staci Anderson at 916-576-3300 or stacia@proyouthandfamilies.org.



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: PRO Youth - Governments Engaging Youth in the City of Rancho Cordova

Name of Organization: PRO Youth & Families

Name of Applicant and Title: Staci Anderson, President and CEO

Applicant's Phone: **Applicant's Email:** stacia@proyouthandfamilies.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: **Elk Grove Unified** **Folsom Cordova Unified** ■ **Sacramento City Unified** **Other**

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #44



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

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To be filled out by grant applicant

Project/Program Name: Pro Youth- Governments Engaging Youth in the City of Rancho Cordova

Name of Organization: Pro Youth and Families

Name of Applicant and Title: Staci Anderson, President and CEO

Applicant's Phone: 916-576-3300 **Applicant's Email:** stacia@proyouthandfamilies.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement (Withheld) _____

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Elizabeth Rueda on behalf of: Dr. Bindy Grewal

Date: 3/18/22

School District: Elk Grove Unified ■ Folsom Cordova Unified Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #44

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Ranga Vasantha- Festival of Arts & Culture

Name of Organization: Kannada Sangha of Sacramento (KSS)

Name of Applicant and Title: Prabhakar Rao, Board of Director

Applicant's Phone: 916-281-5529 **Applicant's Email:** prabhaker49@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement Withheld DiAnne Brown

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name:

Date: 3/18/22

School District: Elk Grove Unified ☐ Folsom Cordova Unified ▪ Sacramento City Unified ☐ Other ☐

Comments (Optional): Rancho Cordova High School is not an SCUSD school

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #44

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 4, 2022 1:53 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1510332
IP Address:	206.15.249.230
Submission Date:	03/04/2022 1:53
Survey Time:	32 minutes, 56 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Enhanced Family Life Education for Cordova High School Students

Project Synopsis

The health education staff at Cordova High School (CHS) would like to purchase parent simulator dolls to provide hands-on parenting experience. The goal is to educate students about the responsibility of caring for a baby and the importance of preventing pregnancy until ready to take on the responsibility of parenting.

Project Description

According to Sacramento County Public Health, In 2018, the teen birth rate was 5.5 births for every 1,000 females ages 15-19. An estimated eight percent of young men will become fathers before their 20th birthday. Teen birth rates are highest among Hispanic and Black adolescents. Approximately 55% of CHS student body identifies as one of these high risk groups. Teen pregnancy has a significant impact economically. Teen parenting costs taxpayers an average of $5,500 per year for each teen parent. Teen parents and their children usually require an increased amount of public service support throughout their entire lives related to behavioral problems, chronic medical conditions, and increased need for foster care. The economy also has lost tax revenue due to the teen mom having low academic achievement which often leads to the mom being unemployed or underemployed. One effective way to prevent teen pregnancy is through comprehensive family life education. Comprehensive family life education includes topics about healthy relationships and methods to prevent pregnancy; including abstinence and proper use of birth control. Per California law, high school students must receive family life education at least one time during high school. Health classes are offered two times per year at CHS. The family life curriculum that is taught in the health classes is Positive Prevention Plus. Positive Prevention Plus is an evidence-based curriculum that is compliant with California's law. Please see attachment for complete description

Project Team

Amanda Holoway: CHS health teacher Teal LeBaron: CHS Physical Education and Health department head Rhonda Franks: FCUSD Student Assistance Programs

Project Goals

By the end of their family life education lessons, teens will be empowered to make responsible family life choices as evidenced by verbalizing various ways to prevent pregnancy and the importance of family planning By the end of their family life education

lessons, teens will be empowered to make responsible family life choices as evidenced by explaining the physical, social, emotional and economic challenges of teen pregnancy By the end of their family life education lessons, teens will be empowered to make responsible family life choices as evidenced by identifying how teen pregnancy and parenthood affects teen parents, their children, families and society

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$9,200

Estimated breakdown of project expenditures

Staffing $3,600 Curriculum $600 Simulator Dolls $5,000

Matching Funds

$4,200

Include any other funding contributions

multiple FCUSD departments including Cordova High School, Health Services, and Curriculum & Instruction

Ongoing operations and maintenance costs (if applicable)

Health education staff, student workbook purchase

Total Community Enhancement & Investment Funds requested

$5,000

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

The purchasing of the simulation dolls will sunset by June 30, 2023. However, family life education will continue to be taught per CA Education Code for an indeterminate amount of time.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

Future purchase of additional simulation dolls and the funding for these dolls is to be determined.

Project Schedule, Timeliness and Adaptability

Project Schedule

August: Purchase simulator dolls November: Teach first cohort family life education lessons April: Teach second cohort family life education lessons

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

To purchase the dolls, we will receive a quote within 60 days from time of purchase from Nasco Educations. Once we receive this quote, we will work with FCUSD's budget department to complete a purchase order and order 10-12 dolls online. Per California law, high school students must receive family life education at least one time during high school. Health classes are offered two times per year at CHS. To comply with state mandates, the family life curriculum will be taught during each semester.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Application #45

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Throughout the pandemic teachers have been able to adjust their lessons to meet changes in health mandates and still provide students with a valuable educational experience. Should we have to return to on-line lessons again, students will receive lessons via Zoom or Microsoft Teams. Students are able to pick up and drop off supplies at the school site as needed and assignments can be submitted on-line through Google Classroom.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

Cordova High School
2239 Chase Dr.
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

n/a

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

CHS Letter of Support.pdf
HS Letter of Support.pdf

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Rhonda Franks

Title

Student Assistance Program

Submitting as

Other: K-12 Public School

Phone

9162949013

Email

rfranks@fcusd.org

Organization's legal name, if applicable

Folsom Cordova Unified SD

Mailing Address of Submitter

1965 Birkmont Dr
Rancho Cordova, CA 95742

Signatory's Name

Dr. Sarah Koligian

Signatory's Title

Superintendent

Signatory's Phone

9162949000

Signatory's Email Address

skoligian@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr
Rancho Cordova, California 95742

Attach any additional documents here

Project Description.pdf
School_SupplementalEndorse.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Project Description:

According to Sacramento County Public Health, In 2018, the teen birth rate was 5.5 births for every 1,000 females ages 15-19. An estimated eight percent of young men will become fathers before their 20th birthday. Teen birth rates are highest among Hispanic and Black adolescents. Approximately 55% of CHS student body identifies as one of these high risk groups.

Teen pregnancy has a significant impact economically. Teen parenting costs taxpayers an average of $5,500 per year for each teen parent. Teen parents and their children usually require an increased amount of public service support throughout their entire lives related to behavioral problems, chronic medical conditions, and increased need for foster care. The economy also has lost tax revenue due to the teen mom having low academic achievement which often leads to the mom being unemployed or underemployed.

One effective way to prevent teen pregnancy is through comprehensive family life education. Comprehensive family life education includes topics about healthy relationships and methods to prevent pregnancy; including abstinence and proper use of birth control. Per California law, high school students must receive family life education at least one time during high school. Health classes are offered two times per year at CHS. The family life curriculum that is taught in the health classes is Positive Prevention Plus. Positive Prevention Plus is an evidence-based curriculum that is compliant with California's law.

In addition to teaching Positive Prevention Plus, the health education staff at CHS would like to add a hands-on simulation experience to their student's family life education. This experience would allow students to take home a simulation doll for a few days. Students would take care of the doll as if it were a real baby. This experience would include students identifying the need and responding to the doll when it cries. Also, students will need to ensure adequate childcare is available when the student is not able to care for the baby. Students will learn about how much it costs to buy food and diapers and other items needed to care for a child. This simulation would provide a deeper insight into the time commitment and responsponsibilities of parenting and will emphasize the importance of delaying having children until the students are physically, financially, and emotionally ready.

This simulation experience aligns with several of the City of Rancho Cordova's goals. First of all, these lessons align with the goals to empower responsible citizenship and promote a positive image of Rancho Cordova by educating teens about the importance of making responsible decisions regarding family planning. As previously stated, teen pregnancy is expensive and resource intensive for communities to support. By preventing teen pregnancy, this frees up resources and helps the city to achieve its goal of ensuring the availability of the best public services in the region while practicing sound financial management.

CHS health education staff is asking the City of Rancho Cordova for a $5000 grant to pay for the simulation dolls. The school district is able to fund core curriculum material. However,

funding for additional supplies, such as the simulation dolls, is limited. The simulation dolls cost about $400 per doll. To purchase enough dolls for a class to receive this enhanced family life education experience would exceed the supply budget for CHS health education classes. By preventing as few as 1 teen pregnancy this on-time $5,000 investment will more than pay for itself because as previously stated, it costs taxpayers approximately $5,500 per year to support a teen mom.

Thank you for taking the time to consider this application. This additional hands-on experience to the family life education curriculum will increase teen knowledge about caring for a family which will prevent teen pregnancies and the impact that teen pregnancies have on an individual, their children, their family, and the greater Rancho Cordova community.

Application #45

Cordova High School

2239 Chase Drive, Rancho Cordova, CA 95670
Phone (916) 294-2450 http://www.fcusd.org/CHS

Folsom Cordova Unified School District

Jerad Hyden
Principal

Ann Botsford
Michele Brown
Michele Cooper
Joel Francisco
Assistant Principals

Heidy Naderi
Admin. Assistant

Erin Kaluza
ELD Program Manager

Josh Creeger
Activities Director

Mark Beamish
Athletic Director

Kitty White
Head Counselor

Grace Martinez
IB MYP Coordinator

Chris Mahaffey
IB CP Coordinator

Zandi Llanos
IB DP Coordinator

Tracey Jacobs
School Resource Officer

March 2nd, 2022

To Whom It May Concern:

I would like to express support for the Cordova High School Enhanced Family Life Education application for the City of Rancho Cordova Community Enhancement Fund. This funding would allow the Health Education Department the opportunity to create a comprehensive family life unit with state-of-the-art simulation dolls to positively impact student learning. With teen pregnancy rates on the rise for our most vulnerable student groups, CHS is uniquely positioned to provide critical intervention at a time during teen development which may have a substantial impact on prevention methods.

During this school year, as a result of a lack of available funding, our dedicated Health Teacher Ms. Holway, still attempted to incorporate this learning into her scope and sequence. Unfortunately, students utilized bags of flour as replacement for the simulation dolls and it was apparent that providing this technology would further support the intended learning outcomes for our students.

If awarded, the Health Department will work towards valuable goals of preventing unwanted pregnancy while balancing the importance of clear family planning for students. Additionally, students will be able to better understand the physical, social, and emotional impact and challenges associated with teen pregnancy and young parenthood.

I urge you to give this application your most serious consideration. Should you or your staff have any questions regarding this letter, please do not hesitate to call.

Respectfully submitted,

Jerad A. Hyden

Principal
Cordova High School
(916) 294-2450 x810150
jhyden@fcusd.org

Application #45

Kerri Kaye, RN
Director, Health & Wellness

FCUSD
Folsom Cordova Unified School District

March 2nd, 2022

To Whom It May Concern:

I would like to express my support for the Cordova High School Enhanced Family Life Education application for the City of Rancho Cordova Community Enhancement Fund. This funding would allow the Health Education Department at Cordova High School the opportunity to create a comprehensive family life unit with state-of-the-art simulation dolls to positively impact student learning. With teen pregnancy rates on the rise for our most vulnerable student groups, CHS is uniquely positioned to provide critical intervention at a time during teen development which may have a substantial impact on prevention methods.

As a School Nurse Administrator, I endorse the work done by Ms. Holway at CHS to teach her students a comprehensive family life unit. Prevention education is essential, and the information taught in our health classes is foundational to future generations.

If awarded, the Health Department will work towards valuable goals of preventing unwanted pregnancy while balancing the importance of clear family planning for students. Additionally, students will be able to better understand the physical, social, and emotional impact and challenges associated with teen pregnancy and young parenthood.

I encourage you to give this application your most serious consideration. Should you or your staff have any questions regarding grant request, please do not hesitate to call.

Kerri L. Kaye, RN, MSN, BSN
FCUSD Director, Health & Wellness
1965 Birkmont Drive
Rancho Cordova, CA 95742

Application #45

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To be filled out by grant applicant

Project/Program Name: Enhanced Family Life Education for Cordova High School Students

Name of Organization: Cordova High School, PE and Health Education Department

Name of Applicant and Title: Rhonda Franks, Student Assistance Programs

Applicant's Phone: 916-294-9013 **Applicant's Email:** rfranks@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 3:07:03 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1510511
IP Address:	40.112.191.118
Submission Date:	03/04/2022 3:06
Survey Time:	39 minutes, 2 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Boys & Girls Club at Navigator Elementary

Project Synopsis

The Boys & Girls Club program would continue its work at Navigator Elementary, providing a comprehensive after-school program Monday-Friday for over 100 Navigator students. The Club would serve an additional 250 Navigator students during the school day through targeted outreach activities.

Project Description

The Boys & Girls Club at Navigator Elementary has been a constant in the lives of Rancho Cordova youth and families since 2018. Despite the Covid-19 pandemic, the Club has continued to serve Navigator students and their families. With the Club being back on campus for the 21/22 school year primary areas of focus for the program include health, safety, and education. On a typical day, the Boys & Girls Club serves over 300 youth on the campus of Navigator Elementary; providing academic support and enrichment programs designed to keep youth on track and successful both in and out of school. The Club has become a trusted partner and valued member of the school team; providing additional academic support and resources to the schools most vulnerable students. The Club has become an integral part of the school day, and a part of the Navigator team. Our Site Coordinator is traditionally on campus most of the school day and because of a close partnership with school administration, as well as teachers, the Club has been able to further positively impact all students at Navigator by providing school day support. Twice weekly the Boys & Girls Club facilitates High-Yield Learning Activities (HYLA) at recesses that are open to all students on campus. Our Site Coordinator is always “on call” at Navigator during the school day, there to assist with students who have behavioral issues and need time away from the classroom environment. We work with those students to process through their behavior/feelings, offer guidance, and redirect the youth back in to the classroom in a better frame of mind. Club data consistently shows that greater engagement in Club activities leads to decreases in high school dropout rates and truancy, drug and alcohol use and other risky behaviors as well as increases in good behavior and healthy lifestyle choices. The Club focuses on helping youth in three critical areas; Academic Success, Good Character and Citizenship and Healthy Lifestyles.

Project Team

Kimberly Key, Chief Executive Officer Kim has been an integral part of the Boys & Girls Clubs of Greater Sacramento

for over 18 years. She was first introduced to the Club as a volunteer at our Teichert Branch, teaching art classes. From there she joined the board of directors while she was in the field of commercial banking for Bank of the West. She served as Board President for over 5 years, assisting the Club to open more sites and serve more Sacramento-area youth than ever before. Kim's passion for the organization and its mission led to her accepting the role of CEO in 2015. Jon Rango, Chief Operating Officer Jon has been in the field of youth development for 27 years and with Boys & Girls Clubs for 18. Before coming to the Boys & Girls Clubs of Greater Sacramento, Jon was an Area Director for Boys & Girls Clubs of the North Valley. It was there he oversaw ASES and 21st Century school-based programs and worked closely with several school districts. He also has the opportunity to help start a Boys & Girls Club inside of the county's juvenile hall, only the second in the state at the time. Lisa Spiegler, Director of Quality, Impact and Evaluation Lisa currently creates program curriculum for all Club sites and has been with the Boys & Girls Club for 12 years. Her wide-ranging experience working with youth and overseeing programs has made her an invaluable part of the Boys & Girls Club team. In addition to program management, Lisa is our on-boarding coordinator, training new staff at school sites on classroom management, program expectations, as well as organizational and district policies and procedures. Andrew Gambalie, Navigator Elementary Site Coordinator Andrew has been with Boys & Girls Clubs for over 5 years, and the 21-22 school year is his first at Navigator. Andrew has been able to continue the Club's expectations of high-quality youth development programming for our Navigator Club members.

Project Goals

1) A minimum of 100 unduplicated youth will become Boys & Girls Club members for the 22/23 school year. 2) A minimum of 200 Rancho Cordova youth and their families will receive additional Club programs and services, including participating in the Club's weekend meal program. 3) 85% of Club members will improve school attendance. 4) 85% of Club members will show improvement in a single academic subject or overall GPA. 5) 90% of Club members will improve social-emotional skills through participation in BGCSAC's Smart Moves program. All data for the above goals will be tracked in the Club's member tracking system (Visions). Data will be collected via progress reports/report cards, youth surveys, and attendance logs.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$132,255

Estimated breakdown of project expenditures

Site Manager - $38,000 Youth Development Professionals (3) - $56,202 Total Wages - $94,202 Payroll Taxes & Benefits - $16,030 Total Wages & Benefits - Direct Services - $110,232 Program Supplies - $6,000 Club Technology - $4,000 Total Operating Costs - $10,000 Administrative Costs (10%) - $12,023

Matching Funds

Corporate Contributions & Restricted Funding - $57,255

Include any other funding contributions

N/A

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$75,000

Is this a multiyear request?

No

How many years have you received funding for this project?

4

Application #46

When will your request for funding sunset for ongoing programs?

The Club has steadily been able to increase its corporate donations and restricted funding contributions to support the program at Navigator. Current projections of expected income could see the request to the City of Rancho Cordova sunset in 3-4 years.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

The Club has continued to seek and receive corporate support from the Rancho Cordova community. In addition, the Club has pass-through funding that it applies for through Boys & Girls Clubs of America.

Project Schedule, Timeliness and Adaptability

Project Schedule

The Boys & Girls Club at Navigator Elementary will begin August 2022 and run through May 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The Club's program will run over the course of the 22/23 school year. Throughout the year, the Club should have no challenges meeting the project schedule or goals and objectives.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The Boys & Girls Club has operated both in-person and virtual programs since the onset of the pandemic. The Club will be able to safely and successfully meet all goals and objectives even if required to modify the program based on potential health orders/restrictions. The Club has established safety policies and protocol that will ensure the safe facilitation of both in-person and virtual programs.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10679 Bear Hollow Dr.
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

N/A

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Jon Rango

Title

Chief Operating Officer

Submitting as

Non-Profit

Phone

9163921350

Email

jrango@bgcsac.org

Organization's legal name, if applicable

Boys & Girls Clubs of Greater Sacramento

Mailing Address of Submitter

5212 Lemon Hill Ave.
Sacramento, CA 95824

Signatory's Name

Chief Executive Officer Kimberly Key

Signatory's Title

Chief Executive Officer

Signatory's Phone

9163921350

Signatory's Email Address

kkey@bgcsac.org

Signatory's Mailing Address

5212 Lemon Hill Ave.
Sacramento, CA 95824

Attach any additional documents here

Navigator Principal Letter of Support.pdf

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City of Rancho Cordova

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To be filled out by grant applicant

Project/Program Name: Boys & Girls Club at Navigator Elementary

Name of Organization: Boys & Girls Clubs of Greater Sacramento

Name of Applicant and Title: Jon Rango - Chief Operating Officer

Applicant's Phone: 916-392-1350 **Applicant's Email:** jrango@bgcsac.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

HOME OF THE FALCONS

NAVIGATOR ELEMENTARY SCHOOL
10679 BEAR HOLLOW DRIVE
RANCHO CORDOVA, CA 95670
916-294-2420 | WWW.FCUSD.ORG/NE
JAMES TUCKER, PRINCIPAL

March 3, 2022

To Whom it May Concern;

It's my pleasure to write this letter in support of the Boys and Girls Club at Navigator Elementary School. The Boys and Girls Club serves nearly 75 students daily at our school. Their after-school program supports students academically and socially with a variety of enrichment opportunities.

Our students really enjoy this program and benefit from the mentorship of its club's leaders. We often have a waiting list of students who wish to join due to the positive reputation the program has in our community.

The collaboration and partnership we have with the Boys and Girls Club is lucrative for both students and staff. They provide a safe, productive program for our students after school and work closely within the behavioral systems we have in place during the school day. Their program provides a valuable service to our community.

We look forward to continuing our partnership with the Boys and Girls Club here at Navigator Elementary because we know that it benefits our students and their families.
If you have any questions, please feel free to reach out to me.

Sincerely,

James Tucker

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Friday, March 4, 2022 3:21:56 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1510552
IP Address: 206.15.249.206
Submission Date: 03/04/2022 3:21
Survey Time: 27 minutes, 1 second

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Book Recovery and Expansion

Project Synopsis

Book recovery and collection expansion for FCUSD Rancho Cordova school libraries.

Project Description

During the 2020-2021 and 2022-2023 school years, FCUSD library staff encouraged families to check out books from their school library. This initiative helped curb learning loss, contributed to social-emotional learning while at home, and emboldened students to continue their love of reading despite distancing from one of their favorite places on campus. This was a successful campaign, as thousands of books went home with students at curbside pickups. Due to circumstances beyond families' and our control, many of these books did not return to campus. Several titles were our libraries' most popular novels, non-fiction texts and picture books. We would like to recover these lost books with the help of a Community Enhancement Grant. Additionally, it is critical that we support the social-emotional learning of students and curb learning loss by increasing the number of books students have access to. In Rancho Cordova, 22 percent of students met or exceeded state reading standards. In Folsom, 52 percent of students met or exceeded state reading standards. According to the American Association of School Libraries, when spending for libraries rises, better reading scores follow. Furthermore, the average age of Rancho Cordova school library collections is 1999, which is a 23-year-old collection. This means many non-fiction books are outdated and need replacement titles for factually accurate information. New titles, which better reflect student background and life experience, ought to be added to library collections. As an educational institution, newly purchased titles are essential so that we can align themed and non-fiction books to supplement our curriculum and select material that reflects each school's population. Our request is for one additional new library-bound book per Rancho Cordova student this year, with the goal to fully realize a 20:1 ratio in four years.

Project Team

11 Library clerks at 12 Rancho Cordova K-12 sites, and the district librarian.

Project Goals

In Rancho Cordova, school sites have on average, 11 library books per student. The American Library Association

study on highly effective school libraries recommends 15-20 books per student. We would like to build libraries in our Rancho Cordova schools to be at the maximum recommendation of the American Library Association for a ratio of 20 books per students. Plentiful access to a wide variety of library books will contribute to an equitable and high-level educational support for all students in Rancho Cordova. The average consumer purchased book is not suitable for school libraries. Library-bound books are more costly. This is because unlike a traditional hardback books, they are their binding is reinforced for more extensive use. According to the California Department of Education, since the demise of the School and Library Improvement Block Grant in 2009, the primary source of library funding for 51 percent of schools comes from fundraising activities. In Folsom, funding for additional library staff time and material is donated by the PTO or businesses or purchased from largely successful Scholastic Book Fairs. For Rancho Cordova, the Community Enhancement Grant would fill that gap in funding for our libraries and students. Substantial research has demonstrated that a school library with a rich collection of materials makes a positive impact on literacy and academic achievement of students. We want to encourage students to read broadly and satiate their curiosity for learning. To do that, our goal is to reach the recommended 20 books per student in the Rancho Cordova schools. The material purchased will support intellectual growth, classroom connections, personal development, individual interests, and the recreational needs of students.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$153,000

Estimated breakdown of project expenditures

Information attached

Matching Funds

0

Include any other funding contributions

0

Ongoing operations and maintenance costs (if applicable)

0

Total Community Enhancement & Investment Funds requested

$153,000

Is this a multiyear request?

Yes

Number of years

4

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

When we have reached 20 books per child in Rancho Cordova school libraries the project will be completed. With district and grants funds, we estimate this will take 4 years. After this time, the district can maintain the collection at 20 books/student. It is sustainable as a single year request. An additional book per child is a benefit in and of itself.

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

When we have reached 20 books per child in Rancho Cordova school libraries. With district and grants funds, we estimate this will take 4 years. After this time, the district can maintain the collection at 20 books/student.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

School based fundraising, library grants and district funds, when available.

Project Schedule, Timeliness and Adaptability

Project Schedule

The timeline for this project is from September 2022 and to be completed by May 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

District librarian will purchase material from book vendor. She will liaison with library staff who will work with school site teachers to select material. Library staff at each site will add library books to collection.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

As was conducted during school shutdowns, library staff would offer curbside pickup and read to students virtually to ensure they are able to access high-quality and grade-level literature.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

1965 Birkmont Dr
Rancho Cordova, California 95742

Other physical addresses if project/program is at multiple sites

• Cordova Gardens Elementary 2400 Dawes St. • Cordova Meadows Elementary 2550 La Loma Dr. • Cordova Villa 10359 S. White Rock Rd. • Mills 10439 Coloma Rd. • Mitchell 2100 Zinfandel Dr. • Navigator 10679 Bear Hollow Dr. • Peter J. Shields 10434 Georgetown Dr. • Rancho Cordova Elementary 2562 Chasella Way • Cordova High School • Riverview STEM Academy 10700 Ambassador Dr. • White Rock 10487 White Rock Rd. • Williamson 2276 Benita Dr. 95670

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by Application #47

Sasha Kinney

Title

District Librarian

Submitting as

Individual

Phone

9162949000 ext. 10336

Email

skinney@fcusd.org

Organization's legal name, if applicable

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr
Rancho Cordova, California 95742

Signatory's Name

Angi Carlomagno

Signatory's Title

Director of Curriculum and Instruction

Signatory's Phone

9162949000

Signatory's Email Address

skinney@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr
Rancho Cordova, California 95742

Attach any additional documents here

+ 1 book Community Enhancement Grant 2022-2023.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:

https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Rancho Cordova Schools	Enrollment	Average age of collection	Current number of books per student	Add 1 book/student	Total number of books to add		Average cost of book	Total amount needed
Cordova Gardens	287	2001	14	1	287			
Cordova Meadows	375	1995	10	1	375			
Cordova Villa	495	2000	13	1	495			
Peter J. Shields	323	1999	13	1	323			
Navigator	378	2001	15	1	378			
Rancho Cordova	467	1999	16	1	467			
Riverview STEM Academy	250	1998	15	1	250			
White Rock	439	2001	10	1	439			
Williamson	501	1999	14	1	501			
Mills	756	1999	14	1	756			
Mitchell	831	2001	11	1	831			
Cordova High	1939	1994	6	1	1939			
Kinney/Prospect	108	-	0	1	108			
RC schools		1999	12		7149		$21	$150,129
						Shipping & Processing	0.10	2,814
						Total		**$152,943**

Number of books and books/student from library management software report

Enrollment numbers from student information system

Application #47



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Book Recovery and Expansion

Name of Organization: Folsom Cordova Unified School District

Name of Applicant and Title: Sasha Kinney, District Librarian

Applicant's Phone: 916-294-9000x10663 **Applicant's Email:** skinney@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #47

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Saturday, March 5, 2022 12:00 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1511018
IP Address: 50.126.149.245
Submission Date: 03/05/2022 12:00
Survey Time: 22 minutes, 53 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

"A Day in the Life": A Collaboration with George Washington Carver School of Arts and Science and California Capital Film Office

Project Synopsis

"A Day in the Life" program is a collaboration between California Capital Film Office and George Washington Carver School of Arts and Science. California Capital Film Office will work directly with Carver students to produce a, no shorter than 10 minutes and no longer than 15 minutes short documentary relevant to the city of Rancho Cordova. Student documentaries will have the possibility of being showcased in the Annual Documentary Film Festival with George Washington Carver SAS participating as one of several locations.

Project Description

As a Waldorf school, arts integration is fundamental to student learning; however, Carver has lost many of their arts programs due to limited funding. The partnership with California Capital Film Office provides students the opportunity to engage in every aspect of film production, explore career possibilities in the film industry, learn about the people and the city, highlight the City of Rancho Cordova, enter and host the Annual Documentary Film Festival while earning community service credit. The short documentaries focus on the day in the life in Rancho Cordova. This could be as follows; • A historical documentary as far as a landmark, building, history of the city, or past public figure who was born in Rancho Cordova. • A short doc about a public figure such as a sports star, film or RC personality, or business leader who lives or works in Rancho Cordova. • A celebrity who was born and lived their early life in Rancho Cordova. People that come to mind include, Lester Holt, Chris Bosio, MLB pitcher Geoff Jenkins, MLB player Jerry Manuel, MLB player/manager Max Venable, MLB player Seneca Wallace, NFL quarterback Gerald Willhite, NFL runningback • "A Day in the Life" of a Rancho leading figure, i.e. The Police Chief, The City Manager, a business leader who works in RC. • How the pandemic affected Rancho Cordova. Perhaps find a resident who had a particularly hard time. • How Rancho Cordova fits into the Sacramento region at large. • The many outdoor parks, river areas, and activities areas RC offers. • The effects of climate change in the greater river areas of rancho Cordova • A doc that looks at the new arts center that is slated to break ground on Folsom Blvd across from the MACC. A series of short documentaries by young students at a high school in Rancho Cordova. The finished product would be of high quality that is of broadcast quality and able to be screened. The students would be guided through the process from beginning to end.

Project Team

La Niecia Kobelt: Principal, George Washington Carver SAS: Oversee the overall program, students, approve topics, provide facility; Charles Lago (Director of the California Capital Film Office), Would act as the "Executive Producer" He would oversee the program and be heavily involved in the choosing of the topics and help with contacting people who would need to be interviewed or who we would need to gain access to etc.; Jose Ruiz (Executive Assistant to Charles Lago and Office Manager of the film office), Would work directly with each team to help craft their ideas. Would also act as "The Producer" of each film made.; Rafael Portillo (DP/Editor California Capital Film Office), Would be the main technical director on each film, and oversee the editing and post-production process.

Project Goals

• A series of short documentaries by young students at a high school in Rancho Cordova. • The finished product of high quality that is of broadcast quality and able to be screened. • The students would be guided through the process from beginning to end - "From Concept to Delivery" aided by filmmakers, writers, and editors who do this for a living. • Students product and ownership • A panel of three judges made up of three notable people, i.e. The Mayor, a notable film producer, and perhaps a TV journalist would choose 1st 2nd 3rd place winners. • Prizes awarded solicited through sponsorship. • A ceremony is held at City Hall, and the awards are presented by the Mayor or during a city council meeting which is televised. • Enter films in the Annual Documentary Film Festival that will take place every year in June. • The films (or a selection of the films) would be included in the festival screening program and shown as part of the festival. • After each screening, the group of students who made that film would give a short presentation as to how they came up with the idea and discuss the filmmaking process.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$48,500

Estimated breakdown of project expenditures

• Camera body $1,295 X 4 = $5180 • Lenses $599 X 4=$2396 • 4 Track portable recorders $249 X 4= $996 • Bodypack handset lavalier mics $159 X 3 = $477 • Shotgun Microphone $399 X 3= $1197 • Telescopic boom pole $149 X 3 = $447 • Total Equipment Cost without Taxes = $7219 with taxes =$8,000 • Cal Cap Film Office Equipment - $6,500 (for entirety of the program) • Cal Cap Film Office Support Staff - $3,500 • Program Technical Director $6,000 • Program Producer - $6,000 • Program Executive Producer - $5,000 • School Administrative Cost - $3,500 • School Custodial Services - $5000 for festival and after school hours • Staffing Cost: $30,500 • Advertisement: Shirts, Hats, flyers, outreach, recruitment= $5000 Total Grant requested: $48,500

Matching Funds

Facility and administrative in kind contribution

Include any other funding contributions

N/A

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

48,500

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2024

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Application #48

Without the staffing allocation for a film teacher, Carver will continue to seek community partnerships with organizations and our Parent Guild.

Project Schedule, Timeliness and Adaptability

Project Schedule

-Semester 1: September – January; Production- Topics, Interviews, filming; -Semester 2: January – April: Editing and final production; May: Film Entries and selection for Annual Documentary Film Festival; June1 –June 14: Film Festival and surveys

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Student will have multiple deadlines to complete projects throughout the year. In addition, students will be motivated to complete their short documentaries to enter the Annual Documentary Festival that begins the first week of June and ends prior to graduation the week of June 13th.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Every student has a Chromebook and is capable of completing interviews and film work virtually and digitally.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10101 Systems Parkway
Sacramento, CA 95827

Other physical addresses if project/program is at multiple sites

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Sacramento City Unifed

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

La Niecia Kobelt

Title

Principal

Submitting as

Public Agency

Phone

9163955266

Email

LaNiecia-Kobelt@scusd.edu

Organization's legal name, if applicable

Sacramento City Unified School District

Mailing Address of Submitter

10101 Systems Parkway
Sac, Ca 95827

Signatory's Name

Mrs La Niecia Kobelt

Signatory's Title

Principal

Signatory's Phone

9163955266

Signatory's Email Address

LaNiecia-Kobelt@scusd.edu

Signatory's Mailing Address

10101 Systems Parkway
Sac, CA 95827

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Ranga Vasantha- Festival of Arts & Culture

Name of Organization: Kannada Sangha of Sacramento (KSS)

Name of Applicant and Title: Prabhakar Rao, Board of Director

Applicant's Phone: 916-281-5529 **Applicant's Email:** prabhaker49@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement Withheld DiAnne Brown

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name:

Date: 3/18/22

School District: Elk Grove Unified ☐ Folsom Cordova Unified ▪ Sacramento City Unified ☐ Other ☐

Comments (Optional): Rancho Cordova High School is not an SCUSD school

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #48

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Monday, March 7, 2022 9:41 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1514165
IP Address: 174.208.168.41
Submission Date: 03/07/2022 9:40
Survey Time: 12 minutes, 43 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Snakes to Schools Project

Project Synopsis

The Snakes to Schools Project seeks to educate elementary through high school-aged students, teachers, parents, and other outdoor enthusiasts in the Sacramento region about snake ecology, snake conservation, and snakebite first aid.

Project Description

Human-snake conflict is an increasingly common problem around the world, stemming from a lack of education about snakes. As human encroachment increases in many areas, the likelihood of human-snake conflict also increases. In the USA, the Center for Disease Control and Prevention estimates that annually 7,000 to 8,000 people are bitten by a venomous snake. Globally, it's much higher. According to the World Health Organization, each year over 2.7 million people around the world suffer a serious snakebite envenomation. Although there is only one venomous snake (the Northern Pacific rattlesnake, Crotalus oreganus oreganus) in the Sacramento area, encounters with them are common and serious rattlesnake bites do occur. Our community would benefit from additional education about rattlesnakes and other snakes in the region. Many snakes that live in human occupied areas are killed regardless of if they are harmful or not, because of fear. Snakes play a crucial role in ecosystems by maintaining ecosystem health and environments, however, their role is often highly overlooked. To address these issues, Save The Snakes seeks to empower our community members to safely coexist with snakes through our education and outreach programs. Our community of wildlife biologists and educators will implement all objectives of the Snakes to Schools project to mitigate human-snake conflict in the Sacramento area through effective education about snake ecology and wildlife conservation. The overall goals of the Snakes to Schools project are to successfully educate communities and learners about snakes found in the Sacramento area, which will build awareness and understanding of snakes, reduce snakebite, and lessen conflict between humans and snakes.

Project Team

The Snakes to Schools project will be led by the nonprofit organization Save The Snakes.

Project Goals

This project seeks to effectively communicate the importance of snakes in the Sacramento region; communicate and express how humans can and need to live in harmony with snakes. This will be accomplished by organizing awareness talks/workshops at schools

that can be attended by learners. Parents will also be welcome and encouraged to join. These talks/workshops will educate the learners on the ecological importance of snakes, identification of venomous vs non-venomous snake species, snake ecology and their role within different ecosystems, precautionary measures to avoid snakebites, and what to do in the event of a snakebite. Participants of these presentations will receive educational materials that are innovative and interesting to increase interest in snakes within learners at schools and to educate local communities about snakes. During the presentations, Save The Snakes will use educational tools such as snake specimens, live snakes, and innovative engagement quizzes to create interest in snakes. The use of interactive objects for learning purposes has been shown to engage learners longer and create an increased desire to learn. By introducing learners to live snakes, and other educational materials, we aim to reduce fear of snakes, promote snake awareness and understanding, and create snake ambassadors within the Sacramento community. Over a period of ten months, Save The Snakes will educate 500 learners from ten schools such that these learners can act as snake ambassadors in their communities. Additionally, we aim to generate support for snakes and snake conservation in the Sacramento area online, at community talks, and at events open to the public. By tabling at local events, using print/electronic media, and social media platforms, we aim to publicize our efforts to convey the importance of snake conservation and habitat preservation to communities.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$6300

Estimated breakdown of project expenditures

Education and Awareness Materials Printing - $500 Materials printed for educational purposes, conservation cards, stickers, etc. Program Materials Design - $1,000 40 hours at a rate of $25 per hour to create program materials (conservation cards, educational materials, PowerPoint presentations) Program Coordination - $500 20 hours at a rate of $25 per hour to contact and secure program work at schools, libraries and events Program Implementation - $2,500 100 hours at a rate of $25 per hour to conduct program work at schools, libraries and events Program Expenses - $1,200 Program supplies (Costs for care and maintenance of educational animals) Fuel for vehicle - $300 Fuel for main vehicle (Costs for driving to schools, events etc.) Communications - $300 Phone calls made to stakeholders and creating website for program

Matching Funds

N/A

Include any other funding contributions

N/A

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$6300

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

February 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Save The Snakes will seek additionally funding from community foundations and donations from individuals.

Project Schedule, Timeliness and Adaptability

Project Schedule

January-July 2022 (Preparation): Select schools and community members for project and begin preparation of educational materials. This time will also be used to organize program materials and equipment. August 2022-November 2022 (Field work): Visit ten schools, present talks, and conduct workshops. Attend community events and conduct work detailed in the Snakes to Schools proposal. December 2022 (Reporting): Analyze data gathered and prepare and submit results.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Measures to complete project are detailed above. This project's completion date is scheduled to be completed by December, 2022.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we will be able to adjust the project if needed. We are able to conduct this program virtually using Zoom or other virtual meeting software.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

NA
NA
NA, NA NA

Other physical addresses if project/program is at multiple sites

This project will be held at multiple schools, libraries and public events throughout the Sacramento region. These locations are still in the process of being determined.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Applicant and Signatory

Application submitted by

Michael Starkey

Title

Save The Snakes Founder & Executive Director

Submitting as

Non-Profit

Phone

9165204382

Email

contact@savethesnakes.org

Organization's legal name, if applicable

Save The Snakes

Mailing Address of Submitter

3100 Fite Circle
Suite 101
Sacramento, CA 95827

Signatory's Name

Mr Michael Starkey

Signatory's Title

Save The Snakes Founder & Executive Director

Signatory's Phone

9165204382

Signatory's Email Address

contact@savethesnakes.org

Signatory's Mailing Address

3100 Fite Circle
Suite 101
Sacramento, CA 95827

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #49

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Snakes to Schools Project

Name of Organization: Save the Snakes

Name of Applicant and Title:

Applicant's Phone: **Applicant's Email:**

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given No

Endorsement Withheld App received after the due date

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Monday, March 7, 2022 4:50:10 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1515793
IP Address:	206.15.249.226
Submission Date:	03/07/2022 4:50
Survey Time:	30 minutes, 14 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

VSP Professional Pathways

Project Synopsis

VSP Professional Pathway will support students interested in pursuing a career with VSP as a direct pathway. FCCP Youth Engagement Specialist will provide marketing, outreach, recruitment and enroll students in VSP 8 week training. Enrolled students will be supported by the Youth Engagement Specialist with challenges that arise, identify barriers and provide support services to be able to complete VSP's 8 week job training, increasing direct employment placement with VSP. Youth Engagement Specialist will follow up with a 30 and 60 day follow up after placement with VSP to provide additional support to successful placement.

Project Description

FCCP is proposing to provide professional pathways to students who want direct employment placement with VSP. VSP is one of our recent partnerships we added to provide students who completed a career assessment indicated interest in VSP direct support to enroll and complete VSP training and future job placement. FCCP's Youth Engagement Specialist will provide 1 on 1 support to help with outreach, recruitment, enrollment and ongoing support to students during their VSP training. Enrolled students will be provided further support to address barriers that arise and pre and post completion VSP Professional Pathways training. FCCP's partnership with VSP is a direct investment into Rancho Cordova's workforce development and filling vacancy in Rancho Cordova. The goal of this project is to integrate opportunities for students to participate in VSP's Professional Pathways. FCCP will utilize the data collected from our YCC participants' Career Assessment Interest Profile, a self-assessment, career exploration tool that helps youth discover the type of work activities and occupations that are of interest to them. The Career Assessment fosters career awareness but more importantly reveals the top 3 areas of interest for a significant number of youth to be Social, Enterprising and Conventional leading to working and serving the people and careers with a need to be able to integrate rules and attention to details. Providing a direct avenue for youth to be able to pursue further information and training with VSP would allow them to further examine and inform their career trajectory. ●VSP Career Planning – FCCP staff will assist an additional 10 students with completing their Career Assessment and set up an intake orientation to learn about VSP to see if it is a viable career path that they would pursue. ●Enrollment and Youth Engagement – FCCP staff will assign a Youth Engagement Specialist to support their

enrollment and job placement with VSP

Project Team

FCCP has been operating youth and adult employment programs in Rancho Cordova for over twelve years. For the past six years, FCCP has operated a full-service Job Center offering a wide range of employment support to Rancho Cordova community members. This grant continues our successful extension of these services tailored to high school students by bringing the services directly to them. With transportation a major barrier for many of our students, bringing services into their high schools is a necessity. This project will receive strategic design and oversight by Robert Sanger and Shinder Gill. Robert Sanger has led FCCP as Executive Director for the past eleven years with a total fifteen-year history with FCCP serving Rancho Cordova families and youth. He participates in the City's Education Stakeholders Committee and many other endeavors to improve the quality of life for Rancho Cordova residents and students. Shinder Gill has over 20 years of experience working in family and social services and close to five years combined workforce and youth development experience having managed various youth and employment projects in Sacramento, in particular social and emotional development and research with at risk youth. The day-to-day project management will be conducted by Doris Cortez. Doris has worked in youth and employment programs for close to three years with training specific to working with high risk youth including foster youth, parenting, criminal justice involved and youth with disabilities and/or behavioral challenges. Primary onsite staff will include Yalda Hadi, with experience in education, youth development and refugee youth mentoring and career exploration experience, in particular to underserved populations. This project will be executed in collaboration with Cordova and Kinney High Schools. FCCP has received full support from the administrators of both sites who have expressed a desire for the continuation of this project. Letters of support via email

Project Goals

● FCCP will serve a minimum of 10-12 unduplicated high school youth in this second half of the program per year. This will be measured by sign in sheets at each Youth Career Center locations (Cordova and Kinney High Schools). ● VSP Career Exploration - 60% of youth will enroll and complete VSP Professional Pathways curriculum Pathway/Goal Setting – ● Youth will be supported by Student Engagement Specialist who will provide case management and address barriers that arise to support completion of the their training. ● Employer Engagement - Student Engagement Specialist will work with enrolled students to prepare for workforce development and entry into professional career pathways with VSP. Support will be provided in resume, and interview preparation. ● Follow Up- Student Engagement Specialist will provide 30 and 60 day follow up to provide continued support post completion and possible VSP worksite placement to assist with resources and referrals.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$56,134.40

Estimated breakdown of project expenditures

Please see budget spreadsheet with itemized expenditures.

Matching Funds

$31,125.20

Include any other funding contributions

In kind services by Director of Programs by .05%.

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$56,134.40

Application #50

Is this a multiyear request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

Services are specific to the community of Rancho Cordova. This project is dependent on City of Rancho Cordova Community Enhancement funds. We will continue to explore sustainable funding for this project, however, because the geographical scope is very narrow, it is difficult to find alternative funding sources.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

We will continue to explore sustainable funding for this project, however, because the geographical scope is very narrow, it is difficult to find alternative funding sources.

Project Schedule, Timeliness and Adaptability

Project Schedule

● Jan 1, 2023 to March, 2023 – Continue outreach, recruitment and annulment into VSP Professional Pathways. ● March, 2023 to June 10, 2023 – Support enrolled students in VSP Professional Pathway towards completing the program and placement into directo VSP workforce entry level placement on job site. ● May 28, 2023 to June 30, 2023 –Student Engagement Specialist will support follow up support services and provide resources and referrals necessary.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Result oriented monitoring outcomes will be established and tracked and address areas of focus by the Director of Programs and Youth Services Manager to ensure the outlined project schedule is completed by 6/30/23.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

FCCP iwill assess students' service delivery model and make adjustments accordingly. Adapattabilit will align with those made by FCCP with the onset of COVID-19 to be able to provide services using digital platforms such as zoom, google meets to engage students synchronously, hold student office hours and created semi hybrid online and in-person services. FCCP has a COVID worksite plan in place and regularly updates it in accordance with the Sacramento County Health Order and CDC guidelines. FCCP YCC continues to explore google classroom and virtual platforms to integrate both synchronous and asynchronous learning activities strategies and continue to safely provide services and stay in compliance with CDC guidelines. FCCP will continue to stay informed in navigating the principles of change based on research.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10826 Gadsten Way
Bldg E
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

This project will be primarily located at Cordova, Walnutwood and Kinney High Schools at 2239 Chase Drive, 10850 Gadsten Way and 2710 Kilgore Road, Rancho Cordova respectively. Preparation activities and summer services will be offered at Folsom Cordova Job Center at 10826 Gadsten Way, Rancho Cordova on the Community Education Center Campus. Activities for this project will take place within Folsom Cordova Unified School District

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

City of Rancho Cordova 01_12_2022 8_10 PM - 6.pdf

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Surinder Gill

Title

Director of Programs

Submitting as

Non-Profit

Phone

9162949107 ext. 84050

Email

sgill@thefccp.org

Organization's legal name, if applicable

Folsom Cordova Community Partnership

Mailing Address of Submitter

P.O. Box 3227
Rancho Cordova, CA 95741

Signatory's Name

Executive Director Robert Sanger

Signatory's Title

Executive Director

Signatory's Phone

9163618684 ext. 290

Signatory's Email Address

rsanger@thefccp.org

Signatory's Mailing Address

P.O. Box 3227
Rancho Cordova, CA 95741

Attach any additional documents here

FCCP Professional Pathways Jan to June 2023 Budget.xlsx
City of Rancho Cordova 01_12_2022 8_10 PM - 6.pdf
Professional Pathway 2022-2023 Portal Submission.docx

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #50

City of Rancho Cordova
Fiscal Year 2022/2023 Grant Application
Community Enhancement Fund

Applicant: Folsom Cordova Community Partnership

Project Name: Professional Pathway

Project Synopsis: VSP Professional Pathway will support students interested in pursuing a career with VSP as a direct pathway. Enrolled students will be supported by a Youth Engagement Specialist designed to engage, identify barriers and support services to be able to complete VSP's comprehensive job training to be able increase direct employment placement with VSP.

Project Description: Describe the project and how it benefits the community based on the City's Community Enhancement Fund guidelines and project criteria.

FCCP is proposing to provide professional pathways to students who want direct employment placement with VSP. VSP is one of our recent partnerships we added to provide students who completed a career assessment indicated interest in VSP direct support to enroll and complete VSP training and future job placement. FCCP's Youth Engagement Specialist will provide 1 on 1 support to help with outreach, recruitment, enrollment and ongoing support to students during their VSP training. Enrolled students will be provided further support to address barriers that arise and pre and post completion VSP Professional Pathways training. FCCP's partnership with VSP is a direct investment into Rancho Cordova's workforce development and filling vacancy in Rancho Cordova.

The goal of this project is to integrate opportunities for students to participate in VSP's Professional Pathways. FCCP will utilize the data collected from our YCC participants' Career Assessment Interest Profile, a self-assessment, career exploration tool that helps youth discover the type of work activities and occupations that are of interest to them. The Career Assessment fosters career awareness but more importantly reveals the top 3 areas of interest for a significant number of youth to be Social, Enterprising and Conventional leading to working and serving the people and careers with a need to be able to integrate rules and attention to details. Providing a direct avenue for youth to be able to pursue further information and training with VSP would allow them to further examine and inform their career trajectory.
The components of this project include:

- VSP Career Planning – FCCP staff will assist an additional 10 students with completing their Career Assessment and set up an intake orientation to learn about VSP to see if it is a viable career path that they would pursue.
- Enrollment and Youth Engagement – FCCP staff will assign a Youth Engagement Specialist to support their enrollment in VSP training curriculum and provide ongoing support during the enrollment and identify resources to support their completion of the program and possible

employment placement. Effective student engagement ensures that the student is able to process and explore goodness to fit with the employer.

Project Team: The project team will include Yalda Hadi Youth Engagement Specialist and, Doris Cortez-Youth Services Manager, Shinder Gill-Director of Programs, and Robert Sanger-Executive Director.

FCCP has been operating youth and adult employment programs in Rancho Cordova for over twelve years. For the past six years, FCCP has operated a full-service Job Center offering a wide range of employment support to Rancho Cordova community members. This grant continues our successful extension of these services tailored to high school students by bringing the services directly to them. With transportation a major barrier for many of our students, bringing services into their high schools is a necessity. This project will receive strategic design and oversight by Robert Sanger and Shinder Gill. Robert Sanger has led FCCP as Executive Director for the past eleven years with a total fifteen-year history with FCCP serving Rancho Cordova families and youth. He participates in the City's Education Stakeholders Committee and many other endeavors to improve the quality of life for Rancho Cordova residents and students. Shinder Gill has over 20 years of experience working in family and social services and close to five years combined workforce and youth development experience having managed various youth and employment projects in Sacramento, in particular social and emotional development and research with at risk youth. The day-to-day project management will be conducted by Doris Cortez. Doris has worked in youth and employment programs for close to three years with training specific to working with high risk youth including foster youth, parenting, criminal justice involved and youth with disabilities and/or behavioral challenges. Primary onsite staff will include Yalda Hadi,, with experience in education, youth development and refugee youth mentoring and career exploration experience, in particular to underserved populations.

This project will be executed in collaboration with Cordova and Kinney High Schools. FCCP has received full support from the administrators of both sites who have expressed a desire for the continuation of this project. Letters of support via email tfrom Jerad Hyden, Principal of Cordova High School, and Assistant Principal Allen Sims of Kinney High School are attached.

Project Goals: The goals of this project include:

- FCCP will serve a minimum of 10 unduplicated high school youth in this second half of the program per year. This will be measured by sign in sheets at each Youth Career Center locations (Cordova and Kinney High Schools).
- VSP Career Exploration - 60% of youth will enroll and complete VSP Professional Pathways curriculumPathway/Goal Setting –
- Youth will be supported by Student Engagement Specialist who will provide case management and address barriers that arise to support completion of the their training.
- Employer Engagement - Student Engagement Specialist will work with enrolled students to prepare for workforce development and entry into professional career pathways with VSP. Support will be provided in resume, and interview preparation.
- Follow Up- Student Engagement Specialist will provide 30 and 60 day follow up to provide continued support post completion and possible VSP worksite placement to assist with resources and referrals.

Funding Request:
Total Project Cost: $56,134.40

Estimated Breakdown of Project Expenditures: Provided on attached spreadsheet.

Matching Funds: $31,009.20

Ongoing (beyond FY 2022/2023) Operations and Maintenance Costs, if applicable: N/A

Total Community Enhancement Funds Requested: $25,009.20

FCCP is requesting a total of $25,009.20 in Community Enhancement funding for this VSP Professional Pathways project for half of 2023- Jan 2023-June -2023 program year. FCCP understands that if there are remaining funds from the VSP Professional Pathways-2022-2023 program year, the City of Rancho Cordova will deduct the remaining 2023 VSP Professional Pathways program year funds from any awarded amount for this project.

Is this a multi-year request? No If yes, number of years: N/A

If you answered yes above, describe your sustainability plan: N/A

How many years have you received funding for this project? Started December 2022

When will your request for funding sunset for ongoing programs? Services are specific to the community of Rancho Cordova. This project is dependent on City of Rancho Cordova Community Enhancement funds. We will continue to explore sustainable funding for this project, however, because the geographical scope is very narrow, it is difficult to find alternative funding sources.

Project Schedule

- Jan 1, 2023 to March, 2023 – Continue outreach, recruitment and annulment into VSP Professional Pathways.
- March, 2023 to June 10, 2023 – Support enrolled students in VSP Professional Pathway towards completing the program and placement into directo VSP workforce entry level placement on job site.
- May 28, 2023 to June 30, 2023 –Student Engagement Specialist will support follow up support services and provide resources and referrals necessary.

Project timeliness

Result oriented monitoring outcomes will be established and tracked and address areas of focus by the Director of Programs and Youth Services Manager to ensure the outlined project schedule is completed by 6/30/23.

Adaptability

FCCP iwill assess students' service delivery model and make adjustments accordingly. Adapattabilit will align with those made by FCCP with the onset of COVID-19 to be able to provide services using digital platforms such as zoom, google meets to engage students synchronously, hold student office hours and

created semi hybrid online and in-person services. FCCP has a COVID worksite plan in place and regularly updates it in accordance with the Sacramento County Health Order and CDC guidelines. FCCP YCC continues to explore google classroom and virtual platforms to integrate both synchronous and asynchronous learning activities strategies and continue to safely provide services and stay in compliance with CDC guidelines. FCCP will continue to stay informed in navigating the principles of change based on research.

Project Location and Physical Address: This project will be primarily located at Cordova, Walnutwood and Kinney High Schools at 2239 Chase Drive, 10850 Gadsten Way and 2710 Kilgore Road, Rancho Cordova respectively. Preparation activities and summer services will be offered at Folsom Cordova Job Center at 10826 Gadsten Way, Rancho Cordova on the Community Education Center Campus. Activities for this project will take place within Folsom Cordova Unified School District. Letters of support are attached and the Supplemental Endorsement Form will arrive to the City of Rancho Cordova directly.

School District: Folsom Cordova Unified School District

Application Submitted by: Shinder Gill, Director of Programs, Folsom Cordova Community Partnership
Phone: 916-294-9107 ext. 840503 **Email:** Sgill@TheFCCP.org **Non-Profit**
Mailing Address: P.O. Box 3227, Rancho Cordova, CA 95741

Signatory: Robert Sanger, Executive Director, Folsom Cordova Community Partnership
Phone: 916-361-8684 ext. 290 **Email:** RSanger@TheFCCP.org **Non-Profit**
Mailing Address: P.O. Box 3227, Rancho Cordova, CA 95741

Application #50

Folsom Cordova Community Partnership
Community Enhancement Grant
Professional Pathways VSP
Budget Jan 2023-June 2023

LINE ITEM		CE	Matching / In Kind Funds	Source of Matching / In Kind Funds	Narrative	Total Funds
Salaries	Youth Services Manager	$3,800	$ 3,800.00	In Kind	Youth & Employment Development Manager: Calculated at .05 FTE for CE and .05 FTE for In-kind	$ 7,600.00
	Youth Engagement Specialist	$13,368.00	$ 7,488.00	In Kind	Youth Mentor Coordinator: Calculated at .50 FTE for CE and .20 FTE for In-kind	$ 20,856.00
	Accounting / Admin Assistant	$861.20	$861.20	In Kind	Accounting / Admin Assistant: Calculated at .02 FTE for CE and .02 for In-kind	$ 1,722.40
Benefits		$ 5,108.00	$ 3,644.00	Alternative Grants / In-kind	Benefits expensed to this grant include 30% of salaries for staff positions. In Kind Benefits provided for additional FTE associated with this grant.	$ 8,752.00
Space			$ 9,000.00	In-kind	Matching/In-Kind Funds, Activity Space @ FCUSD Campuses, Walnutwood, Cordova and Kinney High School, average $75 per day for 1.5 hours x 96 Days per year (23 Kinney, 23 Cordova & 40 Walnutwood)	$ 9,000.00
Mileage		$ 200.00	$ 200.00	Alternative Grants / In-kind	Mileage Reimbursement: (60 miles per month x $.58 per mile x 6 months) In kind mileage expense is provided through alternative grants for business internship development activities	$ 400.00
Communications		$ 208.00	$ 208.00	Alternative Grants / In-kind	Landline and cell Phone share of costs for .67 FTE expensed to this grant	$ 416.00
Computer and Printer Equipment			$4,400.00	In-kind	Usage of 10 ChromeBooks at Kinney High School, 10 ChromeBooks at Cordova High School & 2 printers estimated as follows & is provided as In Kind match to this project. Chromebooks $200 x 20 and Printers $200.00 x 2 = $4,400.00	$4,400.00
Program Supplies		$ 780.00			Program supplies include paper, toner, resume paper, thumbnail drives, after school healthy snacks for students, supplies for job readiness, career orientation activities, and workshops to support the Youth Career Center project	$ 780.00
Insurance and Audit Fees		$ 684.00	$ 1,524.00	Alternative Grants	Share of Insurance and Audit Fees for .67 FTE associated with this grant are expensed-.67 FTE x $1,200.00 ($600.00 Audit $600.00 Insurance per FTE). Additional insurance and Audit fees for In Kind Staffing are provided as an In Kind Donation	$ 2,208.00
Totals		$ 25,009.20	$ 31,125.20			$ 56,134.40

Application #50

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: VSP Professional Pathways

Name of Organization: Folsom Cordova Community Partnership

Name of Applicant and Title: Shinder Gill(Director of Programs) & Robert Sanger(Executive Director)

Applicant's Phone: (916) 294-9107 **Applicant's Email:** sgill@thefccp.org/rsanger@thefccp.

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Tuesday, March 8, 2022 4:21 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1518366
IP Address:	206.15.249.226
Submission Date:	03/08/2022 4:20
Survey Time:	16 minutes

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Youth Career Centers

Project Synopsis

Youth Career Centers will help youth to explore technical, vocational and career pathway trajectories by utilizing work readiness assessment methodologies. Project activities will include skill development in soft skills, interviewing preparation, communication, and work based learning. All services will be provided on school sites with trained youth career mentors.

Project Description

The goal of this project is to continue providing career development services for students at Cordova, Walnutwood and Kinney High Schools. To an important extent, the Youth Career Center (YCC) will allow students to graduate with first hand exposure to a wider array of career opportunities, an informed sense of their career direction, and a strong correlation between continuing education and achieving their career goals. FCCP has established a solid base and has exceeded outcomes in the three previously funded fiscal years and continues to see the number of students we assist grow each year. The components of this project include: ●Intentional Career Planning – Through conducting career exploration and career assessments FCCP staff will assist students with building an employment plan that reinforces educational goals and sets them on viable career pathways providing access to reliable information to assist with alignment align with their educational goals ●Integrated Workplace Experiences – FCCP staff will utilize our ever-growing network of local business connections to connect and broadening youth experiences to job shadowing opportunities, part-time jobs and internships to help students begin their career pathways, gain work-based learning, develop marketable technical and professional skills and connect their educational plans to their career development and future self-sufficiency. Effective employer engagement ensures that the right young people engage with the right employer or employee volunteer through the right activity at the right time in their school life. FCCP will assist in identifying goodness to fit between the young person and employer and provide ongoing support to ensure they are able to successfully achieve their potential. ●Adulting Skills – FCCP staff will teach students valuable skills they are requesting including financial goal setting, understanding debt and credit, healthy relationships, social and emotional development and nutrition

Project Team

Application #51

FCCP has been operating youth and adult employment programs in Rancho Cordova for over twelve years. For the past six years, FCCP has operated a full-service Job Center offering a wide range of employment support to Rancho Cordova community members. This grant continues our successful extension of these services tailored to high school students by bringing the services directly to them. With transportation a major barrier for many of our students, bringing services into their high schools is a necessity. This project will receive strategic design and oversight by Robert Sanger and Shinder Gill. Robert Sanger has led FCCP as Executive Director for the past eleven years with a total fifteen-year history with FCCP serving Rancho Cordova families and youth. He participates in the City's Education Stakeholders Committee and many other endeavors to improve the quality of life for Rancho Cordova residents and student. Shinder Gill has over 20 years of experience working in family and social services and close to five years combined workforce and youth development experience having managed various youth and employment projects in Sacramento, in particular social and emotional development and research with at risk youth. The day-to-day project management will be conducted by Doris Cortez. Doris has worked in youth and employment programs for close to three years with training specific to working with high risk youth including foster youth, parenting, criminal justice involved and youth with disabilities and/or behavioral challenges. Primary onsite staff will include Victoria, Youth Mentor, with three years of experience in education, youth development and refugee youth mentoring and career exploration experience, in particular to underserved populations.

Project Goals

●FCCP will serve a minimum of 100 unduplicated high school youth in this program per year. This will be measured by sign in sheets at each Youth Career Center locations (Cordova, Walnutwood and Kinney High Schools). ●Career Exploration - 60% of youth will take Career Interest Assessments providing information about potential careers matching their interests and abilities. Upon completing these assessments students will research job openings, labor market information, and educational pathways in their areas of career interest. Career Interest Assessment information will be given to students and recorded in secure student Youth Career Center database to track areas of career interest for reporting and internship development. ●Pathway/Goal Setting – 60% of youth will receive assistance developing a My Action Plan (MAP) identifying short, medium, and long range goals and action steps necessary to pursue their area of career interest. The MAP will be given to students with a copy maintained by Youth Career Center staff to track student progress toward identified goals. ●Resume Development/Job Attainment - 70% of youth will receive training on resume development, interviewing skills, and job attainment including how to complete online applications and pre-employment assessments. A minimum of 55 youth will develop a professional resume each program year. ●Adulting Workshops – A minimum of 30 youth will attend Adulting workshops and receive education related to financial literacy, healthy relationships, nutrition and understanding insurance. Youth will be pre- and post-tested to measure gains. ●Employer Engagement - FCCP will develop 20 new employer relationships sites per program year including educating employers about opportunities to partner with the high schools and employ students. ●Student Jobs/Internships – FCCP will assist students seeking internships or part time work to provide financial resources for themselves. A minimum of 15 youth placed.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$141,732,65

Estimated breakdown of project expenditures

Please see attached budget spreadsheet with project expenditures.

Matching Funds

$85,867.60

Include any other funding contributions

In Kind services will be provided and indicated on budget spreadsheet attached.

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$55,865.60

Is this a multiyear request?

No

How many years have you received funding for this project?

Application #51

4

When will your request for funding sunset for ongoing programs?

Services are specific to the community of Rancho Cordova. This project is dependent on City of Rancho Cordova Community Enhancement funds. We will continue to explore sustainable funding for this project, however, because the geographical scope is very narrow, it is difficult to find alternative funding sources.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will continue to explore different funding sources on an ongoing basis.

Project Schedule, Timeliness and Adaptability

Project Schedule

● July 1, 2022 to August 11, 2023 – Provide Adulting, Job Readiness and Financial Literacy Workshops at FCCP's Job Center for out of school youth. Develop new employer host sites for internships, job shadowing or part time employment for students in a variety of career fields. ● August 12, 2022 to May 27, 2023 – Youth Career Centers will operate onsite at Cordova and Kinney High Schools. Students will receive assistance with career exploration, pathway/goal setting, resume development, job application assistance and financial literacy training. FCCP staff will continue to develop employer relationships and internship sites, matching students based on areas of career interest. ● May 28, 2023 to June 30, 2023 –Youth Career Services will be provided at FCCP's Job Center on the Walnutwood/Adult Education Campus until school restarts in August. Youth Career Center staff will provide ongoing activities including financial literacy and adulting workshops. Students will also receive ongoing assistance with resume development, job applications and interview preparation. Youth Career Center staff will continue to conduct employer outreach to develop internship sites and part time job opportunities for Cordova and Kinney High School youth. Graduated youth will receive priority enrollment in FCCP's Out of School Youth Program for 18 to 24 year olds which includes a paid work experience component in their career field of interest.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Result oriented monitoring outcomes will be established and tracked and address areas of focus by the Director of Programs and Youth Services Manager to ensure the outlined project schedule is completed by 6/30/23.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

FCCP made adjustments to our YCC service modality with the onset of COVID-19 by integrating digital platforms such as zoom, google meets to engage students synchronously, hold student office hours and created semi hybrid online and in-person services. FCCP has a COVID worksite plan in place and regularly updates it in accordance with the Sacramento County Health Order and CDC guidelines. FCCP YCC continues to explore google classroom and virtual platforms to integrate both synchronous and asynchronous learning activities strategies and continue to safely provide services and stay in compliance with CDC guidelines. FCCP will continue to explore virtual gallery walks for students to be able to create and display their career aspiration projects and work and have an opportunity to learn from their peer's experiences and projects. FCCP will continue to stay informed in navigating the principles of change based on research.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10826 Gadsten WAy
Bldg E
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

This project will be executed in collaboration with Cordova, Walnutwood and Kinney High Schools. FCCP has received full support from the administrators of both sites who have expressed a desire for the continuation of this project. Letters of support from Jerad Hyden, Principal of Cordova High School, Annie Conover, Principal of Walnutwood High School and , Assistant Principal Allen Sims of Kinney High School are attached.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Surinder Gill

Title

Director of Programs

Submitting as

Public Agency

Phone

9162949107 ext. 84050

Email

sgill@thefccp.org

Organization's legal name, if applicable

Folsom Cordova Community Partnership

Mailing Address of Submitter

P.O. Box 3227
Rancho Cordova, CA 95741

Signatory's Name

Executive DIrector Robert Sanger

Signatory's Title

Executive Director

Signatory's Phone

9163618684 ext. 290

Signatory's Email Address

rsanger@thefccp.org

Signatory's Mailing Address

P.O. Box 3227
Rancho Cordova, CA 95741

Attach any additional documents here

City of Rancho Cordova 01_12_2022 8_10 PM - 6.pdf
FCCP RC CE YCC 2022-2023 Budget.xlsx
FCSUD YCC Endorsement.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Folsom Cordova Community Partnership
Community Enhancement Grant
Youth Career Center
Budget 2022 - 2023

LINE ITEM		CE	Matching / In Kind Funds	Source of Matching / In Kind Funds	Narrative	Total Funds
Salaries	Youth Services Manager	$ 8,599.00	$ 5,500.00	In Kind	Youth & Employment Development Manager: Calculated at .15 FTE for CE and .10 FTE for In-kind	$ 14,099.00
	Youth Mentor Coordinator	$23,712.00	$ 7,488.00	In Kind	Youth Mentor Coordinator: Calculated at .60 FTE for CE and .20 FTE for In-kind	$ 31,200.00
	Director of Programs	$ 2,400.00	$ 2,400.00	In Kind	Director of Programs: Calculated at .03 FTE for CE and .03 for in kind	$ 4,800.00
	Executive Director	$2,247.00	$2,247.00	In Kind	Executive Director: Calculated at .02 FTE for CE and .02 for In-kind	$ 4,494.00
	Accounting / Admin Manager	$1,286.40	$1,286.40	In Kind	Accounting / Admin Manager: Calculated at .02 FTE for CE and .02 for In-kind	$ 2,572.80
	Accounting / Admin Assistant	$861.20	$861.20	In Kind	Accounting / Admin Assistant: Calculated at .02 FTE for CE and .02 for In-kind	$ 1,722.40
Benefits		$ 11,731.00	$ 5,261.00	Alternative Grants / In-kind	Benefits expensed to this grant include 30% of salaries for staff positions. In Kind Benefits provided for additional FTE associated with this grant.	$ 16,992.00
Space			$ 18,000.00	In-kind	Matching/In-Kind Funds, Activity Space @ FCUSD Campuses, Walnutwood, Cordova and Kinney High School, average $75 per day for 1.5 hours x 240 Days per year (46 Kinney, 46 Cordova & 148 Walnutwood)	$ 18,000.00
Mileage		$ 418.00	$ 418.00	Alternative Grants / In-kind	Mileage Reimbursement: (60 miles per month x $.58 per mile x 12 months) In kind mileage expense is provided through alternative grants for business internship development activities	$ 836.00
Communications		$ 482.00	$ 482.00	Alternative Grants / In-kind	Landline and cell Phone share of costs for 1.27 FTE expensed to this grant	$ 964.00
Computer and Printer Equipment			$4,400.00	In-kind	Usage of 10 ChromeBooks at Kinney High School, 10 ChromeBooks at Cordova High School & 2 printers estimated as follows & is provided as In Kind match to this project. Chromebooks $200 x 20 and Printers $200.00 x 2 = $4,400.00	$4,400.00
Program Supplies		$ 1,354.45			Program supplies include paper, toner, resume paper, thumbnail drives, after school healthy snacks for students, supplies for job readiness, career orientation activities, and workshops to support the Youth Career Center project	$ 1,354.45

Application #51

Insurance and Audit Fees	$ 1,524.00	$ 1,524.00	Alternative Grants	Share of Insurance and Audit Fees for 1.31 FTE associated with this grant are expensed-1.27 FTE x $1,200.00 ($600.00 Audit $600.00 Insurance per FTE). Additional insurance and Audit fees for In Kind Staffing are provided as an In Kind Donation	$ 3,048.00
Stipends to Participants	$ 1,250.00			Stipends provided for summer Adulting workshops to incentivize continued engagement and practical money management experience - Estimated $10 x 5 workshops x 30 students = $1,250.00	$ 1,250.00
Wages from Internships and Jobs	$ -	$ 36,000.00	In Kind	12 paid interships and/or student part time work estimated at 200 hours per student at $15.00 per hour = $36,000.00	$ 36,000.00
Totals	$ 55,865.05	$ 85,867.60			$ 141,732.65

Application #51

Cordova High School

2239 Chase Drive, Rancho Cordova, CA 95670
Phone (916) 294-2450 http://www.fcusd.org/CHS

Folsom Cordova Unified School District

Jerad Hyden
Principal

Ann Botsford
Michele Brown
Michele Cooper
Joel Francisco
Assistant Principals

Heidy Naderi
Admin. Assistant

Erin Kaluza
ELD Program Manager

Josh Creeger
Activities Director

Mark Beamish
Athletic Director

Kitty White
Head Counselor

Grace Martinez
IB MYP Coordinator

Chris Mahaffey
IB CP Coordinator

Zandi Llanos
IB DP Coordinator

Tracey Jacobs
School Resource Officer

February 14th, 2022

To Whom It May Concern:

I would like to express support for the Folsom Cordova Community Partnership's application for the City of Rancho Cordova Community Enhancement Fund. This funding would allow the Folsom Cordova Community to continue to operate a Youth Career Center on the Cordova High School campus. The presence of a Youth Career Center on our school campus, housed in our College and Career Center in the CHS Library, has proved extremely beneficial to supporting our most disenfranchised learners. With an expediential increase in the number of newly immigrated refugee students, the Youth Career Center has proactively worked to offer their assistance each week through dedicated services and supports which are truly invaluable to our team.

To date the Youth Career Center has served over 100 Unduplicated Youth and have had close to 300 Total Youth Visits to get assistance with resume development, interview preparation, career and college exploration, job applications and understanding employer expectations.

If awarded, the Folsom Cordova Community Partnership will continue to offer on-campus activities to expose student to a wider array of career opportunities, help them develop a more informed sense of their career direction and build a strong correlation between continued education and achieving their career goals. Additionally, the Youth Career Center will connect students with work opportunities in the local community including internships, job shadowing and part time jobs to help develop technical and professional skills for their future success.

I urge you to give this application your most serious consideration. Should you or your staff have any questions regarding this letter, please do not hesitate to call.

Respectfully submitted,

Jerad A. Hyden

Principal
Cordova High School
(916) 294-2450 x810150
jhyden@fcusd.org

Application #51

KINNEY HIGH SCHOOL

2710 Kilgore Road
Rancho Cordova, CA 95670
(916) 294-9060
www.fcusd.org/khs

Michelle Flowers, Principal
Allen Sims, Assistant Principal

Date 2/28/2022

To Whom It May Concern,

I would like to express support for the Folsom Cordova Community Partnership's application for the City of Rancho Cordova Community Enhancement Fund. This funding would allow the Folsom Cordova Community to continue to operate a Youth Career Center on the Cordova High School campus. The presence of a Youth Career Center on our school campus has proved beneficial to the student population. The students who have been able to improve their job readiness, and success has benefited the community. The support that Folsom Cordova Community Partnership provides is in valuable to the students. The dedication and support for the students on the site is second to none. We have had many students access services this past year and receive the support needed for their future.

To date the Youth Career Center has served over a 100 Unduplicated Youth and have had close to 300 Total Youth Visits to get assistance with resume development, interview preparation, career and college exploration, job applications and understanding employer expectations.

If awarded, the Folsom Cordova Community Partnership will continue to offer on-campus activities to expose student to a wider array of career opportunities, help them develop a more informed sense of their career direction and build a strong correlation between continued education and achieving their career goals. Additionally, the Youth Career Center will connect students with work opportunities in the local community including internships, job shadowing and part time jobs to help develop technical and professional skills for their future success.

I urge you to give this application your most serious consideration. Should you or your staff have any questions regarding this letter, please contact me at (916) 294-9060.

Sincerely,

Allen Sims
Interim Principal

Application #51

WALNUTWOOD HIGH SCHOOL

10848 Gadsten Way
Rancho Cordova, CA 95670-619
Phone (916) 294-9105 Fax (916) 294-2479
www.fcusd.org/whs

Annie Conover, Principal
Shelley Raffaelli Administrative Assistant

February 23, 2022

To Whom It May Concern,

I would like to express support for the Folsom Cordova Community Partnership's application for the City of Rancho Cordova Community Enhancement Fund. This funding would allow the Folsom Cordova Community to continue to operate a Youth Career Center on the Walnutwood and Cordova High School campus. The presence of a Youth Career Center on our school campus has proved beneficial to the student population. Allowing for students to receive support in career exploration and job applications. We have had many students access services over the years. Particularly, our pregnant teen program.

To date the Youth Career Center has served over a 100 Unduplicated Youth and have had close to 300 Total Youth Visits to get assistance with resume development, interview preparation, career and college exploration, job applications and understanding employer expectations.

If awarded, the Folsom Cordova Community Partnership will continue to offer on-campus activities to expose students to a wider array of career opportunities, help them develop a more informed sense of their career direction and build a strong correlation between continued education and achieving their career goals. Additionally, the Youth Career Center will connect students with work opportunities in the local community including internships, job shadowing and part time jobs to help develop technical and professional skills for their future success.

I urge you to give this application your most serious consideration. Should you or your staff have any questions regarding this letter, please contact me at (916) 294-9105

Sincerely,

PRINCIPAL
Annie Conover MS CCC/SLP
WALNUTWOOD HIGH SCHOOL
FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT
PHONE: (916) 294-9105 EXT: 840111
FAX: (916) 294-2479
10848 GADSTEN WAY
RANCHO CORDOVA CA 95670

Application #51



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Youth Career Centers

Name of Organization: Folsom Cordova Community Partnership

Name of Applicant and Title: Shinder Gill(Director of Programs) & Robert Sanger(Executive Director)

Applicant's Phone: (916) 294-9107 **Applicant's Email:** sgill@thefccp.org/rsanger@thefccp.

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #51

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 9, 2022 10:57 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1519884
IP Address:	76.192.55.137
Submission Date:	03/09/2022 10:56
Survey Time:	38 minutes, 47 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

The Connect Workshop

Project Synopsis

The Connect Workshop Group is an 8-week workforce development training program for underrepresented youth/young adults ages 16-24 that provides independent living skills lessons and task to enhance mental health and wellness. Participants who attend the weekly groups will receive a monetary stipend upon completion of group curriculum and tasks.

Project Description

The 8-week Connect Workshop group is a workforce development training program designed to enhance youth and young adults' employment skills, teach transitional living skills, and enhance mental health and wellness. Up to 32 youth and young adults/annually will participate in the weekly group and complete two community service projects and receive a monetary stipend upon completion. The Connect Workshop Project is a curriculum designed to provide youth and young adults with the relevant research, job training and education to assist in supporting long term employment and/or applying to an educational program. Youth and young adults will have the opportunity to employ career fields, job shadowing, college tours, networking and more through the Connect Workshop Project. The Connect Workshop Project is designed for youth/young adults ages 16-24 with special emphasis on underrepresented minority communities in Sacramento County. The location of the group meeting is TBD.

Project Team

SAC Connect Co-Owners and Licensed Clinical Social Workers, Chenee Robinson and Shanece Okoro Duncan, developed the Connect Group curriculum, oversight of weekly groups, development and evaluation of the pre/posttest, and exit survey. SAC Connect staff including group facilitators and peer mentors are responsible for implementation of the group to include facilitation of the weekly groups, participant monitoring and organizing community service project opportunities.

Project Goals

The Connect group will service 32 youth and young adults by the conclusion of the Program. This will be measured by weekly attendance and the number of monetary stipends disbursed. 100% of The Connect participants will identify a career and/or education path by the conclusion of the program. This will be measured by pre and exit surveys.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$80,000

Estimated breakdown of project expenditures

Staff Wages: -Program Manager: $15,600 ($30/hr for 10hrs/week) -Facilitator: $10,400 ($20/hr for 10hrs/week) -Facilitator: $10,400 ($20/hr for 10hrs/week) -Peer Mentor $2,000 ($500/group) -Peer Mentor $2,000 ($500/group) Youth Stipend: $32,000 Supplies: $6,000 Program incentives/giveaways: $1,600 ($400/group)

Matching Funds

N/A

Include any other funding contributions

N/A

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$80,000

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

N/A

Project Schedule, Timeliness and Adaptability

Project Schedule

The 1st Connect Group anticipated start date is 7/20/2022 and will run a new group quarterly with a two week break between groups. 1st Quarter- July 20, 2022- September 7, 2022 2nd Quarter- September 28, 2022-November 16, 2022 3rd Quarter- December 7, 2022-18, February 1, 2023 4th Quarter-February 22, 2023-April 19, 2023 Final Evaluation/Review- April 22, 2023-May 21, 2023

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

SAC Connect staff diligently adheres to creating and keeping deadlines/making modifications as needed to adjust to the current climate of the community (i.e. COVID-19), team collaboration, goal setting and meeting goals, and emphasizes a long-term commitment to and passion for mission-driven work. SAC Connect has experience implementing timeline driven programs which included meeting with funding monitoring points of contact monthly, submitting monthly, quarterly, and financial reports, and providing program updates as needed.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This group can be provided virtually if the Public Health and/or Sacramento County Health Orders change. SAC Connect has laptops that youth can check out in the event they don't have one at home and if youth don't have access to internet the SAC Connect Office has internet that can be used by participants and space to adhere to social distancing requirements/PPE. Additionally, the community service projects required for the group can be adapted to align with Public Health Orders if needed.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

225 30th Street, Suite 312
Sacramento, California 95816

Other physical addresses if project/program is at multiple sites

The program can be offered virtually and within the participants community/residence.

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Shanece Duncan

Title

Licensed Clinical Social Worker/Co-owner

Submitting as

Non-Profit

Phone

9164000908

Email

thesacconnect@gmail.com

Organization's legal name, if applicable

SAC Connect

Mailing Address of Submitter

225 30th Street
Suite 312
Sacramento, CA 95816

Signatory's Name

Mrs Shanece Duncan

Signatory's Title

Licensed Clinical Social Worker/Co-owner

Signatory's Phone

9164000908

Signatory's Email Address

thesacconnect@gmail.com

Signatory's Mailing Address

225 30th Street, Suite 312
Sacramento, California 95670

Attach any additional documents here

The Connect Overview.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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The SAC Connect
Therapeutic & Wellness Services
Transitional Age Supportive Services.
225 20th Street, Suite 312
Sacramento, CA 95816

The Connect: "Educate, Encourage, Enhance Overview

Created by The SAC Connect

WEEK 1-2: Introduction- *Participants will review guidelines, expectations, and receive COVID-19 Care Kit/employment portfolio.*

Ice Breaker: Bingo –(boards to be created by staff)

- Pass out/review program schedule, guidelines, and expectations – black folders w/ documents
- Receive Covid-19 Kits/employment kits -drawstring bag w/ supplies
- Online Personality assessments: https://www.truity.com/test/type-finder-personality-test-new

- Online Career assessments: https://www.truity.com/view/tests/personality-career

  Debrief Activity: **create professional emails/**participant workshop online assessment

WEEK 3: Education- Participants will identify their learning style and educational options.

Ice Breaker: Jeopardy – mainstream categories (game to be created by the staff)

- Building the Foundation-Educational
  - Guest Speaker(s): TBD
  - Online Learning Style assessment: http://www.educationplanner.org/students/self-assessments/learning-styles-quiz.shtml

    Debrief: Learning Style Charades

WEEK 4-5: Money Management- *Participants will learn money management skills and difference between necessity/luxury/saving.*

Icebreaker: Scavenger Hunt -handout needs to be printed

- Money Management
  - Guest Speaker: Doug Gaffney, Financial Consultant
  - Start Employment Goals

    Debrief Activity: "Money Packets" (participants given a certain amount of money to purchase items)

Application #52

WEEK 6: Online Job Search- *Participants will utilize workstations to search jobs in job/career field of interests and review qualifications.*

Icebreaker: Toilet paper Topics (participants take up to 6 toilet paper squares and tell the group a topic about themselves for each toilet paper square taken)

- Create resume/cover letter
  - Staff assist participants with creating resume/cover letter
  - Debrief Activity:
- Job search tools- Create Profiles
  - Indeed
  - LinkdIn
  - Handout dress for the interview tips/remind participants to come prepared for headshots and interviews

Debrief Activity: Family Feud -to be created by the staff

WEEK 7: Interview Preparation- *Participants will learn interview etiquette.*

Icebreaker: What's Changed?

- Dress for the job
  - Acceptable vs unacceptable video clips on YouTube

- Mock Interviews
- Headshots

Debrief Activity: Games (i.e. Connect 4, Uno, Mancala, ect…)

WEEK 8: Wrap-up/Reflection/Graduation: *Participants will complete a post-assessment, review highlights, and participate in program certificate/stipend.*

- Commencement
  - Participants will receive certificate of completion and stipend
  - Participants reflect and share experience participating in program
  - The Connect Workshop online evaluation

Debrief Activity: Movie

Application #52

NEWMARK

March 14, 2022

City of Rancho Cordova
Community Enhancement Fund
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Subject: SAC Connect Landlord Letter of Recommendation

To whom it may concern,

In addition to being a commercial real estate broker with Newmark, I am also the Asset Manager for S&L Partnership, the owner and property manager for 225 30th Street, the building that SAC Connect Therapeutic & Wellness Services uses as their office space and for programs. In addition to simply being a good tenant and paying rent on time every month, SAC Connect also runs some excellent programs including their Job Readiness Program which helps underserved members of our community research, prepare and apply for jobs. I am lucky to have such an organization as a tenant in our building and our community is lucky to have them serving Sacramento. Please call or email if you have any questions.

Sincerely,



David Brandenburger
Managing Director
CA RE Lic. #01408572
916.569.2310
David.brandenburger@nmrk.com

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Thursday, March 10, 2022 2:45:15 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1522887
IP Address: 206.15.249.226
Submission Date: 03/10/2022 2:45
Survey Time: 43 minutes, 20 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Financial Empowerment

Project Synopsis

FCCP will provide financial empowerment to residents of Rancho Cordova ages 16+ to increase financial literacy. The project will use an approved, CFPB Your Money, Your Goals curriculum to teach financial transformation and tools to make effective money and debt management to be able to have a healthy financial lifestyle. Improving financial independence and understanding debt and credit has a positive, detrimental impact on future financial health.

Project Description

Folsom Cordova Community Partnership (FCCP) was able to create a financial empowerment program through a pilot grant from the Office of Child Abuse Prevention (OCAP). Although this grant came to an end, it provided us with seed money to develop and adopt Consumer Financial Protection Bureau's (CFPB) financial empowerment curriculum and tools to the unbanked and underbanked in our communities. We have created dynamic visuals, activities and handouts to provide a vibrant experience that addresses all learning modalities in multiple languages; English, Spanish, Farsi, Russian and adding Armenian, Hindi and Ukrainian. Each language series has specific adoptions based on cultural specifics regarding money and banking practices. We have piloted and administered this teaching series in both classroom and web-based modules as well as through one on one financial coaching. Through this pilot period we have delivered financial empowerment education to over 200 community members. We have been funded by Calmoney Smarts based on our success and demand for financial empowerment to serve an additional 80 participants throughout Sacramento. This project will allow us to increase our capacity further to serve and target specifically, 80 Rancho Cordova to receive a comprehensive financial empowerment curriculum and leading to financial independence. Financial Empowerment addresses the City of Rancho Cordova's mission to support and value the development of youth and community members and provide opportunity towards economic advancement .

Project Team

FCCP for the past 11 years started and built and operated a full-service Job Center offering a wide range of employment support to Rancho Cordova community members. This grant continues our successful extension of these services tailored to Rancho Cordova residents by bringing the services directly to them. With transportation a

major barrier for many of our students, bringing services into the community, particularly underserved is a necessity. This project will receive strategic design and oversight by Robert Sanger and Shinder Gill. Robert Sanger has led FCCP as Executive Director for the past eleven years with a total fifteen-year history with FCCP serving Rancho Cordova families and youth. He participates in the City's Education Stakeholders Committee and many other endeavors to improve the quality of life for Rancho Cordova residents and students. Shinder Gill has over 20 years of experience working in family and social services and close to five years combined workforce and youth development experience having managed various youth and employment projects in Sacramento, in particular social and emotional development and research with at-risk youth. The day-to-day project management will be conducted by Doris Cortez. Doris has worked in youth and employment programs for close to three years with training specific to working with high risk youth including foster youth, parenting, criminal justice involved and youth with disabilities and/or behavioral challenges. Primary onsite financial empowerment staff will include Micaela Cantu(Spanish language), Anna Kyrylyuk(Ukrainian & Russian language), Suman Makwana(HIndi) and Noune Manukyan(Armenian & Farsi).

Project Goals

FCCP will serve a minimum of 80 unduplicated Rancho Cordova residents in this program per year. This will be measured by registration and tracking during virtual module attendance. Provide "YOUR MONEY, YOUR GOALS" program curriculum to support positive cash, credit, and saving management skills. Provide The YOUR MONEY, YOUR GOALS utilizing the Digital Toolkit Provide in-person cohorts in the community and web-based delivery offering a culturally competent financial education program. Financial behavior scale pre and post-70% participants will complete pre and post behavioral scale to demonstrate increased understanding of financial goal planning, understanding credit card debt, learning how to manage and pay bills, understand loan process and saving for emergencies Entire Module Completion 60% of the participants will complete the entire Modules 1-9 increasing their capacity to increasing generational and long term healthy financial future.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

114,240.15

Estimated breakdown of project expenditures

Please see attached budget sheet with itemized project expenditures.

Matching Funds

$54,276.55

Include any other funding contributions

In kind services provided by Director of Programs and administrative staff to support the project.

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

S59,963.60

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

Services are specific to the community of Rancho Cordova. This project is dependent on City of Rancho Cordova

Community Enhancement funds. We will continue to explore sustainable funding for this project, however, because the geographical scope is very narrow, it is difficult to find alternative funding sources.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

We will continue to explore and examine other funding sources. For this particular project we will target banking institutions to help provide funding to assist participants in navigating and building financial prosperity.

Project Schedule, Timeliness and Adaptability

Project Schedule

● July 1, 2022 to July 31,2022, – Review and update plan for created infrastructure of Your Money, Your Goals(YMYG). Identify staff to add to existing framework of Spanish and Farsi and work to add Hindi and Ukrainian to be trained on the YMYG toolkit ● August 1, 2022-August 31, 2022- Staff training on targeted outreach, identify community partnerships to maximize staff resources to facilitate workshops/cohorts and client engagement strategies ● August 1, 2022 to May 27, 2023 – Financial Empowerment Specialist will provide YMYG in person and web based to the residents of Rancho Cordova. FCCP staff will continue to work with and identify underserved community liaisons to establish cohorts. Facilitate the nine module packet system available for ease of home-based delivery of YMYG curriculum education. Conduct Pre-Post financial behaviors surveys to gather measurable financial changes demonstrating competency. ● May 28, 2023 to June 30, 2023 –Financial Empowerment will wrap up and conduct analysis of client changes in financial wellbeing or financial management as measured by the pre-/post-service assessment tool

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Result oriented monitoring outcomes will be established and tracked and address areas of focus by the Director of Programs and Employment/Youth Services Manager and Financial Engagement Specialists to ensure the outlined project schedule is completed by 6/30/23.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

FCCP made adjustments to our Financial Empowerment service modality with the onset of COVID-19 by integrating digital platforms such as zoom, google meets to engage students synchronously, hold student office hours and created semi hybrid online and in-person services. FCCP has a COVID worksite plan in place and regularly updates it in accordance with the Sacramento County Health Order and CDC guidelines. FCCP YCC is exploring google classroom and virtual platforms to integrate both synchronous and asynchronous learning activities strategies and continue to safely provide services and stay in compliance with CDC guidelines. FCCP is exploring virtual gallery walks for students to be able to create and display their career aspiration projects and work and have an opportunity to learn from their peer's experiences and projects. FCCP will continue to stay informed in navigating the principles of change based on research.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

10826 Gadsten Way
Bldg E
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

We will be providing majority of the services in the community in cohorts and virtually. Mobilizing staff will allow us to maximize our resources and reach Rancho Cordova residents in the community.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Surinder Gill

Title

Director of Programs

Submitting as

Non-Profit

Phone

9162949107 ext. 84050

Email

sgill@thefccp.org

Organization's legal name, if applicable

Folsom Cordova Community Partnership

Mailing Address of Submitter

P.O. Box 3227
Rancho Cordova, CA 95741

Signatory's Name

Executive Director Robert Sanger

Signatory's Title

Executive Director

Signatory's Phone

9163618684 ext. 290

Signatory's Email Address

rsanger@thefccp.org

Signatory's Mailing Address

P.O. Box 3227
Rancho Cordova, CA 95741

Attach any additional documents here

FCCP RC CE FE 2022-2023 Budget.xlsx

City of Rancho Cordova 01_12_2022 8_10 PM - 6.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Folsom Cordova Community Partnership
Community Enhancement Grant
Financial Empowerment
Budget 2022 - 2023

LINE ITEM		CE	Matching / In Kind Funds	Source of Matching / In Kind Funds	Narrative	Total Funds
Salaries	Youth & Employment Development Manager	$ 8,599.00	$ 5,500.00	In Kind	Youth & Employment Development Manager: Calculated at .10 FTE for CE and .05 FTE for In-kind	$ 14,099.00
	Financial Empowerment Specialist	$22,760.00	$ 9,880.00	In Kind	Financial Empowerment Specialist: Calculated at .55, with an additional .25 in kind for FTE	$ 32,640.00
	Director of Programs	$ 2,400.00	$ 2,297.40	In Kind	Director of Programs: Calculated at .03 FTE for CE and .02 for in kind	$ 4,697.40
	Executive Director	$2,247.00	$2,046.50	In Kind	Executive Director: Calculated at .02 FTE for CE and .02 for In-kind	$ 4,293.50
	Accounting / Admin Manager	$1,286.40	$1,286.40	In Kind	Accounting / Admin Manager: Calculated at .02 FTE for CE and .02 for In-kind	$ 2,572.80
	Accounting / Admin Assistant	$861.20	$861.20	In Kind	Accounting / Admin Assistant: Calculated at .02 FTE for CE and .02 for In-kind	$ 1,722.40
Benefits		$ 10,900.00	$ 5,095.05	Alternative Grants / In-kind	Benefits expensed to this grant include 30% of salaries for staff positions. In Kind Benefits provided for additional FTE associated with this grant.	$ 15,995.05
Space			$ 18,000.00	In-kind	Matching/In-Kind Funds, Activity Space @ FCCP Job Center, average $75 per day for 1.5 hours a day 240 days	$ 18,000.00
Mileage		$ 400.00	$ 400.00	Alternative Grants / In-kind	Mileage Reimbursement: (60 miles per month x $.58 per mile x 12 months) In kind mileage expense is provided through alternative grants for business internship development activities	$ 800.00
Communications		$ 482.00	$ 482.00	Alternative Grants / In-kind	Landline and cell Phone share of costs for .74 FTE expensed to this grant	$ 964.00
Computer and Printer Equipment			$4,400.00	In-kind	Usage of 10 ChromeBooks & 2 printers estimated as follows & is provided as In Kind match to this project. Chromebooks $200 x 20 and Printers $200.00 x 2 = $4,400.00	$4,400.00
Program Supplies		$ 1,200.00			Program supplies include paper, toner, and supplies for financial empowerment activities, and workshops to support the financial literacy	$ 1,200.00

Application #53

Insurance and Audit Fees	$ 828.00	$ 828.00	Alternative Grants	Share of Insurance and Audit Fees for .74 FTE associated with this grant are expensed-.69FTE x $1,000.00 ($500.00 Audit $500.00 Insurance per FTE). Additional insurance and Audit fees for In Kind Staffing are provided as an In Kind Donation	$ 1,656.00
Stipends to Participants	$ 8,000.00	$ 3,200.00	Alternative Grants	Direct Stipends provided for financial empowerment workshops to incentivize continued engagement and practical money management experience to promote financial literacy - Estimated $10 per module x 9	$ 11,200.00
Totals	$ 59,963.60	$ 54,276.55			$ 114,240.15

Application #53

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Monday, March 14, 2022 10:09 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1530082
IP Address:	67.187.250.141
Submission Date:	03/14/2022 10:08
Survey Time:	38 minutes, 35 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Sacramento Splash - Youth Environmental Leadership Camp (YELC)

Project Synopsis

YELC is an immersive summer program for 6th/7th grade students. Campers will attend a 1-week camp, M-F from 8:30 a.m. – 5:30 p.m., in groups of 15. Youth will design and implement climate-smart solutions aimed at improving air/water quality or natural habitats where they live. We will hold 4 camp weeks.

Project Description

YELC is an immersive summer program for 6th/7th grade students. Campers will attend a 1-week camp, M-F from 8:30 a.m. – 5:30 p.m., in groups of 15 where youth will design and implement climate-smart solutions aimed at improving air/water quality and/or natural habitats where they live. We will be conducting 4weeks of camp. During the week-long camp, each day will cover topics related to climate change including but not limited to: air quality, water, energy, transportation, food/consumption/waste, land use, and natural habitats. The campers will visit local sites for hands-on guided experiences related to these topics. Campers will sample and collect data, gaining experience using some of the tools and materials that scientists and engineers use in their work. Campers will get the chance to engage with professional environmental scientists, engineers, social scientists, and environmental protection activists to learn about their careers and what they did to work in their specific fields of expertise. After the camp, Splash will convene YELC campers monthly in a 2-hour after-school club for the remainder of the 12-month rolling year. Campers will work together on a team project that will have a positive impact on the environment and climate in their community. They will learn about project management, from identifying & defining a problem, to planning & budgeting, project implementation and measuring their success and impact. Throughout the process, they will have the support of mentors and staff. Splash will provide a small project budget for each team to use in implementation of their team project. Projects will be brainstormed, developed, and led by campers in groups of 4-6. Mentors will guide the projects, and will also coach campers on their collaboration, engagement, listening and communication skills. This project is aligned to the following grant criteria: Children and Youth, Education, Community Pride, and Quality of Life.

Project Team

YELC will be executed by the staff of Sacramento Splash. We will have 2 FTE working on the program during the summer camp weeks along with the assistance of 2 field guides. Throughout the school year, the 2 FTE we will be partnering with 12 volunteer mentors to assist on the monthly mentoring meetings with the cohorts and the different community projects. Mentors will be employees or retirees from SMUD, Regional San, City of Sacramento, the CA Department of Natural Resource and Department of Water Resources, and many other organizations.

Project Goals

Goal #1 (G1): Reflect the socio-economic, racial and ethnic diversity of the greater Sacramento population, with particular emphasis on those underrepresented in the outdoors, science and engineering. Measure #1 (M1): Teachers from schools with disadvantaged populations nominate student candidates for YELC; Splash produces final list of 60 participants. G2: Local youth grow in a safe, supportive community while learning, working, and playing together. M2: Program evaluations at end of camp completed by students and parents. G3: Campers develop intellectual, physical and emotional connections with nearby nature. M3: Program evaluations at end of camp completed by campers and parents. G4: Campers understand how air and/or water quality impacts all life, how people impact these and how they can improve it. M4: Campers complete all camp activities, and their journal entries reflect impact. G5: Campers learn to conduct scientific investigations (observe, collect, measure, analyze, draw, document) and report findings for a local stream or aquatic habitat, as well as compare reference sites or historical data. M5: Campers' reports are evaluated by Splash leads and professional mentors. G6: Campers learn to define a natural habitat problem, write and present a small project plan with budget, implement plan, and present the results. M6: Plan and Results reports will be reviewed by Splash lead staff & mentors with constructive feedback, plan and results report out will be presented to peers, Splash staff, and mentors. Camper small projects must show improvement or projected improvement over a planned duration in the natural habitat involved.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$103,695

Estimated Breakdown of Project Expenditures

Delivery/implementation of camp and camper-driven environmental projects: $38,569 Personnel $7,600 Food $600 General Office Supplies $1,500 Participant Incentives and Materials $30,000 Field Trips $10,000 Transportation $9,427 Indirect Costs/Overhead $6,000 Camper-Driven Environmental Projects Funding

Matching Funds

$37,907

Include Any Other Funding Contributions

$20,000

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$45,000

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

Funding will be needed annually to help run YELC. We plan on providing scholarships for some youth coming from title 1 schools and schools with a high percentage of free/reduced lunch program recipients.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Application #54

We will be applying for grant funding from foundations and other municipalities. We will also be working to secure business sponsorships and, we will be reaching out to our donors on the Big Day of Giving and in our yearly appeal letter to assist with general cost of the project. In ongoing years, we will likely charge 25% of our campers who are not need based campers to help subsidize the costs of the program. But aim to ensure that 75% of campers remain subsidized and from low-income communities.

Project Schedule, Timeliness and Adaptability

Project Schedule

- Jul 2022-May2023: Campers meet with mentors monthly after school to complete project plan, implement, measure progress. Campers write about their experiences, track & analyze data. - Jun 2023: Campers present results of project to peers, Splash Staff, mentors, and incoming camp group. Finishing campers "Graduate" from YELC. - Jun 2023: Post-assessment of campers to measure learning and program surveys to campers & parents to measure impact and challenges of YELC - with mixture of qualitative & quantitative measures, as well as attitudinal statements. - April 2023: Partner teachers determine candidate students interested in joining YELC. Splash selects campers, ensuring target representation of underrepresented groups. Splash applications/permissions slip packets are sent to parents and received back completed. - May 2023: Finalize camp program, schedule, and list of participants. Splash trains mentors. - Jun 2023: “Meet and Greet”/Orientation for campers & mentors to YELC. Pre-assessment of campers. - Jun and Jul 2023: Four, 1-week, Monday through Friday, 8:30am – 5:30pm YELC sessions.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

If grant funding is received, Splash would have completed the summer camp phase of YELC for the pilot year (Jun’22). We will have all planning and arrangements made the for the second half of the pilot year; the monthly mentor sessions (Jul’22-May’23). We will have a schedule and a better understanding of when cohorts will be meeting and the types of projects the youth will be pursing by the start of this grant’s period. As we begin to plan the following year, we will review evaluations from the summer program portion and make adjustments to the 2023/2024 season. Partner teachers will select interested student candidates after their classes have experienced Splash's "Investigating Vernal Pools" and/or "Splash in the Class" programs, which are delivered between Jan-Apr every year, as this is the most active and vibrant time for vernal pool habitats. Furthermore, YELC requires a significant initial camper time-commitment, so camps must start during the summer. Therefore, we will be tied to local school calendars as well as nature.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we would be able to operate our program if health options change. Due to the nature of our program, the camper group size is already small. If necessary, we could be able to provide virtual laboratory and field experience through live on-line observation and measurement, including microscope use, with digital journaling.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

4426 Excelsior Road
Mather, CA 95655

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Sara Husby

Title

Development Director

Submitting As

Non-Profit

Phone

7734919716

Email Address

sara@sacsplash.org

Organization's Legal Name (if applicable)

Sacramento Splash

Mailing Address of Submitter

PO Box 3188
Rancho Cordova, CA 95741

Signatory's Name

Mackenzie Wieser

Signatory's Title

CEO

Signatory's Phone

9168967811

Signatory's Email Address

mackenzie@sacsplash.org

Signatory's Mailing Address

PO Box 3188
Rancho Cordova, CA 95741

Attach Any Additional Documents Here

Sac Splash Additional Documents Final.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #54

Supplemental Document
Sacramento Splash – Youth Environmental Leadership Camp

Last year Sacramento Splash applied for and received a community enhancement grant from the City of Rancho Cordova in the amount of $29,000 for the development of the Youth Environmental Leadership Camp (YELC.) YELC is an immersive summer program for 6th/7th grade students. Campers will attend a 1-week camp, M-F from 8:30 a.m. – 5:30 p.m., in groups of 10 (per COVID restrictions for Summer 2022) where youth will design and implement climate-smart solutions aimed at improving air/water quality and/or natural habitats where they live. We will be conducting 3 weeks of camp in Summer 2022.

During the week-long camp, each day will cover topics related to climate change. The campers will visit local sites for hands-on guided experiences related to these topics. Campers will sample and collect data, gaining experience using some of the tools and materials that scientists and engineers use in their work. Campers will get the chance to engage with professional environmental scientists, engineers, social scientists, and environmental protection activists to learn about their careers and what they did to work in their specific fields of expertise.

After the camp, Splash will convene YELC campers monthly in a 2-hour after-school club for the remainder of the 12-month rolling year. Campers will work together on a team project that will have a positive impact on the environment and climate in their community. They will learn about project management, from identifying & defining a problem, to planning & budgeting, project implementation and measuring their success and impact. Throughout the process, they will have the support of mentors and staff. Splash will provide a small project budget for each team to use in implementation of their team project. Projects will be brainstormed, developed, and led by campers in groups of 4-6. Mentors will guide the projects, and will also coach campers on their collaboration, engagement, listening and communication skills. Each Project Team will aim to complete its project within the program year. At the end of that time, each Team will present their project to camp staff, mentors, parents, and the next set of YELC campers. YELC will lay the foundation for - inspiring the next generation of scientists and environmental stewards who are dedicated to conserving energy and protecting air, water, and ecosystems from the impacts of urban life. All of this will take place while we are also teaching these youth leaders transferable skills that can be applied to any future career path.

During the fall, Splash's CEO used her extensive network to identify potential YELC Development Team members and recruit those interested in helping develop this program. The Development Team that has now been formed consists of members of Splash's Board of Trustees and staff, a former Board member, and local industry and climate/nature experts spanning a broad range of related backgrounds and experiences, and a retired Department of Water Resources Engineer. The Team documented a charter, which was approved by the Board of Trustees.

Application #54

During the later fall into winter, the YELC Development Team identified the themes for each day of the immersive camp week: Climate Change/Air Quality, Energy/Transportation, Water, Food/Waste/Consumption, & Land Use/Habitat. The Team has explored other camps in the Sacramento and Bay Areas to understand what exists that focuses on environment/climate projects and/or leadership and contacted organizers for information that might help our efforts. We have defined overarching learning objectives for the Program and drafted a camp schedule of field trips to one or more sites relevant to each day's theme, discussion topics, hands-on activities, speakers, and more. The Team is in progress on recruiting mentors for the program and has drafted Mentor Roles & Responsibilities.

We were able to establish a partnership with Paratransit who will be providing the transportation for the summer camp during the day. Funding for transportation was generously paid for by - Supervisor Don Nottoli.

The Team has also created communications/marketing-related materials including a flyer and online application for the potential campers. On March 8th, the application went live, and we are awaiting submissions.

At the time of our December grant update to the City, Splash has used $15,265.11 of the funding awarded. Roughly 100 hours have been volunteered by members of the Development Team to date. Splash has applied for numerous grants and has been awarded $30,000 from Regional San for the execution of the program over the summer. We have also received $11,000 in TOT funds from Sacramento County. We are currently waiting to hear from 5 additional foundations regarding grant applications.

We have recieved an in-kind donation of journals for the campers ($360 value), and we are awaiting to hear if we will be receiving additional in-kind donations of backpacks ($450 value) and lunches ($3,375 value).

The $45,000 of funding that we are requesting from the 2022/2023 Community Enhancement and Investment Fund from the City of Rancho Cordova will be used for the 2022/2023 YELC 2-hour after-school club and for the summer camp portion of the 2023/2024 camp year.

For the 2023/2024 summer camp year we plan on increasing the number of campers participating in the program from 30 to 60, and we will be operating the camp over a span of four weeks.

Application #54

Summer 2022

YOUTH ENVIRONMENTAL LEADERSHIP CAMP (YELC)

Splash

WATER AND WILDLIFE EDUCATION

Application #54

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Application #54

PROGRAM SUMMARY

Splash's YELC is an immersive summer program for middle-school students. Splash will emphasize recruitment of campers from groups underrepresented in the outdoors and STEM programs. Campers will attend a 1-week camp, in groups of 10* (until COVID restrictions are removed), where youth will become change-agents who design and implement climate-smart solutions aimed at improving air/water quality and/or natural habitats where they live. Campers will learn about project management, budgeting, and project implementation through the support of mentors and staff while learning water management, pollution prevention, and watershed ecology. After the camp, Splash will convene YELC campers monthly in a 2-hour after-school club for the remainder of the 12-month rolling year, where mentors will guide students to implement projects. Mentors are community leaders, naturalists, and environmental professionals who will ensure campers deliver a positive impact within their community. YELC will lay the foundation for an on-going, youth-led movement to conserve energy and protect air, water, and ecosystems from the impacts of urban life.

WHY IS THIS PROGRAM IMPORTANT?

For many decades conservationists in Sacramento County have seen streams, vernal pools and other wetlands diminish and degrade, despite many federal, state and local laws and agencies designed to protect them. The world is quickly realizing that initiatives to implement projects that will aid in reaching carbon neutral goals will take massive efforts. Youth driven action will be critical to reaching the global goals to mitigate climate change. Over the years many climate-focused advocates and agency staffers have been working on these issues, yet many of them are retiring. Splash plans to identify and mentor young people to become the next generation of environmental leaders. This project will give students hands-on experience to identify air, water, energy, or other natural habitat-impacting problems and develop climate-smart solutions and ecosystem restoration projects. For example, they may work with their community leaders, Splash, and professionals to ensure that stormwater discharges from new development will not impact local creeks or vernal pools, plan a solar farm to supplement power and decrease energy costs, or create a park out of an empty lot. These are just examples of the limitless ideas that a camper may want to work on. Splash will support any climate-smart project a camper wants to implement. YELC will lay the foundation for an on-going, youth-led leadership movement while teaching these youth leaders transferable skills that can be applied to any future career path.

PROGRAM FOCUSES

- Children/Youth
- Education
- Environment / Nature & Water Literacy and Connection

Application #54

- Becoming Scientists & STEM careers
- Serving Leadership
- Community Pride
- Quality of Life

PARTICIPANT COUNT & DEMOGRAPHICS

- Estimated Number of Participants per week: 10* (until COVID restrictions are removed)
- Splash will emphasize recruitment of campers from socio-economic, racial, and ethnic groups underrepresented in the outdoors and STEM programs. This will be based on candidate nominations from teachers at schools in disadvantaged populations (especially Title 1 schools) based on higher rates of Free/Reduced Lunch data according to the school districts located in the region, focused on students who demonstrated the most interest in or benefit from Splash's existing Programs, "Investigating Vernal Pools" and "Splash in the Class." Also, the location of the schools will be a consideration to enable us to prioritize those school areas with less green space nearby.

PROGRAM DESIGN/DETAILED DESCRIPTION

YELC primarily targets providing expanded STEM learning, career-field exposure, and a project development, management, and implementation opportunity for middle-school students during summer and after-school. Youth will attend a 1-week summer camp at the Splash Center in Mather, in groups of 10, where they will learn water management, energy saving, pollution prevention, watershed ecology and more through lessons, assignments, field observation, collection, measurement, analysis, drawing, documenting, and reporting findings. This program integrates science, mathematics, engineering, writing, inquiry, and exploration. Campers will learn about project management, budgeting, and project implementation with the support of mentors and staff. Campers will have meaningful experiences outdoors, connecting with nature, something that an urban concrete existence limits and which was further limited by the increase in screen time caused by the Covid-19 pandemic's requirement for distance learning. Campers will be helping improve the quality of life in their community both physically and socially and building connections that minimize the need for possible intervention, promote systemic social change, and will encourage and support them to thrive.

After the camp week, Splash will convene YELC campers monthly in a 2-hour after-school club for the remainder of the 12-month rolling year as the campers work in teams, collaborating to develop a climate-smart project focused on improving or restoring a natural habitat in their community. They will develop a project plan with budget, implement the plan, and present their project and its results at the end of the year to

their peers, professional mentors, Splash leaders, and to the next year's incoming group of campers. The campers may work with community leaders, Splash naturalists, and other professionals along the way to ensure that they can deliver a positive impact to nature in their community, feeling the empowerment of success and service to others. Campers will become change-agents and will be the foundation for an on-going, youth-led leadership movement to conserve energy and protect air, water, and ecosystems from urban impacts.

Starting with youth who already have created a connection to nature and Splash will help campers be engaged initially, but we will also ensure activities during the camp week are both engaging and interactive. Splash will also do everything possible to ensure that the participants feel safe, welcomed, respected, and important to the Program and their communities. Campers will not just be recipients of information, but will be encouraged to actively take part with observation, exploration, inquiry, opinion, and prediction. By keeping the groups small, camp leaders will be able to be sure they have encouraged every camper to ask questions and/or be asked questions and to extrapolate what they learn. They will be supervised as they interact with nature, with the professionals mentoring them, and with each other, to ensure safety, encourage collaboration, and to help them reach the best outcomes with their projects and their Program experience. During the year, camp leaders will stay in touch with participants not only through the monthly after-school sessions, but also through email, to ensure questions get answered and progress continues on all projects. We hope that our Program will develop in the participants an eco-centric mindset as well as place-based attachments that help them care about nature and their community, while introducing them to STEM careers that they could pursue.

PROGRAM PARTNERS

- Splash will recruit volunteer mentors through outreach and personal relationships. SMUD, Regional Sanitation District, Department of Water Resources, CA Natural Resources Agency, CA Department of Fish and Wildlife, Go-Biz, along with other youth focused nonprofits such as Green Tech, Clean Start, Sierra Nevada Journeys, Soil Born Farms, Effie Yeaw Nature Center, and the American River Parkway Foundation.
- Connections to UC Davis, Sacramento State and the Los Rios Community Colleges, along with working with Sacramento Vice Mayor Jay Schenirer will ensure mentors have experience working with youth within the region and with the communities which our program is targeting.

PROGRAM MEASURES OF SUCCESS

Program Goal	Program Objective(s)	Program Activities	Program Outcomes (include target numbers and percent)	Evaluation Method
Promote equity with a concerted application of resources toward those youth in greatest need.	Reflect the socio-economic, racial and ethnic diversity of the greater Sacramento population, with particular emphasis on those underrepresented in the outdoors, science and engineering.	• Teachers from schools with disadvantaged populations nominate student candidates with diversity in mind • Splash produces final list of 30 participants.	• >50% of participants come from schools with >65% free/reduced lunch participants • Best effort at diversity coming from the recruited Sacramento youth population	• List of participants in total • List of participants in each camp week
Create a safe environment, both physically and emotionally, in all settings, honoring culture and community	Local youth grow in a safe, supportive community while learning, working, and playing together.	• Site maintained to superior physical safety standards. • Staff experienced in supporting participants with respect and a sense of community.	• 0 safety incidents at our site • 100% of participants report having had a positive experience at our site.	• Safety record • Program evaluations at end of camp completed by participants.
Provide opportunities for young people to become active and engaged community members	Students develop intellectual, physical and emotional connections with nearby nature.	• Field experiences in nearby nature-observation, measurement, exploration, inquiry, etc. • Lessons in water management, pollution prevention, and watershed ecology. • Community natural habitat problem identification, definition, solution planning, implementing.	• 60% increase in awareness and understanding of local ecosystems, their resources, and threats to them. • 50% increase in interest in nature/science	• Pre-&Post-assessments completed by participants.
Increase STEM understanding and success	Participants understand how air and/or water quality impacts both aquatic life and human life, how people impact these and how they can improve it.	• Field experiences in nearby nature-observation, measurement, exploration, inquiry, etc. • Lessons in water management, pollution prevention, and watershed ecology.	• 60% increase in knowledge of these topics.	• Participants complete all lessons, assignments, and lab reports; journal entries reflect impact. • Pre-&Post-assessments completed by participants.

Increase STEM understanding and success And Provide opportunity for collective action	Participants learn to conduct scientific investigations and report findings for a local stream or aquatic habitat, as well as compare reference sites or historical data.	• Field experiences in nearby nature-observation, measurement, exploration, inquiry, analysis, drawing, documenting. • Community natural habitat problem identification, definition, solution research, planning, implementing. • Work/collaborate with peers, Splash leaders and professional mentors	• 100% completion of all assignments/tasks/steps	• Participants' report is evaluated by Splash leads and mentors.
Problem Solving, planning, budgeting, presenting	Participants learn to define a climate smart project, write and present a small project plan with budget, implement plan, and present the results.	• End-of-year presentation to peers, Splash leaders, professional mentors, new group of participants of project showing positive actual results or projected results, if there has not been sufficient time yet to measure actual results	• 100% of participant projects show improvement made or projected to be made in a nearby natural habitat • 100% of participants contribute to mathematics, science, and writing aspects of the project.	• Plan and Results reports will be reviewed by Splash leaders & mentors with constructive feedback, plan and results report out will be presented to peers, Splash staff, mentors and in-coming new participants. • Participant projects must show improvement or projected improvement over a planned duration in the natural habitat involved.
Build 21st century skills including leadership, workforce development, life, resiliency, and social-emotional skills	Exposure to careers dealing with science or the environment	• Professional mentors working in STEM fields will provide insight and coaching to participants throughout their project	• 100% of participants understand possible STEM career pathways available to them. • 35% of participants continue on as mentors to the next year's program.	• Post-assessments completed by participants. • Tracking list of participants returning to mentor.

Application #54

ORGANIZATION STATEMENT OF QUALIFICATIONS

Sacramento Splash is a non-profit organization dedicated to helping children understand and value our natural world through science education and outdoor exploration. We believe that all youth deserve the opportunity to learn and play in nature and our vision is of a generation of youth who take an active role in its protection.

Splash was started in 1999, but officially incorporated in 2008. We offer a variety of environmental science programs designed to introduce Sacramento area children to the wonders of science by teaching them about local habitats. We provide curricula and activities that make science relevant, engaging, and simply fun! We have also provided public nature tours of the vernal pools at Mather Field and of Morrison Creek for the benefit of children of all ages!

Splash is in a unique position to run the YELC Program and pass the torch of environmental stewardship to the next generation. Over our more than 20 years, we've built an extensive collaborative network with public school teachers, environmental educators and advocates, government agencies, industry, and developers. We've trained thousands of teachers and connected over 56,000 kids with nature. We have demonstrated to the region that we are committed to and effective at teaching hands-on science and the importance of protecting our natural resources.

Our long-standing relationships with teachers allow us to particularly access hard-to-reach populations of students with barriers to the outdoors and STEM. We provide outreach to more than 200 public schools and 8 municipalities and hold special learning and awareness events in the community, tables at community events, STEM education nights at schools and interface regularly with regional funders at consortiums, conferences, and round tables (on hold during Covid restrictions).

Our staff, who will build-out the YELC Program activities and lead camp sessions have more than 40 years of experience between them, writing our curricula, coordinating our programs, and delivering our field trips (in-person and virtually). They regularly have been working with this age range and demographic, so they know well how to interact with and motivate them. They are all active naturalists and well-known, respected experts in the area.

We successfully pivoted during the pandemic to provide on-line curricula, class sessions, live web-cam, virtual field trips, and "Live from Critterville" experiences. We continue to get tremendous positive feedback from teachers and students alike, such as:

- "Not only did my class learn a lot, but I did as well. This generation is our future and it is important for them to see different parts of our ecosystem and how it is important to the area. One girl was sad to hear that only 5-10% of the Vernal pools still exist. She wants to grow up and make sure they are taken care of." – 5th grade teacher

- "One area of the 5th grade Next Generation Science Standards related to matter in ecosystems that we strive to engage with is the human impact on our world. The "Splash in the Class" presentation gave my students a chance to apply what they had learned about a healthy ecosystem to our very own local streams and waterways. Students were inspired by the presentation, coming away with not only a deeper understanding of their connection to the environment, but an interest in finding creative solutions to keep our watershed healthy and clean." – 5th grade teacher
- "I learned about the Western Spadefoot, most commonly found in vernal pools and grasslands. Sometimes, this toad will let out a fume of rosted peanuts and garlic, which will cause sneazing! I also learned how my family could stop urban runoff…we could find liter and pick it up or we could go to a car wash instead of washing <it> at a drive way!" – 5th grader
- "I really liked the field trip and I never had a field trip in my house and that was a really good first one." – 5th grader

PROGRAM BUDGET

TOTAL: $96,290 – please see accompanying MS Excel file

- YEAR 1 – Program Build-out, first camp weeks: $37,446
- YEAR 2 – First full Program year: $58,844

YOUTH ENVIRONMENTAL LEADERSHIP CAMP





When is the camp?

June 13–17th, 2022
June 20–24th, 2022
June 27–July 1st, 2022

What Will We Provide?

- FUN EXPERIENCES
- All Program Materials
- Transportation to All Field Trips
- Exposure to Environmental Science Careers

How Do I Apply

Complete this application form

Oh the places we will go...and the things we will do!

	Day 1 – Monday	Day 2 – Tuesday	Day 3 – Wednesday	Day 4 – Thursday	Day 5 – Friday
Theme	**Climate Change & Air Quality**	**Energy**	**Water**	**Food, Waste, & Consumption**	**Land Use & Habitat**
Field Trip	Air Quality Monitoring Station	Dairy Digester or Solar Farm Site	Nimbus Fish Hatchery & Cordova Creek Restoration Site	Water Treatment Plant, The Bufferlands, Nicolaus Dairy	Cosumnes River Preserve
Activities	• Measure air pollutants • Plant tree seedlings	• Make and cook with a solar oven • Use a solar pump • Make a wind turbine	• Survey stream health • Make a map • Assess Water Quality	• Check out a lab! • Plant/harvest veggies	• See wildlife • Scavenger Hunt • Take part in a mock land decision

...plus speakers from each field, creative journaling, and more!

A week of fun experiences...

Campers will spend five (5) weekdays with us, going on field trips, making things that actually work, learning about air, water, energy, food & waste, nature, and more!

...followed by making a difference in your community!

Campers will participate in a year-long mentor-guided team project to benefit the community.

Who can participate?

6th and 7th Graders from the Sacramento region who already have some interest in the environment or natural habitats, and are interested in growing their knowledge through hands on learning!

More Info: visit our web page

What does it Cost?

FREE!

Special Thanks to our Sponsors:

Help the environment and make new friends!



Splash

4426 Excelsior Road Mather, CA 95655 916-364-2437

# of camp weeks	4
# of campers per week	15

Development Phase	Hourly Rate*	Of/Per	Hours	Subtotal	
CEO/Director of Programming	$ 57		45	$ 2,572	
Program Manager	$ 50		45	$ 2,250	
Camp Leader / Program Coordinator 1	$ 45		45	$ 2,025	
Camp Leader / Program Coordinator 2	$ 45		45	$ 2,025	
Subtotal				$ 8,872	

Program Implamentation Phase					
Personnel	**Hourly Rate***	**Of/Per**	**Hours**	**Subtotal**	
Camp Leader / Program Coordinator 1 during camp weeks	$ 45	9 hours per day x 5 days per week x 4 camp weeks**	160	$ 7,200	
Camp Leader / Program Coordinator 2 during camp weeks	$ 45	9 hours per day x 5 days per week x 4 camp weeks**	160	$ 7,200	
Field Guide 1	$ 20	9 hours per day x 5 days per week x 4 camp weeks**	160	$ 3,200	
Field Guide 2	$ 20	9 hours per day x 5 days per week x 4 camp weeks**	160	$ 3,200	
Camp Leader / Program Coordinator during monthly mentor sessions	$ 45	2 hours a month for 11 months	22	$ 990	
Mentors	$ 30	12 mentors x 2 hours a month for 11 months	264	$ 7,907	in-kind donation
Personnel Subtotal				$ 29,697	

Program Implamentation	Unit Price/Rate	Of/Per	Quantity	Subtotal	
Field trips	$ 1,500	5 field trips per week x 4 weeks	20	$ 30,000	in-kind donation
Food - camp lunches	$ 15	per camper/leader/guide x 5 days per camp week	380	$ 5,700	
Food - snacks	$ 5	per camper/leader/guide x 5 days per camp week	380	$ 1,900	
General Office Supplies	$ 10	per camper	60	$ 600	
Participant Incentives/Swag	$ 25	per camper	60	$ 1,500	
Project Budget for climate-smart solutions in the community	$ 500	per team of 4-6 campers	12	$ 6,000	
Travel/Transportation	$ 10,000	4 weeks/Partnership with ParaTransit	N/A	$ 10,000	
Overhead and G&A (Indirect) Costs	10%	Listed Program Costs	N/A	$ 9,427	
Program Implamentation Phase Total				$ 65,126.86	

* Personnel Pay Rates = Hourly loaded w/ taxes, worker's comp, health ins & time off
** split across employees to prevent overwork

Total cost of program	**$ 103,695.41**
Total cost of program minus in-kind donations	**$ 65,788.61**

Application #54

REGIONALSAN
TAKING THE WASTE OUT OF WATER
Sacramento Regional County Sanitation District

Main Office
10060 Goethe Road
Sacramento, CA 95827-3553
Tel: 916.876.6000
Fax: 916.876.6160

Treatment Plant
8521 Laguna Station Road
Elk Grove, CA 95758-9550
Tel: 916.875.9000
Fax: 916.875.9068

Board of Directors
Representing:
County of Sacramento
County of Yolo
City of Citrus Heights
City of Elk Grove
City of Folsom
City of Rancho Cordova
City of Sacramento
City of West Sacramento

Christoph Dobson
District Engineer

Glenn Bielefelt
Director of Operations

Mike Huot
Director of Policy & Planning

Matthew Doyle
Director of Internal Services

Masiku Tepa Banda
Director of Finance

Nicole Coleman
Public Affairs Manager

www.regionalsan.com

Printed on Recycled Paper

March 10, 2022

Mackenzie Wieser
Sacramento Splash
4426 Excelsior Road
Mather, CA 95655

Subject: Approval of Funding for Youth Environmental Leadership Camp

Dear Ms. Wieser:

We received your Confluence Program application from Sacramento Splash (Splash) requesting funding for the Youth Environmental Leadership Camp (YELC). I'm pleased to inform you that your request is approved and will be fully funded in the amount of $30,000, provided Splash meets the following conditions:

1. Splash staff will work with Regional San's Public Affairs staff to collectively design a meaningful experience for the campers' time at the wastewater treatment plant and Nicolaus Dairy.

2. Splash staff will provide pre- and post-camp surveys to gauge campers' knowledge on key Regional San topics and issues. Splash staff will work with Regional San's Public Affairs staff to craft these survey questions once we establish the campers' planned experience at the wastewater treatment plant and Nicolaus Dairy.

3. Where appropriate, Regional San's logo will be featured on any materials where other funding partners are recognized.

Funding in the amount of $15,000 will be issued upon Splash's acceptance of the aforementioned conditions. The final $15,000 in funding will be issued once Splash completes the camps and provides Regional San the pre- and post-camp survey results. Regional San reserves the right to confirm funding is being utilized for the approved purposes.

If you have any questions regarding this funding approval, please contact Nicole Coleman at colemann@sacsewer.com or (916) 876-6246.

Sincerely,

Nicole Coleman
Public Affairs Manager

Christoph Dobson
District Engineer

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Tuesday, March 15, 2022 11:06 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1531168
IP Address:	165.196.30.2
Submission Date:	03/15/2022 11:06
Survey Time:	9 minutes, 14 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Cordova/Folsom Lake College Promise Program

Project Synopsis

Folsom Lake College proposes to continue its partnership with Rancho Cordova in implementing the Rancho Cordova/Folsom Lake College Promise program, providing two years of virtually fee-free education to Rancho Cordova residents. Funding of tuition, fees, books, and basic needs will continue to ensure access to education for Rancho Cordova students.

Project Description

See attached project description.

Project Team

Dr. Whitney Yamamura—President, Folsom Lake College Dr. Kellie Butler—interim Vice-President of Student Services, Folsom Lake College Dr. Monica Pactol—Vice-President of Instruction—Folsom Lake College Hannah Blodgett, interim Dean of Student Success, Folsom Lake College Brian Robinson—Dean of Rancho Cordova Center Michele Steiner—Regional Director of Philanthropy—Los Rios Community College District

Project Goals

The Rancho Cordova/Folsom Lake College Promise Program will be guided by the following goals in the next three years: Program Growth--through more targeted outreach, the team will strive towards annual participation of 100 students/year. Increased Retention--through use of peer mentors and additional support staff, the team will work towards 85% retention per semester. Increased Success--through the use of peer mentors, success coaches, and faculty liaisons, the team will work towards 72% course success/semester. Streamlined support--through the deployment of BankMobile, the team will seek an increase in Promise dollars distributed directly to students each academic year.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Application #55

Total Project Cost

$157,900

Estimated Breakdown of Project Expenditures

Tuition, Fees, Supplies: $46/unit X 12 units X 100 students X 2 semesters = 110,400 Support for Center Clerk: $35,000 Total Request: $145,400

Matching Funds

Folsom Lake College will contribute $12,500 to support the Center Clerk.

Include Any Other Funding Contributions

None.

Ongoing Operations and Maintenance Costs (if applicable)

n/a

Total Community Enhancement & Investment Funds Requested

$145,400

Is this a multi-year request?

Yes

Number of Years

3

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

Folsom Lake College intends to request three years of funding.

How many years have you received funding for this project?

6

When will your request for funding sunset for ongoing programs?

Folsom Lake College intends to request annual funding.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Folsom Lake College is exploring possible donors as well as investigating further grant opportunities to help support Promise students.

Project Schedule, Timeliness and Adaptability

Project Schedule

The project timeline is ongoing and part of a multi-year request; some elements are subject to county and Los Rios covid protocols; however, in general the Promise students' experience is guided by the following timelines: November-August—Recruitment and application to the Promise program; the application for the Rancho Cordova Promise program opens in November of each year and remains open until the two weeks before the fall term begins. Calling campaigns for Rancho Cordova applicants to Folsom Lake College who have not filled out the Promise application launched in March, May, and July to ensure maximum access to the program for Rancho Cordova residents. August—Promise kickoff at the Rancho Cordova Center—Students receive a welcome to the Promise Program, information about their funding and Promise requirements, including how to maintain funding through their second year. Also students attend orientations on various aspects of being a Promise student. August-May—Promise students take 6-18 units (of which 6 units must be with FLC) primarily with FLC but where appropriate with the other three Los Rios Colleges as well. In addition to taking classes, students receive support from peer mentors and other staff associated with the Promise program.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

While some refinements to the program are new, Folsom Lake College has been administering the Promise Program since 2017 and has the team and infrastructure in place to support students through June 30, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Folsom Lake College and the City of Rancho Cordova have collaborated since the beginning of the pandemic to ensure that Promise students continue to not only receive the education which the project is funding, but also the support necessary to be successful as online students. Examples of adaptability include not only moving all students to the online modality at the beginning of the pandemic, but also providing chromebooks for those Rancho Cordova Promise students who needed technology. In the program's third year, the college moved to extending Promise support to veterans. Additionally, the college has made changes in the ways funds are distributed as a result of collaborating with the city of Rancho Cordova in the National League of Cities cohort city program.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Folsom Lake College Rancho Cordova Center--10259 Folsom Blvd.
Rancho Cordova, Ca. 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Brian Robinson

Title

Dean of Instruction--Folsom Lake College-Rancho Cordova Center

Submitting As

Public Agency

Phone

9163616330

Email Address

robinsb@flc.losrios.edu

Organization's Legal Name (if applicable)

Folsom Lake College

Mailing Address of Submitter

10259 Folsom Blvd.
Rancho Cordova, Ca. 95670

Signatory's Name

Dr. Whitney Yamamura

Signatory's Title

President--Folsom Lake College

Signatory's Phone

9166086570

Signatory's Email Address

YamamuW@flc.losrios.edu

Signatory's Mailing Address

10 College Parkway
Folsom, Ca. 95630

Attach Any Additional Documents Here

Rancho Cordova-Folsom Lake Promise Program Description-2022.docx

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #55

Rancho Cordova/Folsom Lake College Promise Program—Program Description:

This project is a continuation of the Rancho Cordova/Folsom Lake College Promise Program whereby recent high school graduates who are Rancho Cordova residents receive funding for tuition, books, fees, and supplies. For those students who are not eligible for a California Promise Grant or Los Rios Promise grant, the funding would cover their tuition and fees. For those who qualify for one of the aforementioned grants, the Rancho Cordova Promise would provide "first dollar" aid for books, supplies, and basic needs in the amount equivalent to students' unit load. In essence, Rancho Cordova residents taking anywhere from 6-18 units would receive Promise support as participants in the Rancho Cordova/Folsom Lake College Promise Program.

In addition to its support for new students, Folsom Lake College proposes to continue offering support to Veteran students who are Rancho Cordova residents using the same funding parameters outlined above. Further, the college proposes to extend eligibility for the Promise program to students who are retraining/refining career skills because of pandemic displacement. Fall 21 data shows 20 new Rancho Cordova students whose goals are noted as updating career skills or pursuing a career education related certificate. As part of its expansion of the Promise program, Folsom Lake College will offer support to new students from Rancho Cordova who are pursuing career education certificates or updating job skills.

As noted above, the means of dispersing funds to Promise students is being refined as a result of a survey of Promise students administered by Folsom Lake College's Office of Institutional Research and as a result of Folsom Lake College's participation in the National League of Cities program with the City of Rancho Cordova. In the survey, some students expressed challenges getting books directly from the Folsom Lake College bookstore while participants in the National League of Cities program learned of postsecondary education students' challenges with things like basic needs and transportation. To that end, Folsom Lake College will pivot from establishing funds for books and supplies in the college bookstore to providing students with a grant so that books and supplies can be purchased from other sources, and students will have funds available for other financial needs.

To build further on refinements made since the program's inception, Folsom Lake College will continue its Promise peer mentoring program whereby up to ten students from each first year Promise class will be selected to serve as paid peer mentors for the following year's incoming class at a rate of $15/hour for 12 hours per week for 32 weeks per year. For the 2022-23 academic year, Folsom Lake College will support peer mentors with existing funds. This mentoring program aligns with best practices outlined by the Northern California College Promise Coalition, an organization with which the college has partnered in the 2021-22 academic year.

To ensure the Promise students stay on track and reach their goals, Folsom Lake College will employ a Center Student Personnel Assistant who is partially funded by Promise funds. This team member's duties will include:

- Outreach
- Recruitment of new Promise students.
- Tracking of student progress.
- Communication with current and potential Promise students
- Recruiting Promise peer mentors.

The duties associated with this position align with best practices discussed in the National League of Cities program as well as with resources provided by the Northern California College Promise Coalition and the Campaign for College Promise. Further, it was a request of respondents in the fall Promise survey.

Continued funding of this program will help to ensure that Rancho Cordova residents have continued access to virtually fee-free postsecondary education in coming years. Even with interruptions to instruction brought on by the pandemic, the Rancho Cordova/Folsom Lake College Promise program has continued to provide educational access and support to hundreds of Rancho Cordova residents, giving many who had not considered college a viable option the opportunity to pursue higher education. Indeed, some of the students from the earliest Promise cohorts have already transferred to four-year schools, and some have completed their four-year degrees. Survey respondents in the fall survey noted that such achievements would likely not have been possible without the support of the city of Rancho Cordova.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Tuesday, March 15, 2022 5:18 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1532274
IP Address:	69.62.139.46
Submission Date:	03/15/2022 5:18
Survey Time:	31 minutes, 6 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Animation Intern Education

Project Synopsis

Animation Intern Education (AI) will provide instruction to 60 students split between two classes (30 students per class) to learn how to be Production Assistance (PA). At the completion of class, students will receive a certificate of completion. Students who complete the class will be added to the City of Sacramento Film Office hiring list as PAs. City of Sacramento Film Office has a requirement that any films done in Sacramento requires the film crew to hire PA and other positions from the their hiring list.

Project Description

Two PA classes will be taught during the grant cycle. One class of 30 students in the Fall 2022 and one class of 30 students in the Spring 2023. At the completion of the class, students will receive a certificate of completion. Four computer units (hardware and software) will be purchased with the grant money to be used to create animation curriculum to be used in future classes for students.

Project Team

Shawn Sullivan, Amy Sullivan, Industry Professionals to be determined by Shawn Sullivan, Instructional Teacher and Instructional Assistances to be determined by Shawn Sullivan.

Project Goals

1. Production Assistance (PA) classes provided to 60 students (split between two classes) to provide jobs as PAs as part of the workforce development. 2. Four computer units (hardware and software) to be purchased to create animation content and curriculum developmemt.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$201,000

Estimated Breakdown of Project Expenditures

Production Assistance Classes (two classes of 30 students each) for a total of $137,000 Cost per student equals $2,283. Computer equipment including hardware and software $16,000 x 4 units equals $64,000 Total budget cost $201,000

Matching Funds

NA

Include Any Other Funding Contributions

NA

Ongoing Operations and Maintenance Costs (if applicable)

NA

Total Community Enhancement & Investment Funds Requested

NA

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

NA

Project Schedule, Timeliness and Adaptability

Project Schedule

July 1, 2022 - June 30, 2023 - development of animation content/curriculum via computer units July 1, 2022 - December 31, 2022 - Production Assistant class (completed within 12-16 weeks via Zoom) for 30 students. January 1, 2023 - June 30, 2023 - Production Assistant class (completed within 12-16 weeks via Zoom) for 30 students.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Shawn Sullivan and his instructional team will conduct two PA classes (30 students per class) during the grant period. One class in the fall of 2022 and one class in the spring of 2023. Additionally, Shawn Sullivan and his instructional team will be able to build animation content/curriculum during the grant period to be used in future animation curriculum classes.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, both the PA classes and the creation of amination content/curriculum can be done remotely via Zoom and asynchronous.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Application #56

Physical Address of the Project Location

New Life Church
2451 Zinfandel Drive
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Granite School (non school site in historic Folsom district) 909 Mormon Street, Folsom, CA 95630

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Shawn Sullivan

Title

Co-Founder of Animation Intern Education

Submitting As

Individual

Phone

9167520253

Email Address

sullivan@animationintern.com

Organization's Legal Name (if applicable)

Animation Intern Education, LLC

Mailing Address of Submitter

Animation Intern Education
9752 White Pine Way
Elk Grove, CA 95624

Signatory's Name

Shawn Sullivan

Signatory's Title

Shawn Sullivan

Signatory's Phone

9167520253

Signatory's Email Address

sullivan@animationintern.com

Signatory's Mailing Address

Shawn Sullivan
9752

Application #56

Elk Grove, CA 95624

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 4:10 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1534615
IP Address: 206.15.249.238
Submission Date: 03/16/2022 4:09
Survey Time: 6 minutes, 10 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

The Kiwanis Family Literacy Initiative(FLI) of the Book Buddies' Club

Project Synopsis

"The family that reads together, succeeds together" is the motto of the Book Buddies' Family Literacy Initiative (FLI) of the local Kiwanis Club. Through a vibrant, multi-agency network, Kiwanians engage the broader community in promoting reading at home, while giving books to local youth, of whom many live in poverty.

Project Description

The FLI helps families to embrace reading at home as a way to compensate for the negative impact on learning that the pandemic has had, especially for at-risk children in our community. Our Kiwanis Club will expand its family literacy focus in order to help families to overcome any deficits children are experiencing because of COVID and distance learning. The FLI will strengthen the capacity of children and youth to succeed in life through literacy and education. Literacy is a core skill vital to personal and professional fulfillment. The FLI engages young people, their families, and the community in activities that encourage reading and strengthening literacy skills. By providing free books to local children and youth, the Kiwanis Club of Rancho Cordova creates and expands home libraries for youngsters. By providing information that promotes reading at home and embedding other family literacy activities within family-focused community events and programs, the FLI broadens the impact and visibility of our club's and community's commitment to family literacy. The FLI will continue to distribute books through schools in Rancho Cordova, and will now include two Sacramento City USD campuses in this initiative: A.M. Winn and Abraham Lincoln Elementary Schools. We propose to connect through schools' ASES After School Programs, Book Vending Machines, and other school-based programs and events, as determined by the schools. We will also partner with the Rancho Cordova Police Activities League (PAL) and the Cordova Community Council (CCC) to do outreach through their programs and activities.

Project Team

FLI is staffed by the volunteers of the Kiwanis Club of Rancho Cordova. Club members develop the funds needed, purchase books and coordinate the distribution process, maintain all financial and book distribution records, provide all required reporting, and promote the project and its funding and outreach partners. FLI committee co-chairs are Nora Stroke (the 2021-2022 Kiwanis Club President) and Linda Burkholder (Kiwanis Club member and a Past President). Committee members include Cindy Cogil, Kathleen

Ross, Delores Lee, and Deborah Barrell. Other members of the club actively volunteer during distribution FLI events and project activities.

Project Goals

I. Expand family literacy activities in homes. A. Develop and distribute family literacy information sheets in multiple languages at events. B. Create a website with a link for on-line family literacy video presentations, activity guides and tip sheets. C. Deliver at least six family literacy presentations at community events. D. Include a link to the Sacramento Public Library website on the Kiwanis Club's website page for FLI. II. Provide free age-appropriate books to children and youth in Rancho Cordova. A. Distribute at least 3000 books to local young people. III. Engage teenagers involved in PAL's Youth Leadership Council and the Key Club at Cordova High School in reading and discussing books about inspirational young leaders and service. A. Provide books to members of the Youth Leadership Council of PAL and the Key Club at Cordova High School who participate in discussions about the concepts of leadership and service presented in the books.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$ 12,400.

Estimated Breakdown of Project Expenditures

$ 9,000 - purchase of books for children and youth 1,500 - Production of bookmarks, stickers and family literacy handouts 1,900 - Creation of family literacy videos and messages on Kiwanis Club website

Matching Funds

$ 3,000 - allocated from Kiwanis Club of Rancho Cordova Foundation budget 4,500 - requested from Kiwanis International Children's Fund 100 - donated by MERO Pictures (which is also donating $1000 in in-kind videography and photography) 300 - donated by Kiwanis Club member Assemblyman Ken Cooley We also receive free books from our book vendors based on the dollar amount we spend on purchasing books.

Include Any Other Funding Contributions

We are receiving funding from a club member, Assemblyman Ken Cooley and from MERO Pictures. We have also requested funding from the Kiwanis International Children's Fund.

Ongoing Operations and Maintenance Costs (if applicable)

Not applicable.

Total Community Enhancement & Investment Funds Requested

$ 4,500.

Is this a multi-year request?

No

How many years have you received funding for this project?

2

When will your request for funding sunset for ongoing programs?

Unknown.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will also be applying for funding from the Kiwanis CalNevHa Foundation.

Project Schedule, Timeliness and Adaptability

Project Schedule

The project timeline is July 1, 2022 to June 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Our school-based activities will happen during the school year for FCUSD and SCUSD. Other outreach activities with PAL and the CCC may happen outside of school calendars. However, all grant funds must be spent by June 30, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we will adjust project activities based on any requirements of California Public Health and Sacramento County Health orders. We have been able to adapt already, within our school- based and community-based activities.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10035 Mills Station Road
Space 100
Sacramento, CA 95827

Other Physical Addresses (if project/program is at multiple sites)

Multiple Rancho Cordova school sites in FCUSD; AM Winn and Abraham Lincoln Elementary Schools in SCUSD; PAL and CCC event locations.

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Letter of Support PAL.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified
Sacramento City Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Nora Stroke

Title

President

Submitting As

Non-Profit

Phone

9162250136

Email Address

nstroke@fcusd.org

Organization's Legal Name (if applicable)

Kiwanis Club of Rancho Cordova Foundation

Mailing Address of Submitter

PO Box 2641
Rancho Cordova, CA 95741

Signatory's Name

Ms. Nora Stroke

Signatory's Title

President

Signatory's Phone

9162550136

Signatory's Email Address

nstroke@fcusd.org

Signatory's Mailing Address

PO Box 333
Rancho Cordova, CA 95741

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

CORDOVA COMMUNITY COUNCIL

Stacy Delaney
City of Rancho Cordova
Community Enhancement and Investment Fund
2729 Prospect Park Dr.
Rancho Cordova, CA 95670

Dear Stacy:

The Cordova Community Council (CCC) has partnered with the Kiwanis Club of Rancho Cordova for many years. We are proud of our cooperative work to celebrate and improve the quality of life for young people and families in our city.

The Kiwanis Club has a goal to redefine their partnership with the CCC to provide thematic children's books and family literacy activities at CCC-led events such as Kids Day in the Park and iFest. The CCC encourages the city to approve the application of the Kiwanis Club for a Community Enhancement and Investment Fund CEIF grant to support this planned expansion for the Book Buddies Family Literacy Initiative within CCC programs.

Funding from the city in 2022-2023 will also assist our local Kiwanis Club to apply for another year of matching funds from the Kiwanis International Children's Fund. The club secured a grant from their parent organization for this current project year, in large part because of the grant provided this year by the city. Leveraging another Children's Fund matching grant is likely if the city once again funds this project. The local Club feels confident about this because the Children's Fund Board has invited our Kiwanis Club to speak about the Family Literacy Initiative and its funding from the city at an upcoming conference.

The CCC is excited at the prospect of entering a new phase in our collaboration with the local Kiwanis Club. We heartily endorse their focus on family literacy and creating home libraries for young people in Rancho Cordova. We urge favorable consideration of the Kiwanis Club of Rancho Cordova's application for a Community Enhancement and Investment Fund grant to support their important work and our collaborative efforts on behalf of children and families in Rancho Cordova.

Sincerely,

Shelly Blanchard

Shelly Blanchard, Executive Director
Cordova Community Council Foundation

RANCHO CORDOVA POLICE ACTIVITIES LEAGUE

www.rcpdPAL.org

Sergeant R. Merideth
President

2897 Kilgore Road
Rancho Cordova, CA 95670
916.875.9627 - Main
rcpdpal@ranchocordovapd.com - Email

March 1, 2022

City of Rancho Cordova
Community Enhancement and Investment Fund
Rancho Cordova City Hall
2729 Prospect Park Drive
Rancho Cordova, Ca 95670

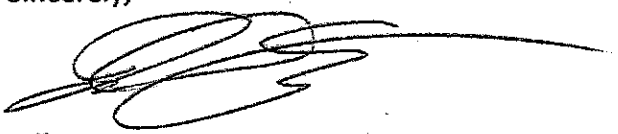
To whom it may concern,

The Rancho Cordova Police Activities League (PAL) is excited to partner with the Kiwanis Club of Rancho Cordova in order to encourage the reading of books by the youth engaged in PAL activities. In particular, Kiwanis plans to provide members of PAL's Youth Leadership Council (YLC) with books featuring inspiring young leaders. Volunteers from the Kiwanis organization will assist PAL in facilitating a book study with our YLC members about the book provided. Taking a deeper dive in to a book about the qualities of a strong youth leader will motivate our YLC members to be even more committed to positive leadership roles. This will allow YLC to then begin teaching younger PAL youth about these books and family literacy through story time and videos. The Kiwanis Club will also provide age-appropriate, and as available thematic books about baseball, to children who register in PAL's Junior Giants baseball program. Each of these books will include bookmarks, as well as tip sheets for adults on how to encourage reading in the home. The books will be used as an aspect of the Junior Giants read around the bases program which requires each participant to log 120 minutes of reading time. Once completed these youth will be eligible to attend the Junior Giants Day at Oracle Park and share their experience with other Junior Giants players and the Giants organization.

PAL always encourages its young participants to focus on success in school and community service. By partnering with the Kiwanis Club, a service organization of volunteers in our community, we have another way to promote civic engagement, community service, and literacy.

Thank you for considering the Kiwanis Club's application for funding to support of collaborative efforts.

Sincerely,



Officer Jose De La Cruz #1034
Rancho Cordova Police Department
PAL Executive Director

Application #57

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Kiwanis Club Rancho Cordova Family Literacy Initiative - Book Buddies Club

Name of Organization: Kiwanis Club of Rancho Cordova

Name of Applicant and Title: Linda Burkholder, Co-Chair of Book Buddies' Club

Applicant's Phone: 916-612-8267 **Applicant's Email:** lindaburkholder1254@gmail.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given DiAnne Brown

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: DiAnne Brown

Date: 3/4/22

School District: Elk Grove Unified Folsom Cordova Unified (Sacramento City Unified) Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #57

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Kiwanis Club Rancho Cordova Family Literacy Initiative - Book Buddies Club

Name of Organization: Kiwanis Club of Rancho Cordova

Name of Applicant and Title: Linda Burkholder, Co-Chair of Book Buddies' Club

Applicant's Phone: 916-612-8267 **Applicant's Email:** lindaburkholder1254@gmail.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given — Yes - Integration into programming will be explored but cannot be guaranteed.

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 6:19 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1537113
IP Address: 64.73.251.171
Submission Date: 03/17/2022 6:19
Survey Time: 58 minutes, 45 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Studio T Arts - Side Hustle Academy

Project Synopsis

We created Side Hustle Academy in late 2020 as a response to the pandemic. Through a six-figure grant from the city of Sacramento, we were able to build all necessary infrastructure for the program and test and refine our process across 75 youth in multiple cohorts. In addition to our training curriculum and youth-business partnership curation, we provide participants with up to three months of ongoing support to help them complete projects and monetize their new skills. Through years of program experience with difficult-to-serve populations, we have learned that these youth already have deeply entrepreneurial tendencies. By focusing those instincts through the lens of professional experience and training that meets them where they are, we unleash their talents and provide them with the skills to enter high-demand career paths with incomes that allow them to escape generational cycles of poverty.

Project Description

Our program is designed to break the pattern of poverty within Rancho Cordova's low-income communities by providing underserved youth career opportunities that promote long-term economic growth, while also supporting local small businesses in the transition to a digital world. By leveraging a model successfully piloted under a grant from the City of Sacramento, we will match 6-12 youth with local small businesses in order to create positive outcomes for both groups and to expand on the support we began as many Rancho Cordova small businesses are not only in need of content, but brand development for e-commerce . Studio T will provide youth participants 120+ hours of digital marketing curriculum and training, then pair them with small businesses hit hard by the pandemic and still struggling to establish a digital presence. Our participants will utilize digital expertise and innate talents to build online branding and marketing campaigns for up to 6 small businesses in the City of Rancho Cordova. By providing workforce development opportunities for youth and economic development in the form of increased revenue to small businesses, we will enhance Rancho Cordova's community with a leveraged investment that benefits city residents for years to come. Our youth are already experts in the world of digital content. Studies from Pew Research and Common Sense Media show teens spend over 7 hours per day consuming content on screens. Low-income youth spend, on average, two hours more than peers from high-income households. Youth keenly discern the difference between quality content and design that will work and content that will not. This makes them a gold mine for content creators and focus groups for shaping what works online. With the heavy impact of COVID-19

on our youth workforce and our small business community, we seek to enhance youth employment opportunities while helping small businesses reboot, rebrand, and relaunch in the digital community.

Project Team

Tamaira Sandifer, affectionately known as “Miss Tee” by thousands of youth nationwide. Many of the families Miss Tee and her teams serve face poverty, hunger, and a systematic lack of opportunity, she has made it her daily work to include financial education, life and social skills training, and entrepreneurship coupled with real-world skill development and enthusiastic empowerment. As the creator of the distance learning platform-PassToClass.com and Side Hustle Academy, her impact exploded across the country serving 192,000 youth and 7,800 educators nationwide during the pandemic. Sandifer built a Sacramento-based Social Media Production Studio to support local small businesses with digital content support during COVID while training youth apprentices in creative-based entrepreneurism: video production, photography, graphic design, event production (virtually and live), and social media management. She was recently named ‘Woman of the Year’ 2022 by Assembly Member Kevin McCarty and the California Legislative Women’s Caucus, and was also recognized by Forbes Magazine among the inaugural For(bes) The Culture 50 Champions list "Introducing the Black and Brown leaders making the most impact through their capital, creativity, connections and commitment." Amanda Sanchez - Graphic designer, web developer, and content creator who utilizes her 20 years of experience to support the Studio T community as both a vendor and volunteer. As the mother of two aspiring dancers, she recognized the positive impact dance has on youth and was inspired to offer her award-winning skills to help the organization. In 2019, with Sanchez’s help, Studio T conceptualized PasstoClass.com, a distance learning website. Her technical knowledge and sleek aesthetic made it possible for teachers to supplement their P.E. classes with dance. Driven and dedicated, her efforts have enabled thousands of kids to access Studio T’s quality educational content.

Project Goals

- 6-12 Youth complete 24 weeks of digital media and marketing training - 6-12 Youth paired with small business clients - Up to 20 small business clients recruited - Up to 6 small business client projects completed - 80% or more youth participants rate experience as positive in post evaluations

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$39,790.00

Estimated Breakdown of Project Expenditures

Digital Media staff - to manage program $7,800 Executive Director - Lead program trainer $9,500 Equipment rental $1,800 Audio/ Annual Music and Digital Content licensing $1,500 Stipends for youth participants - $250 each $6,000 Facility rental - production studio (modified with COVID Guidelines $7,200 Program Evaluation $1,500 Printing (yard signs, flyers, posters, youth tshirts) & Digital Marketing Material $1,200 Indirect Administration costs $3,290

Matching Funds

Program evaluation expenses and digital subscription costs are matched through volunteer support and Adobe licenses donated totaling a match amount of: $6,930

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$39,790.00

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will also seek funding for technology to expand our computer lab and extend our ability to reach and training youth virtually. As well as, provided on going services to our small businesses who need specific support based on current needs. The goal to to get our small businesses to a place where their sales increase online affording them the additional financial resources to hire our youth to continue services part time.

Project Schedule, Timeliness and Adaptability

Project Schedule

Our project schedule occurs in three phases: Phase 1 - Planning & Recruitment (30-60 days post-award notice) Phase 2 - Youth Training & Development (60-90 days) Phase 3 - Business Campaign Execution & Evaluations (60-90 days) PHASE 1 - PLANNING & RECRUITMENT After the grant award, we will execute initial logistics, contract negotiations, and other miscellaneous items. Our focus for this period will be spreading the word to partner agencies so that youth candidates can be nominated for the program. Within 60 days, we would confirm youth participants and begin the training cohort. PHASE 2 - YOUTH TRAINING & DEVELOPMENT Once youth are nominated and selected, we would begin the training academy program. Participants attend 2-3 hours of live training (initially planned as virtual, in-person when safety allows) and complete 8-10 hours of self-paced content each week. Content outline is below. - Practical Workforce development: Skills assessment testing, leading a team, accountability, Customer service expectations, goal setting. - Branding: Teaching the value and types of brands. Allowing the students to identify different aspects of a brand and discover what makes a brand successful. - Strategy: How to understand if you are winning – Defining campaign goals, objectives and measurements of success. (ie: # of likes, # of sales, # of followers…) How to effectively market the campaign. - Platforms: Understanding social media platforms (FB, IG, SC, TT, YT) and their respective audiences and missions. When and how to use, optimize, algorithms, A/B test, metrics, consumer interaction, formats for images and video, and peak traffic times. - Media Design: Developing eye-catching graphics & engaging video (scripting, graphic design, photo-editing, animation, camera basics, and editing basics) PHASE 3 Youth would be matched with their small business partner, and campaign planning and collaboration would begin. Post Campaign Evaluations

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Flexibility is built into the project at multiple points, for example, an extra 30-day buffer in the month of December. A sample month-by-month schedule is below; however, we are prepared to condense the academy and business project timelines if unexpected time constraints occur. JUNE/JULY 2022 - Award notifications received. Phase 1 begins. SEPTEMBER 2022 - Phase 2 begins, 12 weeks of training for youth participants at 8-12 hours/week JANUARY 2023 - Phase 3 begins, youth participants paired with small business clients. MARCH 31 - Target date for client project completion, followed by two months of additional support for participants. JUNE 1 - All client projects have been completed for 30 days or more, evaluations completed, additional youth coaching concluded.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Side Hustle Academy was built as a COVID response program and operated with our first 75 youth participants in a completely virtual environment. The digital nature of the work makes it possible for youth to work with their matched small business client completely virtually or in person. In addition, they can participate in all live training provided by Studio T via Zoom and our production studio. While we hope to be able to work with these youth and small businesses in person, we are fully prepared to operate remotely.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2410 Fair Oaks Blvd
130
Sacramento, California 95825

Other Physical Addresses (if project/program is at multiple sites)

N/A

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Studio T Arts and Entertainment - Letters of Recommendation-SM.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Tamaira Sandifer

Title

CEO

Submitting As

Non-Profit

Phone

9167607917

Email Address

misstee@studiotdance.com

Organization's Legal Name (if applicable)

Studio T Arts & Entertainment

Mailing Address of Submitter

2410 Fair Oaks Blvd
130
Sacramento, California 95825

Signatory's Name

Ms Tamaira Sandifer

Signatory's Title

CEO

Signatory's Phone

9167607917

Signatory's Email Address

info@studiotdance.com

Signatory's Mailing Address

2701 Del Paso Road
130-119
Sacramento, California 95835

Attach Any Additional Documents Here

Studio T-Program-Overview-2022-sm.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #58

Studio T Arts & Entertainment

Supporting Youth & Educators of all subjects



Through 20+ years of dance and community with area school districts and community-based organizations, churches, and Urban Housing developments, Studio T and the PassToClass platform was created. Our mission is to help youth develop critical creative and life skills through exposure to the arts. To inspire them to maintain a positive academic focus through partnerships with schools in resource starved communities. We seek to train youth to use the arts as an entrepreneurial tool to generate income, creativity, and healing.

Studio T changes the lives of vulnerable youth and their families through the power of the performing arts, culturally-relevant and engaging experiences, and creative entrepreneurship that actually pays young people. Essentially, we transform difficult-to-serve youth who live in low-income, minority communities, into vibrant young leaders who can earn a dollar, pay it forward, and express themselves in positive ways. Sacramentan youth flock to Studio T because it's a place where they can belong, gain hope, and shine joyfully as themselves while gaining upward mobility.

In addition, we run an online learning platform called "Pass to Class" that engages over 192,000 educators across the nation. We bring joy and hope through dance, as well as build self-esteem, creativity, confidence, and an unshakable respect for the arts. Dance is our primary engagement tool-- a culturally relevant way for us to connect with diverse youth-- but we are also a youth development nonprofit. Why? Because when we couple the arts with real-world skill development and enthusiastic empowerment, we witness explosions of academic growth and powerful transformations of entire families. Too many of our families face poverty, hunger, and a systematic lack of opportunity, so our daily work includes financial education, life and social skills training, and entrepreneurship. To that end we provide 3 programs that accompany our dance offerings to divert young people off the streets by giving them skills and a positive social alternative. Our programs are: 1. Side Hustle Academy; 2. PasstoClass.com; and 3. LVL Up Campaign.

Application #58



Miss Tee Joins Groundbreaking Leaders On For(bes) The Culture List of 50 Champions, Including Colin Kaepernick, Issa Rae, Dr. Kizzmekia Corbett, Dwayne Wade, Angel Rich and Amanda Gorman. A Sacramento-based youth advocate, philanthropist and Studio T Arts & Entertainment Founder Tamaira 'Miss Tee' Sandifer has been recognized by Forbes Magazine among the inaugural For(bes) The Culture 50 Champions list "Introducing the Black and Brown leaders making the most impact through their capital, creativity, connections and commitment."

Ms Tee is committed to providing arts to all, including sharing her model with others in the field and with those in a position to influence policy. Tee not only shares her knowledge with current leaders in the field, she is helping develop the next generation of leaders. She trains her young staff to carry on her vision, and not just teach, but become leaders in the communities they touch.

Application #58

Studio T School Day & Afterschool Enrichment Programs

Program	Program Benefits	Pricing
Studio T Dance	Our mission at Studio T Dance is to train champions! We use Performing Arts to develop any one into a more confident and creative version of themselves. Through our dance sessions youth and educators discover new friendships, build self-esteem, and share your talents on many stages. Oh! And also be prepared to get healthy and sweat! These sessions are also included on the PassToClass.com online learning platform.	**IN PERSON** (1) School Site - $1,200 up to 30 students for Per month 1 weekly session *Multi Class / District Discounts available.*
PassToClass.com	PassToClass.com is an On Demand platform that offers students and educators 100+ hours of content to teach you anything from dance, media production, to starting your own side hustle. • New videos added weekly. Includes dance instruction, SEL focused education, teamwork/small group games using dance challenges. • Access to hundreds of on-demand instructional videos • One weekly Motivational Video to address social and emotional wellness for students, educators, and parents - Shareable • It houses a video version of all of our programs from dance to side hustle to family management	Unlimited Access classroom accounts starting at $599/year ***See Program Overview & District pricing starting on Page 5.***

Application #58

Side Hustle Academy	Youth entrepreneurship training and practical advice to help anyone get started in creating the business of their dreams. Youth learn to make a dollar and pay the training forward. *Get your side hustle on.* • Studio T's Side Hustle academy is an ongoing course in all things entrepreneurship and small business • Access to the weekly SHA podcast hosted by Miss Tee • Learn to monetize your hobbies, skills, and business ideas. • Learn the details of starting and running your very own business(es). These sessions are also included on the PassToClass.com online learning platform.	**Virtual Sessions** (12) 1-hour video modules $1750/school **In Person Sessions** *[Middle and High school-level students & educators]* - $2,900 per class 12 weeks - Up to 30 students
LVL Up Program	Social Media Content Creation, Brand Development, and Creative Campaigning training. *You can LVL UP.* • Studio T's LVL UP is a training program developed to help teachers and students learn what it takes to be a modern creative, manage a brand or influencer page on social media, and make an impactful presence on social media. • Fillable PDFs that follow the teaching content of the program and help students to develop their own brand. • Individual homework assignments reviewed by fellow peers in the program. • Subject topics include graphic design, captions, videography and photography, branding, collaboration, influencer markets, and campaigning procedures. These sessions are also included on the PassToClass.com online learning platform.	**Virtual Sessions** (12) 1-hour video modules $1750/school **In Person Sessions** *[Middle and High school-level students & educators]* - $2,900 per class 12 weeks - Up to 30 students ***On-Demand videos are available on the PassToClass.com platform***

TAKE CONTROL! Workshops Family . Finances . Fun	The Take Control Workshops are created to support balance in our Family, Finance, and Fun for youth and their parents. As a result of this offering, we've seen an explosion in the academic growth and success of our kids and the transformation of entire families. Bring the Take Control Workshops to any campus or grow on your own by subscribing to PassToClass.com to access hundreds of training videos. INSTRUCTIONAL SESSIONS | VIDEOS: • Meal Prep and Meal Planning • Easy Organization for a Busy Family • Summer Fun for the Family • How To Not Go Broke At Christmas | Budgeting and Saving • Preparing Your Holiday Menu - Couponing • Family Get Up and Groove These sessions are also included on the PassToClass.com online learning platform.	**In Person or Zoom Workshops** Costs start at $1,500 per (2-3) Hour Workshop This Plug-In is a collection classes or webinars for students and educators ***On-Demand videos are available on the PassToClass.com platform***

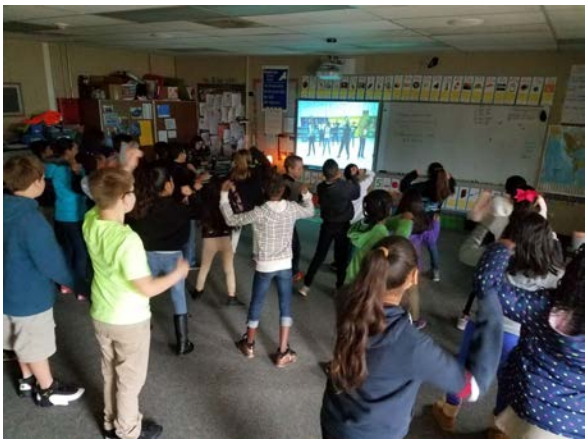
Application #58

PassToClass.com is Ready to use Curriculum

Teachers can use Pass to Class to meet students where they are, right now. It helps students engage their bodies, express their emotions, have a positive association with school, and focus on learning. Simply log in to PassToClass.com and get quick access to 100+ hours of videos. You can share them in Google Classroom, Canvas, and other learning communities. You can also share links to videos or share them right in the classroom on any monitor or smart board.

Programs include:

The Pass To Class online program also meets California state standards for PE and Visual And Performing Arts (VAPA) in a socially and culturally relevant way.



We are very intentional about the creating content that keeps our educators connected to our youth and our youth connected to school. A vital facet of making this connection is cultural and socially relevant content that youth really want. As well as quality content our educators use to stay connected to the cultural climate of their students. From music to movement, you can trust the quality and integrity of each video. ***No parental advisory*** necessary.

We align our work with the VAPA standards for the State of California public schools. We have concentrated our effort for the past 20+ years in developing the following standards through our hip hop dance program. We include foundational hip hop movement that develops motor skills and technical expertise that teaches our students the quality, force, and speed in which they should move. We also teach our students the names of each foundational move, so they are all able to describe, perform, and analyze them.

Our students express themselves while creating choreography, improvisation, and learning choreography without imitating it. We encourage our students to bring their own styles and decisions within the choreography being taught. We also have performances for students to share their growth with their peers and their community. This helps them develop teamwork and a dependence on their peers.

We use aesthetic valuing by having our students give constructive criticism back to one another when performing in front of each other. We package this in a “hype circle” format. We also share dance videos that help them see movement, set design, costuming, and lighting, which helps them with aesthetic choices. Based on past success of Studio T Arts graduates, we know our students can create career paths in performing arts today. We also connect dance with school subjects such as math and audiovisual such as recording Tik Tok's and other videos for social media. They learn how to perform on these platforms and monetize their talent through them.

Application #58

Here are some fun samples educators use in the classroom:

One-Move Grove - Teachers start class off right with some physical movement and students start by mastering popular single moves.

Brain Breaks - Short, rapid, in-seat movements intended to get the child's blood flowing so he/she can refocus during intense lesson time.

Full Dance Routines - Build confidence and express emotions with more extensive programs, and "performances."

Daily Encouragements - Quick encouragement for students AND educators to boost your day, lesson plan, or your classroom's energy. Addresses social and emotional wellness for students, educators, and parents to help propel you to your best self.

Integrate with existing classroom management

This off the shelf curriculum is already available on Canvas or you can leverage the existing Pass-To-Class online platform. Teachers can immediately and easily integrate the program into their existing Google Classroom and Zoom sessions.



SEL Online Learning Program

The *Pass to Class* online program is based on hip-hop dance as a way to connect with students in a culturally relevant way, while also giving them key tools to understand and express their own emotions.

This plug-and-play program provides off the shelf culturally relevant distance learning curriculum with programs that have proven to inspire students and improve their behavior. What starts with dance quickly becomes a way to help teachers engage students in all subjects, with fun activities, brain breaks and confidence builders.

What Educators and Students are Saying

"I didn't know how to express myself. Dance gave me the tools to express myself so I can let go and feel everything and release. Dance is my outlet. It changes the game." - Keke, middle school student

"The platform, content and delivery method has given us a tool that engages students in distance learning. This fun creative and healthy outlet not only exercises their body and mind, it also helps their social emotional wellbeing. We look forward to continuing to expand the use of the platform in our distance learning plan."
-- Matt Perry Ed.D, Assistant Superintendent, Sacramento County Office of Education

"This program has been wildly popular and engages students from all backgrounds. She empowers students, helping them feel a positive connection to school and a sense of self respect for themselves. She has found an outlet for them to be active, healthy, and engaged with students from diverse backgrounds. Students involved in

the program have become positive members of our community. This is the type of innovative program I'm looking for to keep my students engaged and help them persevere through these difficult times."
- Andrea Egan, Principal at C. K. McClatchy High School

"This program meets students where they are and has helped them improve by a full grade. It makes learning creative, engaging and culturally relevant for underserved communities."
–Nathan Street, Ed.D. Greensboro Country Schools

OUR PROGRAMS ARE ACTIVE IN OUR COMMUNITIES

School Districts: Twin Rivers Unified Sacramento City Unified San Diego Unified Elk Grove Unified Sac County Office of Education San Juan Unified	**Cities:** Sacramento, CA Elk Grove, CA North Highlands, CA Antelope, CA Rancho Cordova, CA San Diego, CA Guilford County, NC
Change Agents / Non-profits: Californians For the Arts 4 Spheres Bill Krause Coaching Coco Queendom Creed22 Consulting Education Impact Family Community Church Gorilla Learning Academy Pantry Overflow Patrice Hill Paul Willis Sacramento Helping Hands Unity of Sacramento	**Businesses:** NAWBO Aklosett Black Capitol Blog About It All City of Sacramento - "On Our Streets" project Hello Puddin': Marketing campaign Nritta School of Dance That Kidz Show The Center P413 Productions PBID Manager Popin Pete: Brand development Royal Stage Take Control

OUR PROGRAMS ARE ACTIVE IN OUR COMMUNITIES *(continued)*

Programs:	**Schools:**
Healthy Hearts & Minds	Leataata Floyd Elementary
SAYS	Sequoia Elementary
Bridge Network	Albert Einstein Elementary
City of Refuge	Las Palmas Elementary
My Brother's Keeper	Bowling Green Elementary
Sisterhood Summit	Phoebe Hearst Elementary
The GRID	Washington Elementary
PACE	Genevieve Didion
Sacramento Chinese	Babcock Elementary
Robert Family Development Center	FC Joyce Elementary
Create California	Rosa Parks K-8
	John Cabrillo Elementary
	Nicholas Elementary
	Ethel I Baker Elementary
	Pony Express Elementary
	New Joseph Bonnheim
	Kemble Edward Elementary
	Elder Creek Elementary
	Caesar Chavez
	Sam Brannan Middle
	California Middle
	MLK Middle
	Center High School

Application #58

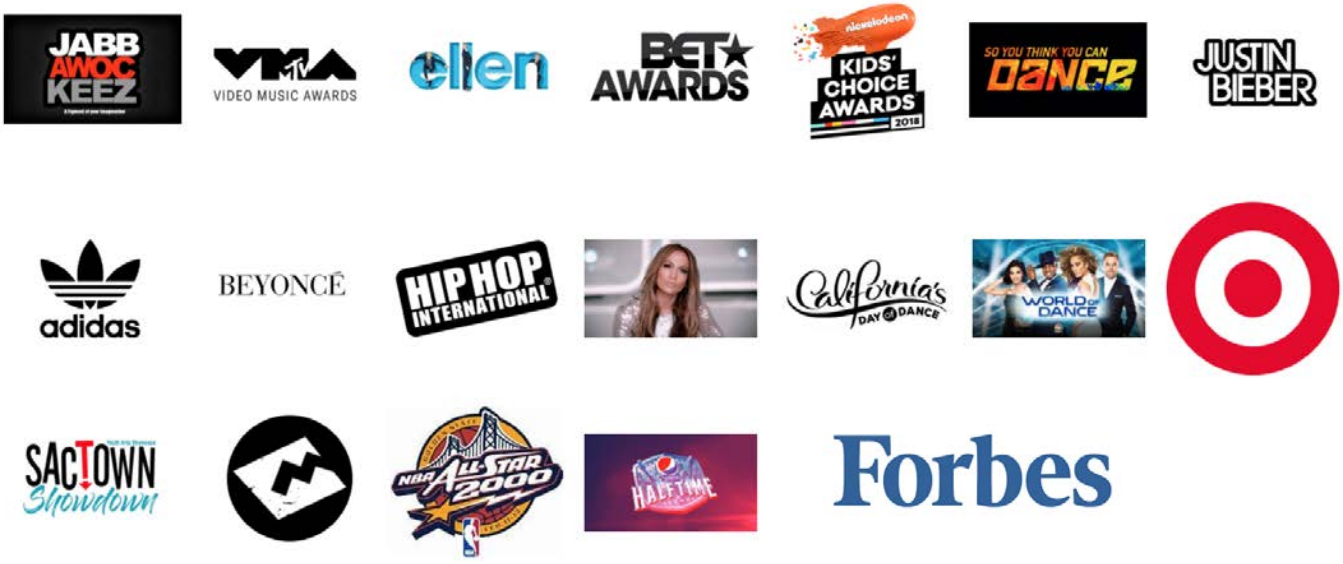
STUDIO T ARTS FAMILY OF PROGRAMS FOR & BY OUR YOUTH

In addition to dance and SEL programs, you will have access to these Studio T Arts programs, events, and community training events too!

Studio T Arts | All things dance	Pass To Class | Online and Distance learning tool for	Creative Business Training for Youth	LVL UP Campaigns For Change
Studio T Content Creation Lab	Family, Finance, and Fun training for youth and parents	Program Development Consulting	Social services through the arts
Statewide Dance Day and Dance Festival	Career Fair and Job Training Block Party for Youth	Performing Arts Competition for Youth in Under-resourced Communities	90s Fresh - 90s themed Dance Concerts and Community Dance Pop Ups

Application #58

Our Graduates
Have Been Seen On



Application #58

City of SACRAMENTO
Convention & Cultural Services

To Whom it May Concern:

There are so many organizations and individuals who are working diligently to help our youth navigate this world we live in. Sometimes one organization stands out above the rest. For Sacramento, that organization is Studio T Arts & Entertainment established by Tamaira Sandifer. Serving more than 5,000 youth in school districts throughout Northern California, Studio T works to instill real life skills, hope and a sense of belonging to her students.

Ms. Tee, as many know her, is a literal powerhouse who has recognized the benefit of dance in the everyday lives of youth who need a creative outlet – and for many – a reason to stay off the streets, out of jail, and to stay alive. She works as a tireless champion in the development of every child to build confidence, character and a conquering spirit that believes anything is possible. What sets Ms. Tee and this organization apart is that through their work, not only have they saved lives, they have created, nurtured, and established the arts leaders of tomorrow Some of her students have moved from her studio to the national stage as some of Hollywood's most sought after dancers. Many, not destined to be professional dancers, have found dance to be an outlet for their emotions. Dance has allowed them the opportunity to process their emotions through movement – and move forward in their lives.

> *"One of the best forms of therapy that we have found is dance. It gives them a way to express themselves. Sometimes they don't know how to say I'm scared. Sometimes they don't know how to say I'm stressed out. Our objective is, if we can get them relieving their anger and stress and pressure this way, you won't find them doing some other unsavory things that are more detrimental than helpful," – Tee Sandifer*

Through this organization Ms. Tee and her team set out to change the course of their lives. Her mission is clear – to impact as many youths as she could, through the arts and dance.

Sincerely,

Application #58

Jody Ulich
City of Sacramento
Director, Convention & Cultural Services

915 I Street
Sacramento, CA 95814

September 3, 2019

To Whom it May Concern,

It is with unmitigated enthusiasm that I write this letter of recommendation for Tamaira “Miss Tee” Sandifer in her effort to seek grant funding to offer free dance instruction to students at schools in our community.

Last school year, Miss Tee sought me out to offer her unique services. Within minutes of our meeting, I realized she was a special person committed to empowering young people to meet their potential through dance. Miss Tee is deeply rooted in our community, having built relationships with students and families in some of Sacramento’s most impoverished areas. While her official role is the Founder and CEO of Studio T Arts and Entertainment / Urban Dance Academy, her role at California Middle School was different - she sought to offer her services to students attending Cal - for free. About 25 Cal students were treated to world class dance instruction every Thursday after school for the entire school year. She took students with varied experience and molded them into a family - a family who could perform like trained skilled dancers.

What Miss Tee brought to Cal was not just dance lessons, she brought community to some of the poorest and most at- risk students in the city. She monitored their academic, social-emotional, and behavioral achievements and struggles. Miss Tee forged relationships with our administrative team, and several teachers on campus to better support the students in her dance class.

Tamaira Sandifer’s resume is impressive - she knows her trade, and is committed to using dance as a vehicle to keep students engaged in school and making positive lifestyle choices. I wholeheartedly support her mission, and hope she can receive the funding needed to continue her services here at Cal Middle, and other local schools.

Sincerely,



Andrea Egan
Principal, California Middle School

Application #58

October 14, 2020

To Whom it May Concern:

I am writing today to endorse the work of Tamaira Sandifer – Miss Tee – and recommend her for this funding opportunity.

Miss Tee has always been a true community leader and advocate. She developed and implemented the National Day of Dance in Sacramento, at a time when no one thought that a dance event at a major municipal venue was a plausible idea. She has proved the naysayers wrong and carried it out brilliantly, shedding a light on the diverse dance in our community as well as bringing dance to forefront of our cultural landscape.

Last year, Miss Tee was a featured presenter and performer at the first Sacramento Creativity Summit for high school students, a full day of creative workshops, performances and presentations for 300 students from 10 school, held at the newly opened Sofia Theatre in Sacramento. Her presentation was mesmerizing, as she captured the essence of creativity for theater full of youth, inspiring them not to give up on their dreams, lose confidence in their innate creativity, or believe that their circumstances or environments limit who they are. And, of course, her teaching and performance were evidence of the message.

And, I am honored to say that I have had the pleasure of working with Miss Tee during the past six months, while COVID-19 has severely hit our community and made difficult and inequitable systems for youth more visible for all to see. We've sat on committees together and discussed and planned the work that needs to be done. And she is in the forefront of this work. She and the amazing artists and youth she works with have jumped in with resources, positive messaging, support for those in need and teaching – both in person where students gather for much needed supplies and services and virtually, with a variety of online classes and resources demonstrating her powerful teaching and dance skills. Her work stands up without her activism – yet her activism magnifies the reach of her work.

Tee is always the first to say, "what can I do?" when art and messaging is needed. And it has never been needed more than now.

I am happy to help her work in any way I can and to recommend her for support.

Sincerely,

Melissa Cirone
Programs Manager, Arts & Community Programs
Sacramento Office of Arts & Culture

Application #58

BOARD OF SUPERVISORS
COUNTY OF SACRAMENTO
700 H STREET, SUITE 2450 • SACRAMENTO, CA 95814

PHIL SERNA
SUPERVISOR, FIRST DISTRICT
Telephone (916) 874-5485
FAX (916) 874-7593
E-Mail: sernap@saccounty.net

October 13, 2016

Re: 3 Point 0 Inc., dba Studio T Urban Dance Academy

To Whom It May Concern:

I'm pleased to submit this letter of support for 3 Point 0, Inc., dba Studio T Urban Dance Academy. For more than a decade, Tamaira Sandifer, founder and operator of Studio T, has been committed to supporting schools, providing performing arts opportunities and encouraging fitness for children and youth in the Greater Sacramento area. Through Studio T's educational programs, youth achieve artistic and academic success to help prepare them for the future. As a member of the Sacramento County Board of Supervisors representing District 1, I recognize the importance and need for quality after-school programs that offer creative and positive outlets for students. Studio T's dedication to underserved and at-risk children and youth sets them apart.

Please contact me or my staff at 916-874-5485 or SupervisorSerna@saccounty.net should you have any question or require more information.

Respectfully,

Phil Serna
Supervisor, District 1

Application #58

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 6:39 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1537139
IP Address: 98.224.81.59
Submission Date: 03/17/2022 6:38
Survey Time: 46 minutes, 37 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Life! Camera! Action!

Project Synopsis

LCA is a leadership and life skills development program that will use digital video and the art of storytelling to teach Rancho Cordova youth, 12-17 years old to become productive citizens. Partnering with the Rancho Cordova Police Activities League, LCA will be an innovative program that will provide students opportunities to use technical and digital media to explore issues important to them and their community by developing Public Service Announcement from concept to delivery. This program can be done on an individual basis (one on one) or depending on how many students sign up, split into groups of 4-6. For the purpose of the "Project Description," the project is described as "groups of students".

Project Description

1. Brainstorm Issues: As some students may not know what a PSA is, we will show examples of relevant PSA's and discuss with the whole group. Students will then be formed into groups and each group will decide on a PSA they want to make. 2. Deciding on the PSA and Storyboarding: Students sketch how their film will look, frame by frame. Is it a text only PSA, voice over, music, and/or video that they plan to use in their film. Film Office staff will catch any hiccups, for instance if the film is too long, confusing, or if they forgot to cite sources. 3. Research and Plan: Students walk through how to research the subject matter of their PSA as they need to be accurate. At this step students collate any materials they may need such as visual aids, and graphics. Shoot locations are decided as well as equipment needed discussed. 4. Filming the PSA: Students two groups at a time make their PSA. They are instructed on how to use camera equipment, lights, sound and keeping track of time as far as "takes". the PSA and be instructed on the various "takes" needed. Each group will decide as to the on camera person in their group guided by film office staff. 5. Editing/Effects/Music: Students will be shown how to download their footage from the camera memory card in to a computer and introduced to the editing program Final Cut. Each group will edit their film into a 30 second PSA. Music, effects and credits added. . 6. Color Correction and Locking Picture: Students will be guided through the color correction process, a process that colors the film to broadcast quality. Da Vinci program is used for this. Once the students are happy with the PSA, film office staff will instruct them on "picture lock". The PSA is now complete and ready to be shown. The PSA's will be juried and the top three will receive an award, 1/23 place. Film Office will use its connections to have the winning PSA's broadcast on local TV. A screening will be held at the youth center.

Project Team

Charles Lago, Director California Capital Film Office: Will oversee the overall program and supervise Film Office Staff and select invited instructors, and liaise with PAL personnel. Rafael Portillo, Lead Editor and Camera Operator at California Capital Film Office: Lead instructor in the filming process. Will instruct students on camera use and will oversee the editing process of all the PSA's. Jose Ruiz, Production Manager, California Capital Film Office: Will work closely with students in the development of their PSA's. Will guide them through the pre-planning, producing and prodcution process. Bryce Nicastro, Graphics and Design California Cap;ital Film Offcie: Will work with students to develop story boards, come up with graphic images to use in PSA and help with music selection. Tina Aldama, PAL Program Director: Will oversee the program on behalf of the Rancho Cordova Police Activitioes Leauge. Officer Jose De La Cruz, Youth Services Officer Rancho Cordova Police Dept: Will oversee and supervise the students selected for the program.

Project Goals

- Teach students about different types of cameras, microphones, editing software and lighting equipment. This skills are invaluable for student filmmakers, cinematographers or to generally work in film. - In the age of social media, teach students how to make impactful and meaningful video presentations. - Teach Students Team Work – Learning film is a great way for students to learn to work well with each other and apply dedication to a project. - Bring awareness to social issues that are important to young people today. Developing a PSA is a great way for students to learn about a subject as they research their PSA and spread a message to peers and adults. - Teach the students to have their work examined by experts and receive criticism - Teach students something new without prior knowledge and experience, and how to think constructively about social issues that are important to them. - Get students interested in the arts, primarily through film which will lead to other areas of creativity. - Teach students to see other points of view through each other's PSA's. - Teach students to collaborate with each other, dividing tasks, and manage tasks and deadlines. - Teach the students how to set goals and what is required to achieve those goals

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$26,395.00

Estimated Breakdown of Project Expenditures

SUPPORT STAFF - $15,000.00 BLACK MAGIC POCKET CINEMA CAMERA X 3 - $3,885.00 TASCAM D1 - 100 LAVALIER BODY PACKS X 4 - $1,110.00 NW-088 BOOM POLE AND MIC X 2 - $2,800.00 EDITING DESKTOP COMPUTERS X 2 - $3,300.00 ADOBE PREMIERE EDITING SUITE - $300.00

Matching Funds

FULL CINEMA LIGHTING PACK - $6.000.00 (FILM OFFICE) DA VINCI MOVIE COLORING PROGRAM - $750.00 ROBIKON 24, 35, 50, 85 MM CIEN LENSES FOR BLACK MAGIC CINE - $2,500.00 ALL THE ABOVE WILL BE SUPPLIED FOR THE PROGRAM BY THE CALIFORNIA CAPITAL FILM OFFICE

Include Any Other Funding Contributions

NONE

Ongoing Operations and Maintenance Costs (if applicable)

NONE

Total Community Enhancement & Investment Funds Requested

$26,395.00

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

NONE

Project Schedule, Timeliness and Adaptability

Project Schedule

PAL's preference is the program is held at the new Rancho Cordova Youth Center opening August 2022. We will start as soon as we are able to at the youth center. We anticipate this will be a bi-weekly program for 3-4 months and competent by February 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

As soon as the youth center is completed, PAL will have already put out the word about this program through their sources. They are optimistic there will be a strong response. We plan to begin the program in late August/early September. Will will plan on a class every two weeks and we anticipate this program will take 4 months (9 classes) to complete. Once the classes and PSA's are filmed and locked, we will plan for a community screening at the youth center where all PSA's will be screened with filmmakers introduced for a Q&A about the process of making their PSA's. At this event prizes will be awarded (hopefully by the Police Chief with Mayor in attendance) The program will be completed by February 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. This program could be done over zoom if need be. Not preferred but possible.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Rancho Cordova Youth Center
10455 Investment Circle
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Some of the classes may take place at: The California Capital Film Office 9845 Horn Road, Suite 100, CA 95827

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Charles Lago

Title

Application #59

Director, California Capital Film Office

Submitting As

Non-Profit

Phone

9167062000

Email Address

clago@calcaparts.org

Organization's Legal Name (if applicable)

California Capital Film Office, Corp

Mailing Address of Submitter

9845 Horn Road
Suite 100
Sacramento, CA 95827

Signatory's Name

Mr Charles Lago

Signatory's Title

Charles Lago

Signatory's Phone

3106634226

Signatory's Email Address

clago@dtlaent.com

Signatory's Mailing Address

9845 Horn Road
Suite 100
Sacramento, CA 95827

Attach Any Additional Documents Here

Film Office Support Letter (1).pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

RANCHO CORDOVA POLICE ACTIVITIES LEAGUE

www.rcpdPAL.org

Sergeant R. Merideth
President

2897 Kilgore Road
Rancho Cordova, CA 95670
916.875.9627 - Main
rcpdpal@ranchocordovapd.com - Email

March 17, 2022

City of Rancho Cordova
Community Enhancement and Investment Fund
Rancho Cordova City Hall
2729 Prospect Park Drive
Rancho Cordova, Ca 95670

To whom it may concern,

The Rancho Cordova Police Activities League (PAL) is excited to partner with the California Capital Film Office to bring Life! Camera! Action! to Rancho Cordova. PAL will work in conjunction with the California Capital Film Office to help youth to develop form scratch PSA's that are important to them. California Capital Film Office staff will instruct kids how to develop PSA's from step one to completion, provide all the equipment and instruction needed, and help them bring their PSA's to broadcast level and will do this at the future Rancho Cordova Youth Center. PAL will introduce the kids who will participate in the program, work with film staff at the Youth Center and help facilitate the classes and events.

PAL always encourages its young participants to focus on success in school and community service. By partnering with the California Capital Film Office we have another way to promote civic engagement, community service, and bring light to issues that matter to our youth.

Thank you for considering the California Capital Film Office's application for funding to support of collaborative efforts.

Sincerely,

Officer Jose De La Cruz #1034
Rancho Cordova Police Department
PAL Executive Director

Application #59

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 7:14 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537191
IP Address:	155.190.3.6
Submission Date:	03/17/2022 7:14
Survey Time:	11 minutes, 46 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Robotics Training Program for City Resident Students

Project Synopsis

The proposed Robotics Program will help elementary and middle school students (Grades 4 through 8) of Rancho Cordova City in designing and coding the robots to perform specialized real world operations.

Project Description

The program makes the students engage in STEAM subjects, hones their computer programming skills and creativity, and develops engineering skills, leadership skills and presentation skills. These skills will also help students in excelling their regular academics and make them successful engineers in cutting edge career spaces such as aerospace engineering, computer science, medicine, and automotive manufacturing. The proposed Robotics Program is the continuation of previous calendar year and will include students from grades 4 and 5. The program will also incorporate additional components including python coding classes and stress management training. The first year program students will have entry level training while the second year program students will have more in-depth training including maze follower. The program will continue to use previous year's robotic gear for current year training. The program will also facilitate team building activities through youth empowerment and stress-management program for students. As students learn to reduce stress and manage emotions through interactive fun games and activities, they gain ability to build more positive relationships with their peers, parents and coaches and can be great team members. The students also gain the ability to focus and perform well academically at school. The project directly meets the City's Community Enhancement Funds guidelines and selection criteria in the following ways: • Children and Youth – This program specifically focuses on the future of our community youth. • Education – The program inspires young people to be science and technology leaders and provide an opportunity for students to learn engineering, leadership, and presentation skills through a unique and appealing platform. • Community Pride –The youth will have an opportunity to represent the City of Rancho Cordova in local Robotics Competitions.

Project Team

Suvidha International Foundation, A California Registered non-profit, plans to help the students with multiple educational activities including providing robotic training to talented and underprivileged Rancho Cordova Elementary and Middle Schools' students. Suvidha International Foundation is responsible for development and delivery of this project. Sudheer Pandinchara, local robotics

expert and organizer and Bhaskar Vempati, President of Suvidha International Foundation will develop and implement the project. The short bios of project team projects including prior experience are listed below Sudheer Padinchara • MS Degree in Computer Science • Coach for FIRST (For Inspiration and Recognition of Science and Technology) LEGO League competition for past 8 years • Coached teams ranging from Kindergarten, Elementary, Middle and High School students. • Created several coaches for past five years. • Mentored a team to an international robotics competition in Turkey. • Taught LEGO Robotics to public via the Sacramento Public Library branch, Orangevale. • Piloted a virtual robotics summer program for Natomas Unified Middle School. Bhaskar Vempati • Ph.D in Mechanical Engineering • Coach for FIRST (For Inspiration and Recognition of Science and Technology) LEGO League for years in 2018 and 2019. • Coached teams ranging from Elementary students. • Mentored a team to championship qualifiers in year 2019. • Helped team win a project innovation award in 2019. Robotic Coaches • Adult and youth coaches from local Robotics expert teams mentor the program teams throughout the process.

Project Goals

The project allows students to: 1) Learn the robotics and designing 2) Learn python programming language and coding skills 3) Enhance the engineering and research skills by designing and coding robots to perform specialized activities. 4) Learn stress-management techniques to handle their workload and emotions 5) Develop leadership and teamwork skills 6) Develop critical thinking, problem solving and management skills 7) Improve the communication skills 8) Learn effective presentation skills In proposed program, the students learning python coding, developing collaborative and leadership skills and be able to design and code robots to carry multiple special automated operations involved in real world activities including line following, maze following and sumobot. The students/ robotics designs account for real-world challenges such as the wear and tear of robotic parts and battery power in designing the repeated automated operations. The students will demonstrate their robotic design and coding skills at the competition scheduled at the end of the program. The skills learned through the program will engage the students in STEAM program and help them excel in their academics and place them on a straight road to becoming successful future engineers.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$20,100

Estimated Breakdown of Project Expenditures

Description Sub Total 1 Spike Prime Lego Kits & Expansion Sets (New) $6,000.00 2 Spike Prime Lego Kits & Expansion Sets (Existing) $0.00 3 Additional Sensors & Lego Parts $1,250.00 4 Awards and Trophies $2,500.00 Fastest Line Follower (Grades 4-5) Strongest Sumobot (Grades 4-5) Champion Team (Grades 4-5) Maze Solving (Grades 6-8) Strongest Sumobot (Grades 6-8) Champion Team (Grades 6-8) Four Consolation Prizes 5 Tables $800 6 Robotics Mats for Teams $1,250 7 E-certificate to all the teams $0 8 Python Coding Training $1,000 9 Youth Empowerment Program (Half) $1,500 10 Workshop Supplies $400.00 11 Event Day Venue Rental Costs (City Hall) $0 12 Event Day Electronic Equipment (City Hall) $0 13 Event Day Supplies $500.00 14 Zoom Subscription (Jan - May) $400.00 15 Volunteer T-shirts $500.00 16 Event Day Food for Volunteers $1,000.00 17 Insurance $500.00 Total Funds from City $17,600.00 18 Suvidha International Foundation $2,500.00 Total Project Funds from City $20,100.00

Matching Funds

N/A

Include Any Other Funding Contributions

$2,500 from Suvidha International Foundation

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$17,600

Is this a multi-year request?

Yes

Number of Years

4

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

The program is not viable as a single year project as it can only help us in training limited students. The program will include new students every year and previous students will go through incremental expert training in successive four years. After five years program, students will be an expert robotic design and coders and can pursue their careers on their own afterwards. The program will use the previous program years' robotics gear and equipment in future years.

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

June 30, 2025

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will also aim to get funding from other local sponsors.

Project Schedule, Timeliness and Adaptability

Project Schedule

The 2022-2023 program will start in November 2023 and end in May 2023 with a competition. Student Selection: Nov 2022 - Jan 2023 Kick-Off Meeting: Jan 2023 Python Coding: Feb 2023 Youth Empowerment Training: Feb 2023 Robotics Design and Coding: Mar 2023 Scrimmage: May 2023 Competition: May 2023

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The 2022-2023 program will start in November 2023 and end in May 2023 with a competition. We select students from Nov 2022 to January 2022. Then we will have a kick-off meeting in January 2023. We will assign adult and youth mentors from local robotic experts to each of the teams. These coaches and our organization will guide the student teams on a weekly basis. We will organize scrimmage (trail run) two weeks before the competition. The final competition will be held on May 20, 2023 at City Hall.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Our program involves mostly virtual classes and few in-person team sessions at team's designated meeting places and final competition. However, if COVID-19 health orders prevent us to meet in-person, we will simply redesign our team meetings and competition and conduct them virtually. Our project coach, Sudheer Padinchara successfully conducted virtual robotic classes and competitions in 2020 and 2021. His expertise will assist us in conducting 100% virtual classes if Sacramento County Health Orders do not permit us to meet in-person.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

599 Broken Top Ct
Folsom, CA 95630

Other Physical Addresses (if project/program is at multiple sites)

The program will happen over zoom. The scrimmage and final competition will be scheduled at City Hall, Rancho Cordova

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Bhaskar Vempati

Title

President

Submitting As

Non-Profit

Phone

9163909945

Email Address

bhaskarvempati@gmail.com

Organization's Legal Name (if applicable)

Suvidha International Foundation

Mailing Address of Submitter

599 Broken Top Ct
Folsom, CA 95630

Signatory's Name

President Bhaskar Vempati

Signatory's Title

President

Signatory's Phone

9163909945

Signatory's Email Address

bhaskarvempati@gmail.com

Signatory's Mailing Address

599 Broken Top Ct
Folsom, CA 95630

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #60

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 8:58 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537304
IP Address:	155.190.2.32
Submission Date:	03/17/2022 8:58
Survey Time:	31 minutes, 33 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Speech & Debate Programs

Project Synopsis

The proposed educational Program will help elementary and middle school students and resident students (grades 4 through 8) of Rancho Cordova City with speech and debate training sessions.

Project Description

The speech and debate programs will provide the students with valuable skills that they will use for the rest of their lives, including but not limited to researching, writing, critical thinking, organization, persuasion, conflict resolution and communication proficiency. These educational tools are necessary in every part of our lives and successfully mastering them at a young age will allow the participants to utilize them in their day-to-day activities. Whether it is online or in person, the skills (researching, writing, critical thinking, organization, persuasion, conflict resolution and communication) will help them articulate their opinions in a constructive format, delivering their thoughts in a clear and concise manner. They will also communicate with peers their own age, develop a level of confidence in themselves, and leave a positive impression upon the people around them. The program will engage the students and the skills acquired will help them excel in their academics and place them on a straight path to becoming successful future leaders in politics, business, law, academics, entertainment, and many other fields. The speech program will provide a foundation for various types of speech, categorized as oratorical, persuasive, impromptu, dramatic, humorous, and poetic. The programs attendees will be encouraged to focus their training in their preferred speech category. The introductory training classes will include demo sessions for each of the speech categories to help familiarize the students with their choices. The debate program will provide an overview of different styles of debate, categorized as Parliamentary, Public Forum, Lincoln-Douglas, Spontaneous Argumentation, Team Policy, and Cross-Examination. The elementary and middle school student program attendees will receive more comprehensive training in the debate category of their choice.

Project Team

Suvidha International Foundation, a California registered non-profit, plans to help the Rancho Cordova Elementary and Middle Schools' students with speech and debate skills. Suvidha International Foundation is responsible for the development and delivery of this program. Bhaskar Vempati, President of Suvidha International Foundation and Saritha Jasthi, Suvidha International Foundation

Volunteer will develop and implement the project. A youth team of ten-member expert speech and debate coaches will support the program. These youth coaches have a wealth of expertise to share with their younger peers, having won competitions at regional, state, and national levels. Our team has conducted several speech and debate programs in Greater Sacramento area for the past two years and community spirit has flourished amongst the participants, as demonstrated by their eagerness to assist the next generation in achieving similar successes. Short bios of project team leads (including prior experience), are listed below. Saritha Jasthi • MS Degree in Computer Science • Coached teams ranging from Elementary, Middle and High School students. • Mentored a team to conduct similar events for the past four years. • Served as a judge for several local speech and debate competitions Bhaskar Vempati • Ph.D in Mechanical Engineering • Organized several speech and debate competitions in the Greater Sacramento area • Mentored/mentoring several of the youth coaches • Acted as the judge for multiple local speech and debate competitions Youth Coaches • A ten-member team of local expert speech and debate coaches who won competitions at county level, state level and national level are available to support the speech and debate program. Judges • Several local speech and debate adepts will lend their expertise to the competition by way of their judging skills.

Project Goals

The project allows students to develop effective 1) Researching capabilities 2) Critical thinking dexterity 3) Organizational competence 4) Team building skills 5) Writing proficiency 6) Use of body gestures (eye contact, stance, and expressions) 7) Speech delivery virtuosity (proper speed, tone, diction, language, clarity, and fluency) 8) Conflict resolution adroitness According to the Stanford article, “The Power of Speech & Debate Education,” (https://snfi.stanford.edu/skills), there are lifetime benefits for students who commit to speech and debate programs. Forbes published an article titled “How to Find the Millennials Who Will Lead Your Company,” (https://www.forbes.com/sites/robertsher/2014/03/02/how-to-find-the-millennials-who-will-lead-your-company/?sh=3d697bc37178), which suggests that the leaders of the future are ex-debaters. As that article notes, debate teaches “how to persuade, how to present clearly, and how to connect with an audience,” exactly the skills businesses look for in their young employees. “You’ll find ex-debaters in every area of public life, from Bruce Springsteen to Oprah Winfrey to Nelson Mandela. 60% of Congressional representatives participated in debate, as well as at least a third of the Supreme Court. There are ex-debaters excelling in business, law, politics, academia, and many other fields.” The proposed program helps the students learn effective communication, collaborative, and leadership skills. The student program attendees will demonstrate their newly garnered skills at the competition scheduled at the end of the program. The educational tools gained through the program will engage the students, help them excel in their academics and place them on a straight path to becoming successful future leaders in several prominent areas including business, law, politics, academia, entertainment, and media.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$7500

Estimated Breakdown of Project Expenditures

Zoom Link (for weekly virtual sessions, one for each of the Speech & Debate programs) $500 Awards and Trophies (Speech) $1,000 Awards and Trophies (Debate) $1,000 Student Coach Scholarships (Speech) $1,500 Student Coach Scholarships (Debate) $1,500 Event Day Venue Rental Costs (City Hall) $0 Event Day Electronic Equipment (City Hall) $0 Event Day Supplies $500 Event Day Food for Volunteers $1,000 Insurance $500 Total Funds $7,500

Matching Funds

N/A

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$7,500

Is this a multi-year request?

Yes

Number of Years

Application #61

5

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

The program is viable as a single year project but it can only help the limited students in first year. If funds are available, the program will be able to train new students every year and make them learned valuable skills listed in the program description

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2026

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will request funding from local sponsors to support additional students in future years

Project Schedule, Timeliness and Adaptability

Project Schedule

The program will start in September 2022 and end in November 2022 with a competition. Speech Program : Student Selection: August 2022 Kick-Off Meeting: September 2022 Weekly Speech Sessions - September 2022 - November 2022 Speech Competition - November 2022 Debate Program: Student Selection: August 2022 Kick-Off Meeting: September 2022 Weekly Debate Sessions - September 2022 - November 2022 Debate Competition - November 2022

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The programs will start in August 2022 and end in November 2022. The programs will enroll students in August 2022. After enrolling students, we will have kick-off calls in first half of September. The weekly speech and debate sessions start in September 3rd week. The weekly sessions will continue till first week of November. The final competition will be held either in November 2nd week or third week. The plan is same for both the speech and debate programs. Our team including Saritha Jasthi, Bhaskar Vempati and youth coaches along with volunteer judges will execute the program as described above plan.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Our project involves virtual classes and in-person competition. However, if COVID-19 health orders prevent us from meeting in-person, we will simply redesign our competition and conduct it over Zoom. Our team, Saritha Jasthi and Bhaskar Vempati successfully conducted several virtual speech and debate programs for the past two years. Our expertise gained from past experience will assist us in conducting 100% virtual classes including competitions if Sacramento County Health Orders do not permit us to meet in-person

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

599 Broken Top CT
Folsom, CA 95630

Other Physical Addresses (if project/program is at multiple sites)

The program happens over zoom sessions. The final speech and debate competitions will be held at City Hall to save venue costs.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Bhaskar Vempati

Title

President

Submitting As

Non-Profit

Phone

9163909945

Email Address

bhaskarvempati@gmail.com

Organization's Legal Name (if applicable)

Suvidha International Foundation

Mailing Address of Submitter

599 Broken Top CT
Folsom, CA 95630

Signatory's Name

President Bhaskar Vempati

Signatory's Title

President

Signatory's Phone

9163909945

Signatory's Email Address

bhaskarvempati@gmail.com

Signatory's Mailing Address

599 Broken Top CT
Folsom, CA 95630

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #61

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 12:07 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537383
IP Address:	73.185.111.80
Submission Date:	03/18/2022 12:06
Survey Time:	25 minutes, 28 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Falkon Academy Competitive Robotics

Project Synopsis

The aim of this project is to build competitive VEX Robotics and FTW Drones Teams for kids from ages 9yrs to 15yrs. Rancho Cordova, RiverView Stem Academy elementary school has VEX robotics as part of STEM curriculum. But there no opportunities in the community to go competitive for middle and high-school. Falkon Academy would like to fill that gap.

Project Description

The aim of this project is to build competitive VEX Robotics and FTW Drones Teams with kids from ages 9yrs to 15yrs old. These teams will build VEX Robots and FTW Drones and compete in regional and hopefully state and national level. Rancho Cordova, RiverView Stem Academy elementary school has VEX robotics as part of STEM curriculum. But after the kids move out of Riverview to Middle school and then to high school there is no VEX robotics programs available in the community. Falkon academy would like to help fill this gap. We want to build competitive teams and take them to state and national level. (It should be noted that these competitions are very competitive, around 60,000 kids compete national level. So winning is not guaranteed). But Falkon can guarantee that kids will learn lot of new things that are not taught in typical school curriculum. Falkon has developed custom curriculum to teach kids with lots of examples. We want to develop their own pain-point identification through observation and come up with their own unique solutions. This is how startup's are built. And this is how new products are developed. (https://medium.com/@gojilabs/a-startups-guide-to-product-management-understanding-customer-pain-points-33b431ff2992). With out this mindset and there would not be products like iPhone, Impossible Burgers, Tesla Cars and many other innovative products. VEX Robotics Description: The VEX Robotics Design System, which was created by Innovation First, Inc., is recognized as a leading classroom robotics platform. It has been designed to nurture creative advancement in robotics and knowledge of science, technology, engineering, and math (STEM) education. It could be compared to Lego Robotics. But cheaper. The added advantage of VEX robotics is that its being used in Riverview STEM. I would look at it as another avenue for kids to learn robotics and compete past elementary school. VEX Robotics has primarily two categories. VEX IQ and VEX V5.

Project Team

Application #62

Falkon Academy Organization Name Some of the key members are: Ashwin Thirunahari Director/Coach Veronica Griffin Coach Ryan Vermillion Area Manager Ashwin Thirunahari has started offering classes and building teams. And he already has two teams from Folsom. He was able to build this team without any marketing. Just talking to few friends. This shows there is big interest in the community. He is running his class in his garage Ashwin Thirunahari has Masters in Electrical Engineering. And has patents on drone technology. Veronica Griffin has been coaching VEX IQ Teams, and this team has already won State Championship and selected for World. She is running her class from garage. Ryan Vermillion is Area Manager for Skyhawks Sports programs. He runs 100 programs for 3000kids per year throughout Sacramento area.

Project Goals

June-July 2022 Start Marketing to Community/parents for team formation and Build Interest July 2022 Start initial Classes – if possible Order Kits This is last opportunity to exit the proposal. Once kits are ordered they cannot be returned. But they can be sold atleast ¾price or donate to schools August – September Build at least 5 teams. With 5 members each. Two teams will compete in VEX IQ. Two teams will compete in VEX V5. One team will compete in Drones. September Start Training October Attend at least one competition Nov – Feb Attend 4 -5 competitions Refine the robots over the period March Attend State competition if selected. April Attend Nationals if selected.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

Various Options: $10,928 to $104,914. A Good Program will be $23,914

Estimated Breakdown of Project Expenditures

1) Required Kits Kit Name Cost 2 VEX V5 Competition Kit ($1899 each) $3798 2 VEX IQ Competition Kit ($650 each) $1300 Drone Kit (Around $2000) $2000 1 VEX V5 Game Pad. $500 each $500 1 VEX V5 Perimeter. $799 each $799 1 VEX V5 Tile Set. $249 set $249 1 VEX IQ Pitching Field. $119 each $119 1 VEX IQ Perimeter $163 each $163 Special Parts – Pneumatics kits, gears, wheels etc. $1800 Shipping $200 Total $10,928 2) Enhanced Learning Kits - Optional. The required kits above, will provide competition graded parts. But its not enough for every kid to learn the basics. Overtime they will all learn. But at Falkon Academy we like to give every kid a kit for 3 months. So they can really understand how every thing works. Really build the expertise. These classroom kits are great value add. Also using the classroom kits, kids can build prototypes and a spare robot for competitions in case their main robot falls apart. Having this kits will also address “Adaptability” Concerns. We will be able to distribute the kits to take home, so we can run the program over Zoom. Kit Name - Nice to have kits 1 VEX V5 Classroom bundle $7988 – Nice to have, for enhanced learning experience $7988 1 VEX IQ Classroom bundle $4998 – Nice to have, for enhanced learning experience $4998 Total $12,986 3) Cost of Coaching: $80 per kid/per month for 8 months in a year. $16,000 4) Miscellaneous Expenses: $5,000 This covers, Competition Registrations, Snacks, Insurance, Internet, projectors, etc. 5) External Rental Space. $12/sft/year (Rancho Cordova): $60,000 A dedicated space is highly recommended. But not essential. If the program is not done at a central dedicated space, it would have to be run at parent-volunteer garage space. If the program is done at a school Site, then this cost can be waived.

Matching Funds

N/A

Include Any Other Funding Contributions

We may seek sponsorship of competitive teams from other local companies, restaurants. This is only possible after we have some teams that start winning. We may be able to offer after school enrichment camps to raise some funds.

Ongoing Operations and Maintenance Costs (if applicable)

The equipment will last 3years. After which they need to be replaced. There will be lost and broken equipment that need to be replaced. This may cost about $3000/year. We plan to raise our own funds to cover this expense.

Total Community Enhancement & Investment Funds Requested

Provided 4 options above. Our request is for Option B, Option C or Option D.

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

Application #62

June 30, 2023.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

We may seek sponsorship of competitive teams from other local companies, restaurants. This is only possible after we have some teams that start winning. We may be able to offer after school enrichment camps to raise some funds.

Project Schedule, Timeliness and Adaptability

Project Schedule

June-July 2022 Start Marketing to Community/parents for team formation and Build Interest July 2022 Start initial Classes – if possible Order Kits This is last opportunity to exit the proposal. Once kits are ordered they cannot be returned. But they can be sold atleast ¾price or donate to schools August – September Build at least 5 teams. With 5 members each. Two teams will compete in VEX IQ. Two teams will compete in VEX V5. One team will compete in Drones. September Start Training October Attend at least one competition Nov – Feb Attend 4 -5 competitions Refine the robots over the period March Attend State competition if selected. April Attend Nationals if selected.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This project need to completed by Apr 30, 2023. Thats when world competitions end.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Although Robotics Programs are better experienced at a central location in a classroom setting. But we can still run the programs virtually. We have to use “Enhanced Learning Kits” and distribute to kids as take home kits. We can run Virtual Reality Robotics Programs, and also compete in virtual world. This is another great learning experience. This builds a different set of programming skills and is very innovative.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

W.E. Mitchell Middle School
2100 Zinfandel Drive
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

If the project does not become viable at the school site, then we will run the program at parent-volunteer Garage space. Or we can rent a space outside

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Application #62

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Ashwin Thirunahari

Title

Director

Submitting As

Other

Phone

9162211123

Email Address

ashwin@skyhawks.com

Organization's Legal Name (if applicable)

Falkon Academy

Mailing Address of Submitter

1992 Larkhall Cir.
Folsom, CA 95630

Signatory's Name

Ashwin Thirunahari

Signatory's Title

Director

Signatory's Phone

9162211123

Signatory's Email Address

ashwin@skyhawks.com

Signatory's Mailing Address

1992 Larkhall Cir.
Folsom, CA 95630

Attach Any Additional Documents Here

Falkon_Robotics Proposal.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #62

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 GRANT APPLICATION
COMMUNITY ENHANCEMENT & INVESTMENT FUND

"Lets make Rancho Cordova hub for Robotics and Hi Tech"

Project Name : Falkon Academy Competitive Robotics

Contact: Ashwin Thirunahari

Phone Number: 916 221 1123

Email: ashwin@skyhawks.com

Project Synopsis: The aim of this project is to build competitive VEX Robotics and FTW Drones Teams for kids from ages 9yrs to 15yrs. Rancho Cordova, RiverView Stem Academy elementary school has VEX robotics as part of STEM curriculum. But there no opportunities in the community to go competitive for middle and high-school. Falkon Academy would like to fill that gap.

Application #62

Project Description: The aim of this project is to build competitive VEX Robotics and FTW Drones Teams with kids from ages 9yrs to 15yrs old. These teams will build VEX Robots and FTW Drones and compete in regional and hopefully state and national level. Rancho Cordova, RiverView Stem Academy elementary school has VEX robotics as part of STEM curriculum. But after the kids move out of Riverview to Middle school and then to high school there is no VEX robotics programs available in the community. Falkon academy would like to help fill this gap. We want to build competitive teams and take them to state and national level. (It should be noted that these competitions are very competitive, around 60,000 kids compete national level. So winning is not guaranteed). But Falkon can guarantee that kids will learn lot of new things that are not taught in typical school curriculum. Falkon has developed custom curriculum to teach kids with lots of examples. We want to develop their own pain-point identification through observation and come up with their own unique solutions. This is how startup's are built. And this is how new products are developed. (https://medium.com/@gojilabs/a-startups-guide-to-product-management-understanding-customer-pain-points-33b431ff2992). With out this mindset and there would not be products like iPhone, Impossible Burgers, Tesla Cars and many other innovative products.

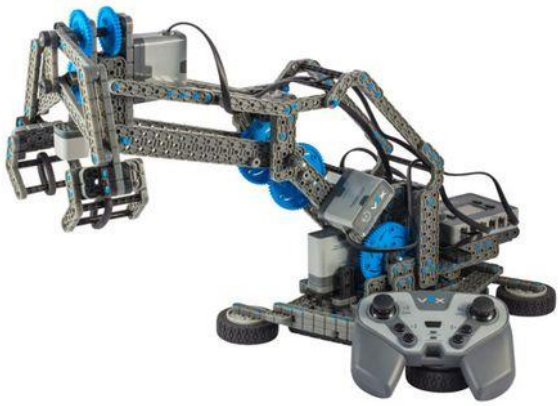
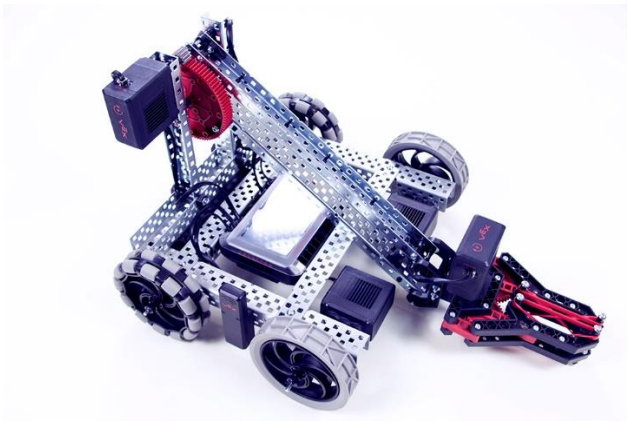
VEX Robotics Description: The VEX Robotics Design System, which was created by Innovation First, Inc., is recognized as **a leading classroom robotics platform**. It has been designed to nurture creative advancement in robotics and knowledge of science, technology, engineering, and math (STEM) education. It could be compared to Lego Robotics. But cheaper. The added advantage of VEX robotics is that its being used in Riverview STEM. I would look at it as another avenue for kids to learn robotics and compete past elementary school.

VEX Robotics has primarily two categories. VEX IQ and VEX V5.

At any of the VEX competitions, the representation from Sacramento is very minimal. Most teams are from Bayarea, Davis, Modesto, Stockton. There are only couple of teams from Placer and Natomas. Whereas Rancho Cordova and Folsom has only couple of teams in VEX IQ category. **None** from VEX V5 category.

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Below is description of different categories.

	**VEX IQ** is a snap-together **robotics** system, making it fast and easy to build an endless variety of robots. Watch code come alive on a physical robot and apply key STEM skills. Organized parts storage reduces classroom clutter **IQ** Electronics are Simple, Flexible and Powerful Students can build and change their robots fast. This is for kids from 4th grade to 7th grade.
	**VEX V5**. Invigorating students with a passion for STEM with **robotics**! **VEX V5** represents our fifth generation of education **robotics** systems developed with 20 years of experience using **robotics** to teach STEM principles. **V5** electronics are approachable, flexible and powerful, using state of the art technology to ensure relevant education outcomes. This is for kids 7th grade to 11th grade.
	**FTW** (**For The Win**) Robotics is a STEM-based experiential educational Drones. In this program **Drones** are used as an effective way for students of all ages to explore engineering, computer science, and aviation. This is for kids from 5th grade to 11th grade.

Letter from Riverview STEM Team – Selected for World Championship.

Attached is a letter and a video from some of the kids from River View Stem. After Riverview Stem they became an independent team and now is selected for World Championship.

They want to **continue their passion for robotics** and take it to the next level. But its turning out to be expensive as an independent team. They **plan to be part of Falkon Robotics**, so they will **have access to the community and be able to share costs**. They will also have access to curriculum and facilities.

They expressed their concern that after Riverview STEM there are no avenues for the kids besides being an independent team.

Video from the Riverview STEM Team: https://youtu.be/pinvCAF7b6s

Letter from the Riverview STEM Team is **at the end of the document**. And can also be accessed from: https://docs.google.com/document/d/1KIbh3nFSW-_v2JOhJEk75729cLmOGsFERSgt-69hpxU/edit?usp=sharing

Falkon is funding them through small Scholarship for travel expenses.

Falkon Robotics Project Team:

Falkon Academy	Organization Name

Some of the key members are:

Ashwin Thirunahari	Director/Coach
Veronica Griffin	Coach
Ryan Vermillion	Area Manager

Ashwin Thirunahari has started offering classes and building teams. And he already has two teams from Folsom. He was able to build this team without any marketing. Just talking to few friends. This shows there is big interest in the community. He is running his class in his garage Ashwin Thirunahari has Masters in Electrical Engineering. And has patents on drone technology.

Veronica Griffin has been coaching VEX IQ Teams, and this team has already won State Championship and selected for World. She is running her class from garage.

Ryan Vermillion is Area Manager for Skyhawks Sports programs. He runs 100 programs for 3000kids per year throughout Sacramento area.

Project Goals (Timeline):

June-July 2022	Start Marketing to Community/parents for team formation and Build Interest
July 2022	Start initial Classes – if possible Order Kits **This is last opportunity to exit the proposal. Once kits are ordered they cannot be returned. But they can be sold atleast ¾price or donate to schools**
August – September	Build at least 5 teams. With 5 members each. Two teams will compete in VEX IQ. Two teams will compete in VEX V5. One team will compete in Drones.
September	Start Training
October	Attend at least one competition
Nov – Feb	Attend 4 -5 competitions Refine the robots over the period
March	Attend State competition if selected.
April	Attend Nationals if selected.

Expenses Outline:

1) **Required Kits**

Kit Name	Cost
2 VEX V5 Competition Kit ($1899 each)	$3798
2 VEX IQ Competition Kit ($650 each)	$1300
Drone Kit (Around $2000)	$2000
1 VEX V5 Game Pad. $500 each	$500
1 VEX V5 Perimeter. $799 each	$799
1 VEX V5 Tile Set. $249 set	$249
1 VEX IQ Pitching Field. $119 each	$119

Application #62

1 VEX IQ Perimeter $163 each	$163
Special Parts – Pneumatics kits, gears, wheels etc.	$1800
Shipping	$200
Total	$10,928

2) **Enhanced Learning Kits - Optional.**

The required kits above, will provide competition graded parts. But its not enough for every kid to learn the basics. Overtime they will all learn. But at Falkon Academy we like to give every kid a kit for 3 months. So they can really understand how every thing works. Really build the expertise. These classroom kits are great value add.

Also using the classroom kits, kids can build prototypes and a spare robot for competitions in case their main robot falls apart.

Having this kits will also address "Adaptability" Concerns. We will be able to distribute the kits to take home, so we can run the program over Zoom.

Kit Name - Nice to have kits	
1 VEX V5 Classroom bundle $7988 – Nice to have, for enhanced learning experience	$7988
1 VEX IQ Classroom bundle $4998 – Nice to have, for enhanced learning experience	$4998
Total	$12,986

3) **Cost of Coaching:** $80 per kid/per month for 8 months in a year. $16,000

4) **Miscellaneous Expenses:** $5,000

This covers, Competition Registrations, Snacks, Insurance, Internet, projectors, etc.

5) **External Rental Space. $12/sft/year (Rancho Cordova):** $60,000

A dedicated space is highly recommended. But not essential. If the program is not done at a central dedicated space, it would have to be run at parent-volunteer garage space. If the program is done at a school Site, then this cost can be waived.

Advantages of dedicated space:

1) A dedicated space will provide opportunities for the kids to communicate with other teams and learn from each other.

2) A dedicated space will also provide place to store the material. Otherwise there is a high chance that the material will be lost. Robotics comprises of 1000s of parts. And replacing parts is very expensive.
3) A dedicated space will inculcate professionalism and responsibility in kids. As its not home. (As an example: We have seen during pandemic, kids were attending school zoom sessions from bed. Although robotics programs are not zoom sessions, but still a home-based program may not inculcate similar professionalism as a dedicated space would.)
4) No frequent interrupts from siblings, parents, visitors and neighbors, unlike garage space.
5) Heating in winter and air-conditioner available during summer, unlike garage space.
6) Easy access to restroom and water, unlike garage space where families can feel inconvenient.
7) Robotics typically need 3hrs to 8hrs of work per week. And and most families don't like to have so many kids spend that many hours at their place. And using restrooms, asking for water etc.
8) Don't have to find a volunteer garage space. Robotics takes up 2 car garage space. And most families don't like to dedicate that much of space.
9) With dedicated space, we can host competitions.
10) With dedicated space, we can offer programs for 50 to 100 kids.
11) With dedicated space, we can offer summer programs and raise some money.

<u>Disadvantage of dedicated space:</u>

1) Big expense to rent, and other costs like insurance, and maintenance.
2) Increased distance of travel to one central location for all of Rancho Cordova. Garage spaces can be distributed across multiple locations across Rancho Cordova.

Not having a dedicated space, is one of the reasons why robotics is not catching up in our area. With a dedicated space, we can run professional programs.

Endorsement from School – for Dedicated space.

We have approached W.E. Mitchell Middle School for space to run robotics. The school expressed lot of interest. And Endorsed us.

<u>Options for Funding:</u>

Option A) Minimally Funded Project/Garage Based:

Buy Only Required Kits **$10,928**

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Such a program will be run through people garages. Not an ideal program as kids learn a lot from each other.

Coaching fee and Miscellaneous fee will be paid by parents.

This project is self sustainable, for 3 years. After 3 years, we may have to replace with new kits.

Option B) 2nd Level Funded Project/Garage Based. – Minimum Recommended $23,914

This funding will provide complete equipment for Competitions and Enhanced Learning Experience. It will cover the cost of Required Equipment (1, above) and Enhanced Learning Kits (2,above)

This program will run from Parent-Volunteer Garages.

Option C) Run the program at Mitchell Middle School. – Minimum Recommended $23,914

Endorsement from W.E Mitchell Middle School is provided.

This funding will provide complete equipment for Competitions and Enhanced Learning Experience. It will cover the cost of Required Equipment (1, above) and Enhanced Learning Kits (2,above)

The dedicated space will be provided by the school. Which is huge cost saver.

The cost of coaching will be borne by the parents.

Note: We may need to work with school to open the program to all kids of Rancho Cordova. And not be dedicated to only Mitchell Middle School Students.

Option D) Fully funded Project Cost: $104,914

This option will fully fund the project, by providing all the expenses, documented in the "Expenses Outline" section above.

This project will provide an external space, instead of a school site. – This option can be centrally located to all of Rancho Cordova. It will take out the dependence on schools. And It will be easier to open up to all the schools in Rancho Cordova.

As, City will also pay for all the coaching. This may benefit low-income kids as well.

Ongoing (beyond FY 2022/2023) operations and maintenance costs if applicable:

The equipment will last 3years. After which they need to be replaced. There will be lost and broken equipment that need to be replaced. This may cost about $3000/year. We plan to raise our own funds to cover this expense.

Application #62

Total Community Enhancement & Investment Funds requested:

Provided 4 options above. **Our request is for Option B, Option C or Option D.**

Is this a multiyear request? NO

How many years have you received funding for this project? 0

Do you plan to ask annually for funding? NO.

What other funding will you seek to support your project?

We may seek sponsorship of competitive teams from other local companies, restaurants. This is only possible after we have some teams that start winning.

We may be able to offer after school enrichment camps to raise some funds.

Adaptability

Although Robotics Programs are better experienced at a central location in a classroom setting. But we can still run the programs virtually. We have to use "Enhanced Learning Kits" and distribute to kids as take home kits.

We can run Virtual Reality Robotics Programs, and also compete in virtual world. This is another great learning experience. This builds a different set of programming skills and is very innovative.

Physical Address/School District

Waiting for Endorsement letter from W.E. Mitchell Middle School.

If this is not done, we will run the project

1) from parent-volunteer garages if Option or rent a space if Option C: is funded.

Application Submitted by

Name:	Ashwin Thirunahari
Title:	Director
Phone:	916 221 1123
Email:	ashwin@skyhawks.com
Organization's Legal Name (if applicable):	Falkon Academy
Mailing Address:	1992 Larkhall Cir. Folsom CA 95630

Signatory (Same as above)

Signatory's Name:	Ashwin Thirunahari
Title:	Director
Phone:	916 221 1123
Email:	ashwin@skyhawks.com

Application #62

Mailing Address: 1992 Larkhall Cir. Folsom CA 95630

Closing Comments:

As expressed in this document, there is a big need and interest for robotics in the community. So funding to get this project started will have a big impact in our youth.

Let's together build the next generation work force. And make Rancho Cordova hub of Robotics and New Tech.



LETTER From Riverview STEM TEAM - Must Read

March 3, 2022

To Whom It May Concern,

My name is Fallon Griffin. I am eleven years old and one day want to pursue a career in robotics and mechanical engineering.

My passion for robotics started with watching the TV show BattleBots when I was two years old. My parents were kind enough to encourage my passion with Little bits, Legos, k'nex and any other building toys that could move.

I was fortunate to go to Riverview STEM Academy through elementary school and it was there I discovered VEX IQ. We used VEX for our Project Lead the Way (PLTW) curriculum. In 4th Grade I signed up for the VEX robotics team started by Mrs. Lanich. I never knew there were robotics competitions for my age group. It was on this team that I was able to put all my knowledge about design, engineering, teamwork and programming to good use.

VEX IQ Challenge is a creative competition where each year a new challenge is released for teams to compete in. The first year we were tasked to create a robot to stack cubes on platforms, and for

extra points, stack balls on top of them. There are three components to the competitions, driver controlled matches, autonomous skills matches and judged awards. It was frustrating more than fun at first, robotics is not for those who view failure negatively. Failure in robotics is essential in working towards a final working product. Each gear ratio that wouldn't work teaches us more about what will work and why. These competitions gave me real world understanding about concepts that I had studied before, but was finally getting to see work.

In 5th grade, because I was homeschooled due to the pandemic, there was nowhere for me to compete or have a team. I truly appreciated the tech lab at Riverview and for the opportunity to come early and stay late at school with my teammates, my friends, and work on a sport that I loved. My parents were willing to let me continue robotics, and two of my friends were excited to join, and for a year all my birthday and Christmas presents were robotics parts and a field for the garage. Measuring six by eight feet it takes up most of the space.

My team was able to stay together and compete as an independent team thanks to each of our parents. **We have qualified for State Championship every year since we started and won the State Design Award in 2021 qualifying us for World's!** My experience with robotics only propels my desire to pursue robotics in the future. I am sad to know that many of my elementary school friends who were part of robotics with me at Riverview are not doing it anymore because they don't have the space or parts to make a team. We all fell in love with this sport, but don't have fields or equipment to keep competing.

Soon, my team will outgrow my parents' garage as we transition to the older VEX competitions for middle and highschoolers. Also, the cost to fund a highschool robotics team will only grow with the complexity of the robot. Soon I may find myself without a team and a space to pursue my passion.

I hope that robotics could be recognized as a league locally. I wish we had fields and a tech lab to pull all the kids interested in pursuing robotics competitively and recreationally in one spot. I want to coach and mentor younger kids in this sport and inspire them to love science and engineering as much as I do. This sport is unique as it not only provides a fun environment for kids to compete in, but trains the next generation of engineers, programmers and roboticists.

My team is named Generation Artemis, because we will grow up seeing humanity return to the moon. I want to be part of the next generation of engineers who confront climate change, sustainable farming and space exploration with scientific innovations. **Please consider the importance of a supporting robotics league and facility locally.**

Sincerely,
Fallon Griffin





Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 8:33 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537860
IP Address:	206.15.249.230
Submission Date:	03/18/2022 8:33
Survey Time:	31 minutes, 25 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Elementary Field Trip partnership with Sly Park for Rancho Cordova Schools!

Project Synopsis

FCUSD would like to bring more STEM focused field trip opportunities to our students. Our project benefits the community by offering STEM based educational opportunities to our students.

Project Description

This is a growing, high demand area of study that has the potential to create substantial economic benefits for our children and community. “The study found that, regardless of gender, ethnicity or socioeconomic status, youth who take educational trips have better grades (59 percent), higher graduation rates from high school (95%) and college (63%), and greater income (12% higher annually). In fact, 89% said educational trips had a positive, lasting impact on their education and career because the trips made them more engaged, intellectually curious and interested in and out of school.” -National Education Association, NEA

Project Team

FCUSD & John Bliss(CGE), Amber Fontaine (CME), Christy Wilkerson (CVE), James Tucker (NVE), Ted Bosque (PJS), Jessica Hutchison (RCE), Lari Powell (RSA), Kim Christierson (WRE), Leslee Cottrell (WME)

Project Goals

Every 5th grade class will have a Sly Park experience which will result in academic gains through greater engagement. We will measure our goal by student surveys, teacher engagement feedback, and monitoring academic achievement before and after each event.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$45,000.00

Application #63

Estimated Breakdown of Project Expenditures

Sly Park Options! Sly Park Options Cost Description Virtual Science Camp ● 5 days online ● 5th Grade $1500 per class Students receive sequenced daily lessons to support citizen science and environmental stewardship. Hybrid Science Camp Option A ● 4 days online ● 1 day on-site ● 5 Grade $1600 per class Modeled after the Virtual Science Camp. Structured for 4 days of online learning experiences and 1 day of in person instruction at your school site Hybrid Science Camp Option B ● 4 days on-site ● 1 day online ● 5th Grade $2000 per class (min 2 classes) Modeled after the Virtual Science Camp. Structured for 4 days of exploratory learning experiences on your school campus and 1 day for an online follow-up lesson/check-in at a later date

Matching Funds

N/A

Include Any Other Funding Contributions

school site budgeting

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$45,000.00

Is this a multi-year request?

No

How many years have you received funding for this project?

3

When will your request for funding sunset for ongoing programs?

Received funding for 3 years but have been unable to use until this year due to COVID.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

School site funding

Project Schedule, Timeliness and Adaptability

Project Schedule

We would have this in place by August 9th, 2022 and continue throughout the school year, ending May 26th, 2023. In addition to this funding, we will use site funds to sustain the programs that produce the most effective results in terms of overall learning and STEM engagement and academic gains, beyond 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

We will begin scheduling field trips 08/09/2022 and complete all field trips by 05/25/23. All data will be collected by 05/26/23.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes We have been able to provide virtual field trips during the pandemic and can do so again if necessary.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Application #63

1965 Birkmont Dr
Rancho Cordova, CA 95742

Other Physical Addresses (if project/program is at multiple sites)

Our field trips are located throughout our local rancho Cordova Schools and/or at the Sly Park Location

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Elementary Field Trip - Funding request (1).pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Lari Powell

Title

Principal

Submitting As

Public Agency

Phone

9162942435

Email Address

lpowell@fcusd.org

Organization's Legal Name (if applicable)

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr
Rancho Cordova, CA 95742

Signatory's Name

Dr. Sarah Koligian

Signatory's Title

Superintendent

Signatory's Phone

9162949000

Signatory's Email Address

skoligian@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Elementary Field Trip Supplemental Endorse (3) (2).pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Measure H - Funding request-

Project Name:
Elementary Field Trip partnership with Sly Park for Rancho Cordova Schools!

Project Description
FCUSD would like to bring more STEM focused field trip opportunities to our students. Our project benefits the community by offering STEM based educational opportunities to our students. This is a growing, high demand area of study that has the potential to create substantial economic benefits for our children and community.

"*The study found that, regardless of gender, ethnicity or socioeconomic status, youth who take educational trips have better grades (59 percent), higher graduation rates from high school (95%) and college (63%), and greater income (12% higher annually). In fact, 89% said educational trips had a positive, lasting impact on their education and career because the trips made them more engaged, intellectually curious and interested in and out of school.*" -National Education Association, NEA

Project Team
FCUSD & John Bliss(CGE), Amber Fontaine (CME), Christy Wilkerson (CVE), James Tucker (NVE), Ted Bosque (PJS), Jessica Hutchison (RCE), Lari Powell (RSA), Kim Christierson (WRE), Leslee Cottrell (WME)

Project Goals
Every 5th grade class will have a Sly Park experience which will result in academic gains through greater engagement. We will measure our goal by student surveys, teacher engagement feedback, and monitoring academic achievement before and after each event.

Funding Request - $45,000.00

Sly Park Options!

Sly Park Options	Cost	Description
Virtual Science Camp ● 5 days online ● 5th Grade	$1500 per class	Students receive sequenced daily lessons to support citizen science and environmental stewardship.
Hybrid Science Camp Option A ● 4 days online ● 1 day on-site ● 5 Grade	$1600 per class	Modeled after the Virtual Science Camp. Structured for 4 days of online learning experiences and 1 day of in person instruction at your school site

Application #63

Hybrid Science Camp Option B ● 4 days on-site ● 1 day online ● 5th Grade	$2000 per class (min 2 classes)	Modeled after the Virtual Science Camp. Structured for 4 days of exploratory learning experiences on your school campus and 1 day for an online follow-up lesson/check-in at a later date

Project Schedule We would have this in place by August 9th, 2022 and continue throughout the school year, ending May 26th, 2023. In addition to this funding, we will use site funds to sustain the programs that produce the most effective results in terms of overall learning and STEM engagement and academic gains, beyond 2023.

Project Criteria
Education - We will improve the quality, availability, and accessibility of STEM education. We will also connect our students to STEM related resources in our community to foster an interest in STEM that goes beyond the classroom and into our greater community.

Timelines:
We will begin scheduling field trips 08/09/2022 and complete all field trips by 05/25/23. All data will be collected by 05/26/23.

Adaptability:
Sly Park field trips are virtual, onsite, or overnite at the Sly Park campus.

Project Location:
Our field trips are located throughout at our local Rancho Cordova Schools and/or at the Sly Park location.



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: STEM Field Trips for Elementary Schools

Name of Organization: Folsom Cordova Unified School District

Name of Applicant and Title: Lari Powell - Principal at Riverview STEM Academy

Applicant's Phone: 916-294-2435 **Applicant's Email:** lpowell@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #63

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 1:26 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538743
IP Address:	71.193.59.177
Submission Date:	03/18/2022 1:26
Survey Time:	29 minutes, 11 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Thinking Like a CEO: From non-Employer to Employer

Project Synopsis

Three to five of Rancho Cordova's small businesses owners learn to operate their businesses as employing CEOs rather than as the only employee in their businesses.

Project Description

Thinking Like a CEO is a 12-month program wherein participants receive: • Classroom instruction with hands-on experiences to address the knowledge and skills gaps as well as the thought patterns and behaviors that impede small business success • One-on-one business coaching to develop sales and revenue generation capacity , • Support services to practice and experience how hiring professional service providers for day-to-day tasks allows them to drive their business goals and objectives from a CEO perspective and achieve professional results. Participants apply their training to their businesses in real time. Each deliverable is developed and customized for their unique business needs. The program walks participants through identifying and documenting their unique goals and objectives, budgeting to meet these goals and objectives, branding and representing their businesses, building sales capacity, and finally leading teams. Our instructional team is composed of local certified professionals, including a Balanced Scorecard champion, a doctor of behavioral sciences, a Forbes 50 Champion, a multi-business entrepreneur, and a professional copy writer. Support services are provided by local independent businesses who grant them special philanthropic pricing, and our coaches specialize in revenue generation.

Project Team

Maximum Reach 4 Economic Equity Cornelius Strategies for Business and Life Moorepark Enterprises Rising Star Coaching Howard II Enterprises TeeSandi Consulting Entrepreneurship Empowered Burgess Brothers Quality Media Consultant Group

Project Goals

Students gain business management knowledge, skills and tools including business and project analysis, project planning tools, strategic mapping, budgeting and forecasting, pricing strategies, team building and communication skills, task delegation and follow-up, business writing skills, digital marketing, revenue generation, product placement, interviewing and hiring or contracting professional services. Our metrics consist of pre and post assessment testing and surveys. 100% gain at least 1 new tool, skill, insight

80 % or more gain 2 to 4 new tools, skills, insights 100% are more likely to use budgets after having the class. 80% or more of the students feel more comfortable about budgeting 60% or more feel more confident forecasting for business growth. 100% are willing to delegate at least 1 day-to-day task that they currently do themselves. 100% or more students believe professional editing improved their first impression documentation 60% or more feel it greatly improved their first impression documentation 60% or more feel more empowered use at least one social media platform more effectively 100% place a higher value on professional support services 60% or more believe professional results significantly improve their brand over DIY task completion. 60% or more will set goals to be able to hire or contract for professional support services 100% have completed pre-revenue generation coaching questionnaire 100% report having had an orientation and established revenue generation goals with their coach 100% report receiving specific tasks and or feedback from their coach to help them achieve their goals. 80% or more complete tasks on time. 100% or more complete tasks by the next reporting period. 20% • increase call backs or current client engagement • increase network or contacts • Increase appointments • Increase revenue • Have met with at least 1 high potential client • Have met with the manager of at least 1 retail location for product placement

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$98,425

Estimated Breakdown of Project Expenditures

Instruction 46,600 Services 19,125 Staff Direct 24,400 Staff Indirect 7,800 Supplies 1500

Matching Funds

$23,425

Include Any Other Funding Contributions

na

Ongoing Operations and Maintenance Costs (if applicable)

na

Total Community Enhancement & Investment Funds Requested

$75,000

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

NA

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

I will seek corporate funding for continued coaching for last year's cohort.

Project Schedule, Timeliness and Adaptability

Project Schedule

7-Sep 1 Strategic Planning Strategic Planning Overview 14-Sep 2 Fishbone Diagram 21-Sep 3 Project Assessment 28-Sep 4 Balanced Scorecard SWOT 5-Oct 5 From Analysis to Action Plan 12-Oct 6 Building a dynamic project Plan 19-Oct 7 Mapping the plan 26-Oct 8 Communicating the plan 2-Nov 9 Choose your Coach Event 9-Nov 10 Budgeting & Forecasting Funding your Project without loans 16-Nov 11 Project Forecasting 23-Nov 12 Thanksgiving Break 1-Dec Coaching Packages Begin 30-Nov 13 Pricing to Make your goals 7-Dec 14 Building your Success Team Identifying & motivating your team 14-Dec 15 How Delegation Fits into the Plan 21-Dec 16 Leading your Team 28-Dec 17 Kwanzaa Break 4-Jan 18 Business Writing Business Writing: Words are the New Business Attire 11-Jan 19 Digital Marketing Module what is digital marketing and why it matters 18-Jan 20 Digital marketing platforms and uses 25-Jan 21

Branding your business 1-Feb 22 Bringing it All Together 8-Feb 23 Identify Skills and Traits that Compliment your own DISC Analysis and consultation 15-Feb 24 CEOs work on their Businesses not in their businesses Experiential program Begins 22-Feb 25 open December 1 through June 1 Project Execution & Revenue Generation 6-month coaching package 7-Dec Professional Editing packages 15-Feb Vouchers 8-Feb Identify Complimenting Soft Skills Overview & Self Analysis December 1 through June 11 Hands On Management Success services management Coaching Oversight/Management Choose your Coach event Vouchers management January 11 through June 11 Digital Media Content Creators June 11 through June 20 Outcomes Reporting 30-Jun Program End

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Our program will begin July 1 with preparation and recruitment activities. Students will be enrolled and have orientation by September when instruction begins. They receive 6 months of instruction and 6 months of experiential training with some running concurrently: Instruction runs from September to February 22, and experiential training begins December 1 and ends on June 11. Outcomes tracking takes place throughout the program, and is expected to be completed by June 20.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The instructional portion of the program is all virtual, and the experiential section can be delivered virtually as well.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Virtual
Sacramento, CA 95820

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Angela Wiggins

Title

Executive Director

Submitting As

Non-Profit

Phone

9162568301

Email Address

WIGGINS.ANGIE@GMAIL.COM

Organization's Legal Name (if applicable)

Maximum Reach 4 Economic Equity

Mailing Address of Submitter

2904 18th ave
Sacramento, CA 95820

Signatory's Name

Maximum Reach 4 Economic Equity Angela Wiggins

Signatory's Title

Executive Director

Signatory's Phone

9162568301

Signatory's Email Address

WIGGINS.ANGIE@GMAIL.COM

Signatory's Mailing Address

2904 18th ave
Sacramento, CA 95820

Attach Any Additional Documents Here

Outcomes document - summary.docx

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #64

Thinking Like a CEO (Maximum Reach 4 Economic Equity)

Outcomes document by Module

Yellow highlight indicates tools students receive

	Phase	Outcomes	Metrics/Measures
July 1 – August 15	**Preparation**	Onboarding Staff Finalize and store onboarding documentation Finalize and store program management forms and documentation	Supporting documentation stored in shared drive: W9s, contracts, orientation attendance, pre & post assessment tests, syllabi
July 1 – August 20	**Recruitment & selection** July 1 – August 20	Eligible businesses identified, recruited, and registered	Applications, acknowledgements and orientation attendance stored in shared drive Three to 5 businesses enrolled
	Strategic Planning Module	Students understand the value and role of strategic planning in business management. Students learn to use various strategic planning tools including fishbone analysis diagrams, Balanced Scorecard SWOT analysis, project planning tools, and strategy maps	Pre and post assessment tests demonstrate: • all students gain at least 1 new tool, skill, insight or awareness • 80 % or more gain 2 to 4 new tools, skills, insights or awareness Students develop the following tools specific to their own businesses: • Fishbone analysis diagram • Balanced Scorecard SWOT analysis • Project Plan • Goals and Objectives Document • Strategy Map Students leave with the following planning templates: • Fishbone diagram template • Project Plan template • Balanced Scorecard mapping templates.
	Budgeting & Forecasting Module	Students understand how to use budgets as tools to help forecast business growth and project completion. Students shift their mindset regarding budgeting from avoidance to usage	Pre and post assessment tests indicate All students are more likely to use budgets after having the class. 80% or more of the students feel more comfortable about budgeting

	Phase	Outcomes	Metrics/Measures
		Students develop real-time budgets and forecasting scenarios for their businesses.	60% or more of students feel more confident forecasting for business growth. All students develop a real-time budget specific to their business. All students receive a budgeting and forecasting template
21	**DISC Assessment**	Identifying traits and characteristics that complement your own	Student feedback indicates: 80% or more feel the assessment will be useful for teambuilding.
	Building your success Team		The following forms are completed and stored on the shared drive My Network Forms Tasks I can Delegate Forms Student feedback indicates: • Most students have more supporters and a larger team than they thought • All students are willing to delegate at least 1 day-to-day task that they currently do themselves.
1.	**Business Writing: Words are the New Business Attire**	Students understand how their word choice and usage impact their brand and bottom line	Survey indicates: • 100% or more students believe professional editing improved their first impression documentation • 60% or more feel it greatly improved their first impression documentation Students receive a First Impressions Documentation Packet.
	Digital Marketing Module		Pre and Post assessment testing indicate that Social Media stats for all students improve in one or more of the following areas: • Views • Contacts or followers • Likes • Shares Pre and post assessment testing indicate that at least 60% or more of students feel more empowered use at lest one social media platform more effectively

	Phase	Outcomes	Metrics/Measures
			Most students will make updates to one of the following: • Email Signature • Tag line • Profile • Video format • Or branding Students receive new social media content
2.	**CEOs work on their business not in their businesses**	Student practice scheduling and leading meetings, team communication and motivation, delegating tasks and following up on assignments, providing feedback about task completion, expressing appreciation. 20% or more of Students experience more time to devote to neglected tasks and more ability to think creatively about growing their businesses. 80% or more understand how contracting or hiring professional services will allow them more time to devote to neglected tasks and more ability to think creatively about growing their businesses.	Pre and Post assessment testing indicate that all students experienced one or more of the following: • More time to drive their businesses • More peace of mind surrounding social media • Improved branding • A more hopeful outlook for business growth Survey results indicate that all students place a higher value on professional support services Survey results indicate that 60% or more of students believe professional results significantly improve their brand over DIY task completion. Survey results indicate that 60% or more of students will set goals to be able to hire or contract for professional support services Students receive 10 hours /month Social media content creation and posting. Students receive support service vouchers,
		Students receive 6 months business coaching services	Month 1 – All students have completed pre-revenue generation coaching questionnaire Current revenue generation is documented

	Phase	Outcomes	Metrics/Measures
			All students report having had an orientation and established revenue generation goals with their coach Month 2 – All students report receiving specific tasks and or feedback from their coach to help them achieve their goals. 80% or more complete tasks on time. 100% or more complete tasks by the next reporting period. Month 3 –Revenue generation coaching questionnaire results indicate all students experienced one of the following • Engaged in networking activity or event • Grew networks or contacts list • Experienced a leads generation event or activity • Increase appointments • Increase in revenue Month 4 –Revenue generation coaching questionnaire results indicate all students have experienced one of the following • Followed up on leads and had a minimum of 5 pitch conversations with potential clients. 20% or more of students have experienced one of the following • Experienced an increase in call backs or current client engagement • Experienced significant increase in network or contacts • Increase in appointments • Increase in revenue Month 5 – student survey results indicate 20% or more of clients have experienced one of the following • Have met with at least 1 high potential client • Have met with the manager of at least 1 retail location for product placement • Increase in appointments

	Phase	Outcomes	Metrics/Measures
			• Increase in revenue Month 6 revenue generation coaching questionnaire. results indicate all students: • Have gained specific knowledge that will help increase sales and revenue • Have gained valuable skills that will help increase sales and revenue All students: • Have increased sales or can explain why not (explanation required) • Have increased revenue or can explain why not (explanation required).

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 2:21 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1538886
IP Address: 76.171.204.126
Submission Date: 03/18/2022 2:20
Survey Time: 20 minutes, 12 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

The California Police Activities League's Rancho Cordova Youth Apprenticeship Readiness Accelerator Program (YARA).

Project Synopsis

The California Police Activities League (California PAL) a 501(c)3 incorporated nonprofit, is spearheading a unique program in partnership with the Laborers Training and Retraining Trust Fund for Northern California (LTC) and The Salvation Army Sacramento to mobilize a powerful collaborative that includes construction trades, CBO's, employers, education, and law enforcement, creating a wraparound project that reflects California PAL's commitment to reducing the wealth equity gap, leads to an effective bridge to quality jobs and a better quality of life. YARA will positively impact community/economic development by creating pathways to high quality employment and High Road jobs by establishing a program with industry-recognized certifications and leadership development. Underserved youth in Rancho Cordova will be presented employment options through career exploration, workforce training and additional opportunities for life-long careers that are not typically afforded to this demographic. CALPAL's history of supporting minority youth from underserved communities is consistent with our proposed target populations in Rancho Cordova, specifically disadvantaged or low-income communities experiencing disproportionate unemployment. By providing exposure and pathways to employment our participants will have access to educational and workforce development resources that were previously not available to them. CALPAL was established in 1972 with the intention of reducing juvenile crime and focus on establishing safer and stronger communities by "Building the Bond Between Cops & Kids." Our successful programs have proven time and time again that dedicated community policing by our Police and Sheriff's Departments in conjunction with their local PAL program and California PAL, is an effective solution that provides a huge positive influence in our communities and make a difference in the lives of our youth.

Project Description

California PAL will provide overall coordination and management of the YARA program. California PAL's future office site, the Rancho Cordova PAL facility, will be a shared facility with Rancho Cordova PAL and will serve as the location for the YARA program. The program will include 2 cohorts each consisting of 12 Rancho Cordova youth. The Cohorts will participate in a comprehensive suite of activities to explore and prepare them for living wage employment through this pre-apprenticeship program. The program will begin with the participants attending California PAL's flagship program, Life After High School Destination Success, a 4-day, 3-night conference held at Fresno State University providing college and career preparedness and workforce development skills including

college/career readiness workshops & Fair, life skills, resume & business interviews and motivational guest speakers from the trades. The YARA program will be the follow-up to ensure a successful pathway towards achieving career goals and living wage jobs. At the core of YARA is the Laborers Training & Retraining Trust Fund for Northern California's (LTC) Pre-Apprenticeship Construction Training, a 6 week (40 hours/week) program that includes certificates in Fundamentals of Construction, OSHA 10, First Aid/CPR, Confined Space, Traffic Control and Hazardous Waste courses. The participants will be presented a comprehensive experience with a combination of hands-on and classroom learning to prepare the participants for the next step in their workforce development journey, including but not limited to entering a formal apprenticeship or post-secondary education. A building project and graduation week activities will also be part of the program.

Project Team

CALPAL: Jennifer Lopez, Executive Director: With over 15 years experience in non-profit management/fund-development and 9 years experience in youth development/engagement, Ms. Lopez will be the overall sponsor of YARA representing CALPAL as the lead operational and fiscally responsible organization. Bryan Ferreria, Director of Operations: In the role of YARA Program Manager, he will coordinate the tactical operations of the program including youth recruitment, partner engagement, scheduling and reporting. Kenneth Ramirez, Director of Development: CALPAL's point of contact and liaison for the YARA program and Measure H focals in addition to grant administration. LTC: Leonard Gonzales (Executive Director): Primary focal for YARA to coordinate the construction curriculum and certification courses of the program, supervise the acquisition and use of tools and PPE. LTC has an extensive history serving underserved and underrepresented communities throughout Northern California. Salvation Army: Captain Larry J. Carmichael, MSOL (Social Services Officer): Liaison to the Sacramento Salvation Army who will be providing tracking and reporting as recognized by the State Workforce Development Board. Both LTC and Salvation Army will work with industry leaders to identify and secure course instructors, industry partners for demonstration projects and construction businesses to provide monetary and in-kind support. Rancho Cordova PAL: Tina Aldama (PAL Program Director): Oversee activities including scheduling and facility preparation at the Rancho Cordova PAL location, maintain communication with participants. Deputy Jose De La Cruz (Youth Services Officer/PAL Director) Help in recruiting and acquiring law enforcement officers to act as advisors for the youth participants. Advisory Council: A council made up of local leaders will be established to promote trades, create employment opportunities & pathways and reduce barriers to employment & training.

Project Goals

The primary goal of YARA is to enable the youth participants to determine a pathway to gain skills leading to a lifelong career. This will be achieved by the defined program curriculum and the advisors in place to assist and ensure the participants identify and take the next step in their workforce development journey. As stated by Captain Larry Carmichael, Sacramento City Social Services officer: https://sacramento.salvationarmy.org/sacramento_metro/construction-training-program?random=107 "The Salvation Army truly believes that the Construction Training Program is another way to take social services to a higher level- a hand up & not a hand out. We realize that construction-related jobs are still in high demand and this gives our clients a real opportunity to learn new skills and find employment in the very near future." Measures will be both quantitative and qualitative to measure the effectiveness of the program to include the following: - Participant attendance - Obtaining Certification Cards in the industry recognized course modules - Program completion - Defined action(s) in place for each participant to continue their workforce development experience, (Apprenticeship, college, etc.) Additionally, surveys will be initiated to assess and compile the effectiveness of the program from the participants' perspective. Example questions include: - Overall value of the program and the importance of defining a plan to obtain skills that lead to employment - Understanding of the curriculum - Trust and value in the advisors - Next step(s) identified for continuing education/job skills - Suggestions on how the program can be modified or improved

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$58,000 - $50,000 requested from Measure H with an additional $8,000 from Laborers Training and Retraining Trust Fund for Northern California and The Salvation Army Sacramento.

Estimated Breakdown of Project Expenditures

Title: Executive Director, (10%) +Benefits - $4,832.00 Title: Director of Operations, (10%) +Benefits - $4,242.00 Title: Director of Development, (10%) - $4,242.00 Coordination and Operations, Rancho Cordova PAL - $4,392.00 Equipment (rental or purchase) Training Expenses $25,000.00 Supplies - $500 Meeting/Travel $4,792.00 Other (specify): Salvation Army Program Assistance $2,000.00

Matching Funds

N/A

Application #65

Include Any Other Funding Contributions

Laborers Training and Retraining Trust Fund for Northern California and The Salvation Army Sacramento will be providing a total of $8,000 to cover the costs of instruction.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$50,000

Is this a multi-year request?

No

How many years have you received funding for this project?

1

When will your request for funding sunset for ongoing programs?

Upon completion of the second cohort and graduation week activities, within the one-year funding cycle, no additional funding will be requested from Measure H. Funding for subsequent years will be sought from other sources such as grants, partner organizations, trade and government resources.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

Harbor Freight – Potential donation of tools/related equipment to be used by youth participants and potential stipends. Construction Companies/Local Businesses – Possible monetary donations to support program curriculum.

Project Schedule, Timeliness and Adaptability

Project Schedule

Funding starts July 1 Recruiting for Cohorts 1 & 2: July 15, 2022 Cohort 1 orientation: July 22, 2022 Life After High School: July,29 – August 2, 2022, or August 5 – August 8, 2022 Cohort 1 curriculum begins: August 15 – September 23, 2022 Cohort 2 orientation: September 26, 2022 Cohort 2 curriculum begins: October 3 – November 11, 2022 Graduation week activities/ceremony for both cohorts: November 16, 2022

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Both cohorts are targeted to be completed prior to the end of the funding period. The timeline above will secure the necessary resources and equipment required to implement and achieve the goals of the program. Cohort 2 orientation: September 26, 2022 Cohort 2 curriculum begins: October 3 – November 11, 2022 Graduation week activities/ceremony for both cohorts: November 16, 2022

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

If necessary, the program can be conducted in a virtual, online environment with minimum modifications.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Application #65

Physical Address of the Project Location

10455 Investment Cir
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

2022Rancho_PAL_Support_Letter.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Kenneth Ramirez

Title

Development DIrector

Submitting As

Non-Profit

Phone

3232462622

Email Address

kramirez@calpal.org

Organization's Legal Name (if applicable)

California Police Activities League

Mailing Address of Submitter

8250 Calvine Road # C326
Sacramento, California 95828

Signatory's Name

Mr. Kenneth Ramirez

Signatory's Title

Director of Development

Signatory's Phone

3232462622

Signatory's Email Address

kramirez@calpal.org

Signatory's Mailing Address

8250 CALVINE RD C326
SACRAMENTO, California 95828-9313

Attach Any Additional Documents Here

SalvationArmy_LTC_Support_Letter.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #65

Laborers' Training and Retraining Trust Fund for Northern California
1001 Westside Drive, San Ramon, CA 94583-4098 • Telephone: (925) 828-2513

March 17, 2022

To Whom It May Concern:

We are pleased to inform you that The Laborer's Training & Retraining Trust Fund for Northern California (LTC) is partnering with the California Police Activities League and The Salvation Army Sacramento County Operations. Together, we are dedicated to achieving the goals to carry out community-based programs and/or services in the area of community and workforce development for the benefit of the City of Rancho Cordova.

The LTC service region covers the 46 Northern California counties. We provide training to over 15,000 Laborers annually and assist with certifying and re-certifying members on a daily basis. We take great pride in preparing a quality skilled workforce to our signatory contractors. We are excited about the opportunity to work with youth and young adults within the City of Rancho Cordova.

The Construction industry is an important and strategic area of growth in our region. We believe strongly in ability to train and prepare participants with key skills training that facilitates their entry into high-demand, high-paying jobs in Construction.

Sincerely,

Leonard Gonzales, Executive Director
Laborers Training & Retraining Trust Fund for Northern California
925.828.2513

Application #65

THE SALVATION ARMY SACRAMENTO
3755 North Freeway Blvd, Sacramento, CA 95834
Phone 916-563-3700 | Fax 916.239-3840
sacramento.salvationarmy.org

DOING THE MOST GOOD

March 17, 2022

To whom it may concern:

We are pleased to inform you that The Salvation Army Sacramento County Operations is partnering with the California Police Activities League and the Laborer's Training & Retraining Trust Fund of Northern California. It is The Salvation Army's intent to provide vital services to program participants in partnership and in support of California PAL's workforce development program to take place within the City of Rancho Cordova. United in this partnership we are confident that we will see individual lives transformed for good and in working together we will have a profound impact on the youth of Rancho Cordova.

Respectfully,

Captain Larry J. Carmichael, MSOL
Sacramento Social Services Officer
The Salvation Army – Sacramento County Operations

William & Catherine Booth
Founders
General Brian Peddle & Commissioner Rosalie Peddle
International Leaders

Commissioners Douglas F. & Colleen R. Riley
Territorial Leaders
Majors John P. & Pam Brackenbury
Divisional Leaders

Captain Larry J. Carmichael
Social Services Officer – Sacramento City

RANCHO CORDOVA POLICE ACTIVITIES LEAGUE

www.rcpdPAL.org

Sergeant R. Merideth
President

2897 Kilgore Road
Rancho Cordova, CA 95670
916.875.9627 - Main
rcpdpal@ranchocordovapd.com - Email

March 9, 2022

City of Rancho Cordova
Community Enhancement and Investment Fund
Rancho Cordova City Hall
2729 Prospect Park Drive
Rancho Cordova, CA 95670

To whom it may concern:

The Rancho Cordova Police Activities League is excited to partner with the California Police Activities League and the Laborer's Training & Retraining Trust Fund for Northern California. We are dedicated to achieving the goals outlined in the Community Enhancement and Investment Fund grant, to carry out community-based programs and/or services in the areas of arts and culture, community development and services, economic or workforce development and health and human services. Each year we look to leverage our collective resources to develop methods in which we can better serve the youth of Rancho Cordova and expand our programs.

This grant represents an exciting opportunity to work, support and benefit from the training and leadership development of youth in the City of Rancho Cordova. It is part of our overall partnership to participate in Californian PAL's conferences and programs to develop wonderful opportunities for youth that will benefit from our continual guidance. Coupled with Rancho Cordova PAL's sustained efforts and reach within the city, the outcomes of the grant will be exponential. We are already taking advantage of this partnership by collaborating with shared resources that we plan to utilize in the city of Rancho Cordova.

Thank you for considering the California Police Activities League application for funding to support our collaborative efforts.

Sincerely,

Officer Jose De La Cruz #1034
Rancho Cordova Police Department
PAL Executive Director

Application #65

Project Information

* **Project Name**
Rancho Cordova Moose Lodge Parking Lot Improvement Initiative

* **Project Synopsis**
The RC Moose Lodge parking lot has become a safety issue for vehicles and pedestrians alike due to the multiple sink holes and disintegrating

* **Project Description**
The proposed project will provide the Rancho Cordova Moose Lodge members and residents with a repaired and resurfaced parking lot for improved safety and accessibility. It will also benefit the many activities held in the parking lot such as the Police Activities League (open to the public), Trunk or Treat and our Annual Rib Cook Off.

* **Project Team**
Our Parking Lot Committee consisting of several volunteers will oversee the project. The Committee consists of Charles Parsons, retired County of Sacramento Safety Inspector and current Lodge President, Joe Gough a past Governor and Parking Lot Committee Chair and a Project Manager

* **Project Goals**
To repair and resurface those areas of the parking lot needing attention. According to preliminary projects plan estimates, this work can be completed in a couple of days. One of the contractors we're considering is currently contracting with the City of Rancho Cordova replacing all the (Central Valley Engineering and Asphalt) old street corners to get them up to code and ADA compliant.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

* **Total project cost**
68000

* **Estimated breakdown of project expenditures**
contractors provided a summary total cost of labor and material of $68,000.00. Remove 3 inches of existing asphalt and haul off. Compact Subgrade. Import, place and compact 3 inches of asphalt concrete over approximately 17,000 square feet. Restripe per existing layout.

* **Matching Funds**
N/A

* **Include any other funding contributions**
N/A

* **Ongoing operations and maintenance costs (if applicable)**
N/A

* **Total Community Enhancement & Investment Funds requested**
68000

* Is this a multiyear request?
No

* **How many years have you received funding for this project?**
SKIPPED

* **When will your request for funding sunset for ongoing programs?**
June 30, 2023

* Do you plan to ask annually for funding?
No

* **What other funding will you seek to support your project?**
We are requesting assistance from our general membership and Moose International.

Application #66

Project Schedule, Timeliness and Adaptability

* **Project Schedule**
Project start date: As as funding is available. July 7th completing by July 10th 2022.

* **In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.**
All contractors have projected this work can be completed within 2-3 days maximum and we intend to complete as soon as funding becomes available.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

* **Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.**
Our parking lot served as our Lodge during the initial closures of businesses due to the pandemic. We used our parking lot to service to go meals and in place outside dining following City of Rancho Cordova and Sacramento County Health guidelines.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

* Physical address of project location
10124 Coloma Road
Coloma Road
Rancho Cordova CA 95670

Other physical addresses if project/program is at multiple sites
SKIPPED

* Have you received a letter of support for the project/program from the property owner?
Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)
SKIPPED

* Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?
No

If you answered yes to the above, and your project/program is intended to operate or take place at a public K-12 school site or a park/park facility, instead of a support letter, you must request the endorsement of the entity using the appropriate Supplemental Endorsement Form. You must submit the form to the appropriate contact by March 4, 2022 along with a copy of your grant proposal. The forms and submittal instructions are available at http://www.cityofranchocordova.org/residents/community-enhancement-investment-fund/grant-applications.

For Public K-12 School Sites: By the application deadline, the City of Rancho Cordova must receive the Supplemental Endorsement Form that's been signed and dated by the corresponding school superintendent for the application to be considered a complete submittal. It's the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Refer to the Fiscal Year 2022/2023 Supplemental Endorsement Form for more information and important deadlines at http://www.cityofranchocordova.org/residents/community-enhancement-investment-fund/grant-applications.

For Park/Park Facilities: By the application deadline, the City of Rancho Cordova must receive the Supplemental Endorsement Form that's been signed and dated by the Cordova Recreation & Park District for the application to be considered a complete submittal. The CRPD representative reserves the right to withhold their endorsement of a project/program. Refer to the Fiscal Year 2022/2023 Supplemental Endorsement Form for more information and important deadlines at http://www.cityofranchocordova.org/residents/community-enhancement-investment-fund/grant-applications.

Application #66

Applicant and Signatory

* Application submitted by
Joseph Gough

Title
Rancho Cordova Moose Lodge Parking Lot Improvement Committee Chairman

* Submitting as
Non-Profit

* Phone
926.730.9287

* **Email**
joe.gough@t-mobile.com

Organization's legal name, if applicable
Rancho Cordova Moose Lodge

* Mailing Address of Submitter
10124 Coloma Road
Rancho Cordova CA 95670

* Signatory's Name
Mr. John Ingrim

Signatory's Title
Administrator, Rancho Cordova Moose Lodge

* Signatory's Phone
916.397.4910

* **Signatory's Email Address**
jingrim@aol.com

* Signatory's Mailing Address
10124 Coloma Road
Rancho Cordova CA 95670

Attach any additional documents here
SKIPPED

Public Record
Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt.

Next Steps
Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June.

We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail.

It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June.

If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Application #66

Randi Kay Stephens

From: Gough, Joe <Joe.Gough@t-mobile.com>
Sent: Friday, February 18, 2022 4:35 PM
To: Randi Kay Stephens
Cc: Stacy Delaney; Gough, Joe; Chuck Parsons
Subject: RE: Confirming Application: Moose Lodge / FW: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Attachments: PkngLotQuote.PrevailWages.RCMooseForRCgrant.pdf; RCMoosePkgnLotPic02.17.22.pdf

Randi/Stacy:

I'm enclosing a scan of the quote from our most compliant bid for resurfacing our Rancho Cordova Moose Lodge Parking Lot which includes prevailing wages. We've included a rudimentary sketch of the parking lot area that shows where the resurfacing will take place.

I've also included the picture you sent to us and asked we notate the area being improved. This is probably a better rendering since it is more to scale and is in color.

We look forward to meeting with Development Services Team next Thursday on the 24th @ 10:30AM.

Thank you and have a good weekend!

Joe Gough
Past Governor
Activities & Parking Lot Improvement Committee Chairman

Client Sales Executive - Strategic Accounts
T-MOBILE FOR BUSINESS
Direct 916.568.4464 | Mobile 916.730.9287 | joe.gough@t-mobile.com
t-mobile.com | Follow us on Twitter, Facebook and LinkedIn
Proud Veteran
VETERANS & ALLIES NETWORK

From: Randi Kay Stephens <rstephens@cityofranchocordova.org>
Sent: Wednesday, February 9, 2022 11:53 AM
To: Gough, Joe <joe.gough@t-mobile.com>
Cc: Stacy Delaney <sdelaney@cityofranchocordova.org>
Subject: Confirming Application: Moose Lodge / FW: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

[External]

Hi Joe –

I'm confirming receipt of your application by email following the call we had this morning to discuss your project.

Here's the link to request a meeting with the Development Services Team:
https://www.cityofranchocordova.org/businesses/business-resources/development-services-team/request-a-meeting.
The city will hold 30 minutes on February 24th at 10:30 a.m. for your now.

Please note the font on the application is small and you'll need to zoom in to review the text. 😊

Please do share supplemental information by email.

Thanks,
Randi Kay

Randi Kay Stephens, MPA
Community Enhancement and Investment Management Analyst II
City Manager's Office
City of Rancho Cordova
2729 Prospect Park Dr.
Rancho Cordova, CA 95670
(916) 851-8781
www.cityofranchocordova.org

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Tuesday, February 8, 2022 7:57 PM
To: Stacy Delaney <sdelaney@cityofranchocordova.org>; Randi Kay Stephens <rstephens@cityofranchocordova.org>
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1460030
IP Address:	208.54.147.20
Submission Date:	02/08/2022
Survey Time:	20 minutes, 54 seconds

You have a new online form submission. To download a copy in PDF format, please click here.
Note: a download will promptly begin but may take up to a few minutes to complete pending the overall submission size.

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #66

CENTRAL VALLEY ENGINEERING & ASPHALT, INC.

PROPOSAL & CONSTRUCTION CONTRACT

*Central Valley Engineering & Asphalt * 216 Kenroy Lane * Roseville, CA 95678*
*phone (916) 791-1609 * fax (916) 791-6424*
*CA Lic# 773404 * DIR Registration # 1000001249*

Project Name:	Rancho Cordova Family Center LOOM 2357		
Project Location:	10124 Coloma Road, Rancho Cordova	***Estimator:***	*Shannon O'Neill*
Proposal Prepared For:	Rancho Cordova Family Center LOOM 2357		
Owner/Contractor Name:	Rancho Cordova Family Center LOOM 2357		
Contact Name:	Chuck Parsons	***Phone:***	
Street Address:	10124 Coloma Road	***Cell:***	916-955-5033
City, State, Zip:	Rancho Cordova, Ca 95670	***Email:***	parsons1956@icloud.com

DESCRIPTION	QTY	UOM	UNIT PRICE	TOTAL
Revised to include prevailing wages 2/9/22: Remove 3" of existing asphalt and haul off; compact subgrade; import, place and compact 3" of asphalt concrete over approximately 17,000 SF. Restripe per existing layout.	1.00	LS	$ 60,496.00	$ 60,496.00
PROPOSAL TOTAL				**Please see above**

CENTRAL VALLEY ENGINEERING & ASPHALT, INC.

PROPOSAL & CONSTRUCTION CONTRACT

*Central Valley Engineering & Asphalt * 216 Kenroy Lane * Roseville, CA 95678*
*phone (916) 791-1609 * fax (916) 791-6424*
*CA Lic# 773404 * DIR Registration # 1000001249*

Project Name:	Rancho Cordova Family Center LOOM 2357		
Project Location:	10124 Coloma Road, Rancho Cordova	***Estimator:***	*Shannon O'Neill*
Proposal Prepared For:	Rancho Cordova Family Center LOOM 2357		
Owner/Contractor Name:	Rancho Cordova Family Center LOOM 2357		
Contact Name:	Chuck Parsons	***Phone:***	
Street Address:	10124 Coloma Road	***Cell:***	916-955-5033
City, State, Zip:	Rancho Cordova, Ca 95670	***Email:***	parsons1956@icloud.com

EXCLUSIONS:

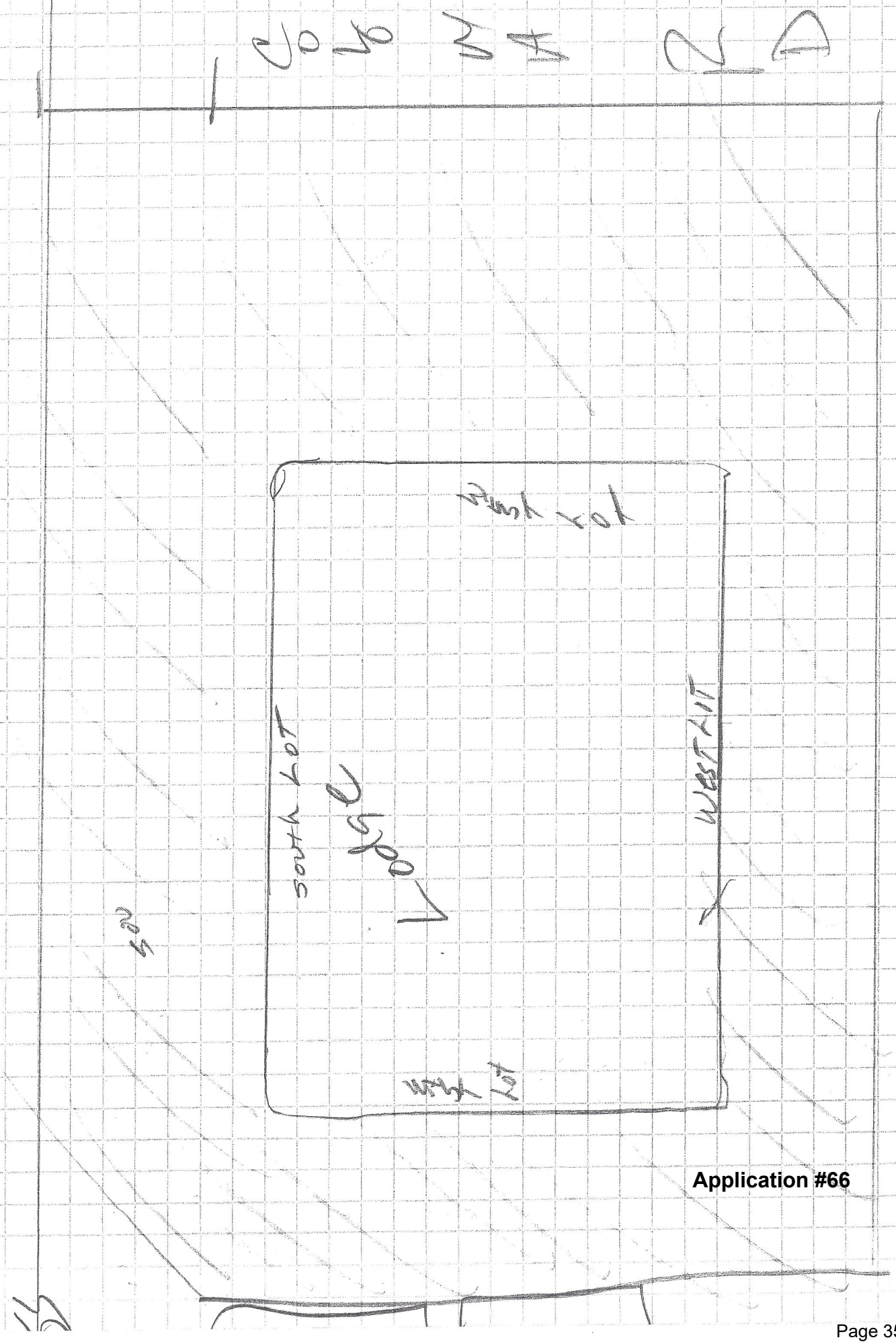
Permits, fees, or bond premiums.

Tree and stump removal.
Storm water pollution control, temporary erosion control or water treatment.
Underground, landscape, electrical, building, or fence work.
Header boards, barricades, or monuments.
Pavement markers, bumpers.
Over-excavation and re-compaction of existing ground.

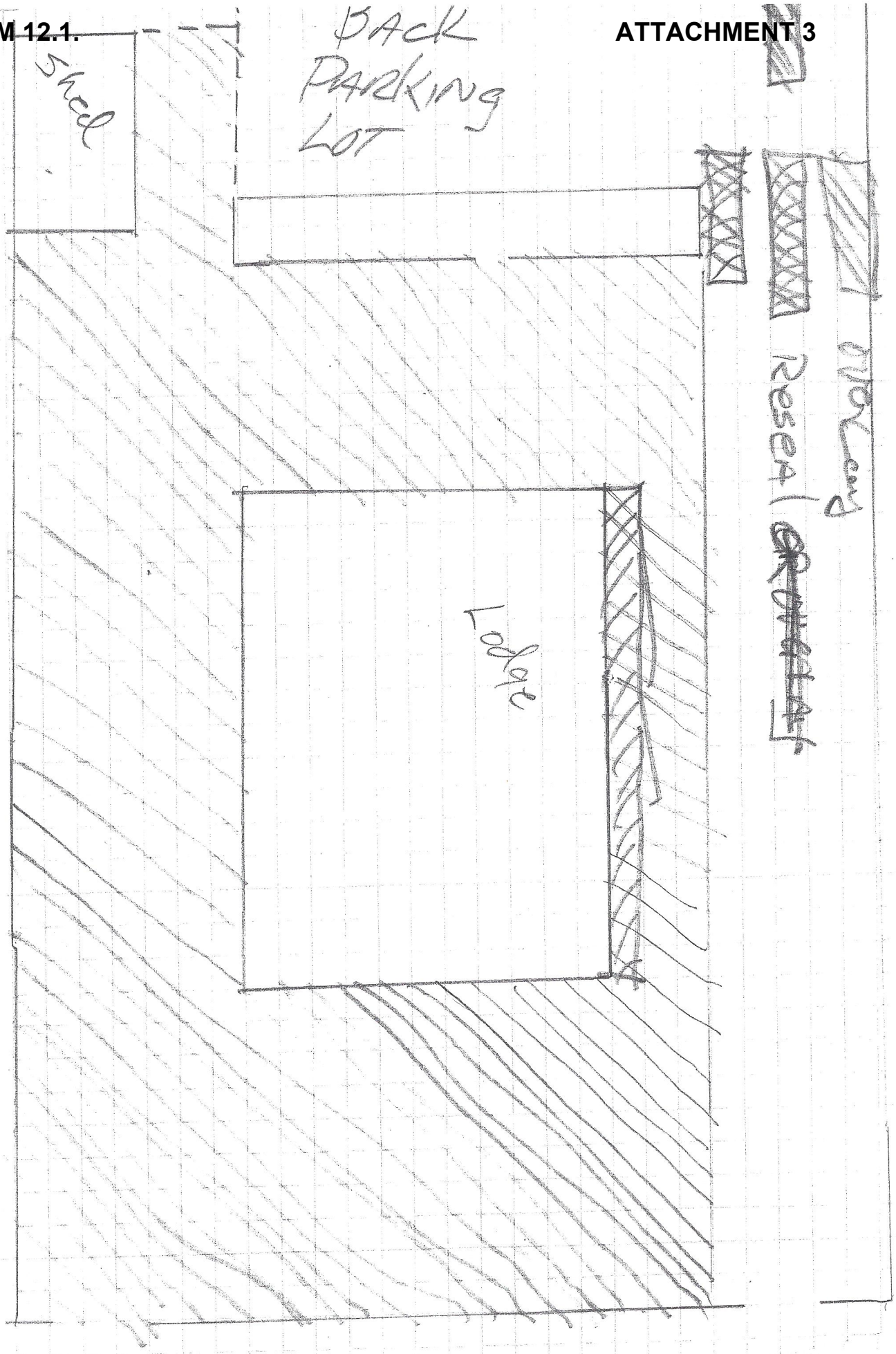
Construction survey, engineering and layout
Sand seal, fog seal or prime coat
Sawcutting of curb patch areas

CONDITIONS:

This proposal based upon the following move-ins:
-Earthwork
-Paving
Any phasing or additional move-ins may result in additional costs.
No weekend or overtime work except for Contractor's convenience.
Earthwork is to balance on-site, and no off-haul or import of material is included in this quotation.
Any buried materials, unsuitable or obstructions will be handled on a time and materials basis.
Unrestricted access for conventional trucks and equipment to be provided at all times.
Number of addenda acknowledged:
Work to be performed per a mutually agreeable construction schedule.
Any retentions to be released within 30 days of CVE&A completion of work.
Drainage will not be guaranteed if existing grade has less than 1% fall.
Payment to be received by CVE&A within 30 days of completion of our scope of work
CVE&A is not signatory to any labor agreements
This bid is subject to change based on current Diesel and Bulk Asphalt pricing
CVEA will not accept any consequential damage clauses in a sub-contract agreement



Application #66


Shed
BACK
PARKING
LOT
Lodge
Reseal



Application #66

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Saturday, February 19, 2022 8:09:40 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1482196
IP Address: 98.41.12.245
Submission Date: 02/19/2022 8:09
Survey Time: 21 minutes, 11 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Joy Of Others: Walk-Run

Project Synopsis

Be a part of our annual In the Joy Of Others Walk | Run! The participation by you and your family as walkers and fundraisers will provide critical support to BAPS Charities so that we may continue providing charitable and humanitarian services in your community and communities the world over.

Project Description

The walk is organized to celebrate the most fundamental element of any community – families – and inspires tens of thousands of people to carry forth the spirit of service. Along with our continuous activities and programs, BAPS Charities is proud to once again support Susan G. Komen® and their fight to address breast cancer from multiple fronts. 1 in 8 women will be diagnosed with the disease during their lifetime and will impact every family in one way or another.

Project Team

BAPS Charities Sacramento - Umesh Patel - Niraj Dhanani - Paragi Patel

Project Goals

The walk, like all BAPS Charities activities, is driven by the belief that In the Joy of Others, Lies Our Own. We serve and help our local communities where we live with Health Fairs, Blood Drives, Food Drives, Flu/Covid Shot Drives and Walkathons.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$5,000.00

Application #67

Estimated breakdown of project expenditures

T-Shirts= $3000 Facility & Logistics= $1000 Water/Drinks=$300 Awards/Certificates= $400 Flyers/Banners= $300

Matching Funds

N/A

Include any other funding contributions

Local Business sponsors pending.

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

5,000

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

june 30 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Local business sponsors.

Project Schedule, Timeliness and Adaptability

Project Schedule

Feb- reserve park and/or facility Mar- Start walker registration and local sponsors Apr-

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Walk-Run will be compelted on May 1, 2022. Any remaining funds and expenses will be accounted and reported by June 15, 2022.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes we plan to always fully comply with Public Health and County Health order changes. We will adapt and take the Walk-Run virtual so they can still pledge to walk and home or take family walk in their neighborhoods.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Application #67

Physical address of project location

3625 Spoto Dr
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

N/A

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a park/park facility

Which school district is the public K-12 school site located in?

Other: Stone Creek Community Park

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Niraj Dhanani

Title

Project Lead Volunteer

Submitting as

Non-Profit

Phone

4089096331

Email

dhananiraj@gmail.com

Organization's legal name, if applicable

BAPS Charities

Mailing Address of Submitter

10548 Armstrong Ave
Mather, CA 95655

Signatory's Name

Mr Niraj Dhanani

Signatory's Title

Project Lead Volunteer

Signatory's Phone

4089096331

Signatory's Email Address

dhananiraj@gmail.com

Signatory's Mailing Address

10548 Armstrong Ave
Mather, CA 95655

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or

in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #67

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Joy of others walk-Run
Name of Organization: BAPS charities
Name of Applicant and Title: Viral Dhanani, outreach Volunteer
Applicant's Phone: 408-909-6331 **Applicant's Email:** dhananiral@gmail.com

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

(Endorsement Given)

Endorsement Withheld

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES
Date: 3/7/22
Comments (Optional):

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Application #67

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Sunday, February 27, 2022 1:14:09 PM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1496892
IP Address:	99.38.155.166
Submission Date:	02/27/2022 1:14
Survey Time:	37 minutes, 55 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Blessings in a Backpack - Rancho Cordova

Project Synopsis

We provide weekend 50 for children in our local elementary schools, who have food shortage issues, on the weekends.

Project Description

Kids should worry about being a kid and not where their next meal will come from. Blessings in a Backpack (BIAB) began providing weekend food to 30 children in 2014, and we've grown to over 350 kids, currently. Our students all receive free breakfast and lunch, Monday through Friday, during the school year, but for too many kids that is their last meal until they come back to school on Monday. BIAB helps to fill that void with weekend meals geared for just that child. It's not feasible for us to feed the entire family, not just from a cost standpoint, but also the children aren't all capable of bringing a big bag of food home. Whether the child receive our prepackaged kits or our bulk food, it's completely manageable and easily fits in their backpack. We are currently sending weekend food home for 230 students from Williamson, Rancho Cordova, Cordova Villa, Cordova Gardens and Cordova Meadows Elementary Schools. We also send food for 20 students who attend Blanche Sprentz Elementary School, 60 students at Abraham Lincoln Elementary School in Lincoln Village, which is in the SCUSD and Pasadena Avenue Elementary School in the SJUSD.

Project Team

Janice and Rickey Davis

Project Goals

My short term goal is to get the 3 remaining elementary schools on board with our program. White Rock Elementary has been a part of our program for several years, and we were sad when they opted out this year. We would like to add 150 children to our program, bringing the total to 500. We will reach out to more schools in the Lincoln Village area if we don't hear back from the Rancho Cordova schools.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The

funds are intended for community enhancement & investment.

Total project cost

$49,050

Estimated breakdown of project expenditures

$1,800 Rent $47,250 Food costs

Matching Funds

n/a

Include any other funding contributions

$10,000 donation from Travelers

Ongoing operations and maintenance costs (if applicable)

n/a

Total Community Enhancement & Investment Funds requested

$25,000

Is this a multiyear request?

No

How many years have you received funding for this project?

3

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

I write grants, we host a charity golf tournament, and we have companies that host food drives, which help to cut our food bill down.

Project Schedule, Timeliness and Adaptability

Project Schedule

Our program runs the entire school year.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Our kids are out of school the end of May.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we can always go back to a drive-thru setup.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

9249 Folsom Bl.

Application #68

Sacramento, CA 95827

Other physical addresses if project/program is at multiple sites

The above address is where our food locker is located. Although we send food for 8 schools, we do not go on any of their campuses. The schools come to our location every 2 weeks to pick up bulk food, or we ship prepackaged kits to each location.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Applicant and Signatory

Application submitted by

Janice Davis

Title

Volunteer Program Coordinator

Submitting as

Non-Profit

Phone

9162135595

Email

jd@bibsac.org

Organization's legal name, if applicable

Blessings in a Backpack

Mailing Address of Submitter

123 King
Sacramento, CA 95827

Signatory's Name

Janice Davis

Signatory's Title

Volunteer Program Coordinator

Signatory's Phone

9162135595

Signatory's Email Address

jd@bibsac.org

Signatory's Mailing Address

123 King
Sacramento, CA 95827

Attach any additional documents here

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https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #68



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Blesings in a Backpack - Rancho Cordova

Name of Organization: Blessings in a Backpack

Name of Applicant and Title: Janice Davis, Volunteer Program Coordiator

Applicant's Phone: 19162135595 **Applicant's Email:** JD@BibSac.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #68

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Ranga Vasantha- Festival of Arts & Culture

Name of Organization: Kannada Sangha of Sacramento (KSS)

Name of Applicant and Title: Prabhakar Rao, Board of Director

Applicant's Phone: 916-281-5529 **Applicant's Email:** prabhaker49@yahoo.com

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given

Endorsement Withheld DiAnne Brown

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name:

Date: 3/18/22

School District: Elk Grove Unified ☐ Folsom Cordova Unified ▪ Sacramento City Unified ☐ Other ☐

Comments (Optional): Rancho Cordova High School is not an SCUSD school

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #68

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Saturday, March 5, 2022 3:29 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1511845
IP Address:	99.33.250.22
Submission Date:	03/05/2022 3:29
Survey Time:	24 minutes, 40 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Spay/Neuter/Vaccine Program

Project Synopsis

Provide free spay/neuter for cats, dogs and rabbits in Rancho Cordova.

Project Description

Enhance the Quality of Life in Rancho Cordova by offering and promoting spay/neuter services for canines and felines in our community and caring for Community (Homeless) Cats. Education and spay/neuter services are urgently needed to reduce pet overpopulation. Canines, specifically, have had very limited support. A small number of rabbit spay/neuters are covered also. Felines continue to be unaltered and abandoned by residents, especially in rental housing, which increases the need for immediate action.

Project Team

Sacramento SPCA Community Spay & Neuter Clinic Rancho Cordova Animal Services Whisker Warriors Animal Defense Fund dba Rancho Cordova Whisker Warriors

Project Goals

Fully support spay/neuter and vaccinations for Rancho Cordova Community Cats (Homeless/Strays). Fully support the Return to Field Program in Rancho Cordova. Fully support spay/neuter, vaccinations, microchips and flea prevention for resident dogs and cats. Support Homeless Individuals residing in Rancho Cordova with free spay/neuter/vaccines for their pets. Support spay/neuter for domesticated rabbits owned by residents and rabbits fostered for adoption. Support the costs of caring for Community Cat populations in Rancho Cordova. Support residents with dog and cat food for their pets on an emergency basis. Support Veterans in Mather Veterans Village with food and supplies for their companion animals.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Application #69

Total project cost

$63,020

Estimated breakdown of project expenditures

Spay/Neuter Voucher Program 31,010 Other Costs covered under Voucher Program 12,670 Co-pay of funds 3,670 Community Cat Care/Maintenance 7,140 Pet Food for Community Members 2,000 Outreach/Volunteer aid & recognition 2,600 Other costs covered by RCWW 2,600

Matching Funds

Matching Funds: $18,010 raised by Whisker Warriors through fund-raising and in-kind donations Costs covered by RC Whisker Warriors: • Co-pay of funds agreed to be covered in 2020: $3,670 • All Community Cat care $7,140 • Pet Food for Community members/feral feeders $7,000 ($5,000 covered by CoVID Grant) • Outreach & volunteer incentives $2,600 • Other costs include: Flea Treatments for resident animals (provided to residents with vouchers, to be applied by SPCA &CSN): $1,200 Shelters and feeding stations. Anticipated costs for materials $1,000 Humane Traps Purchase of additional traps for controlling cat population $400

Include any other funding contributions

Due to COVID related inefficiencies in the spay/neuter surgery process and illness of staff, we anticipate that at least $10,000 of the current fiscal year funding will be unused. We request that all unused funds be rolled over, reducing the amount of the current grant.

Ongoing operations and maintenance costs (if applicable)

none

Total Community Enhancement & Investment Funds requested

$43,000

Is this a multiyear request?

No

How many years have you received funding for this project?

7

When will your request for funding sunset for ongoing programs?

Other communities who have undertaken the challenge of animal overpopulation understood that fully meeting our goal of zero population growth will take years. Now that we have become more well known within the community, we anticipate the need for services will be similar for up to 4 more years. We have a particular challenge/opportunity with so much rental housing in our community. Covid has impacted our over-all plan. So many animals could not even get appointments for spay/neuter.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We have received a COVID Grant for $5,000 to help with pet food needs. We also received a $4,000 grant from the Glide Foundation which will be partially used for feral food. Holiday Lights generated $455.55 in donations from the community. Blaze Pizza held a one-day fundraising event for the Whisker Warriors which generated $319.00. We also received $5,000 in TOT Grant funds for spay/neuter for residents in the unincorporated Sacramento County region.

Project Schedule, Timeliness and Adaptability

Project Schedule

This project is ongoing. We receive calls for service every day.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

COVID has created inefficiencies that are hard to overcome. However, we are hopeful that both spay/neuter clinics can now proceed to serve more residents so we can meet our goals.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Our program already has virtual components. All vouchers are provided through email or text message. The clinics have drive-up operations for drop off and pick up of animals.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

3368 CRISTOM DRIVE
Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

We provide services for any residence or business located in Rancho Cordova.

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

approval to use home.jpg

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Applicant and Signatory

Application submitted by

Therese Kolvenbach

Title

Executive Director

Submitting as

Non-Profit

Phone

9167477534

Email

rcwhiskerwarriors@gmail.com

Organization's legal name, if applicable

Whisker Warriors Animal Defense Fund dba Rancho Cordova Whisker Warriors

Mailing Address of Submitter

PO Box 1415
Rancho Cordova, CA 95741

Signatory's Name

Whisker Warriors Animal Defense Fund Therese Kolvenbach

Signatory's Title

Executive Director

Application #69

Signatory's Phone

9167477534

Signatory's Email Address

rcwhiskerwarriors@gmail.com

Signatory's Mailing Address

3368 CRISTOM DRIVE
Rancho Cordova, CA 95670

Attach any additional documents here

Community Enhancement Grant Application_Y2022-23.docx

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Thank you,
City of Rancho Cordova

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Application #69

CITY OF RANCHO CORDOVA

FISCAL YEARS 2022-2023

COMMUNITY ENHANCEMENT FUND GRANT APPLICATION

Spay/Neuter/Vaccine Program

Project Description:

Enhance the Quality of Life in Rancho Cordova by offering and promoting spay/neuter services for canines and felines in our community and caring for Community (Homeless) Cats. Education and spay/neuter services are urgently needed to reduce pet overpopulation. Canines, specifically, have had very limited support. A small number of rabbit spay/neuters are covered also. Felines continue to be unaltered and abandoned by residents, especially in rental housing, which increases the need for immediate action by the Project Team below.

Project Team:
Sacramento SPCA
Community Spay & Neuter Clinic
Rancho Cordova Animal Services
Whisker Warriors Animal Defense Fund dba Rancho Cordova Whisker Warriors

Project Goals:
Fully support spay/neuter and vaccinations for Rancho Cordova Community Cats (Homeless/Strays).
Fully support the Return to Field Program in Rancho Cordova.
Fully support spay/neuter, vaccinations, microchips and flea prevention for resident dogs and cats.
Support Homeless Individuals residing in Rancho Cordova with free spay/neuter/vaccines for their pets.
Support spay/neuter for domesticated rabbits owned by residents and rabbits fostered for adoption.
Support the costs of caring for Community Cat populations in Rancho Cordova.
Support residents with dog and cat food for their pets on an emergency basis.
Support Veterans in Mather Veterans Village with food and supplies for their companion animals.

Funding Request:
Total Project Cost [see Attachment A for detailed analysis] for 2021-2022

Spay/Neuter Voucher Program	31,010
Other Costs covered under Voucher	12,670
Co-pay of funds	3,670
Community Cat Care/Maintenance	7,140
Pet Food for Community Members	2,000
Outreach/Volunteer aid & recognition	2,600
Other costs covered by RCWW	2,600
Matching Funds from RCWW	(18,010)
Total Request	**$43,000**

Application #69

Whisker Warriors Animal Defense Fund
Non-profit organization, 501c3 status
Tax ID 82-4933796

P.O. Box 1415
Rancho Cordova, CA 95741
RCWhiskerWarriors@gmail.com

Matching Funds: **$18,010** raised by Whisker Warriors through fund-raising and in-kind donations

Costs covered by RC Whisker Warriors:

- Co-pay of funds agreed to be covered in 2020: **$3,670**
- All Community Cat care **$7,140**
- Pet Food for Community members/feral feeders **$7,000 ($5,000 covered by CoVID Grant)**
- Outreach & volunteer incentives **$2,600**
- **Other costs include:**
  Flea Treatments for resident animals (provided to residents with vouchers, to be applied by SPCA &CSN): **$1,200**
  Shelters and feeding stations**.** Anticipated costs for materials **$1,000**
  Humane Traps Purchase of additional traps for controlling cat population **$400**

Total contributions from RC Whisker Warriors: **$18,010**

Total Measure H funds requested: $43,000

CoVID impact to fund utilization in 2020-2021

The inability of the spay/neuter clinics to be efficient due to the safety protocols mandated by the pandemic created a huge backlog in requested spay/neuter surgeries. The wait for surgeries continue to be up to 5 months. CSNC has stopped taking canine appointments, since they are booked for 8 months. We anticipate $10,000 of our 2021-2022 grant funding will be unused. If that indeed occurs, we understand that this current grant will be reduced by any unspent funds.

Project Schedule:
Support for Community Cats will occur throughout the year, intensifying around the breeding seasons of Spring and Fall. Trapping will facilitate spay/neuter services to hold populations in check. The number of animals requiring spay/neuter this year will be greater due to a number of factors:

- The CoVID pandemic has reduced the capacity for spay/neuter surgeries in the region. Appointments are currently extended out 5 months as of March 2022. As restrictions are relaxed, the clinics can be more efficient.
- The Sacramento SPCA had a grant to fully fund 10 ferals per day, which is now expired as of March 2022.

The clinics performing low-cost spay/neuter in the Sacramento Region are at capacity. The Northern California Community Cat Alliance, of which we are an active member, is working on solutions to allow more Community Cats to be altered, thus reducing the over-population pressures in shelters. Costs for spay/neuter services at the clinics have increased, which requires more funding to support surgeries.

Whisker Warriors Animal Defense Fund
Non-profit organization, 501c3 status
Tax ID 82-4933796

P.O. Box 1415
Rancho Cordova, CA 95741
RCWhiskerWarriors@gmail.com

The SPCA has increased their prices for felines by $9 per surgery. We will be utilizing their program more going forward, since our volunteers are working on their own, we don't have a central leader. We are hoping the SPCA does start taking rabbits again.

The Sacramento SPCA has received grant funds to be able to alter feral cats at most Sunday clinics for no cost. But the number of spots are limited and the demand is high. Community Spay & Neuter Clinic performs free surgeries for Community Cats on a limited basis, as long as their grant funds hold out, but we don't anticipate we can rely on this funding in FY 2022-2023. The RC Whisker Warriors take advantage of this program and any other grant funding whenever possible, but the number of slots for feral cats (the free program) are now booked out for months in advance.

E-voucher numbers are provided by RC Whisker Warriors. RC Whisker Warriors are responsible for determining that the pet owner lives in our city, or the feral trapper is trapping within the city limits. Only 5 total vouchers are allowed per resident per year, 4 from the same species, unless the person is using TNR (Trap-Neuter-Return) on community cats. Animal Services passes out postcards with our contact information to obtain the free services.

A detailed billing will be provided by the Sacramento SPCA and Community Spay & Neuter Clinic to the RC Whisker Warriors monthly for approval, invoices will then be sent to the City of Rancho Cordova for payment.

5 year plan

Other communities who have undertaken the challenge of animal overpopulation understood that fully meeting our goal of zero population growth will take years. Now that we have become more well known within the community, we anticipate the need for services will be similar for up to 4 more years. We have a particular challenge/opportunity with so much rental housing in our community. CoVID has impacted our over-all plan. So many animals could not even get appointments for spay/neuter.

At the end of that period, we anticipate the need for Community Enhancement Funds to support this effort will be minimal. We believe that investing the funds now will pay dividends in the future. For instance, San Francisco had an aggressive program in place, and now they have NO kittens! If anyone wants to adopt one, they have to import them from other cities or rescue agencies.

We have found that residents who contact us have very limited funds. They love their pets and/or don't want the stray cats to starve. Many are receiving food from us to continue to support these stray cats.

Reports:
Use of Funds Reports will be provided to the City semi-annually by the 15th calendar day of the month for the previous 6 months of activity.

Program Outcome Reports will be provided semi-annually, by the 15th calendar day of the month for the previous 6 months of activity.

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Attachment A

Spay/Neuter Voucher Program						
	SPCA Costs 2020 Spay/Neuter surgeries		CSNC Costs 2020 Spay/Neuter surgeries			
CATS	FEMALE	MALE	FEMALE	MALE	**Animals**	**Anticipated cost***
SPCA: Monday-Saturday **CSN:** Tuesday – Thursday **	$39	$39	$45	$35	200	$8,000
Kittens: under 4 lbs. & 4 months old	39	39	45	35	35	$1,400
Free Roaming **CATS** (fka Feral)* **	Free* or $17	Free* or $17	45	35	120	$2,400
Total Funding - Cats					355	$11,800

Rabbits	$135	$135	n/a	n/a	6	$810
Total Funding - Rabbits					6	$810

*SPCA Feral Clinic: Flea treatment, tape worm treatment, ear mite treatment, Rabies, FVRCP, and wound treatment (antibiotics separate, see below) ** CSN Ferals: Includes Revolution, pain meds, ear tip, ear mite treatment
Assuming the ferals will be no cost at the SPCA

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DOGS (in lb. ranges)	FEMALE	MALE	**Animals**	**Anticipated cost**
SPCA				
< 20 lbs	60	60	60	$3,600
21-39	90	90	70	6,300
40-79	120	120	45	5,400
80-99	150	150	4	600
100-119	180	180	2	360
120-139	210	210	2	420
SPCA cost - Dogs			183	$16,680
CSNC				
	Female	Male		
< 30 lbs	70	60	8	$520
30-39	80	70	5	375
40-49	90	80	5	425
50-59	100	90	1	95
60-69	110	100	1	105
70-79	120	110	1	115
80-89	130	120	1	125
CSNC cost - Dogs			22	$1,760
			205	$18,440

Other Costs Covered Under Voucher Program						
Services	SPCA	Included in grant	CSN	Included in grant	Need	Anticipated Costs Under Grant
Rabies (DOGS & CATS - required)	$5	included	$10	included	450	$3,375
DHPP (DOGS only-required)	$5	included	$12	included	180	$1,530
FVRCP (CATS only-required)	$5	included	$10	included	325	$2,438
Antibiotics (as needed)	$10 cats, $20 dogs	When needed	Clavomox $28 diclocycline $23 – cats, $50 - dogs	When needed		$100

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Application #69

Flea treatment (non-feral, since included in feral costs)	$10 cats, $15 dogs	Provided by WW, attached to voucher for residents	$15 cats, $15-18 dogs	Provided by WW, attached to voucher for residents	Covered by WW	$0
Ear mites (non-feral, since included in feral costs)	$10 cats, $20 dogs	When needed	$10	When needed		$100
Deworming	$10 cats, $20 dogs	When needed	Cats $5 and up, dogs by size $7-20	When needed		$100
Heartworm dogs over 10 months mandatory for ASN	$20	Prior approval from WW required	$20	When needed	25	$100
Leukemia test up to 7 months optional		Prior approval from WW required	$15	Prior approval from WW required		$100
FeLV/FIV Combo test	$15	Prior approval from WW required	$23	Prior approval from WW required		$100
Bordatella	$5	Not funded	$15	Not funded		
Microchip	$10	Funded for all non-feral animals	$20	Funded for all non-feral animals	546	$3,800
In heat/Pregnant	$10	As needed	In heat cats - $0, pg cats $10 if fluids needed, dogs $20	As needed	15	$150
Disposal fee for deceased animals	0		0	When needed		
Necropsy	0		0	When needed		
Euthanasia	$50 ($100 emergency Euthanasia)	Prior approval from WW required	Cats $20 Sm Dogs $20 to $50	Prior approval from WW required		$100
Dogs - Pain meds –by weight for residents only			$4-37	included	22	$105
Cats – pain meds			$4	included	118	$472

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Teeth removal	$5 for baby teeth (each tooth)	Prior approval by WW required	Per tooth $10, other services case by case	Prior approval from WW required		$100
Total other costs covered by vouchers						**$12,670**

The proposed structure for the Voucher Program will be as follows:

1. Appointment, if needed, will be made by Whisker Warriors or resident directly
2. Voucher number provided to SPCA/CSNC upon arrival
3. SPCA/CSNC completes surgeries and may contact us if other services are needed that are not specifically included in voucher plan. CSNC can use the voucher for vaccines without Spay/Neuter surgeries at their Wellness clinics.
4. SPCA/CSNC compiles all data on spay/neuter surgeries or other services performed and submits detailed billing via email to Tera Kolvenbach by the 10th day of the month for duties performed the previous month. If submitting billing directly to the city, Tera must be copied.
5. Tera approves the billing and submit the bill to the City of Rancho Cordova for payment.

Locations for Spay/Neuter and vaccine Voucher Services:

Sacramento SPCA: 6201 Florin-Perkins Road, Sacramento, CA 95828
Community Spay & Neuter Clinic: 3839 Bradshaw Road, Sacramento, CA 95827

Vouchers
Paper Vouchers cannot be accepted by the SPCA/CSNC without being crimped.
Electronic vouchers for both free roaming (feral) and resident's animals – one per animal

Appointments
SPCA: One cat can be presented for Spay/neuter M-Sat without an appointment. More than one cat and all dogs require an appointment. Request an appointment online at https://www.sspca.org/clinics
CSNC: Contact (916)368-7314 for an appointment. Online appointment requests: https://communityspayneuter.com

Emergency Contacts
SPCA: Email Lydia Caronna-Craig, Spay Clinic Manager, Sacramento SPCA at lcaronna@sspca.org for emergency
CSNC: Marie Naumann (916) 368-7314

Forms to be provided to Residents
Electronic voucher number

Special accommodations
SPCA: One feral spay/neuter per day Monday – Saturday without an appointment

Transportation

Transportation reimbursement will be provided by RC Whisker Warriors when needed by residents, and to help volunteers with the costs of transporting Community Cats to spay/neuter clinics and back to their colonies. RC Whisker Warriors will not transport animals owned by residents.

Community Cat Care/Maintenance

Colony	Location	Approx. # of cats	Dry Food/mo	Wet Food/mo	Cost/yr
Sun Lovers	2880 Sunrise Blvd	4	10	20	$360
El Segundo Gang	2625 El Segundo	4	10	20	$360
	Citrus Drive	4	10	20	$360
	2052 W Coloma	3	10	20	$360
Recyclers	Recycle Road (4 locations)	30	80	0	$960
Stone Creek	3368 Cristom Drive	3	10	20	$360
Working Cats	Mercantile Drive	6	15	0	$180
Movers & Shakers	11327 Folsom Blvd	9	20	40	$720
Jump Sky High Team	Sky High Sports	10	20	40	$720
Postal Team	10923 Progress Ct.	2	10	20	$360
River City	Progress Court	3	10	20	$360
Tree Lovers	2197 Chase Drive	13	30	50	$960
Monks	Abbotford	4	10		$120

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Application #69

Learners	RC Villa School	4	10		$120
Rockers	Rockingham	6	15		$180
High flyers	Mills Tower	5	15		$180
Residents feral cats	4 residents	15	40		$480
Total		125			**$7,140**

Outreach/Volunteer recognition

Outreach/Volunteer aid/Recognition	Anticipated costs
Postage for informational materials for community groups	$250
Printing costs for postcards	500
Website costs/annualized plus webmaster costs	500
Volunteer mileage costs reimbursement for trapping and spay/neuter of Community Cats	350
Volunteer recognition/gift cards	750
Teambuilding event	250
Total	**$2,600**

Funds can be allocated to other elements of the grant if the allocation for one element is exceeded. except for funds allocated to Outreach/Volunteer Costs & Recognition, which cannot be exceeded.

Sustainability

The Rancho Cordova Whisker Warriors believes that the need for our services will continue at this high rate for several more years. We will actively seek more donations. However, we do not envision that the need for support will completely be eliminated.

The Whisker Warriors do provide services to the community above and beyond the services funded through the Community Enhancement Fund grant. Leveraging partnerships is key to fulfilling our mission.

Some of the areas in which we have used donations and partnerships to fulfill our mission:

- **Animal Education** is a priority. We provide education to families at the numerous events we attend each year in the city. We are still hoping to put together a plan to go into the schools and provide classroom education.

- **Trailer Parks & Apartments** We are concentrating efforts on partnering with the managers of these sites to control the population of animals in these locations.
- **Senior aid** We have been successful in engaging local businesses in our requests for donations for seniors. The end result is that we have been able to provide at-risk seniors with a stable source of cat and dog food through the Meals-On-Wheels program without the use of any grant funds. We also have been able to fully support dry cat food for an increasing number of homeless cat colonies in Rancho Cordova outside of the grant funds. We continue to seek opportunities to help seniors and other residents in need.
- **Veterans Village at Mather** We have had sufficient donations to provide pet beds, toys, treats and dog and cat food for the companion animals for all the Veterans at the Village. With all Phases now open (146 apartments), there are increased needs for both dog and cat food and supplies.
- **Adoptions** We are partnering with the SPCA to foster kittens and cats that we bring to the shelter, or animals surrendered to the shelter. NorCal Freedom for Paws now adopts out dogs through PetSmart and other venues. We are also partnering with the Sacramento SPCA, Fat Kitty City and Animal Outreach of the Mother Lode to foster kittens and cats for adoption through their programs.
- **Care for Community Cats** Humane trapping of new colony members and colony maintenance, including building of shelters and feeding stations, is provided by either Whisker Warriors or other trappers in the region. Animal Services Officers rely on us to help mitigate issues with stray or feral cats for residents. We also will partner with them on the return to field program with the SPCA. We partner with the Northern California Community Cat Alliance to provide services within Sacramento County. Volunteers with Sac Ferals and Cat Core Sacramento work with apartment managers, businesses and residents to provide solutions.

Thank you for caring for the animals of Rancho Cordova!

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3368 Cristom Drive
Rancho Cordova, CA 95670

March 5, 2022

RE: Letter of Support for Spay/Neuter and Vaccines Project by Rancho Cordova Whisker Warriors

To whom it may concern:

I, Therese Mary Kolvenbach, fully support this project and will allow the use of my residence, which I own, for traps, pet food and supplies and meetings when necessary.

Property address:

3368 Cristom Drive
Rancho Cordova, CA 95670

Thank you!

Therese Mary Kolvenbach

Therese Mary Kolvenbach

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23
Date: Wednesday, March 9, 2022 11:34:54 AM

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #: 1520002
IP Address: 206.15.249.230
Submission Date: 03/09/2022 11:34
Survey Time: 30 minutes, 33 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

CHS Locker Room Facilities Update

Project Synopsis

Enhancing the Physical Education Locker Room at Cordova High School to improve the aesthetics, provide a safe environment, increase natural light and top notch facilities for our students and the community.

Project Description

The project would allow the maintenance department to complete the renovation of the boys and girls locker room at CHS. The funds would be used to purchase new lockers and windows in the exiting locker rooms. Funds would also be used to install the lockers and windows.

Project Team

The Team responsible for ensure this project is completed will include Jim Bonovich, Director of Maintenance, Matt Washburn, Chief Operation Officer, Peter Maroon, Director of Athletics and Jerad Hyden, Principal.

Project Goals

Our goal is to provide our students at CHS with safe locker room environment, that is aesthetically pleasing, with natural sunlight and new lockers.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$380,000

Estimated breakdown of project expenditures

Funds will be used to: 1. Lockers and accessories - $269,000 2. Locker Installation - $53,000 3. Retrofit Windows Install - $36,000 4. Windows Delivered - $22,000

Matching Funds

FCUSD has provided $745,000 for the completion of this project. The scope of the work included asbestos abatement, electrical, drywall, wall finishes, ceiling finishes and lights, epoxy flooring, HVAC upgrade, HVAC ducted system replacement, and painting. Labor cost has also been incurred by FCUSD.

Include any other funding contributions

N/A

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$380,000

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

This project will sunset on July 2023.

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None.

Project Schedule, Timeliness and Adaptability

Project Schedule

This project work is to be completed in the summer of 2022.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The majority of the work has been started, the last phase of this project work will be done this upcoming summer. Ordering lockers and windows can be done as soon as the grant is approved to expedite the process.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Project can be adjusted as needed to ensure funds are used for purchase of equipment or services.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

Cordova High School 2239 Chase Dr.
Rancho Cordova, California 95670

Other physical addresses if project/program is at multiple sites

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Application #70

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Peter Maroon

Title

Director of Athletics and Physical Education

Submitting as

Public Agency

Phone

9162949388

Email

pmaroon@fcusd.org

Organization's legal name, if applicable

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr.
Rancho Cordova, California 95742

Signatory's Name

Mr. Sean Martin

Signatory's Title

Assistant Superintendent, Business Services

Signatory's Phone

9162949000

Signatory's Email Address

lvenzon@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr.
Rancho Cordova, California 95742

Attach any additional documents here

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the

application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below:
https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #70

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: CHS Locker Room Facilities Update

Name of Organization: FCUSD Athletic Deparment

Name of Applicant and Title: Peter Maroon, Director of Athletics

Applicant's Phone: 916-294-9388 **Applicant's Email:** pmaroon@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #70

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 11, 2022 10:43 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1524401
IP Address:	99.135.33.112
Submission Date:	03/11/2022 10:43
Survey Time:	7 minutes, 36 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

SafeStation®

Project Synopsis

SafeStation is an identification, detection and mitigation system that gives facilities owners and the public confidence to responsibly gather and enjoy sporting events, performing arts, shopping, traveling, or just going back to work - in person, again... finally. SafeStation® is the only system that provides a multi step processing sequence to reduce the risk of infectious diseases entering your facility and carriers unknowingly spreading disease to other guests and your valuable employees. https://www.safestation365.com/

Project Description

SafeStation® combines several proven and long standing technologies into one integrated packaged solution that allows efficient processing and screening of large quantities of entrants into a venue. SafeStation® detection technology includes not only standard metal detection but also the latest in thermal imaging to measure human body temperature in a safe, quick and non-contact process that allows near instant detection of persons having a fever (suggesting infection of a communicable disease). Further, SafeStation® takes the next step by employing spread mitigation technologies that are safe to humans but deadly to viruses and bacteria. SafeStation® does NOT and CANNOT claim to "sanitize" or "purify" humans and their clothing and belongings, but uses far-UVC 222 nm lightwash wavelength doses (again, in low exposure, human safe quantities) to neutralize as many pathogens as possible residing on a person and their belongings. In some platforms O3 infused HEPA filtered air is also used as an additional option. Where inanimate objects may be processed separate from guests, an even higher and more effective far-UVC 222 nm dose is used in that product configuration. The result is a guest or tens of thousands of guests who are screened for possession of weapons and for elevated body temperature suggesting infection of contagious disease PRIOR to entering your building or venue. Further, you will have a best practice and best in class process of using efficient, non-invasive, passive elements to reduce the possibility of these guests carrying disease into your venue ON them, not just IN them.

Project Team

Eric Bland, George Pappas, Tim Casey, Jason Stapleton

Project Goals

The SafeStation launch team endeavors to complete phase one of prototyping three product type deployments in Q2, 2022 including a gateframe unit for more fixed installations, a portable unit geared towards EMS applications and also a ceiling mounted fan unit for space sanitization. Goal is to place units in qualified venues for data and voice of customer gathering to refine the designs for commercial use and sale by Q4, 2022. The SafeStation team, based in Rancho Cordova, would like to place units for use and to the benefit of Rancho Cordova venue(s) and public services for this data and VOC feedback phase, and also promote SafeStation as an incubator and startup company that chose to base itself in and build a business and create jobs in Rancho Cordova going forward. SafeStation intends to be a fully functioning LLC with goals of profitably supplying solutions across the United States Q1 2023 and beyond.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$32,800 to complete Phase 1 prototyping round as described.

Estimated breakdown of project expenditures

Materials and components: $9500 Agency approvals: $7500 Engineering & Development Costs: $6500 Freight in for materials & components: $4800 Field installation / commissioning costs: $2500 Build labor and testing costs: $2000

Matching Funds

N/A

Include any other funding contributions

Current members have contributed sweat equity as well as monetary contributions to secure Trademark, initial prototype components, travels and attendance at a trade show and some marketing materials (literature, website, brand materials).

Ongoing operations and maintenance costs (if applicable)

This will depend upon the scalability of the operation beginning in 2023. However, the SafeStation team currently has a warehouse and R&D space as part of another related company in Rancho Cordova that is prepped to also serve as the SafeStation HQ and warehouse. This space will be subleased from the other company (already agreed) and annual fixed costs/O/H (not COGS) of the self sustaining business in 2023 are initially projected at $275,000 annually.

Total Community Enhancement & Investment Funds requested

$32,800

Is this a multiyear request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

We are seeking to secure some additional investment funds from an industry partner and contract manufacturer as part of a manufacturing partnership agreement on an ongoing basis. This is pending.

Project Schedule, Timeliness and Adaptability

Project Schedule

Project has already begun at Phase 0, with 2 initial prototype units in existence, one in the field. Phase 1 prototyping requires additional funding and is scheduled for Q2/Q3 2022. Phase 1 prototype schedule is July/August 2022 for completion and data collection. Production readiness is scheduled for December, 2022 with full launch Q1 2023. Continuous improvement will always occur to refine and update the products, but Phase 1 prototype completion is targeted for October, 2022.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Initial proof of concept work has already completed and supply chain has been 75% established already. Correct human resources already in place with executive leadership, engineering, production and sales personnel already engaged. This phase of the project (what is being described in this application) is targeted to complete in the next 6 months, not next 15 months.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This project could adjust according to health orders. SafeStation was "born" during the 2020 stay at home orders and significant marketing, sales and engineering headway was achieved and the brand and product plans were developed. Product is and could be built and tested outside of California and Sacramento County and no on site personnel in CA or Sacramento County are technically required at this phase of SafeStation development.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

3127 Fite Circle
Suite D
Sacramento, California 95827

Other physical addresses if project/program is at multiple sites

SafeStation is looking to place products (as explained) at location(s) in Sacramento County and specifically Rancho Cordova but these locations have not yet been deiced or negotiated as of March 11, 2022 (COULD be a school site or park facility BUT this is not yet known). SafeStation is currently located in a Rancho Cordova building with one prototype unit installed for testing and proof of concept review. Thus, per the question below, no "letter of support" is yet available at this time.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Eric Bland

Title

Chief Operating Officer

Submitting as

Other: SafeStation is organizing as a multimember LLC in Q2, 2022

Phone

Application #71

4147025240

Email

ebland@safestation365.com

Organization's legal name, if applicable

Mailing Address of Submitter

3127 Fite Circle
Suite D
Sacramento, California 95827

Signatory's Name

Mr. Eric Bland

Signatory's Title

Chief Operating Officer

Signatory's Phone

4147025240

Signatory's Email Address

ebland@safestation365.com

Signatory's Mailing Address

3127 Fite Circle
Suite D
Sacramento, California 95827

Attach any additional documents here

SS_Brochure_R0.0.pdf

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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SafeStation™



identify

detect

mitigate

Introducing **SafeStation**™

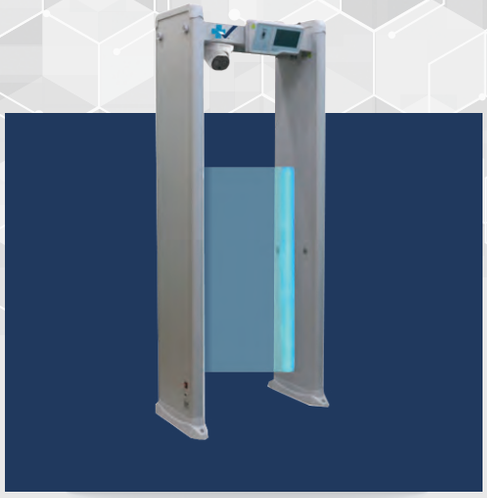
The identification, detection and mitigation system that provides a multi step processing sequence to reduce the risk of infectious diseases.



Application #71

MORE INFO

SafeStation365.com



SafeStation™ D
SafeStation™ DS

- thermal scanning for body temperature
- metal detection with one pass through the gateframe



SafeStation™ M
SafeStation™ DM
SafeStation™ DSM

- thermal scanning for body temperature
- metal detection with one pass through the gateframe
- low and safe dose of far-UVC 222nm light to reduce risk of contagion by killing many types of viruses, bacteria and molds
- HOCl atomized disinfectant



SafeStation™ IDM
SafeStation™ IDM+

- thermal scanning for body temperature
- metal detection with one pass through the gateframe
- low and safe dose of far-UVC 222nm light to reduce risk of contagion by killing many types of viruses, bacteria and molds
- HOCl atomized disinfectant
- identification via ticket or badge validation
- measured dose of O3 infused HEPA filtered air

SafeStation

MORE INFO

SafeStation365.com

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 11, 2022 1:35 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23

Apply for Community Enhancement Fund Grant Funding 2022/23

Submission #:	1524853
IP Address:	66.60.161.174
Submission Date:	03/11/2022 1:35
Survey Time:	10 minutes, 19 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Home and Neighborhood Improvement Campaign

Project Synopsis

This project will enhance the residents' quality of life, community pride, and engagement. It will result in improvements at 30 homes owned by residents with low-income, older adults, those with disabilities, or families with children. 13-15 homes will receive critical, health, safety, efficiency, and beautification upgrades. The remaining homes will receive minor safety modifications.

Project Description

This project will support Rebuilding Together's commitment to improving homes and neighborhoods in the City. The two year home improvement campaign will enhance the residents' quality of life, community pride, and engagement. This project is also aligned with the Housing Element's goal to encourage the improvement, rehabilitation, and revitalization/reinvestment of the City's existing residential neighborhoods. This is a two-year request to improve 30 homes each year. Both years, 13-15 homes will receive extensive health, safety, efficiency, and beautification upgrades and 10-12 will receive minor safety modifications. The work will vary per home but will include upgrades such as landscaping, fencing, roofs, accessibility modifications, HVAC, electrical, plumbing, carpentry, and energy efficiency. The work will occur throughout the year by volunteer groups, contractors, students, Americorps members, etc. The selection process includes community outreach, an application process, and a home preview using a safe and healthy homes assessment. The assessment is focused on identifying deficiencies in the homes related to the principles of keeping the home safe, dry, ventilated, pest-free, accessible, energy-efficient, and maintained. We also identify exterior improvements to enhance the look of the home and neighborhood. The homeowner is also interviewed to identify any other issues such as food insecurity. Community and City resource information is shared with those in need of additional assistance. Tackling substandard housing in neighborhoods cannot be accomplished by one organization in isolation no matter the quality of services and resources invested. We leverage the strengths of volunteers and partners including nonprofit and faith-based organizations, local businesses, financial institutions, occupational therapists, and other service providers to accomplish the project goals.

Project Team

Rebuilding Together has improved over 8,000 homes and 98 nonprofit facilities, and hosted home improvement events for 30 years in the Sacramento area. In 2014, we developed a strong relationship with the City that has resulted in hundreds of homes improved

through our various programs since 2014. The staff is experienced at working with volunteers, contractors, and partners to improve homes and neighborhoods. In 2022, the occupants in 10 of the Rancho Cordova homes benefited from a partnership with Occupational Therapy graduate students. They met with the homeowners, performed home safety assessments, and provided support and education about safe living. Their findings were incorporated into the home's scope of work. Additional Volunteers and Partners may include, but are not limited to: ● Trained "House Captains" and "Volunteer Coordinators" oversee the work on some of the homes. ● Typically, 25-50 volunteers per home ● Workforce development programs, businesses, faith organizations, schools, service clubs ● SMUD: Weatherization audits, energy saving measures ● Sacramento Tree Foundation ● Republic Services ● Real Estate Associations ● Agency on Aging and other sponsors: Funding for accessibility modifications Staff involved in the project to varying degrees include: Executive Director: Grant management, planning, and staff supervision. Rebuild Event Program Manager and Assistant: Coordinate the outreach, home previews and selection, work scope planning, supply management, resource development, labor recruitment and training, logistics, partnership development, reporting, evaluation, and homeowner relations. The team works closely with the City staff to coordinate outreach and services. Safe at Home Manager and Assistant: Provide home safety services at the homes. Resource Development and Marketing Manager: Coordinates community outreach Financial Administrator: Financial tracking and invoicing. Contractors: Provide skilled labor as needed.

Project Goals

The ultimate project goal is to decrease the number of individuals living in substandard housing and improve the housing stock in the City of Rancho Cordova. Specifically, we will achieve the following goals: 1) Quality of Life: Improve the health, safety, efficiency, and curb appeal at 13-15 homes. The homes are selected using a Safe and Healthy Homes assessment tool. The goal is to address 80% of the deficiencies identified. Provide the participants with information about other community resources and additional assessments and support provided by Occupational Therapy graduate students. 2) Safety: Increase the residents' safety and independence by 50% in an additional 15-17 homes by providing safety items such as shower and bath grab bars, stair handrails, shower stools, toilet risers, etc. 3) Community Engagement and Civic Pride: Provide opportunities for the homeowners to meet other residents and learn about City services. Provide opportunities for residents to volunteer to improve the community. Coordinate services with other City services as needed. 4) Workforce Development: Provide training opportunities for young adults and underserved individuals in training programs at a minimum of 5 homes.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total project cost

$180,000 x 2 years =$360,000

Estimated breakdown of project expenditures

$80,000 x 2 years = $160,000 - Project Management which includes personnel, insurance, mileage, rent, etc. $100,000 x 2 years = $200,000 - Home-related expenses such as supplies, contractors, equipment, permits, volunteer support, etc.

Matching Funds

$70,000 x 2 years = $140,000 (8 hours x 250 volunteers x $35)

Include any other funding contributions

$50,000 x 2 years = $100,000

Ongoing operations and maintenance costs (if applicable)

N/A

Total Community Enhancement & Investment Funds requested

$150,000 x 2 years = $300,000

Is this a multiyear request?

Yes

Number of years

2

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

We are requesting the grant for a two-year period of time to maximize the use of the funds and achieve the best results. It typically takes up to 3-5 months to ramp up before repairs can occur. By moving to a two-year project the startup time is eliminated the second year. We can select all the homes earlier to avoid starting over the next year. It allows for more time building relationships with the homeowners and partners, raising funds and recruiting volunteers. This approach is more attractive to funders because of the wider spread impact. We are confident in the ability to secure financial, human and in-kind resources due to 30 years of experience. The project is valid if it is only funded for one year.

How many years have you received funding for this project?

7

When will your request for funding sunset for ongoing programs?

We will continue to need City funding to provide the same type of project in the future. We will continue to seek and leverage outside services and support to increase the impact on each home.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Yes, our Board of Directors and staff is committed to working in communities, such as Rancho Cordova, where there is an interest in neighborhood improvement and the residents' well-being. Our close working relationship with Rancho Cordova staff has resulted in a positive experience for all and tremendous results. We plan to continue asking for funding as the need is growing, particularly among the low-income, older adult population who have limited housing options. We seek sponsorships from organizations such as businesses, service clubs, faith-based groups to support the project. We layer additional funds to provide additional critical repairs such as roofs as needed.

Project Schedule, Timeliness and Adaptability

Project Schedule

If we are awarded funding for two years, the project will occur between August 2022 and June 2024.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Year One Community outreach: August - November Outreach includes mailings, coordination with City staff, Code Enforcement, communication with local organizations, etc. We also consider homes that have participated in our other home improvement services in the City. Application processing and home previews: October - December 10 If appropriate applications are received, some homes will be selected in the Fall so work can begin earlier than January. The homes that receive minor home safety work only will occur beginning in August. Scope of work development: A plan is created for each home based on need, labor, and budget. Some of the homes are selected for one-day projects and others with heavier scopes will occur over time, but be completed prior to June 30 . Workdays: Volunteer workdays will be scheduled throughout the year depending on volunteer availability and the scope of work. Skilled contractors will be scheduled as needed. Year Two: Outreach and home previews will occur during the first year to ensure that an adequate number of homes are selected for the next year. The timeline in Year One will be repeated during Year Two, although work will begin in the Fall on those homes selected the prior year.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we modified our model the past two years resulting in 100% CEIF grant compliance. We have integrated some of the adjustments and lessons learned into our current model which is flexible in case the orders change again.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical address of project location

The opportunity is available to any homeowner in Rancho Cordova.

Application #72

Rancho Cordova, CA 95670

Other physical addresses if project/program is at multiple sites

The opportunity is available to any homeowner in Rancho Cordova. Physical address of project location Street: TBD Unit Number: n/a City: Rancho Cordova State: CA Zip: Rancho Cordova

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application submitted by

Carrie Grip

Title

Executive Director

Submitting as

Non-Profit

Phone

9164551880 ext. 2

Email

cgrip@rebuildingtogethersacramento.org

Organization's legal name, if applicable

Rebuilding Together Sacramento

Mailing Address of Submitter

8231 Alpine Avenue
Suite 3
Sacramento, CA 95826

Signatory's Name

Carrie Grip

Signatory's Title

Executive Director

Signatory's Phone

9164551880 ext. 2

Signatory's Email Address

cgrip@rebuildingtogethersacramento.org

Signatory's Mailing Address

8231 Alpine Ave
Suite 3
Sacramento, CA 95826

Attach any additional documents here

Homeowner Stories.docx

Public Record Unless otherwise exempt under applicable law, applications and application materials are public records. All information received from an applicant, whether received in connection with a grant application or in connection with any grant-funded activities performed are subject to disclosure pursuant to the California Public Records Act, unless otherwise exempt. Next Steps Applicants will receive acknowledgement once their application is received. When the application period closes, staff will review each application according to the application criteria and prioritization method listed within the Fiscal Year 2022/2023 Grant Application Process and Criteria document. Should staff have any questions or need clarification on your application, they will contact you. You are invited to attend any of the public City Council Meetings. It is anticipated at this time that the Community Enhancement & Investment Fund team will present information to the City Council starting in April and continuing through June. We may invite applicants to present their project and we may make selection recommendations to Council during the May City Council meetings. In addition, the Community Enhancement & Investment Fund team will send periodic updates to grant applicants via e-mail. It is possible that all funding decisions for the Fiscal Year 2022/2023 Community Enhancement & Investment Fund could be made in May and formally adopted by City Council by early June. Staff intends to notify all applicants of the funding decisions made by the end of June. If you have not signed up to receive automatic notifications when council meeting agendas are posted, you can do that by using the link below: https://www.cityofranchocordova.org/residents/what-s-happening/sign-up-for-e-news

Thank you,
City of Rancho Cordova

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Application #72

ATTACHMENT: Rebuilding Together

He took his first shower in five years thanks to the work of Rebuilding Together and the City of Rancho Cordova.

There are too many examples of work supported by the City of Rancho Cordova to include. This is one example of the impact as expressed by the homeowner.

The improvements included landscaping, exterior paint, fence repair, wheelchair ramp, hoist for her husband to get into the shower and into bed, and a water heater. Prior to the work, she gave him sponge baths. After the work was completed, he was able to get into the shower for the first time in 5 years.

The work was performed by volunteers, contractors, and staff. Additional resources were leveraged to complete the work.

Impact: Beautification, accessibility, safety, security, and hot water.

LETTER FROM A HOMEOWNER

My husband and I are just one of the families that Rebuilding Together has done so much for this year. I am writing because I wanted to let you know how great this program and all of the people who work for it are. I cannot tell you how much we appreciate all that was done with the funding the City of Rancho Cordova provided.

My husband had a stroke 5 years ago and I retired from my job to stay home to take care of him. He had a caregiver for 1 year while I continued to work but I probably don't have to tell you how expensive that is.

Since we had to live on our combined social security paychecks there was no way we could even keep up with all of the maintenance an older home requires. If it was not for Rebuilding Together and the City of Rancho Cordova I don't know what may have happened.

All of the people who have worked on it have been so kind and cheerful and never made us feel like we were just a couple of old people who couldn't do anything for ourselves.

Thank you and thank the City for making this possible. We need programs and people like this now more than ever.

Application #72

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW
Date: Sunday, March 13, 2022 11:54:31 PM

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1527406
IP Address: 73.223.46.250
Submission Date: 03/13/2022 11:54
Survey Time: 46 minutes, 26 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Locomotive Storage Building

Project Synopsis

Sacramento Valley Live Steamers Railroad Museum, in collaboration with the City of Rancho Cordova and the Cordova Recreation and Park District, intends to invest in the community through the construction of a locomotive storage building adjacent to the Hagan Community Barn for the secure keeping of the museum's locomotives.

Project Description

After 45-years of existence in Rancho Cordova, parents and grandparents bring their families to ride on the same train they have fond memories of enjoying as a child. That is something community members can be proud of, as the Sacramento Valley Live Steamers Railroad Museum certainly improves the quality of life for the residents of the city. To keep the trains moving down the track, the locomotives need a house for protection and shelter between run days. The museum has outgrown the capacity of existing storage facilities. In addition to the security the building will bring, the structure will also serve as an educational aid demonstrating to children and visitors what was once a common sight in towns throughout our nation, the locomotive house. The locomotive storage building is designed to be reminiscent of a locomotive house that might have been seen on one of California's many shortline railroads. Such a building existed at the terminus of the (formerly) Southern Pacific line that traverses Rancho Cordova up to Folsom and then to Placerville. This structure has been designed to meet the current need for locomotive storage and the foreseen needs of the museum's future in Rancho Cordova.

Project Team

President Andy Berchelli – experienced project manager. Has overseen several key projects including the replacement of the museum's tractor three years ago, rebuilding of a major bridge on the railroad, and overseeing a previous grant that funded over $100,000 to build an irrigation system for the museum grounds. Vice-president Dennis Gramith – experienced leader. Dennis is a retired fire chief with Sacramento Metropolitan Fire District. As a museum volunteer for over forty years, Dennis has many longstanding relationships with key personnel at the park administrator's office and at city hall. Volunteer Philip Huntingdale- a structural engineer along with the collaboration of Clausen Engineers, Emeryville, California. Both engineers have vast experience in the design, construction management, and supervision of overall commercial building projects.

Application #73

Project Goals

Goal: Construct Locomotive Storage Building complete and ready for occupancy. Metrics: 1. Secure Measure H Funding 2. Enter into a contract with General Contractor (Contractor). The contractor secures permits. 3. Site work completed for construction. Concrete completed. 4. Building closed in and secured. 5. Rail, racking, and transfer table completed final inspection. 6. Contractors obtain Certificate of Occupancy.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$338,634.00

Estimated Breakdown of Project Expenditures

Project expenditures PLANNING AND DOCUMENTATION $29,000.00 PERMITS $5,000.00 SITE WORK $26,170.00 CONCRETE $26,462.50 MASONRY $31,880.00 STEEL FRAMING $68,790.00 DECKING $14,210.00 DOOR, DOOR FRAMES & HARDWARE $12,600.00 PAINTING $7,050.00 ELECTRICAL $14,000.00 CONTRACTORS PROFFIT AND OVERHEAD $47,032.50 CONTINGENCY $56,439.00

Matching Funds

N/A

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$338,634.00

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

N/A

Project Schedule, Timeliness and Adaptability

Project Schedule

June, 2022 - Measure H grant awarded to SVLSRM. July, 2022 - Rancho Cordova Recreation and Park District (RCRPD) advertise for Request For Proposal (RFP) to general contractors. General contractors present bids to the Park District for evaluation. Include allowing the SVLSRM to help analyze the proposals. August, 2022 - With construction contract secured. Contractor shall assign Project Manager and obtain grading permit. Contractor shall publish and submit first and subsequent progress report, and submit to Measure H facilitators. Sep, 2022 - Site work underway, included the trees removed, track removed, fence/gate installed, and erosion control and refuge measures installed. Initial site work shall be completed. October, 2022 - Pull Building Permits. Groundbreaking

ceremony at the Fall Meet with RCRPD and Rancho Cordova leadership invited to attend. November, 2022 - Ground work completed. Concrete foundations poured and complete. December, 2022 - Masonry walls erected and complete. This includes installing steel door frames within embedded masonry walls. January, 2023 - Roof framing and decking installed, water tight, and complete. Metal doors shall be installed and all locking hardware complete. Building shall be secure. February, 2023 - Electrical work completed. Floor finish shall be installed. Locomotive storage racking shall be underway. March, 2023 - Transfer table and racking shall be completed. Paint the exterior of the building. Finish site work, including rock cover and finish erosion control in place. April, 2023 - Contractor shall conduct a final walkthrough. Contractor shall file Notice of Completion and obtain Certificate of Occupancy. May, 2023 - On May 21, 2023 the building will be finished and a ceremony dedicating the Locomotive Storage Building to the community of Rancho Cordova with a final report to Measure H.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Oversight and accountability of this project will be fulfilled under the direction of Andy Berchielli and Dennis Gramith. Both these individuals have a longstanding history with the City of Rancho Cordova and the Cordova Recreation and Park District. They have an outstanding reputation and a track record demonstrating the ability to see such a project through to completion within the time allotted by this grant.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we will be able to make the adjustments necessary. This project is outside thus construction workers can be socially distanced and will comply with all local, state, and federal health mandates.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2197 Chase Drive
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

N/A

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a park/park facility

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Application #73

Andy Berchielli

Title

President

Submitting As

Non-Profit

Phone

9167526697

Email Address

president@svslrm.org

Organization's Legal Name (if applicable)

Sacramento Valley Live Steamers Railroad Museum, Inc

Mailing Address of Submitter

P.O. Box 273
Rancho Cordova, CA 95741

Signatory's Name

Mr. Andy Berchielli

Signatory's Title

President

Signatory's Phone

9167526697

Signatory's Email Address

president@svslrm.org

Signatory's Mailing Address

P.O. Box 273
Rancho Cordova, CA 95741

Attach Any Additional Documents Here

SVLSRM - Locomotive Storage Building Document Package.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #73

Sacramento Valley Live Steamers Railroad Museum Inc.
P.O. Box 273
Rancho Cordova, CA 95741

Phone (916) 361-7140
www.svlsrm.org

March 14, 2022

Measure H Committee,

The Sacramento Valley Live Steamers Railroad Museum (SVLSRM) is applying for a measure H Grant to construct a Locomotive Storage building at our Hagan Park location that houses our organization.

The SVLSRM has been a member of the community for over forty years. The membership includes members in the city of Rancho Cordova, and surrounding areas in California. The railroad consists of over a mile of mainline track used to provide an educational experience to members of the community. SVLSRM provides public rides on the first weekend of each month beginning in March, as well as the annual Fourth of July in the park, our Pumpkin Patch event in October and Santa Train the first two weekends of December. We also provide rides on our portable track at the Rancho Cordova Christmas Tree Lighting. We served over 10,000 riders in 2021.

The SVLSRM is constantly rejuvenating the railroad and adding features for the public enjoyment. In the last few years an elevated G scale railroad (garden railroad) has added to the enjoyment of the family members and community children. Our organization, 222 members are growing and many are at the park providing a clean area and maintaining our approximately 8 acres. In 2021 the members have contributed 4,592 hours in volunteer time to maintain the park, track, storage facilities, and restrooms for the public enjoyment of public runs and birthday parties.

During the last few years the existing facility has out grown the storage space available for locomotives and public riding cars. The pandemic created a need for more ride cars and gondolas that were used to maintain social distancing of the family riders when we were able to operate. We took pride in providing rides later in 2020 and early 2021 with separating the passenger cars. The public welcomed the SVLSRM opportunity to ride the trains during those trying times.

The Board has determined the need for additional storage and is submitting this request for funding to solve the needs of the organization and its equipment.

Please consider the SVLSRM for your March 2022 Measure H Grant. The goal is to be able to continue and expand the services expected by the public.

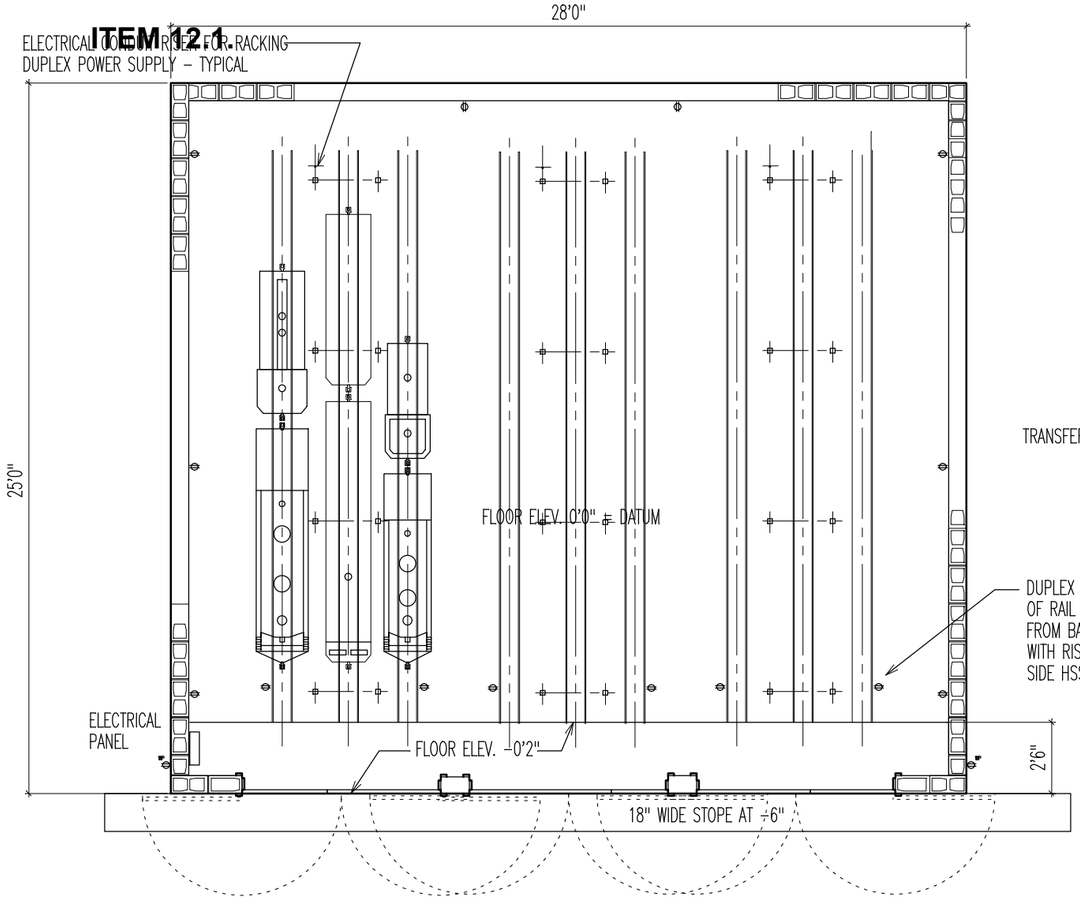
This budget was prepared by Philip Huntingdale, a Structural Engineer along with the collaboration of Clausen Engineers, Emeryville, California. Both engineers have vast experience in the design, construction management and supervision of overall commercial building projects. The budget has assumed prevailing wages and has tried to evaluate where construction costs are at present time. The cost of materials and labor are currently evolving upward rapidly and it is hard to get a firm cost for some parts of the project. SVLSRM will have final approval of any changes and all construction plans.

The Board is very appreciative of the support we have received over the years from the City of Rancho Cordova and Rancho Cordova Recreation and Parks. We would like your consideration of SVLSRM request for Measure H funding.

Please let us know if anything further is needed.

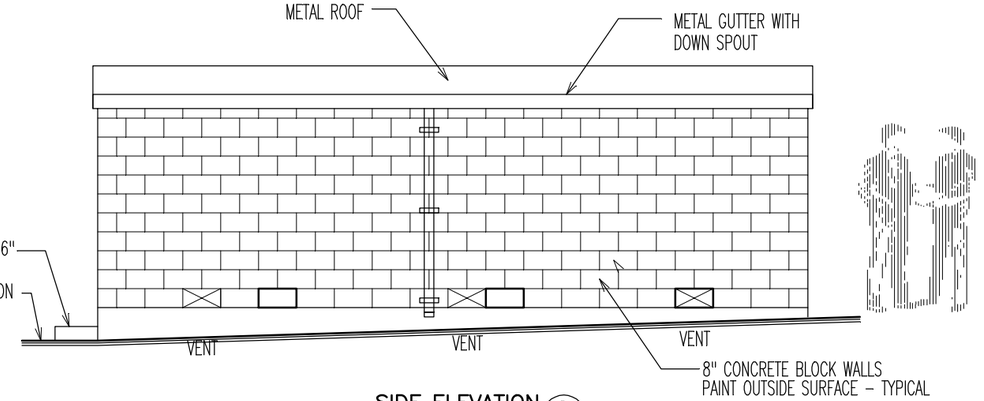
Application #73

ATTACHMENT 3

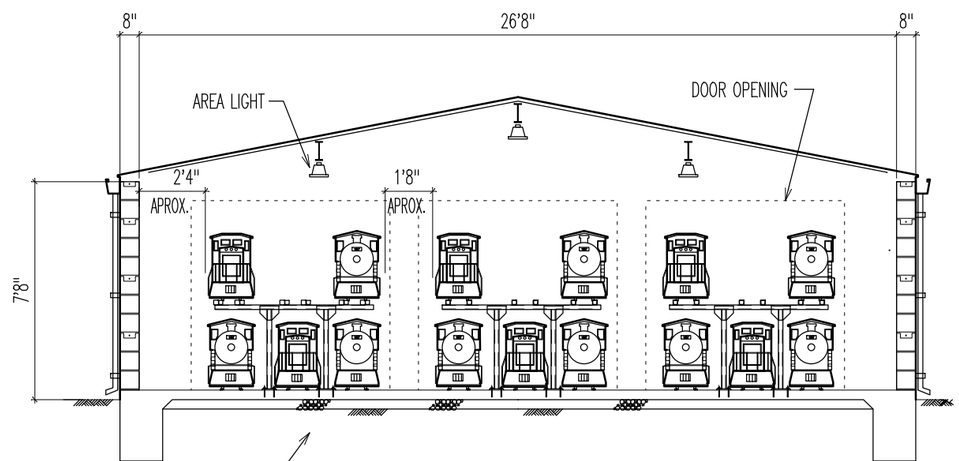


BUILDING OUTSIDE DIMENSIONS 25'0" X 28'0' (700 sq.ft.)

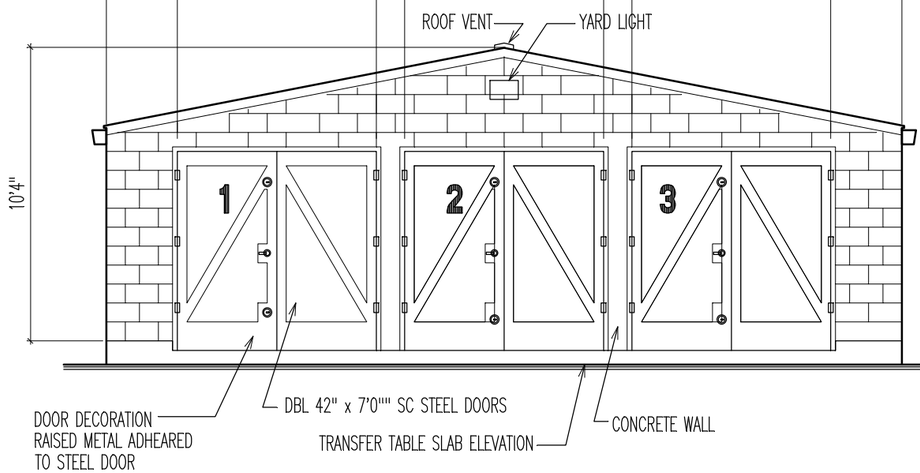
FLOOR PLAN A/1
SCALE 1/2" = 1'-0"



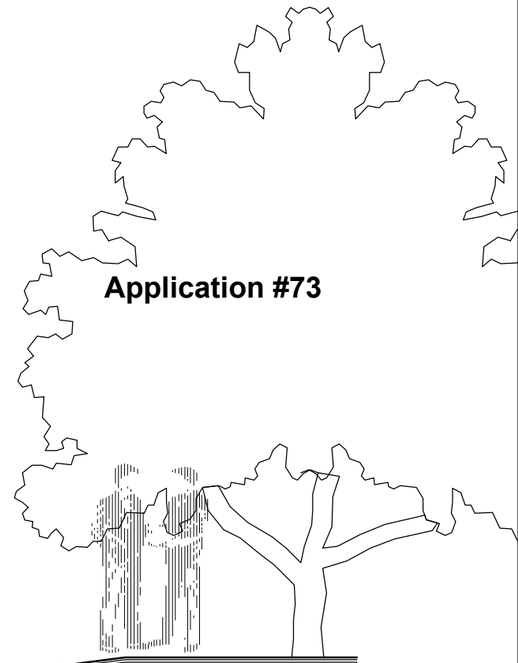
SIDE ELEVATION D/1
SCALE 1/2" = 1'-0"



CROSS SECTION B/1
SCALE 1/2" = 1'-0"



FRONT ELEVATION C/1
SCALE 1/2" = 1'-0"



Sacramento Valley Live Steamers Railroad Museum

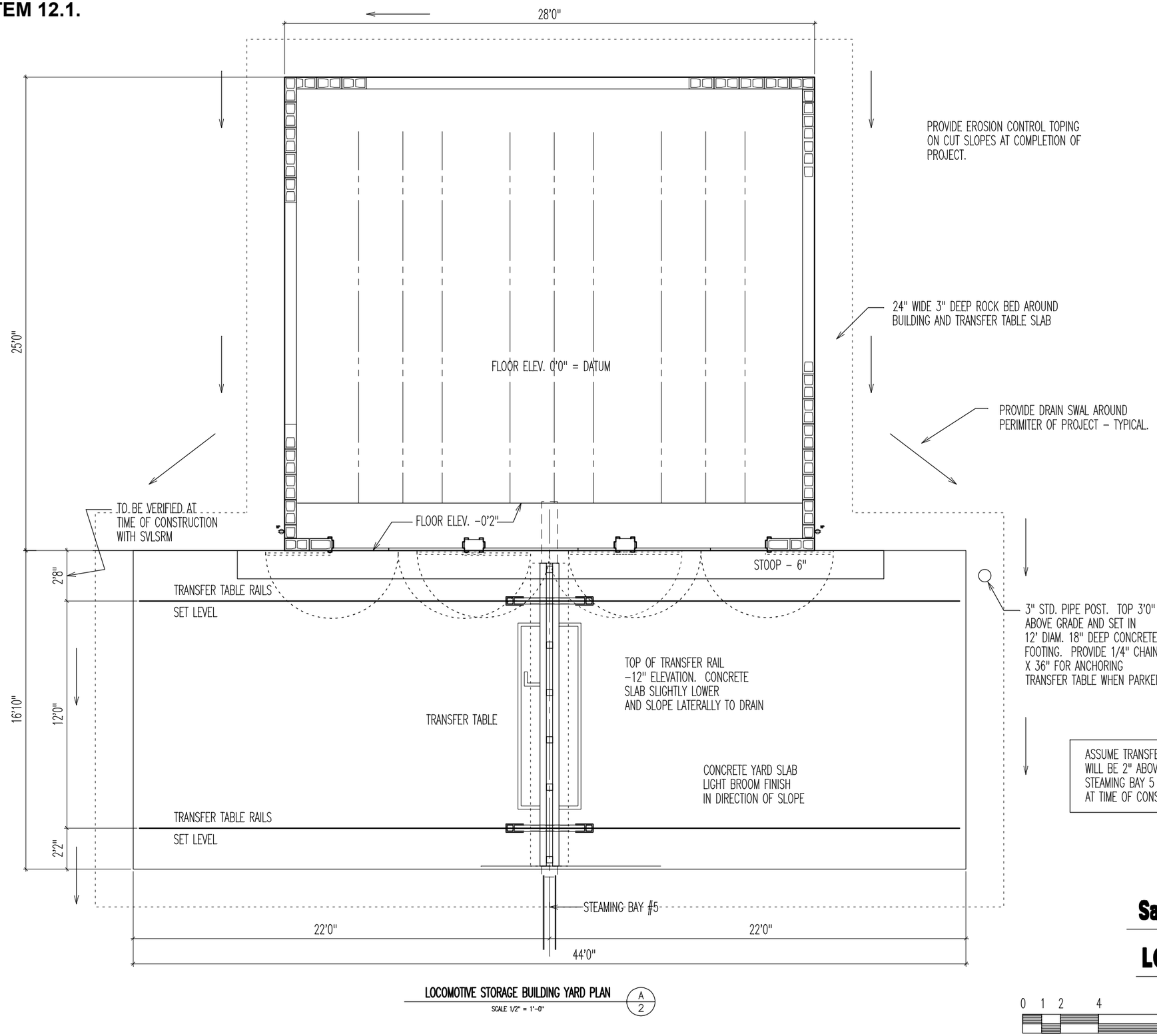
LOCOMOTIVE STORAGE BUILDING

SCALE 1/4" = 1'-0"

0 1 2 4 8
SCALE

MARCH 9, 2022

1



LOCOMOTIVE STORAGE BUILDING YARD PLAN A/2

SCALE 1/2" = 1'-0"

Application #73

Sacramento Valley Live Steamers Railroad Museum

LOCOMOTIVE STORAGE BUILDING YARD PLAN

SCALE 1/4" = 1'-0"

0 1 2 4 8

SCALE

MARCH 9, 2022

2

FARM YARD

NEW LOCOMOTIVE STORAGE BUILDING

BUILDING OUTSIDE DIMENSIONS 25'0" X 28'0" (700 sq.ft.)

NEW TRANSFER TABLE

CONSTRUCTION ACCESS AREA SHOWN APPROX. CORDINATE WITH SVLSRM

CHAIN LINK FENCING

EXIST. IN-BOUND TRACK

EXIST. OUT-BOUND TRACK

NOTE: PROVIDE COVERING OF ALL EXISTING ROCK AREA IN THE STEAMING BAYS WITH 2" CRUSHED ROCK (1/2" GRADATION) AT THE COMPLETE OF THE PROJECT.

EXIST. TURN TABLE
16 FEET LONG

EXIST. STEAMING BAYS

EXIST. ENGINE HOUSE

SVLSRM WILL REMOVE EXISTING RAIL IN THIS AREA TO PERMIT CONTRACTORS ACCESS TO CONSTRUCTION SITE. ROAD BEAD REMOVAL WILL NEED TO BE CONTRACTORS RESPONSIBILITY TO DEAL WITH.

EXIST. FUEL TANK WILL REMAIN. IF CONTRACTOR NEEDS TEMPORARY RELOCATION – COORDINATE WITH SVLSRM

EXIST. LOADING/TURN TABLE

EXIST. LOADING/TURN TABLE

EXIST. CHAIN LINK FENCING

EXIST. GATE

EXIST. GATE

CONTRACTOR SHALL INSTALL NEW DOUBLE 12' GATE AS REQUIRED TO PERMIT ACCESS INTO THE PARK. LOCATE AS NEEDED. CORDINATE WITH SVLSRM.

EXIST. MEMBER PARKING

NOTE: DEPICTS APPROXIMATE SITE LAYOUT. SITE HAS NOT BEEN SURVEYED.

N

0 2 4 8
SCALE

EXIST. STEAMING BAYS

EXIST. TRANSFER TABLE

Application #73

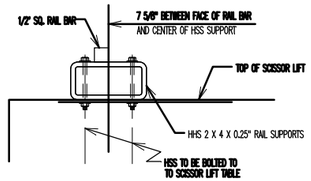
Sacramento Valley Live Steamers Railroad Museum

LOCOMOTIVE STORAGE BUILDING SITE

SCALE 1/8" = 1'–0"

MARCH 9, 2022

3



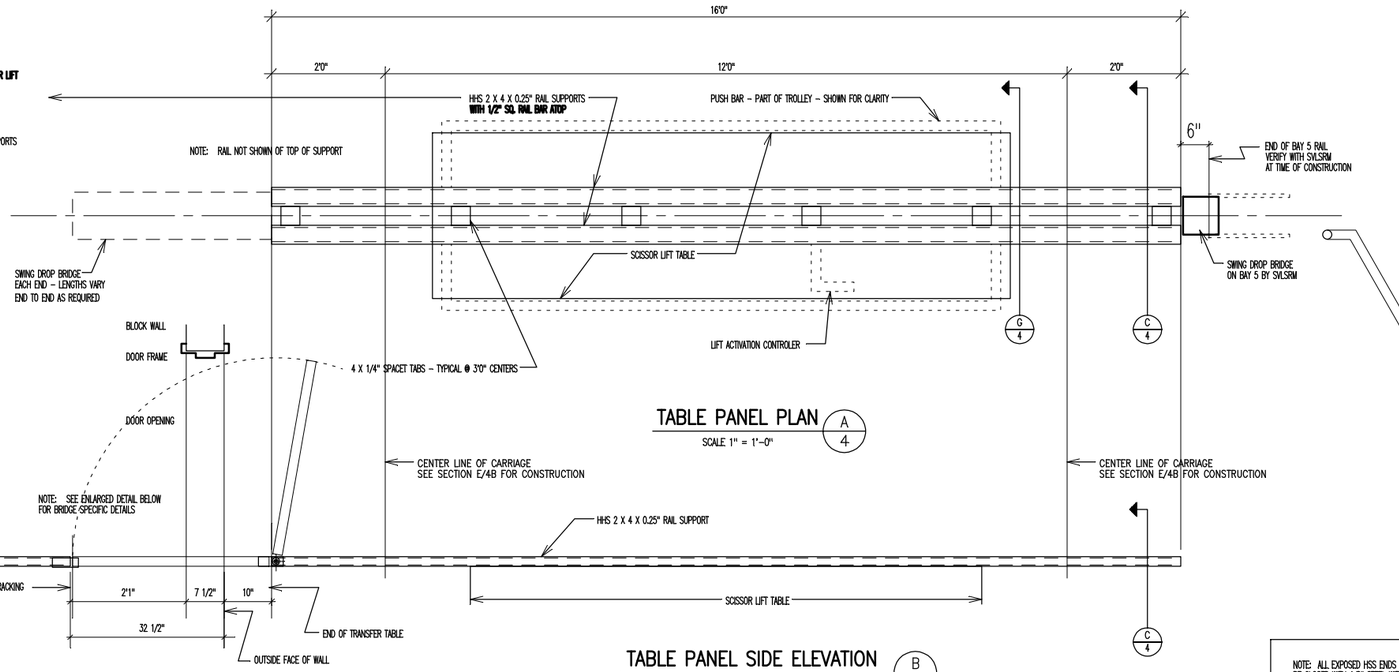
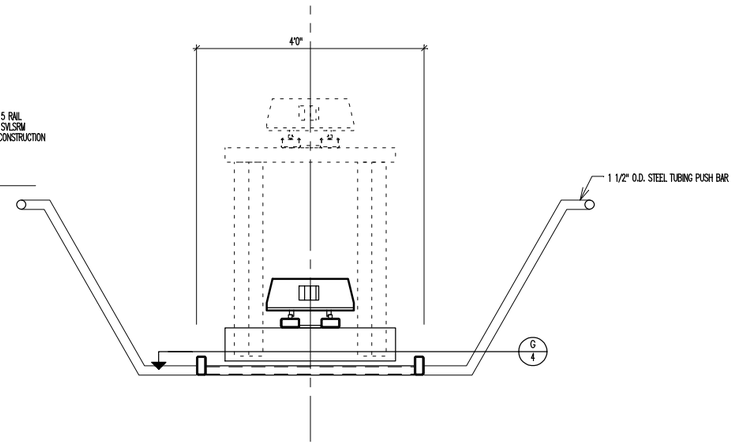


TABLE PANEL PLAN A/4

SCALE 1" = 1'-0"

TABLE PANEL SIDE ELEVATION B/4

SCALE 1" = 1'-0"

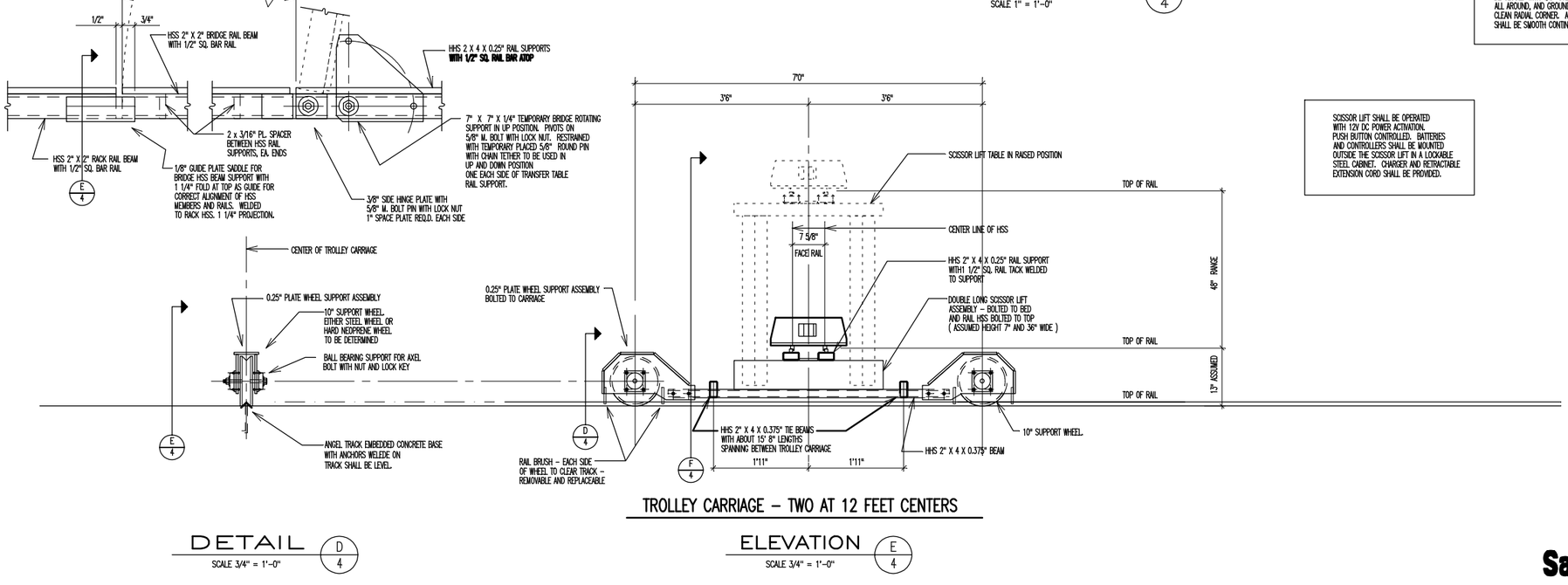


SECTION C/4

SCALE 3/4" = 1'-0"

NOTE: ALL EXPOSED HSS ENDS SHALL BE CLOSED WITH 1/8" STEEL WITH WELD ALL AROUND, AND GROUND SMOOTH FOR CLEAN RADIAL CORNER. ALL OTHER WELDS SHALL BE SMOOTH CONTINUOUS ALL AROUND.

SCISSOR LIFT SHALL BE OPERATED WITH 12V DC POWER ACTIVATION. PUSH BUTTON CONTROLLED. BATTERIES AND CONTROLLERS SHALL BE MOUNTED OUTSIDE THE SCISSOR LIFT IN A LOCKABLE STEEL CABINET. CHARGER AND RETRACTABLE EXTENSION CORD SHALL BE PROVIDED.



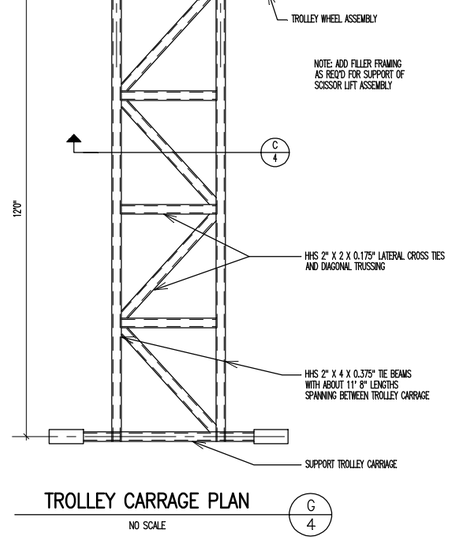
DETAIL D/4

SCALE 3/4" = 1'-0"

TROLLEY CARRIAGE - TWO AT 12 FEET CENTERS

ELEVATION E/4

SCALE 3/4" = 1'-0"



TROLLEY CARRAGE PLAN G/4

NO SCALE

SCISSOR FUNCTIONAL LIFT TABLE

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Sacramento Valley Live Steamers Railroad Museum

LOCOMOTIVE STORAGE TRANSFER TABLE

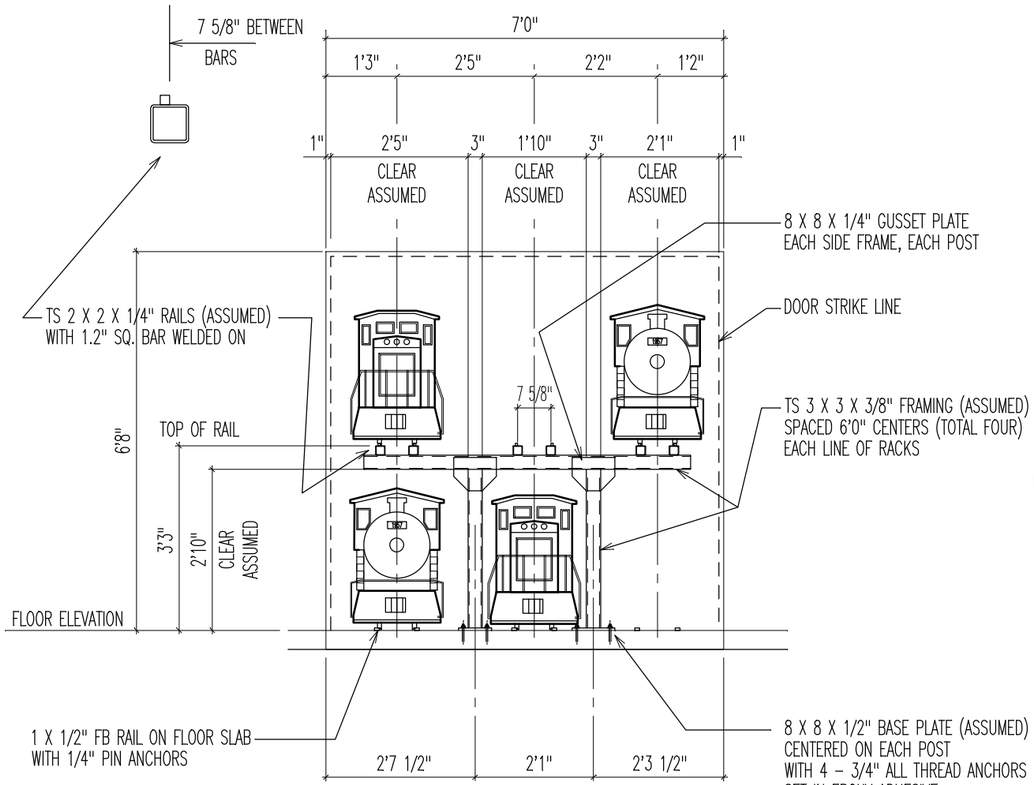
SCALE 1" = 1'-0"

0 6 12 24 48

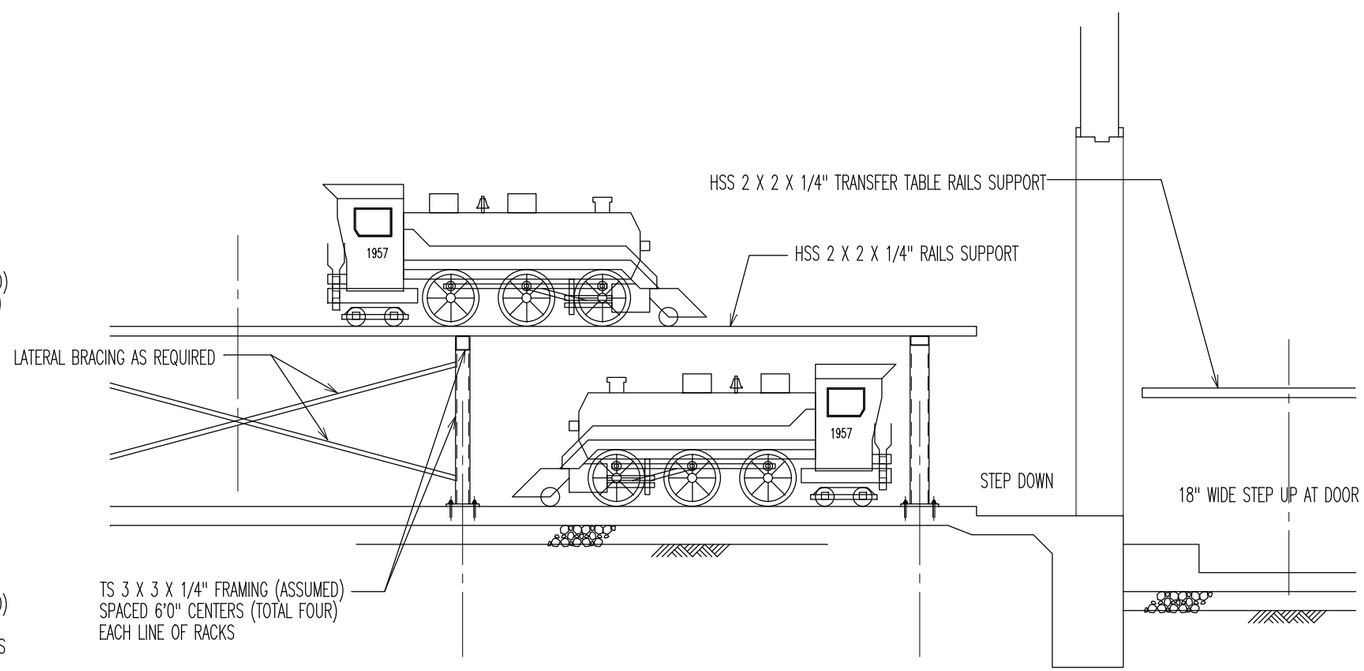
SCALE

MARCH 9, 2022

4



CROSS SECTION A/5
SCALE 1/2" = 1'-0"



ELEVATION B/5
SCALE 1/2" = 1'-0"

LOCOMOTIVE STORAGE RACKING

Application #73

Sacramento Valley Live Steamers Railroad Museum

LOCOMOTIVE STORAGE BUILDING

SCALE 1/4" = 1'-0"

0 1 2 4 8
SCALE

MARCH 9, 2022

5

Sacramento Valley Live Steamers Railroad Museum
HAGEN PARK - RANCHO CORDOVA
LOCOMOTIVE STORAGE BUILDING

BUDGET COST - CONCRETE BLOCK 28 FEET WIDE BY 25 FEET DEPTH

March 9,2022

California Building Code
Occupancy S-1 NS Moderate-Hazard Storage - Non Sprinklered
Type Construction Type III-B
Building Area 540 sq. ft. Less than 9,000 sq. ft.
Occupant no's. 1 - Warehouse 500 sq. / occupant
Exist travel distance 100 ft.
Building is unheated

	UNITS	NO.	LIST/EACH	SUB COST	TRADE TOTAL
PLANNING AND DOCUMENTATION					
PLANNING - CEQA assumed "Negative Declaration"		1	$0.00	$0.00	
BUILDING PERMIT DOCUMENTS (ENGINEERING)	LUMP SUM	1	$25,000.00	$25,000.00	
SURVEYING	LUMP SUM	1	$4,000.00	$4,000.00	
					$29,000.00
PERMITS					
BUILDING PERMITS - ASSUMED	LUMP SUM	1	$5,000.00	$5,000.00	
					$5,000.00
SITE WORK					
TREE REMOVAL - 2 PINE INCLUDING ROOT STRUCTURE	LUMP SUM		$11,000.00	$11,000.00	
LAYOUT	LUMP SUM		$1,000.00	$1,000.00	
PROVIDE ACCESS TO BUILDING SITE	LUMP SUM		$5,000.00	$5,000.00	
GRADING AND SITE PREPARATION - engineered fill	1000 S.F.		$5.25 S.F.	$5,250.00	
ROCK BASE	13 C.Y		$140.00 C.Y.	$1,820.00	
FINISH ROCK AT EDGE OF BUILDING WITH CUT OFF BOARD	600 S.F.		$3.50 S.F.	$2,100.00	
					$26,170.00

LOCOMOTIVE STORAGE BUILDING
March 6,2022

CONCRETE						
FORMS	100	L.F.	$20.00	L.F.	$2,000.00	
REINFORCING	1400	#	$1.25	L.F.	$1,750.00	
DOBIES	2	BOX	$200.00	BOX	$400.00	
CONCRETE - FLOOR SLAB AND FOOTINGS	16	C.Y.	$400.00	C.Y.	$6,400.00	
FLOOR SLAB FINISHING	700	S.F.	$5.00	S.F.	$3,500.00	
FLOOR SLAB CURING COMPOUND	700	S.F.	$0.75	S.F.	$525.00	
FLOOR SEALER	700	S.F.	$3.50	S.F.	$2,450.00	
CONCRETE - TRANSFER TABLE SLAB	10	C.Y.	$400.00	C.Y.	$4,000.00	
TRANSFER TABLE CONCRETE RAIL BASE SLAB - BROOM FINISH	750	S.F.	$4.50	S.F.	$3,375.00	
TRANSFER TABLE SLAB REINFORCING	1200	#	$1.25	L.F.	$1,500.00	
CURING COMPOUND	750	S.F.	$0.75	S.F.	$562.50	
						$26,462.50
MASONRY						
8" CONCRETE BLOCK / GROUTED	940	S.F.	$32.00	S.F.	$30,080.00	
CONCRETE FORM AND POUR PILASTER BETWEEN DOORS	LUMP SUM		$1,800.00		$1,800.00	
						$31,880.00
STEEL FRAMING						
STEEL BEAMS 35 #/LF	2100	#	$4.00	#	$8,400.00	
STEEL LEDGER 6 #/LF	270	#	$4.50	#	$1,215.00	
MISCELANEOUS FABRICATED EMBEDS	6	EACH	$400.00	#	$2,400.00	
TRANSFER TABLE RAILS	250	#	$4.50	#	$1,125.00	
TRANSFER TABLE FRAME - TROLLEY FABRICATION	1200	#	$5.50	#	$6,600.00	
TRANSFOR TABLE WHEEL ASSEMBLIES	4	EACH	$850.00	EACH	$3,400.00	
TRANSFER TABLE FRAME - LIFT ASSEMBLY	1	EACH	$22,000.00	EACH	$22,000.00	
TRANSFRO TABLE MISCELANEOUS POWER FEATURES	1	EACH	$2,500.00	EACH	$2,500.00	
LOCOMOTIVE STORAGE RACKS - RAILS SUPPORTS AND RAIL	4700	#	$4.50	#	$21,150.00	
						$68,790.00

Application #73

LOCOMOTIVE STORAGE BUILDING
March 6,2022

DECKING:						
METAL DECKING - 16 Ga., Painted green finish top - white bottom	620	S.F.	$12.00	S.F.	$7,440.00	
FASTENERS	3	BOX	$40.00	BOX	$120.00	
GUTTERS AND DOWNSPOUTS	70	L.F.	$45.00	L.F.	$3,150.00	
WALL VENTS OR RIDGE VENT	LUMP SUM	1	$3,500.00	LUMP	$3,500.00	
						$14,210.00
MISCELANEOUS						
DOOR AND FRAMES - PURCHASE AND INSTALL	3	DBL	$2,700.00	DBL	$8,100.00	
DOOR HARDWARE - PURCHASE AND INSTALL	3	DBL	$1,500.00	DBL	$4,500.00	
						$12,600.00
PAINTING						
PAINT - STAIN W.P. FINISH (TWO COATS)	1500	SQ.FT.	$4.70	/ SQ. FT.	$7,050.00	
						$7,050.00
ELECTRICAL						
POWER SERVICE FROM RONDHOUSE PLUS PANEL	LUMS SUM	1	$4,500.00		$4,500.00	
LIGHTING - WITH MOTION DETECTION	500	SQ. FT.	$5.00		$2,500.00	
RECEPTICALS - GFI - FOUR PLAX TYPICAL	20	#	$350.00		$7,000.00	
						$14,000.00
PLUMBING						
NONE INCLUDED						$0.00
						$235,162.50

BUDGET TOTAL ON NEXT SHEET

PROFFIT AND OVERHEAD CONTINUES ON NEXT SHEET

CONTRACTORS PROFFIT AND OVERHEAD	0.2	$235,162.50	$47,032.50		
20 PERCENT OF PROJECT		LUMP SUM	1	$47,032.50	
BUDGET COST			**BUDGET TOTAL**		$282,195.00
CONTINGENCY:	0.2	$282,195.00	$56,439.00		
CONTINGENCY - 20%		ESTIMATE	1	$56,439.00	
			ESTIMATED BUDGET SUM TOTAL WITH CONTINGENCY		$338,634.00

Application #73

SVLSRM Locomotive Storage Building
PROJECT SPECIFICATIONS

March 9, 2022

A. Project Outline -

The SVLSRM wishes to construct Locomotive Storage building for storage of SVLSRM equipment and members equipment.

The storage building will be accessed from existing steaming bay number 5. The building will have a transfer table located at the north-west end of the bay, planned to be 16 feet long, and slide laterally about 36 feet. The building will be located at the north-west end of the transfer table. Generally the building is 25 feet by 28 feet, about 10 feet of height. The floor and foundation is concrete, walls are concrete block, and roof is metal decking. The building will have three 7 feet wide by 7 feet high metal double hinged doors. Each door will access three storage double stacked tracks, randomly spaced to suit various sized locomotives.

The transfer table includes an undercarriage for the lateral movement, and a table panel will provide vertical movement. The steaming bay is about 24 inches above grade, storage building floor slab about 14 inches above grade, and second level storage about 40 inches above the floor slab elevation. The vertical lift for the table panel will be about 48 inches, by electric activated scissor lift.

The SVLSRM wishes to obtain a Turn Key proposal for the Project.

B. Project Scope -

Turn Key construction is such that a general contractor will be responsible for the complete project. That is to say the coordination of the project is their responsibility. The General Contractor would be responsible for building documents procured, any site surveying, permits, construction of all phases of the building and transfer table, coordinate all required services, and obtain the Notice of Completion, Release of Leans, and Certificate of Occupancy. Money distribution and approvals of such are generally coordinated thru the owner and SVLSRM coordinators by way of the source of the financing. All work shall be as stated in this document and consistent with commercial building standards of the industry. SVLSRM shall have final approval of construction documents (plans and specifications) and any changes or change orders.

Application #73

C. Specifications -

1. The Contractor shall be responsible for providing the design for the project. The project shall be designed by registered Structural Engineer in the State of California (Project Engineer). Design shall comply with the applicable building codes in order to obtain City of Rancho Cordova Building Permit and any other government permits for specialty work included.

2. The Contractor shall pay all taxes and licenses required. Contractor shall be fully insured including commercial general liability, property loss coverage for the improvements until building is turned over to Owner, with SVLSRM named as an additional insured. Contractor shall provide a project manager to serve as liaison between owner and SVLSRM. Contractor shall have weekly job site meetings, include Owner and SVLSRM project coordinators. Contractor shall coordinate all inspections including " special inspections" required by the Building Code. Work shall occur during normal business hours of 7:00 AM and 5:00 PM., or as otherwise required by the Rancho Cordova Park Department. SVLSRM has a few events during the year that will need some coordination between the contractor and SVLSRM. Employees of all contractors and sub contractors shall be appropriately dressed for being within the park. No alcohol or illegal drugs shall be permitted within the park. Equipment shall not be maintained within the park. The contractor shall keep premises clean, and remove all debris generated by this Project. The Contractor shall maintain sanitary conveniences for all workers for the duration of the Project.

   SVLSRM project coordinator shall be furnished all design, drawings, submittals, shop drawings, and any correspondence related to the project on a timely basis during the term of the project.

2. Site preparation shall included clearing Project site of all vegetation, trees, and root structure in order to construct the Project.

3. Building site will require some engineered fill and site grading. The work shall be directed by a Geotechnical Engineer as may be required by the design and site conditions. Building pad shall have base rock, vapor barrier, and sand placed below the floor slab as specified by the Engineer. Provide drain swale around project.

4. The foundation and floor slab shall be placed with reinforcing as required by the Engineer. The floor slab shall have control joints placed at 8 feet centers. The slab shall have #4 reinforcing bars spaced at 12" minimum centers each way, and placed at mid depth of slab on "adobies" appropriate for application. Floor shall slope 1" per 10 feet from the rear wall to the front doors. Slabs shall have a grade control of 1/8" in 10 feet. Concrete shall have a minimum strength of 3,000 PSI at 28 days. Provide add mixtures to reduce any need to add water to the mix after batching. Floor finish shall be steel trowel. Floor shall have curing compound applied following steel troweling. The control joints shall be saw cut following finish trolling and as soon a possible after set up. Joints shall be filled with joint sealer - Metzer McGuire MM80 for smooth and level with the adjacent concrete finish at least two months after placing concrete. The floor slab shall have a non-skid, gray epoxy floor coating system applied after complete curing of the concrete.

5. Concrete block walls shall have 8" x 16" x 8" block, standard gray. Provide 8" x 16" x 8" opening in block, located about 8" above the floor, and spaced at about 8 feet centers along the side walls for vents. Walls shall be reinforced as required by the Engineer. Walls shall be fully grouted. Steel door frames shall be fully grouted into place as part of the wall assembly.

6. Doors shall be 16 gage galvanized steel, solid core, with 14 gage welded, galvanized steel, masonry frames per SDI Guidelines SDI-100. Door hardware shall be a follows:
    a. Door hinges - 4 per leaf, 4 ½ 4 ½ Hager BB1199 Stainless Steel, NRP hinges.
    b. Door lockset on operable leaf - Best Lock co., Series 9, Storeroom (D) - Outside always locked, open with key and rotating lever; Inside always unlock, open by rotating lever. Keying with interchangeable core, 3 3/4" backset. Rose Style C- 3" convex, 26D satin chromium. Keying shall be with removable cores, construction during before turning over the SVLSRM, and finish as directed by SVLSRM. Assume that each door will have separate keys, and master key. Provide 15 keys of each configuration.
    c. Door dead bolt - best Lock Co., T Series Tubular Deadbolts, K-Turnknob - Operates by turning the key in the outside cylinder and turning the inside turn lever. Keying to match lockset.
    d. Door guard - granger, Rockwood Door Latch Guard: 11 in Lg, 3 3/32 in Wd, Satin Stainless Steel.
    e. Door cane bolt top and bottom of fixed leaf - Medium Duty Cane Bolt, 12", stainless steel.
    f. Door Hold - one each leaf - Magnetic Door Holder Solid Brass.
    g. Door to drip flashing - Pemko 346C Clear Anodized Aluminum Rain Drip Cap.

7. Roof structure shall be structural steel as designed by the Engineer. Metal decking shall be 16 ga. Minimum in configuration as specified by the Engineer. Self drilling, self sealing fasteners shall be used. Decking shall be underlaid with vinyl faced insulation, R-30 minimum, secured appropriately to prevent sagging.

8. Provide seamless aluminum gutters and down spouts to grade.

9. Roof vent and wall vent covers - Roof vent shall be preprinted in color to match roof panels. Screening along opening shall be screened. Wall vents shall have galvanized steel screening of 1/2” x 1/2" x 16 ga. mesh trimmed with galvanized steel frame and secured firmly on outside of building.

10. The concrete block, doors and frames shall be painted. Block wall finished with United Coating “Canyon Tone” Stain as manufactured by United Coating (GAF), Spokane, Washington sealer applied in two coats as per manufacturers specifications. Doors, and building trim shall be painted to a commercial building standard with Sherwin Williams or equal coatings.

11. Transfer Table - Concrete apron slab extend across the front of the building as shown on the drawings. Concrete shall be 4" minimum thickness with control joints, reinforcing, slope longitudinally from middle and drain to edges, and finish to light broom finish in direction of slope. Embedded angle track shall be level. Transfer table shall have functions are presented in the proposed drawings and have lifting capacity for 3,500 pound locomotives. The transfer table support trolley assembly including undercarriage, rail support, and rails, and access bridge, shall be steel fabricated and finished with a Sherwin Williams or equal industrial coating system. Track will be 7.5" gauge and provide level adjustments to reach the rail within the building and steaming bay 5 as sown on drawing 4. Scissor lift hoisting assembly shall be (double long) model no. S35-048-0040-DL with 36" wide by 144" table as manufactured by Autoquip, 1-877-360-6777 or approved equal. Lift shall be activated by a internal 24 v DC, 2 h.p. lift motor, push button controller, with adjustable height limiting switch, gravity down, with recharger include, and flex 120 volt plug in cord long enough to plug in outside receptacle mounted on anchor post when parked. The batteries shall be housed within a fabricated steel on board box with provision for SVLSRM furnished padlock security system. Engineering shall be provided for the table per the code, and the Autoquip company may provide the complete transfer table.

12. Provide storage track and racking for locomotives weighing 3,500 pounds spread over 10 feet of rack length. Clearance between supports shall be 22" minimum, and as shown of drawing 5. Engineering shall be provided for support assembly per the code.

13. Provide LED lighting at a minimum level of 50 fc. throughout. Provide 20 amp. fourplex receptacles at 8 feet around the inside perimeter, and 2 outside on the front wall, and 20 amp. duplex on each outer rail support beam (6) and one on the transfer table anchor post, all located at 48" above floor level except on racking. Service shall be provided thru a panel located inside the building and supplied by underground from the existing Round House building. Yard wall light shall be LED with adequate spread for the transfer table yard.

14. Grade around building and transfer table slab shall have 3" crushed rock (3/4" gradation) placed a minimum of 2 feet around the perimeter of the project and with P.T. wood cutoff board. In addition, provide covering of all existing rock area in the steaming bays with 2" crushed rock (½" gradation) at the completing of the project.

D. Reconnaissance -

1. Contractor shall be familiar with the property before providing a proposal

E. Contract Documents -

1. Standard AIA 101 shall be used for the contract.

2. Contact shall be complete with Certificate of Occupancy by August 15, 2023.

3. Drawing included as part of this document:

1	Locomotive Storage Building	March 9, 2022
2	locomotive Storage Building Yard Plan	March 9, 2022
3	Locomotive Storage Site Plan	March 9, 2022
4	Locomotive Storage Transfer Table	March 9, 2022
5	Locomotive Storage Racking	March 9, 2022

Application #73

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR CORDOVA RECREATION & PARK DISTRICT (CRPD) PROPERTY/FACILITY USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a park or park facility, you must request the endorsement of the Cordova Recreation & Park District (CRPD).

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by a representative of CRPD for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. The CRPD representative reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Locomotive Storage Building

Name of Organization: Sacramento Valley Live Steamers Railroad Museum

Name of Applicant and Title: Andy Berchielli, President

Applicant's Phone: 916-752-6697 **Applicant's Email:** president@svlsrm.org

Submit a copy of your application with this page to the Cordova Recreation & Park District. For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The CRPD representative will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to CRPD no later than March 4, 2022. Submit it via e-mail to Cristina James at cjames@crpd.com.

To be filled out by Cordova Recreation & Park District Representative

(Endorsement Given)

~~Endorsement Withheld~~

Conditional approval of facility rental only

General Manager's or Designee's Printed Name: CRISTINA JAMES

Date: 3/14/22

Comments (Optional): CRPD Does NOT TAKE Responsibility for Project Management or Cost.

The CRPD representative will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

5038711.1

Application #73

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW
Date: Monday, March 14, 2022 3:58:10 PM

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1529537
IP Address: 73.66.247.106
Submission Date: 03/14/2022 3:58
Survey Time: 16 minutes, 40 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

RCFL Capacity Expansion

Project Synopsis

RCFL plans to purchase and install two large refrigeration units (a cooler and a freezer) to handle the greatly increased quantities of cold/frozen foods provided by Sacramento Food Bank & Family Services (SFBFS) and other local businesses/private donors.

Project Description

RCFL plans to use grant funds for two purposes: 1) First, to design, purchase, and install new (or perhaps used) commercial-grade refrigeration equipment in the most appropriate location(s) to best meet operational needs. The new refrigeration equipment would be large and pallet-jack-friendly. The two units could be collocated either in a newly rented/leased warehouse for food storage and processing, or the cooler could be installed at RCFL's current facility instead of the contracted warehouse. The freezer would accommodate the donation of hundreds of turkeys for the annual Thanksgiving and Christmas Giveaways. This is currently RCFL's most vexing problem for storing frozen foods. The cooling unit would accommodate the huge donations of produce and other refrigerated items, especially during the warmer months. This is consistently problematic due to the short shelf-life of such foods. The new refrigeration unit would also allow RCFL to end its lease of one smaller walk-in cooler at a cost savings of over $800/month. The new equipment would greatly expand RCFL's food-processing capacity and also greatly improve its cost efficiency for storage. 2) Second, if any grant funds remain after installation of the refrigeration units, RCFL would apply such residual funds toward the monthly rental costs for the off-site contracted warehouse still in the procurement stage. Such funds would continue until the grant period expires, or until the residual grant funding is exhausted, whichever occurs first. Due to inflation, undetermined size/configuration of the units, volatile supply chain issues, permits, engineering costs, and other considerations, estimated costs are very uncertain. Therefore, any inadvertent overestimation of purchase/installation costs would be used to help RCFL achieve sustainability despite this period of operational "sea-change." If costs are underestimated, RCFL would bear the burden of those unanticipated excess costs. (continued)

Project Team

Walter Little; Chair, RCFL Board of Directors (BOD) Mr. Gary Greeson; Vice Chair, RCFL BOD Mr. Ross Johnson;

Application #74

Treasurer, RCFL BOD Ms. Shelly Blanchard; Secretary, RCFL BOD Ms. Miriam Sammartino; Sacramento Diocese Chief of Catholic Charities, RCFL BOD Ms. Carrie Johnson; RCFL Executive Director

Project Goals

Goal #1: To expand RCFL's capacity for storage and handling of refrigerated and frozen food donations/purchases to meet current and expected future demands. Metric #1: To have an appropriate engineering contractor design the needed commercial grade refrigeration units (one cooler and one freezer) by December 31, 2022. Metric #2: To sign appropriate contracts for purchase and installation of the refrigeration units at the selected site(s) by December 31, 2022. Metric #3: To complete installation of the City-permitted, commercial grade cooler and freezer units at the selected location(s) by May 31, 2023. Goal #2: To improve RCFL's capacity-building efforts by extending financial support for the sought rented/leased off-site food storage/processing warehouse still in procurement. (See Note below under "Estimated breakdown of project expenditures.") Metric #4: To augment (as residual grant CEIF funds permit) the grant funds anticipated from SFBFS to cover the monthly rental/lease costs of the sought off-site food storage and processing warehouse by June 30, 2023 Metric #5: To improve facility and operational compliance with applicable SFBFS food-handling regulations (as demonstrated by results of any periodic SFBFS inspections) by June 30, 2023.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$250,000

Estimated Breakdown of Project Expenditures

Refrigeration-units design plans, & applicable City permits: $15,000 Installation/upgrade of electrical service: $10,000 Forklift-rated concrete foundation & pathways (if required): $30,000 Purchase/delivery/installation of refrigeration units: $175,000 Inflation adjustment for costs (Mar 2022 thru Jun 2023) $20,000

_____ Total: $250,000

Note: Any grant funds remaining after installation of the refrigeration units is complete would be used for monthly rental/lease payments for the off-site food storage and processing warehouse (now still in the procurement stage).

Matching Funds

The Catholic Diocese of Sacramento is directly supportive of RCFL activities and has its Chief of Catholic Charities on RCFL's BOD to oversee the latter's activities. The Diocese has also donated to RCFL in the past, and future financial support is anticipated contingent upon funding available. In addition, the Diocese donates the use of the current facilities on the grounds of St. John Vianney Catholic Church. RCFL's long-term objective (consistent with the Strategic Plan to achieve sustainability) is to transition to an off-site operation large enough to meet future demand. Such demand will be generated not only by existing/projected economic challenges, but also by State law governing food recycling. Rental/lease of the sought food-storage warehouse is planned as a transition step toward the long-term objective. Therefore, the value of the current donated facilities is estimated to be at least $5,000 per month, or a $60,000 annual contribution. Moreover, as a mostly volunteer-based operation, RCFL has about 20 regular volunteers, and another 50-100 volunteers who are earning high school credit, performing community service, or helping at the annual Thanksgiving and Christmas Giveaways. An average of 8 volunteers/day, 4 hours/day, 3 days/week, provide a total of 4,800 hours of free labor. If their wages were only $15 per hour, that amounts to a $72,000 annual contribution. Other Funding Contributions: RCFL has ultimate responsibility for monthly rental payments for the contracted off-site food storage and processing warehouse through the end of the contract term. If SFBFS and CEIF grant funding are inadequate, RCFL will make those payments.

Include Any Other Funding Contributions

RCFL has ultimate responsibility for monthly rental payments for the contracted off-site food storage and processing warehouse through the end of the contract term. If SFBFS and CEIF grant funding are inadequate, RCFL will make those payments. In addition, to expedite the project's completion, RCFL may pay out-of-pocket up front for

allowable expenses (with prior coordination through City staff) and then reimburse itself whenever the grant funding is deposited into RCFL's account.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$250,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

RCFL's website has a donation feature, and financial support for RCFL's operations from the general public as well as local businesses has been tremendous since its inception. In addition, RCFL has applied to SFBFS for a $65k grant to pay monthly costs of the rented/leased off-site warehouse.

Project Schedule, Timeliness and Adaptability

Project Schedule

March through May, 2022 (Project preparation): - Find suitable warehouse space [allowing installation of refrigeration unit(s)] and sign rental/lease agreement - Develop revised operational procedures to address off-site location - Purchase pallet racks and contract for assembly/installation with SFBFS grant funds - Research options for engineering design of new commercial refrigeration units, or purchase of existing used units in case costs or delays preclude new equipment - Decide where cooling unit will be located (in new warehouse, or at current RCFL facility) - Research suitable contractors for purchase/installation of both units June through December, 2022: - Complete Metric #1 (Purchase engineering designs for cooler and freezer units) - Coordinate engineering designs with contractor candidates in order to obtain bids - Select contractor for purchase/installation of the units and complete Metric #2 (Sign contract for purchase/installation of units) - Ensure contractor obtains appropriate City permits - Ensure contractor installs appropriate electrical service at installation site(s) January through June, 2023: - Complete Metric #3: to complete installation of the commercial units at the selected location(s) by May 31, 2023 - Complete Metric #4: to augment, as residual CEIF funds permit, any grant funds from SFBFS to cover the monthly rental/lease costs of the off-site warehouse - Complete Metric #5: If SFBFS conducts any inspections by May 31, 2023, to promptly review results and correct any significant discrepancies noted.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

RCFL's Executive Director, Executive Committee, and BOD will oversee all related activities to keep this project on schedule.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

RCFL expects that it will still be able to fulfill its oversight responsibilities despite possible changes in California Public Health and/or Sacramento County Health Orders. However, it is unknown whether such changes might greatly

affect the contractor's ability to perform their contracted responsibilities. If such changes include "stay-at-home" directives for "non-essential" workers, this project would likely have to halt. But, if such changes are issued and they reinstate previous less-severe restrictions, RCFL anticipates that the contractor would be able to comply with them by providing Personal Protective Equipment for its employees and also implementing proven-effective operational requirements (e.g., social distancing, ventilation, and other measures).

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10497 Coloma Road
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

If the cooler unit is to be installed on the current RCFL facility, the St. John Vianney Parish and/or the Sacramento Diocese would have to approve the installation. They are supportive and this grant application may be considered as a letter of support since it was vetted through the Parish, and the Catholic Diocese of Sacramento (the property owner of record). The Diocese also provides direct oversight through appointment of RCFL Corporation Directors/Officers. If both the cooler and freezer units are to be installed in the rented/leased warehouse, its owner would have to approve the installation and also any associated modifications of the warehouse to accommodate their operation (e.g., electrical, and perhaps plumbing). Physical address: RCFL has not yet obtained a letter of support since the sought warehouse has not yet been found, and the location of the cooler has not yet been decided. If the cooler unit is to be installed on the current RCFL facility, the latter's physical address is as shown above. Whenever a suitable warehouse is found, RCFL will: 1) seek a letter of support from the owner, or 2) ensure that the contract expressly includes the owner's approval to make the essential modifications to accommodate the refrigeration unit(s) and provide a copy of the contract to the City. (continued)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Atch 1 to 2022-2023 CEIF Online Grant Application.docx

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Gary Greeson

Title

Vice-Chair, RCFL Board of Directors

Submitting As

Non-Profit

Phone

9163404885

Application #74

Email Address

ccflcharity@gmail.com

Organization's Legal Name (if applicable)

Rancho Cordova Food Locker, Inc.

Mailing Address of Submitter

2061 Roaring Camp Drive
Gold River, CA 95670

Signatory's Name

Rev. Deacon Walter Little

Signatory's Title

Chair, RCFL Board of Directors

Signatory's Phone

9164020398

Signatory's Email Address

bwal3@sbcglobal.net

Signatory's Mailing Address

11210 Wind River Court
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Atch 1 to 2022-2023 CEIF Online Grant Application.docx

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #74

Attachment 1 – Continuation of Content in Online Application Form

Project Description (continued)

Based on current information, RCFL believes this is the most reasonable and cost-effective option to address RCFL's desperately needed expansion of warehouse capacity. The new refrigeration equipment would also provide extra capacity as demand for RCFL services continues to rapidly grow. Recent patron statistics confirm sharp increases, which are expected to continue due to the current economic volatility.

By providing food to the hungry, RCFL's operations directly and favorably affect the City's most vulnerable and economically challenged groups, such as children, the unemployed and under employed, the elderly, the physically challenged, recent immigrants, and the homeless. This in turn enhances the City's efforts to improve education for children/youth, civic engagement, community pride, public safety, and overall quality of life.

Project Location (continued)

If the cooler unit is to be installed on the current RCFL facility, the St. John Vianney Parish and/or the Sacramento Diocese would have to approve the installation. They are supportive and this grant application may be considered as a letter of support since it was vetted through the Parish, and the Catholic Diocese of Sacramento (the property owner of record). The Diocese also provides direct oversight through appointment of RCFL Corporation Directors/Officers.

If both the cooler and freezer units are to be installed in the rented/leased warehouse, its owner would have to approve the installation and also any associated modifications of the warehouse to accommodate their operation (e.g., electrical, and perhaps plumbing).

Physical address:

RCFL has not yet obtained a letter of support since the sought warehouse has not yet been found, and the location of the cooler has not yet been decided. If the cooler unit is to be installed on the current RCFL facility, the latter's physical address is:

Rancho Cordova Food Locker
10497 Coloma Road
Rancho Cordova, CA 95670

Whenever a suitable warehouse is found, RCFL will:

1) seek a letter of support from the owner, or
2) ensure that the contract expressly includes the owner's approval to make the essential modifications to accommodate the refrigeration unit(s) and provide a copy of the contract to the City.

Application #74

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 2:30 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1534349
IP Address: 174.50.166.106
Submission Date: 03/16/2022 2:29
Survey Time: 41 minutes, 46 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Mills Station Building Exterior Painting

Project Synopsis

This project would provide funds to the Cordova Community Council Foundation to enter into a contract with a painting professional to paint the exterior of the Mills Station Building, home of the MACC.

Project Description

The iconic Mills Station Building exterior was last painted upon arrival at its current location on Mills Station Road around 1998. The building is showing wear and paint is peeling in several locations. In keeping with its stature in the community, this project would fund pressure washing, scraping peeling paint, spot prime as needed and apply two coats of fresh paint to exterior walls and trim.

Project Team

Cordova Community Council Foundation, Shelly Blanchard, Executive Director City of Rancho Cordova Facilities, Matt Thomas

Project Goals

Refreshing the exterior of the building meets the following CEIF criteria: (1) Supports the arts, culture, history and entertainment as a positive outlet for self-discovery, inquiry and enhanced recreational experience; (2) promotes opportunities for civic engagement; (3) invokes community pride; (4) improves quality of life by promoting the MACC as a safe and enriching environment.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$28,500

Estimated Breakdown of Project Expenditures

The City of Rancho Cordova facilities team responded to a Cordova Community Council request for addressing peeling paint issues at the MACC with a proposal from a qualified local contractor for material and labor for painting the exterior of the building, including trim, windows and doors. The proposal was shared with the Cordova Community Council as evidence of support for the project, and identifies a city-qualified vendor.

Matching Funds

None

Include Any Other Funding Contributions

None

Ongoing Operations and Maintenance Costs (if applicable)

Aside from future expected maintenance, there are no on-going costs of this request.

Total Community Enhancement & Investment Funds Requested

$28,500

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None

Project Schedule, Timeliness and Adaptability

Project Schedule

Project would commence upon funding approval and within a schedule to be determined by the City of Rancho Cordova Facilities Department and qualified vendor.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

There are no known impediments to completing this project within standard exterior painting projects which are subject to labor availability and weather. It is hoped the project could be completed during a time period when there is no active exhibit in operation at the MACC.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This project would not likely be susceptible to health orders.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10191 Mills Station Road
Rancho Cordova, CA 95827

Application #75

Other Physical Addresses (if project/program is at multiple sites)

None

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Mills Station Exterior.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Shelly Blanchard

Title

Executive Director

Submitting As

Non-Profit

Phone

9167174408

Email Address

shelly@cordovacouncil.org

Organization's Legal Name (if applicable)

Cordova Community Council Foundation

Mailing Address of Submitter

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Signatory's Name

Cordova Community Council Foundation Shelly Blanchard

Signatory's Title

Executive Director

Signatory's Phone

9167174408

Application #75

Signatory's Email Address

shelly@cordovacouncil.org

Signatory's Mailing Address

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Mills Station Exterior.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #75

TSV Painting INC.

9891 Horn Road, Suite B, Sacramento, CA 95827
(916) 363-5111 Fax (916) 363-1544
Lic. No. 392444

PROPOSAL

PROPOSAL SUBMITTED TO:	PHONE:	DATE:
City of Rancho Cordova	916 540 6481	08/04/21
ADDRESS:	JOB NAME	
10191 Mills Station Rd Sacramento CA 95827	Mills Station Exterior	

We Propose hereby to furnish material and labor - complete in accordance with specifications below, for the sum of: $28,500

Payment to be made as follows: Upon completion

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from specifications below involving extra costs will be executed upon verbal orders, and will become an extra charge over and above the estimate. Owner agrees to pay all attorney's fees, and costs associated with collection, incurred by TSV Painting, Inc. in enforcing these terms and conditions. All agreements contingent upon strikes, accidents or delays beyond our control. Owner to carry fire, tornado and other necessary insurance. Our workers are full covered by Workers Compensation and business liability insurance.

Authorized
Signature_____
ERIC VASEY, PRESIDENT
Note: This proposal may be withdrawn by us if not accepted within 14 days.

We hereby submit specifications and estimate for:

Scope: **Paint exterior of building. Including doors/green trim/red window trim/fascia/soffits/siding trim/gutters/downspouts and red railings**

Preparation: Pressure wash exterior

Scrape peeling paint (assuming no lead is present)

Recaulk existing cracks, fill holes and voids.

Mask and protect windows, lights, prefinished items.

Prime: Spot prime as needed

Finish: Apply two coats of Kelly Moore 1240 Flat 100% acrylic latex paint on exterior walls

Apply two coats of Kelly Moore 1250 Semi-gloss 100% acrylic latex paint on trim/doors.

Application #75

Color: Colors to match existing

TSV Painting has been painting in the Sacramento area for over 45 years. Based on this experience, we use top quality Kelly Moore products due to their outstanding performance and longevity. Other manufacturers are available, please ask.

Please review our enclosed references and photographs on our website at www.tsvpainting.com If you have any questions, please don't hesitate to contact us!

Remember, we are a local contractor that is here to stay when you need us again!! Completely licensed and insured.

To reserve a paint date, please sign and fax or mail a copy of this proposal to the above address.

Start Date: TBD End Date: TBD

Acceptance of Proposal - The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above.

Signature_____
Date of Acceptance_____

Credit rated with Dun & Bradstreet No. 09 249 9797

Contractors are required by law to be licensed and regulated by the Contractors State License Board, which has jurisdiction to investigate complaints against contractors if a complaint is filed within four years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within 10 years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors State License Board, P.O. Box 26000, Sacramento, CA 95826

Terms & Conditions: The terms and conditions on the reverse side are expressly incorporated into this Agreement. Owner acknowledges receipt of "NOTICE TO OWNER." "Notice of Cancellation," a Notice required by Business & Professions Code section 7030 and an EPA document discussing lead in paint, each of which are hereby fully incorporated into this Agreement.

Application #75

NOTICE TO OWNER: Under the California Mechanics Lien Law any contractor, subcontractor, laborer, supplier or other person who helps to improve your property, but is not paid for his work or supplies, has a right to enforce a claim against your property. This means that after a court hearing, your property could be sold by a court officer and the proceeds of the sale used to satisfy the indebtedness. This can happen even if you have paid your contractor in full if the subcontractor, laborers or suppliers remain unpaid. To preserve their right to file a claim or lien against your property, certain claimants such as subcontractors or material suppliers are required to provide you with a document entitled "Preliminary Notice". General contractors and laborers for wages do not have to provide you this notice. A Preliminary Notice is not a lien against your property. Its purpose is to notify you of persons who may have a right to file a lien against your property if they are not paid. To extra protection for yourself and your property, you may wish to take one or more of the following steps: 1. Require that your contractor supply you with a payment and performance bond (not a license bond), which provides a guarantee that all work and proper payments will be completed. This payment and performance bond as well as a copy of the construction contract may be filed with the county recorder for your further protection. 2. Require that payments be made directly to subcontractors and material suppliers through a joint control company, approved by the Registrar of Contractors. 3. Before making payment on any completed phase of the project, require your contractor to provide you with unconditional lien releases signed by each material supplier, subcontractor and laborer involved on that project phase. Anyone signing this release loses the right to file a claim against your property. To protect yourself under this option you must be certain that all material suppliers, subcontractors and laborers have signed.

You, the homeowner (buyer) or tenant have the right to require the contractor to furnish you with a performance and payment bond, however the contractor can require you to pay for that bond. You, the buyer, may cancel this transaction at any time prior to midnight of the third business day after the date of this transaction. Or if this is a contract for the repair of damages resulting from an earthquake, flood, fire, hurricane, riot, storm, tidal wave, or other similar catastrophic occurrence for which a state of emergency has been declared, you the buyer may cancel this transaction at any time prior to midnight of the seventh business day after the date of this transaction. See the attached notice of cancellation form for an explanation of this right.

You may cancel this transaction, without any penalty or obligation, within three business days from the above date. If you cancel, any property traded in, any payments made by you under the contract or sale, and any negotiable instrument executed by you will be returned within 10 days following receipt by the seller of your cancellation notice, and any security interest arising out of the transaction will be canceled.

If you cancel, you must make available to the seller at your residence, in substantially as good condition s when received, any goods delivered to you under this contract or sale, or you may, if you wish, comply with the instructions of the seller regarding the return shipment of the goods at the seller's expense and risk.

If you do make the goods available to the seller and the seller does not pick them up within 20 days of the date of your notice of cancellation, you may retain or dispose of the goods without any further obligation. If you fail to make the goods available to the seller, or if you agree to return the goods to the seller and fail to do so, then you remain liable for performance of all obligations under the contract.

To cancel this transaction, mail or deliver a signed and dated copy of this cancellation notice, or any other written notice, or send a telegram to TSV painting at 9891 Horn Rd., Ste. B, Sacramento, CA 95827 not later than midnight of the thee days after the contract was signed by you.

I hereby cancel this transaction:

_____Date:_____

Buyer's signature

Application #75

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 3:34 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1534532
IP Address:	107.222.28.101
Submission Date:	03/16/2022 3:33
Survey Time:	7 minutes, 20 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Boy Scouts of America, Troop 363 Tents

Project Synopsis

Troop 363 needs to replace our current tents that are over ten years old. The tents are used year-round, and the current tents require constant repair or replacement of the poles after almost every use. Our current tent model is discontinued, making it difficult to keep up with the worn parts.

Project Description

A major component of the Scouting program is camping and being in the outdoors. Troop 363 camps every month, including in the snow. In the summer, we may camp twice a month. The Boy Scouts of America Mission Statement is "to prepare young people to make ethical and moral choices over their lifetimes by instilling in them the values of the Scout Oath and Scout Law." One of the eight methods used by the BSA to accomplish this is the outdoor program. Scouting is designed to take place outdoors. It is in the outdoors that Scouts share responsibilities and learn to live with one another while learning skills that will last a lifetime. Giving back to the community is another aspect of the Scouting program. The Citizenship in the Community Merit Badge is an Eagle Scout required merit badge. Community Service is also a component of rank advancement in Scouting. Troop 363 has done many projects in Rancho Cordova. We have helped with several city tree planting projects Assisted older and handicapped residents with their yard work. We volunteer for the Thanksgiving and Christmas dinner giveaways at the Rancho Cordova Food Locker. The Troops Honor Guard has done flag ceremonies for several Rancho Cordova organizations as well as for the city. While we are asking for new tents to continue with Scout development, we have and continue to give back to our city. This is where our scouts live and go to school. Giving back to our city makes it a better place for all residents.

Project Team

Adult leaders and parents of Troop 363 Scouts will be responsible for the procuring of the tents. Older Scouts, under the guidance of Troop leaders, will instruct the Scouts on how to set up, maintain and care for the new tents.

Project Goals

Application #76

While we have already researched the tent that we feel best fits our needs, availability of most tents is subject to supply chain issues. If funding is approved, the tents will be ordered as soon as possible. Once they arrive and are found to be free of defects, any and all paperwork required by the city will be turned in.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$5,291.84 is the cost of the tents and the footprints that help protect the bottom of the tent to help them last longer.

Estimated Breakdown of Project Expenditures

6 Eureka El Capitan 3+ Outfitter tents-$2,103.78 including tax 6 Eureka El Capitan 3+ footprints- $328.44 including tax 6 Eureka El Capitan 4+ Outfitter tents-$2,498.30 including tax 6 Eureka El Capitan 4+ footprints-$361.32 including tax

Matching Funds

N/A

Include Any Other Funding Contributions

We are requesting funding for 12 tents. To replace our currents tents, we need a total of 14 tents. We have Troop funds for one 3+ and one 4+ tent and footprints. We had hoped to have more funds, but the pandemic has made it harder to fundraise. We know that we are not the only non-profit that has this problem. We currently have $880.00 set aside to purchase the two tents mentioned above.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$5,291.84

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None

Project Schedule, Timeliness and Adaptability

Project Schedule

Once funding is approved, the tents and footprints will be ordered. Since funding is later in the year, the tents we would like to purchase should be in stock. We anticipate the purchase and delivery of the tents to be done before the end of 2022.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

If the tents, we are looking at buying are out of stock or supply issues persists, we will research similar tents and purchase from that supplier.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Application #76

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This project only involves in person contact with Troop members. Masking, if necessary, is not an issue since we have been masking during most of our meetings.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2720 Kilgore Road
Rancho Cordova, California 95670

Other Physical Addresses (if project/program is at multiple sites)

N/A

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Grange Letter.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Marshall Stewart

Title

Scoutmaster

Submitting As

Non-Profit

Phone

9163371092

Email Address

beaglescout@sbcglobal.net

Organization's Legal Name (if applicable)

Boy Scout Troop 363

Mailing Address of Submitter

2918 Hunt Drive
Rancho Cordova, California 95670

Signatory's Name

Application #76

Teddy Ramil

Signatory's Title

Committee Chairperson

Signatory's Phone

9168032720

Signatory's Email Address

t.ramil@comcast.net

Signatory's Mailing Address

11405 Sabalo Way
Gold River, California 95670

Attach Any Additional Documents Here

IMG_4291.JPG

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #76

March 15, 2022

Dear Rancho Cordova Community Enhancement Fund,

Troop 363 meets at the American River Grange No.172 and stores their equipment on the premises. Troop 363 not only meets here, but they also do work here to help keep up the property in addition to the numerous Eagle Scout projects they have done here in support of our building and property.

They have the permission of the American River Grange No.172, to store any equipment and supplies needed for the running of Troop, on our property.

Marshall Stewart

Marshall Stewart

American River Grange Property Manager

Application #76


Eureka!
MOUNTAIN PASS XTE
TIMBER RIDGE

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 4:05 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1534602
IP Address: 174.50.166.106
Submission Date: 03/16/2022 4:05
Survey Time: 16 minutes, 55 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

RCAA Capacity Building Feasibility Study

Project Synopsis

This project would provide funds to the Cordova Community Council to hire a consultant to explore the feasibility, potential structure, cost and benefits of creating a professional staff position to operate, expand and enhance the activities of the Rancho Cordova Athletic Association. The Cordova Community Council is currently spending great effort to keep a number of RCAA projects moving forward, but the demands of this expanding effort are growing beyond staff resources currently available to support it. This project envisions a deeper understanding of the demands and importance of this sector and solutions to its most pressing issues. Rancho Cordova is no longer a small town wherein the burden of running an excellent citywide sports program can be managed by a handful of dedicated coaches and volunteers. The complexity of social media and publicity needs, facility needs and growing legal burdens will require a stronger sports infrastructure to insure success. As an example, it has been reported to the RCAA that the City of Folsom Parks and Recreation Department employs three people to handle scheduling and youth sports related issues in that neighboring jurisdiction.

Project Description

This project would hire a qualified consultant to explore the potential of developing a professional staff position to guide the Rancho Cordova Athletic Association in the areas of project management, fundraising and league coordination to advance and enhance youth sports offerings in the City of Rancho Cordova. Youth sports leagues are at a crossroads. Blessed with strong and dedicated leadership for many decades, there is a wide understanding among experienced leaders that over the next few years this cadre will "age out" and likely retire, leaving a big leadership gap. Continuity is a concern which could be alleviated by the formation of a staff position focused on preserving and planning for these eventual transitions. Second, Rancho Cordova is on the cusp of population explosion and more -- not less -- youth sports will be needed to make Rancho Cordova a desirable hometown for young families. A forward-looking plan of how to prepare for this growth is needed. Third, a crisis of youth sports support infrastructure is looming. Where will the umpires, referees and coaches come from? Youth sports leagues are already turning away participants due to shortages in these areas. A unified system that could address these needs should be developed, however league leaders currently do not have the capacity to address. Fourth, facility development and access issues, fundraising needs and opportunities, unified planning for future needs, unified publicity campaigns and more are fertile grounds for elevating youth sports in the city, making

Rancho Cordova a leader in this area. Physical fitness, education and social benefits are well known -- now is an opportune moment to explore the value of these goals and create the supportive structure needed to get there. Finally, what is the economic benefit to the City of a robust youth sports scene? Finding the answer to that question may surprise with hard dollar values which would be beneficial to all City residents.

Project Team

Cordova Community Council Foundation, Shelly Blanchard, Executive Director

Project Goals

Goal #1: Explore the "as is" environment and general health of Rancho Cordova youth sports leagues, identifying sustainability, facility and related issues and whether they could be improved by professional support Goal #2: Identify various models of collaborative youth sport league management and coordination which result in enhanced offerings and excellent experiences for youth sports participants and whether this could be improved by professional staff support. Metric: These findings would be included in a report to the RCAA Goal #3: Determine costs and benefits of developing a youth sports "one stop" for attracting new sports offerings and tournament play to the City of Rancho Cordova, and whether this could be accomplished by professional staff support Metric: These findings would be included in a report to the RCAA Goal #4: Research and explore fundraising potential for enhancing play facilities, sports fee assistance, outreach to non-English speakers and a wide variety of funding mechanisms which are available but not tapped due to lack of capacity of leagues and RCAA staff support Metric: These findings would be included in a report to the RCAA Goal #5: Explore benefits of professional staff effort to recruit, stabilize and retain coaches, referees, umpires and other officials whose shortage is threatening the demise of youth sports in Rancho Cordova and whether this could be improved by professional staff support Metric: These findings would be included in a report to the RCAA Goal #6: Explore the economic costs and benefits of enhancing the image of Rancho Cordova as a youth sports leader in California, including identifying opportunities wherein Rancho Cordova could take the lead or fill an existing gap Metric: These findings would be included in a report to the RCAA Goal #7: Identify strategies to boost overall youth sports league participation in Rancho Cordova Metric: These findings would be included in a report to the RCAA

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$45,000

Estimated Breakdown of Project Expenditures

$43,000 for contract consultant to investigate and complete a wide-ranging feasibility study $2,000 for the Cordova Community Council to identify and monitor the work of the contractor, and assure compliance with CEIF rules, provide bookkeeping and reporting functions.

Matching Funds

None

Include Any Other Funding Contributions

None

Ongoing Operations and Maintenance Costs (if applicable)

None

Total Community Enhancement & Investment Funds Requested

$45,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

N/A

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None

Project Schedule, Timeliness and Adaptability

Project Schedule

Timeline: August 2022: CEIF Funding agreement finalized September 2022: Identify qualified consultant November 2023: Preliminary report for circulation to RCAA leagues and City of Rancho Cordova (presentation to annual RCAA Member League Retreat for full discussion) January 2023: Issue preliminary report February 2023: Issue final report

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The Cordova Community Council participated in a similar exercise twice in recent years. The first was to ascertain what was needed to build capacity around the arts, which eventually led to the formation of the RC Arts non-profit organization and a City of Rancho Cordova Arts Strategic Plan. The second effort aimed to construct a framework for future success of the Rancho Cordova Community Food Locker. Using those successful efforts as a guide, it strikes us as necessary to undertake a similar effort on behalf of youth sports leagues, a backbone of community life, which is suffering due to lack of capacity, unable to find time and resources to fully plan for a bright future. Because of this overall understanding by a particularly dedicated leadership team currently in place, but mindful that many will "age out" soon, the time is now to perform this deep dive and prepare for the future.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. This project is primarily administrative and adjustments could be easily accomplished to achieve completion.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Shelly Blanchard

Title

Executive Director

Submitting As

Non-Profit

Phone

9167174408

Email Address

shelly@cordovacouncil.org

Organization's Legal Name (if applicable)

Cordova Community Council Foundation

Mailing Address of Submitter

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Signatory's Name

Cordova Community Council Foundation Shelly Blanchard

Signatory's Title

Executive Director

Signatory's Phone

9167174408

Signatory's Email Address

shelly@cordovacouncil.org

Signatory's Mailing Address

2729 Prospect Park Drive
Suite 117
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Wednesday, March 16, 2022 11:48 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1535108
IP Address:	107.219.40.78
Submission Date:	03/16/2022 11:47
Survey Time:	42 minutes, 33 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Boy Scouts of America, Troop 1601 -Tents , Patrol Box, Camp Stove & Lanterns

Project Synopsis

Troop 1601, First all-girl troop in Rancho Cordova established on February 1, 2019 which also happens to be the first day girls were allowed to join the Boy Scouts of America and enjoy all opportunities available. These girls started the BSA program with no prior scouting experience but with much enthusiasm to take on the task at hand. Troop 1601 started up with no camp supplies or tents. The scouts expected to hold fundraisers to obtain much needed equipment and tents to participate in camping and the outdoors as this is a major component of the Scouting program. Unfortunately, Covid-19 restrictions and shut-downs prevented the girls from raising the necessary funds to purchase many items to participate in these opportunities. Another scout troop passed on a few of their oldest tents to assist our troop with starting their adventure. These tents were in poor condition or not serviceable, many were missing parts. We have tried to repair or find replacement parts; however, these tents are no longer available to purchase. Troop 1601 is requesting new tents for year-round use to include snow camping in the winter. The troop is also in need of a patrol box for setting up a kitchen at campsite, a 3-burner camping stove and 3 lanterns. Currently, we are borrowing equipment from various parents and then trying to make sure it gets returned in same condition. This makes it difficult, when trying to make sure all equipment has been obtained and returned just for an outing.

Project Description

The Scouting program offers youth a wide variety of experiences of which mainly focuses around the outdoors and camping not available in many organizations. BSA has opened up this same experience and opportunity to girls. The All-Girl Troop 1601 has only been able to experience a few camp trips since being established, either due to lack of equipment or restrictions/shut downs of Covid-19. Troop 1601 has missed out on opportunities to go snow camping such as the annual Klondike-a competition between troops focused on cold weather activities. The Boy Scouts of America Mission Statement is" to prepare young people to make ethical and moral choices over their lifetimes by instilling in them the values of the Scout Oath and Scout Law." Scouting was purposely created to take place outdoors. Here, scouts learn to share responsibilities, connecting with others, and skills that will last a lifetime. Another aspect of Scouting is giving back to the community. Community service is closely tied to rank advancement in the Scouting program. The Citizenship of the Community Merit Badge is an Eagle Scout required merit badge. While Troop 1601 is relatively new in the Scouting World, we may not have participated in as many community events as other organizations, but we did what we could

under the circumstances and are excited to become an active part of the community. Of the many opportunities available to volunteer in Rancho Cordova, we have volunteered in several events, such as a Pancake Breakfast and Dinner at the United Methodist Church. They also participated in Scouting for Food, volunteered for the Thanksgiving and Christmas Dinner donation drive at the Rancho Cordova Food Locker and provided flag Honor Guards for the City of Rancho Cordova. While we are asking for new tents and other camp equipment to offer a quality program, we give back to our community. The new tents and camp equipment will allow the Troop to deliver a quality outdoor program.

Project Team

Adult leader and parents of Troop 1601will be responsible for obtaining the tents, camp stove, patrol box and lanterns. Older Scouts or Troop leaders will teach the Scouts how to set up, maintain and care for the new tents and camp equipment.

Project Goals

We have researched the tents that will best suit our needs along with the patrol box, camp stove and lanterns, but realize the availability is subject to supply chain issues. If funding is approved, the tents and equipment requested will be ordered immediately. Once all items are received and defect-free, any and all paperwork required by the City will be turned in.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

The cost of the tents, footprints to protect the bottom of tent and increase its life, camp stove, griddles, patrol camp kitchen and lanterns that best suit our needs is $ 4825.09

Estimated Breakdown of Project Expenditures

4 Eureka El Capitan 3+ Outfitter Tent= $ 1525.24 inc. tax; 4 Eureka El Capitan 3+ footprints = $ 238.12 inc. tax; 4 Eureka El Capitan 4+ Outfitter Tent = $ 1811.26 inc. tax; 4 Eureka El Capitan 4+ footprints = $ 261.96 inc. tax; 1 Camp Chef Explorer 3 burner stove = $271.88 inc. tax; 1 burner griddle = $ 81.66 inc. tax; 2 burner griddle = $125.06 inc. tax; 1 Chuck Box Camp Kitchen $ 379.54 inc. tax; and 3 Life + Gear Adventure 2200 Lumens LED Lantern with Power Bank $ 130.47 inc. tax.

Matching Funds

N/A

Include Any Other Funding Contributions

We are looking for funding for a total of 8 tents. These will replace our current tents that are missing parts, torn or not useable. Along with the tents, we will need the footprints to lengthen their life span. Also we are in need of a camp stove, camp kitchen box, and lanterns. Due to the pandemic and loss of fundraising opportunities, we only have $47.55 saved to purchase the items above.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$4825.09

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None

Project Schedule, Timeliness and Adaptability

Project Schedule

Once funding is approved, Tents, footprints stove, griddles, lanterns and camp kitchen will be ordered. Since funding is later in the year, the items should be in stock. We expect all items we wish to purchase will be delivered or picked up prior to the end of the year.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

If the tents and equipment we are looking at are out of stock or manufacturer is having supply issues, we will research and purchase similar items from a like supplier.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This project only involves in-person contact with Troop members. If necessary, masking up as required. This is the same policy as used at most of our meetings.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2720 Kilgore Rd.
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

N/A

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

SHIRLEY THOMAS

Title

Committee Member

Application #78

Submitting As

Non-Profit

Phone

9168067149

Email Address

secret-squirrel@sbcglobal.net

Organization's Legal Name (if applicable)

Scout Troop 1601

Mailing Address of Submitter

2336 Byrd Drive
Rancho Cordova, CA 95670

Signatory's Name

SHIRLEY THOMAS

Signatory's Title

Committee Member

Signatory's Phone

9168067149

Signatory's Email Address

secret-squirrel@sbcglobal.net

Signatory's Mailing Address

2336 Byrd Drive
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #78

ATTACHMENT 3

Received 3/17/2022 @2:45pm SAD

William Thomas
2720 Kilgore Road
Rancho Cordova, CA 95670
(916) 798-1061
wc.thomas@sbcglobal.net
ARGrange172@gmail.com

To Whom it May Concern,

The American River Grange is the proud host of Troop 1601, the first all-girl scout troop in the City of Rancho Cordova and one of the first in Northern California. They hold their weekly meetings at our facility on Kilgore Road each Tuesday evening. They also hold special events on some weekends at our hall and grounds.

We have a storage container located within our backyard which facilitates the storage of their troop gear.

In return for the use of our facilities, they have agreed to assist with quarterly clean up and yard maintenance events along with Troop 363, one of the oldest boy scout troops in Rancho Cordova.

Please provide attentive consideration of their request for assistance as they are a young troop that needs to grow within our community. I see great things in their future as they become an active unit and have more participation and visibility in and around Rancho Cordova.

Respectfully,

William C. Thomas, Grange Master/President
American River Grange No. 172
2720 Kilgore Road
Rancho Cordova, CA 95670

Application #78

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 1:37 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1536545
IP Address: 12.125.225.162
Submission Date: 03/17/2022 1:36
Survey Time: 55 minutes, 12 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Winter Sanctuary and Homeless Services in Rancho Cordova

Project Synopsis

Rancho Cordova HART will provide a rotating Winter Shelter and essential housing counseling and supportive services to the homeless in Rancho Cordova.

Project Description

Rancho Cordova HART's mission is to provide services to the homeless in our community by continuing to provide life-changing services. Our unhoused neighbors will receive much-needed shelter and services during the coldest months of the year. Funds will be allocated to bus passes, services to provide clients with rental assistance, move-in costs, application/background check fees, and the general operation of the Winter Sanctuary Shelter Program. Winter Sanctuary Shelter Program - Citizens and faith communities operate the Winter Sanctuary Shelter Program in Rancho Cordova to provide free overnight shelter, warmth, meals, and connection to mainline health and housing-related services for men & women who are experiencing homelessness in our area during the coldest months of winter. Potential guests are invited to arrive at the intake site at 5 pm each evening during the program to create a consistent meeting place. Guests of the winter sanctuary meet with the outreach navigator and, most importantly, become part of the HART family and Rancho Cordova community. Housing Counseling/Relocation - Rancho Cordova HART partners with Sacramento Self-Help Housing (SSHH) to assist those on the street or in the Winter Shelter Program, to achieve housing. SSHH helps by rapidly connecting clients with landlords, property owners, and housing program options. HART will support by using the community enhancement funds to remove the barriers to housing by covering the costs of security deposits, bus passes, or similar "move-in costs." These funds will also go to supporting those moving out of the new transitional house.

Project Team

1) Rancho Cordova HART operates the local rotating winter shelter program and will connect homeless individuals and families to the homeless outreach navigator for housing referrals, education, and services. HART mentors will also work with clients on additional issues such as transportation to the DMV, filling in applications to rent, or other resources (in-kind and volunteer). Since 2013, Rancho Cordova HART has been mobilizing the community to come together as volunteers to help individuals and families residing in Rancho Cordova who are experiencing homelessness. Rancho Cordova HART is a local collaboration between the faith-

based community, businesses, residents, Folsom Cordova Unified School District, Elica Health, and Sacramento Veteran's Stand Down. Rancho Cordova HART's agenda is dedicated to the needs of the city's homeless population. For the past seven years, Rancho Cordova HART has hosted a successful and welcoming winter shelter for the homeless in the city. During the off-season, HART acts as a local resource to the homeless population and also assists with supporting and maintaining the city's new transitional house. 2) Sacramento Self-Help Housing (SSHH) is an organization that serves individuals and families who have insufficient housing resources. Since 1990, they have been helping people who are homeless, in danger of becoming homeless, in crisis, or who have special needs, to find stable and affordable housing. SSHH operates various programs that assist individuals with their housing needs. Some of these programs include temporary and permanent housing, housing counseling, financial education, tenant-landlord services, and community outreach. SSHH participates in Rancho Cordova HART as a supporting guide to ensure that HART has the resources it needs to assist its clients. SSHH helps during the HART winter shelter season and makes it possible for HARTs to create housing opportunities.

Project Goals

In general, the goal is to operate a rotating winter shelter program during the coldest months of the year in 2022, where our homeless neighbors can receive essential services and get connected to mainstream housing resources. The following are our measures for success. Organize a 2022 winter sanctuary program for 12+ program participants per night 1) Provide 700+ nights of lodging 2) Provide 5+ veterans lodging and services 3) Work with SSHH to provide services to 15+ winter sanctuary program participants 4) Organize 200+ volunteers to support the winter sanctuary program 5) Assist 10+ unhoused individuals or families achieve housing

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

83,900

Estimated Breakdown of Project Expenditures

1. Rent of intake site - $3,000 2. Gas and Expenses for transportation van - $2,000 3. Housing Counseling Services - $25,000 4. Bus Passes - $700 5. Insurance - $1,200 6. In-Kind Expenses for Host Churches - $50,000 7. Food Gift Cards - $2,000

Matching Funds

Item number 7 in the above budget will be donated by members of churches. Facilities and staff/volunteers for each night of the winter shelter are donated by the faith communities that make up Rancho Cordova HART. $50,000 is an estimate based on our 2019 winter shelter program. If we hope to expand the number of winter shelter weeks (which we presume to do), the number will go up. A better estimate of the in-kind donations from our faith-based community partners will be tracked in the reports.

Include Any Other Funding Contributions

None

Ongoing Operations and Maintenance Costs (if applicable)

None

Total Community Enhancement & Investment Funds Requested

$33,900

Is this a multi-year request?

No

How many years have you received funding for this project?

5

When will your request for funding sunset for ongoing programs?

The winter sanctuary program will be done, at the latest, by March 2023. The other services are ongoing.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Application #79

Rancho Cordova HART prioritizes sustainability. Volunteers oversee all administrative tasks and program services, which reduces administrative costs to $0.00. Rancho Cordova HART has secured ongoing funding to support some program costs from its community members and organizational partners. These include submitting grant applications to funders, fundraising events, and individual solicitations.

Project Schedule, Timeliness and Adaptability

Project Schedule

1) July 2022 – June 2023: Ongoing housing services 2) December 2022 - March 2023: Rancho Cordova HART winter shelter season

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The housing counseling program will be ongoing. We will work closely with SSHH and the navigator to make sure the funds are used by June 20, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

The public health orders have not, and we anticipate, will not impact our housing services program. SSHH's navigator has pivoted through the pandemic to continue to provide services to our community. We can offer her support virtually or through other means of communication. If the public health order does not allow us to operate a winter shelter we will need to adjust this aspect of the program. Many HART groups have pivoted to provide respite day warming/cooling centers. We will do the same. Though it does not allow for overnight guests, this retains the service connection and resource distribution sentiment of the winter sanctuary program.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

11223 TRINITY RIVER DRIVE
RANCHO CORDOVA, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Rancho Cordova HART is located at 11223 Trinity River Drive, Rancho Cordova, CA 95670. The Rancho Cordova HART Winter Shelter intake site is to be determined.

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Letter for City.docx

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Derek Corea

Title

Submitting As

Non-Profit

Phone

9167982435

Email Address

derekmcorea@gmail.com

Organization's Legal Name (if applicable)

Rancho Cordova HART

Mailing Address of Submitter

1578 Drake Drive
Mailbox 8
Drake Dr., CA 95616

Signatory's Name

Mr. Derek Corea

Signatory's Title

President

Signatory's Phone

9166776642

Signatory's Email Address

traviskimball@gmail.com

Signatory's Mailing Address

4687 Fairbrook Ct.
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #79

sun river CHURCH
building bridges of irresistible influence

To whom it may concern:

This is to affirm our support for Rancho Cordova HART and the work that they are doing in the community.

Sincerely,

Sharon Johnson, Executive Assistant

11223 TRINITY RIVER DRIVE, RANCHO CORDOVA, CA, 95670
www.sunriverchurch.com | 916.635.9000 office | 916.635.0939 fax

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 3:55 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1536875
IP Address: 216.93.209.250
Submission Date: 03/17/2022 3:54
Survey Time: 42 minutes, 9 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Home Repairs and Neighborhood Revitalization in Rancho Cordova in partnership with Habitat for Humanity

Project Synopsis

Habitat for Humanity of Greater Sacramento is seeking support to work in partnership with the City of Rancho Cordova to fund 25 or more home repair projects for low-income Rancho Cordova homeowners to help beautify the neighborhood, increase neighborhood pride, and support underserved low-income homeowners with deferred home repairs. Habitat for Humanity of Greater Sacramento's overarching goals with this project are to both substantially improve the quality of life of low-income Rancho Cordova homeowners, in particular veterans and seniors, who are in need of critical home repairs to bring their homes into a safe, habitable condition, as well to uplift the neighborhood landscape through the beautification and revitalization of these properties that have deferred maintenance issues. Renovations include work to correct critical exterior life/safety and structural deficiencies as well as other high priority exterior habitability repairs, and maintenance related exterior repairs such as painting and landscaping. Funding will provide for significant capacity expansion of an existing Home Repair program and will allow us to target and prioritize low-income Rancho Cordova homeowners as part of our ongoing efforts in the Greater Sacramento region. For an example of the types of projects this funding would support, please see this video of Veteran and Senior Rancho Cordova Homeowner Miles whose home was repaired through support from the Rancho Cordova Community Enhancement Fund, Measure H funding: https://www.youtube.com/watch?v=6z5e3C7XPUA

Project Description

We estimate this funding will allow us to make significant critical health and safety related and beautification repairs on at least 25 (at minimum) qualified low-income owner-occupied homes in Rancho Cordova thus both improving community pride and quality of life for the residents and their neighbors. Habitat for Humanity of Greater Sacramento will close our fiscal year 21/22 having completed over 75 home repairs for low-income homeowners in the greater Sacramento region (in addition to Habitat's other ongoing home building and Neighborhood Revitalization programs). Example renovations include replacing leaking and structurally unsound roofs and porches, corrected leaking windows, exterior paint/landscaping, substantial accessibility and aging in place upgrades, dry rot remediation, and health and safety related critical exterior repairs. If we receive this requested grant support, planned activities include: •Conducting outreach to increase awareness of the repair program within the City of Rancho Cordova • Screen applicants to establish eligibility and conduct on-site reviews by a construction supervisor to define project scope. • Plan and

execute the selected projects under program supervision from a licensed general contractor and with on-site construction professionals as project supervisors. The majority of the labor on Habitat projects is typically provided by volunteers. Where possible we leverage grant funding by actively soliciting in kind donations of materials to reduce project costs or layering on additional funding pools to stretch Measure H dollars farther and impact more Rancho Cordova households. • Evaluate the effectiveness of this program; report to the City with: a listing of who received assistance, a narrative of their eligibility for funding, description of the work performed, cost of the work charged to the grant, other funding or in kind resources leveraged, and testimonials from the homeowner partners impacted.

Project Team

Habitat's staff of professionals play a huge part ensuring that projects are completed on schedule and on budget. Overseen by our CEO Leah Miller (20+ years nonprofit, real estate, and leadership experience), our Director of Construction Michael Gordon (43+ years construction experience) plans and directs all aspects of our home construction and repair activities. Project Site Superintendent Brian Bushta (10+ years construction experience, 3 years with Habitat) manages the volunteers, subs, and day-to-day details for the project and ensures that the build site is safe, and work is completed on schedule. Our Manager of Homeowner Services Cory Stevenson (JD Western Reserve University Law School) is responsible for outreach, recruiting and qualifying prospective families, and guiding them throughout the process. Our COO Shannin Stein (25+ years non-profit experience) supports the homeowner services team with compliance, insurance, and reporting on grant activities. Our Chief Development Officer Laine Himmelmann (10+ years fundraising experience) oversees the overall fundraising, marketing/media/public relations, and volunteer recruitment and scheduling for the organization. Our Controller Farrah Shields (10+ years finance and accounting experience) is responsible for ensuring donated funds are used efficiently, applied as directed, and that Habitat complies with the terms of grant funding.

Project Goals

Our goal is to repair/renovate 25 or more low-income owner-occupied homes with deferred exterior maintenance issues in Rancho Cordova, transitioning the occupants from substandard living conditions, with potentially serious life/safety and structural deficiencies, to homes with significantly improved habitability and pride of ownership. As evidenced in the photos and testimonials in our previous grant report, celebrating and articulating to homeowner partners who is making the work we are doing possible in Rancho Cordova (the City of Rancho Cordova) is also an important piece of this partnership that adds to the increase of pride of community. Our additional short-term goal by providing these exterior home repairs is also to benefit the neighborhood at large by beautifying the streetscape through repairing these homes. We anticipate these 25+ repairs would directly impact between 40-65 Rancho Cordova individuals with critically needed preservation and maintenance support and untold numbers of neighbors who would benefit from the uplifted streetscape. Our long term goal is to alter the decision-making calculus when seniors need to decide where to live out their lives. The critical home repairs we do are often the make-or-break deciding factor on whether residents are able to choose to age in place or are forced to seek other housing. The beautification repairs (painting and landscaping) can also have significant impact on both the neighborhood and the mental health and pride of ownership for the resident. We will provide an end of grant report to include data on a) who received assistance, b) a narrative of their eligibility for funding, c) description and photos of the work performed, d) costs of the work charged to the grant, e) other funding or in-kind resources leveraged f) homeowner testimonials and impact photos.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

300,000

Estimated Breakdown of Project Expenditures

Our estimated breakdown of the $300,000 grant would be: - 40% Sub-contracted services, site services, and labor/site supervisor – $120,000 - 50% Building materials (lumber, siding, etc.) – 50% of total grant request - $150,000 - 10% Administrative costs (social services and operations labor) - $30,000 The request for construction labor is the site supervisor's salary which includes evaluating each project, ordering materials, scheduling trade partners, and supervising the repairs. A substantial amount of the labor, particularly on "Brush with Kindness" repair projects (landscaping, fencing) will be provided by volunteers. We have also included 10% of the grant go to support the administrative/operational needs including marketing to the Rancho Cordova community, review and selection of homeowners, homeowner support, bi-annual reporting with the City of Rancho Cordova, documentation for reporting, and the weekly communication with City of Rancho Cordova staff. Every inquiry/application from prospective home repair partner families must be reviewed, homeowner communicated with, and for those homeowners whose applications are accepted, walked through the contract and process from application to finish of repairs. As evidenced by our 19/20 Measure H CEF grant where we promised 3-4 home repairs and delivered 5, as well as with our current 21/22 CEF grant where we will leverage other

funding to do 15 home repairs (our scope of services promised 10-12) we will continue to be efficient, frugal, deliberate, and look for opportunities to stretch the CEF grant by leveraging and laying on additional partnerships. As the breakdown of costs can differ substantially per type of repair (for reference, a "brush with kindness" beautification repair is typically under $5,000, but a critical home repair depending on the work needed, can be up to $30,000 with a roof), our plan with this grant would be to have a mix of critical and beautification repairs.

Matching Funds

We currently have grant commitments and applications pending to further expand our Neighborhood Revitalization/Home Repair Program at large across the greater Sacramento and Yolo County region. If any of these applications are approved these funds would work in conjunction with Rancho Cordova funding (and layered on top of where possible as we are doing with a variety of current Rancho Cordova home repair projects from our 21/22 Measure H funding). Rancho Cordova Community Enhancement Funds would only be used in Rancho Cordova and other funding would be used as directed by the granter in the Greater Sacramento area (or layered over Rancho Funding to stretch Measure H dollars farther) SMUD: $1 million 2022-2023 MOU in progress, County of Sacramento $20,000 TOT funding approved, $35,000 Aging in Place Nancy Fisher fund, Air Warrior Courage Foundation$15,000 (pledged), Rock the Block $100,000 in hand. Rancho Cordova applicants have always been eligible for funding through our program and will continue to be so. However our work relies on resources; if this request is denied then Rancho Cordova applicants are competing with a much larger pool of applicants and we will always prioritize on the greatest need and veterans when making decisions as to which applicants to serve. Approving our grant request gives Rancho Cordova residents a dedicated source of funding to address their needs without competing with applicants from all of Greater Sacramento and Yolo County. Habitat home build and repair projects are made possible through volunteer labor and hundreds and hundreds of volunteers. Additionally, if awarded this grant, we would look for opportunities for in-kind support and matching funds (such as SMUD funding and TOT funding) within the city of Rancho Cordova to stretch the allocated dollars farther and repair more homes and neighborhoods.

Include Any Other Funding Contributions

While we have other funding contributions for our repairs program at large (see above), we do not have any other funding that is Rancho Cordova specific and that would help us prioritize the City of Rancho Cordova and Rancho Cordova homeowners. If this request is denied then Rancho Cordova applicants are competing with a much larger pool of applicants. This grant would help us put Rancho Cordova applicants to the top of the list through a dedicated funding source specifically for Rancho Cordova families, seniors, and veterans in need of home repair services. Additionally, while we have included a modest 10% of the grant towards the weekly operations/admin support needed for qualifying and working directly with the homeowner partners and reporting, the majority of the homeowner services, as well as finance, and volunteer services staff time would be covered through other areas of our $8 Million budget such as from our ReStore ($1 million unrestricted revenue annually), Habitat homeowner mortgage payments (unrestricted revenue), and general unrestricted donations.

Ongoing Operations and Maintenance Costs (if applicable)

There would be no additional or ongoing costs related to the projects that would be covered and made possible through this request.

Total Community Enhancement & Investment Funds Requested

300,000

Is this a multi-year request?

No

How many years have you received funding for this project?

2

When will your request for funding sunset for ongoing programs?

Though we anticipate that the need for what we do and what this program does (providing affordable home preservation and repairs for low-income homeowners), will be an ongoing need both in the City of Rancho Cordova and our greater Sacramento region - this request will support all the projects included in this request with no ongoing funding needed for the specific projects funded within this request.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Habitat will look to leverage funding from SMUD, the County of Sacramento, and a variety of other corporate, individual, and in-kind supporters to stretch City of Rancho Measure H dollars farther and help more people in need of affordable shelter, home preservation, and neighborhood revitalization support.

Project Schedule, Timeliness and Adaptability

Project Schedule

Upon notification of grant award: 1. Begin outreach activities to local organizations. 2. Open application process specifically to low-income Rancho Cordova residents. 3. Marketing campaign and work with media partners to broadcast opportunity to residents. 3. Begin application review and selection process. 4. Begin on-site reviews to define scopes of work and estimated costs. 5. Projects selected by no later than January and put into the construction que for completion no later than July 30. 2023. 6. Estimated time to complete each project can vary from a few days (beautification projects) to 4-6 weeks for critical home repairs depending on scope of work, weather, etc. 7. Completion of a minimum of 25 home repair projects for low-income Rancho Cordova homeowners by June 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Careful consideration and conversation is always had with all Habitat leadership team members from homeowner services, construction, finance, development, and operations before requesting funding for a grant to ensure we can perform within the timeline, promises, and expectations of the grant. Both years we have been granted funds by the City of Rancho Cordova, we have/will exceed expectations in terms of impact numbers. Even during COVID in 2020 when our organization was shut down for 6 weeks, we were able to deliver and complete all projects within the time period and exceed expectations. We will do the same this current grant period with a larger funding allotment. Additionally, last month we hired an additional site supervisor dedicated exclusively to home repairs so we now have two full-time construction site supervisors dedicated to our home repair program. We also added two additional homeowner services team members on top of our Homeowner Services Manager to be able to better support our homeowner partners and qualify families quicker. Habitat is an organization which prides ourselves on always doing what we say we are going to do. Based on the surge of Rancho Cordova applications, our proven capacity, and our increased program and construction support added to our team over the past few months, we feel confident that the need is there as is our capacity to make a larger impact with larger grant support. Based on our current construction schedule, the need and interest for our repair services within the Rancho Cordova community, and our staff capacity, if awarded this grant, we will finish all projects by June 30th, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

In March of 2020, Habitat for Humanity was forced to close our retail outlet, the ReStore, with shelter in place orders. As the ReStore is a primary supporter of Habitat's operating costs including rent and staff, that meant temporarily furloughing 90% of the Habitat staff for 6 weeks and temporarily shutting down all the construction sites. Since bringing our staff back and reopening the construction sites in early May of 2020, we have been building forward bigger than ever and with the needed modifications when modifications were needed (less volunteers per site and tier-based allowances for who can volunteer, highly stringent safety measures and protocols on and off the construction site, doing exclusively exterior home repairs , etc.) to continue to operate safely and efficiently. While we are now back to our traditional pre-covid volunteer numbers and modes of operation, building forward through COVID taught our team how to be nimble and adapt to any situation while still staying on our build schedule and maintaining our commitments to funders and those we serve. As an essential business and with the modifications we have made and could make again to ensure we can continue to build forward and operate, this program will be able to continue to adjust, operate and perform as needed based on any California Public Health and Sacramento County Health orders.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

25 or more TBD various qualified owner-occupied homes of low-income residents in the City of Rancho Cordova, CA.
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Laine Himmelmann

Title

Chief Development Officer

Submitting As

Non-Profit

Phone

9164401215 ext. 1108

Email Address

LHimmelmann@HabitatGreaterSac.org

Organization's Legal Name (if applicable)

Habitat for Humanity of Greater Sacramento

Mailing Address of Submitter

819 North 10th Street
Sacramento, CA 95811

Signatory's Name

Mrs. Leah Miller

Signatory's Title

President and CEO

Signatory's Phone

9164401215 ext. 1131

Signatory's Email Address

LMiller@HabitatGreaterSac.org

Signatory's Mailing Address

819 North 10th Street
Sacramento, CA 95811

Attach Any Additional Documents Here

2021 Rancho Cordova Home Repairs Flyer.pdf

Read-Only Content

Application #80

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #80

Habitat for Humanity®
of Greater Sacramento

CITY OF ★ COMMUNITY ★ ENHANCEMENT FUND RANCHO CORDOVA

Are you a low-income Rancho Cordova homeowner in need of free or low-cost paint, landscaping, new fencing, or other home repairs?

In partnership with the City of Rancho Cordova Community Enhancement Fund, Habitat for Humanity provides affordable home repairs for qualified low-income homeowners through our "A Brush with Kindness" program.

before and after



before and after



before and after



Learn more and apply for this opportunity at HabitatGreaterSac.org/RanchoHomeRepairs

Applications accepted now through October 22nd, 2021.

Free and low-cost repairs available. **Apply today!**

EQUAL HOUSING OPPORTUNITY

Application #80

The application period will be open from September 27, 2021 to October 22, 2021.
All mailed applications MUST be postmarked by October 22, 2021.

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 7:07 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537183
IP Address:	99.42.124.189
Submission Date:	03/17/2022 7:06
Survey Time:	51 minutes, 3 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Resilience & Reinvestment Project (Triple R)

Project Synopsis

Program supporting Rancho residents hit the hardest by the economic and social impacts of COVID-19. Services will offer wrap-around case-managed coaching services focused on wholistic support of each participant's needs. Resource Specialists offering a strengths-based, culturally responsive empowerment model will work with participants toward their financial, educational, employment, housing, domestic violence recovery and stress reducing goals. The outcome of this program is to revitalize the community, create participant support networks and recovery to those most impacted by COVID.

Project Description

Triple R will offer participants a chance to change their lives 180 degrees. Coaches will work with participants to identify and access next steps in their social and economic recovery. Immigrants, refugees and communities of color were impacted at astronomical levels with loss of employment, income and access to services throughout the pandemic. While this program does not only focus on these groups, FCCP has a strong relationship with each community in Rancho and this program will work to help participants help themselves. These supports will build community cohesion through networking, provide a positive outlet for self-discovery, inquiry, understanding and knowledge of support systems available. As each participant deepens in their own goals accomplishment and participation in programs this will provide a socio or economic benefit to the city by promoting community relations, residents' well-being, safety and increased economic stability.

Project Team

FCCP will be the main organization responsible for this project. The Director along with the Community Supports Manager will supervise a team of Resource Specialists committed to participant goals accomplishment, connection with resources and supportive activities. FCCP houses Rancho Cordova Job Center for easy referral and has myriad established community partnerships to fulfill this program's needs. FCCP currently has MOU's with WEAVE (domestic violence support provider), CSUS department of Social Work and Early Child Education, Chaplain University-nursing, Rancho Cordova Grocery Outlet, Mi Rancho Market, SMUD, SETA, EFSP and Sacramento's Family Support Collaborative to name a few. FCCP's Accounting department will support billing, payment and tracking of requests for support.

Application #81

Project Goals

Provide up to 480 participants with over 3200 supportive services to enhance their social and/or economic recovery from the pandemic. 960 Mental Health Rehabilitation Supports will be offered 1920 Stress Reduction workshops will be offered At least 80 Vocational Tuition Assistance supports 160 Food Vouchers/Gift Cards provided At least 80 Rental, Utility and/or Car Repair supports

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$1,752,074.00/year

Estimated Breakdown of Project Expenditures

Salaries + Benefits $587,184.00 Program Expenses $162,890 DIrect Community Supportive Services $1,002,000 *budget attached

Matching Funds

$52,000 will be secured for management positions and $25,000 for training from other programs.

Include Any Other Funding Contributions

FCCP has myriad short-term COVID funding grants that will end in this fiscal year. Some salary has been secured for management position from other related programs.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$1,752,074.00/year

Is this a multi-year request?

Yes

Number of Years

2

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

We will do our best if only one year is funded. Considering the wide-spread impacts of the pandemic, FCCP expects to be supporting community members through recovery for at least the next two-three years. FCCP continues to write for grants that will support our most impacted community members.

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2024

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Participants will have access to other grants already held or to be held by FCCP such as: SETA Safety Net funding CBDG CARES funding Emergency Shelter and Food Program funding any other COVID recovery funds available

Project Schedule, Timeliness and Adaptability

Project Schedule

Program will need 4 weeks for start up and plans to be fully operational within 2 months. Completion date will be based on funding but is expected to be June 30, 2024 if fully funded.

Application #81

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

FCCP has a long history of supportive programs to the community. FCCP will outreach the program aggressively through social media, partners and businesses/institutions participants frequent. FCCP has a strong management team of qualified, skilled and tenured leaders. FCCP's Accounting department routinely processes related payment requests and tracking of qualifying data. Many of the proposed supports are already established through on-going MOUs and community relationships. This should prove advantageous to not only identifying participants but also providing connections and support.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

FCCP transitioned with-in three days of the original California Public Health order and has taken most documentation, meetings and programming online. FCCP will continue to adjust services to the needs of the community while adhering to the most current order with as little impact to participant access as possible.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10665 Coloma Rd, Ste 200
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Michele Cook

Title

Director of Programs

Submitting As

Non-Profit

Phone

9168068826

Email Address

MCOOK@THEFCCP.ORG

Application #81

Organization's Legal Name (if applicable)

The Folsom Cordova Community Partnership

Mailing Address of Submitter

10665 Coloma Rd, Ste 200
Rancho Cordova, Ca 95670

Signatory's Name

Executive Director Robert Sanger

Signatory's Title

Executive Director

Signatory's Phone

9163618684 ext. 290

Signatory's Email Address

RSanger@THEFCCP.ORG

Signatory's Mailing Address

10665 Coloma Rd, Ste 200
Rancho Cordova, Ca 95670

Attach Any Additional Documents Here

FCCP RRR budget projection.xlsx

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #81

Folsom Cordova Community Partnership
Community Enhancement & Investment Fund Grant
Rancho Recovery Project
Budget Narrative 2022-2023

LINE ITEM			Matching / In Kind Funds	Matching / In Kind Funds	Narrative	Total Funds
Salaries						
	Director	$100,000.00	$25,000.00	In Kind	Director: Calculated at 1 FTE for 12 months	$125,000.00
	Community Support Manager/Intervention Specialist	$65,000.00	$15,000.00	In Kind	Community Support Manager: Calculated at 1 FTE for 12 months	$ 80,000.00
	Resource Specialists	$199,680.00			COVID Resource Specialists- 4 x 1 FTE x 12 months	$ 199,680.00
	Accounting / Admin Manager	$ 35,000.00			Accounting / Admin Manager: Calculated at .50 FTE	$ 35,000.00
	Accounting/HR Assistant	$ 52,000.00			Accounting Assistant: Calculated at 1 FTE	$ 52,000.00
Benefits		$135,504.00	$12,000.00	In-kind	Benefits: Calculated at 30% of salaries	$147,504.00
total salaries		$587,184.00	$52,000.00			$639,184.00
Program Expenses						
	Rent & Utilities	$63,000.00			$700 monthly rent & utilities x 12 months x 7.5 FTE	$ 63,000.00
	Mileage/Travel	$ 10,440.00			Mileage Reimbursement: 200 Miles x 12 months x 7.5 FTE ($.58 per mile)	$ 10,440.00
	Equipment	$ 18,750.00			Computers, monitors and related software, carrying bags x 7.5 FTE x $2500	$ 18,750.00
	Training	$ 25,000.00	$ 25,000.00	In-kind	Cross-cultural training tfor all staff to effectively serve those most effected by COVID	$ 25,000.00
	Communications	$ 12,000.00			Cell Phone/internet reimbursement at $80 per month x 12 months for 7.5 FTE =$7200 + zoom, landline telephone & internet connectivity expense.	$ 12,000.00
	Insurance and Audit Fees	$ 9,000.00			Share of Insurance and Audit Fees for 7.5 FTE x $1,200.00 ($600.00 Audit per FTE + $600.00 Insurance per FTE)	$ 9,000.00
	Program Supplies	$24,700.00			General Office Supplies = $150 per 7.5 FTE x 12 months=$13,500 / Program Supplies = $10,000 / Protective and Disinfectant supplies $100 per month x 12 months= $1,200	$ 24,700.00
Direct Commnity Supportive Services						
	Mental Health Rehabilitation Supports	$ 96,000.00			Direct payment to 1:1 support provider for up to 80 particpants/families x $100 x 12 sessions	$ 96,000.00
	Stress Reduction Workshops	$ 66,000.00			$100 x 80 participants x 6 months, $500 stipend x 3 community leaders x 12 months	$ 66,000.00
	Vocational Tuition Assistance	$ 400,000.00			$5000 in vocational tuition assistance x 80 participants up to $5,000 per participant	$ 400,000.00
	Food Assistance Program / Food Vouchers- Gift Cards to local graocery stores	$ 40,000.00			$250 x 160 food vouchers - gift cards	$ 40,000.00
Totals	**Rent and Utility Assistance**	$ 400,000.00			$5000 in rent/utility/car repair assistance x 80 households up to $5,000 per household	$ 400,000.00
		$1,752,074.00	$77,000.00			$1,804,074.00

Application #81

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 7:17 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537196
IP Address:	96.81.166.102
Submission Date:	03/17/2022 7:17
Survey Time:	22 minutes, 9 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Community Hub Program

Project Synopsis

This project is to assist and usher low income elementary children. Project is aim to purchase school supplies and related items to the low income children. They will have the equal opportunities to compete and thrive in their academic environment.

Project Description

This project is to ensure low income elementary students are given a fair opportunity to learn and thrive in their perspective schools. We would like to secure funding to provide necessary materials (school supplies, uniforms, backpacks, etc.) to low income elementary school children. This project will bring unity in community and opportunities for low income children and family to strive and thrive in our community.

Project Team

The Salvation Army of Rancho Cordova Corps

Project Goals

The purpose of the Community Hub program is to enhance the physical and mental well-being of the residents of Rancho Cordova by providing cultural and educational opportunities. This project goal is to provide necessary materials for low income elementary children to attend school without fear and shame of not having necessary items to study. Our goal is to ensure and instill confidence to the low income students to thrive and succeed in their environment.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$5,000.00

Application #82

Estimated Breakdown of Project Expenditures

1. Back to School shopping for low income elementary children Total: $5,000.00 a. Each student will have $100 to shop at the local store. Money can only be purchased toward school supply or school related items only. b. School supplies includes: Any writing materials, Papers or notebooks, Binders, backpack, desk supplies, color papers, and Folders. c. School related items includes: Tissues, Hand sanitizers, School Uniforms, Shoes (No sandals or flip flops), any type of socks, and Jackets or sweaters.

Matching Funds

None at this time.

Include Any Other Funding Contributions

No match fund at this time. We will provide volunteers to help with this event.

Ongoing Operations and Maintenance Costs (if applicable)

This program is designed to continue beyond 2022. Key to the success of the program will be the partnership with the local businesses and city of Rancho Cordova. The operation cost will be varied and will be raised through fundraisers and support from the city of Rancho Cordova. TSA is known for many successful fundraising events due to positive and loving relationship with donors, and also positive relationship with the partnership with the city of Rancho Cordova.

Total Community Enhancement & Investment Funds Requested

$5,000.00

Is this a multi-year request?

Yes

Number of Years

2

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

1. 45 days of the grant award, we expect to work with local school and community center to gather list of low income students. We will also be contacting local stores (Target or Walmart) to see if they can assist with this event. 2. Within 3 Months of the grant award, we expect to have complete list of students who qualify for this event. We would expect to secure a store to hold the event. 3. On September 3rd 2022, we expect to hold the event.

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

In year 2.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

None.

Project Schedule, Timeliness and Adaptability

Project Schedule

1. Year 1 of the grant award, we expect to launch the program by shopping with the local elementary students in need. The program will be done with the local stores, such as (Target or Walmart). We will be with the students as they purchase each items. 2. Year 2-3 of the grant award, complete the following: a. Review all program procedures and make necessary refinements b. Establish effective strategy to better serve the low income students. Look for effective strategy to reach more low income students. c. Continue local community partners – elementary and middle schools, and other social service providers in Rancho Cordova. Formally establish relationships to facilitate community outreach and education. 3. Within 4th year of grant award, Be self sustaining with the local businesses and private doners for the funding of the program. 4. Continue programming on a annual basis 5. Work with TSA Development team to ensure funding is available to sustain program

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This is one day event. We will only hold this event one time a year. We are not planning any additional program addition to the program above.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes we are able to adjust according to the California Public Health and/or Sacramento County Health Orders.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

10370 Old Placerville Rd.
107
sacramento, California 95827

Other Physical Addresses (if project/program is at multiple sites)

We will be shopping at local store, but it will depend on the store cooperation. We are planning to shop at either Target or Walmart.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

hyun kim

Title

Lieutenant

Submitting As

Non-Profit

Phone

4087819079 ext. 40878

Email Address

hyun.kim@usw.salvationarmy.org

Organization's Legal Name (if applicable)

The Salvation Army Rancho Cordova Corps

Mailing Address of Submitter

10370 Old Placerville Rd

Application #82

107
sacramento, California 95827

Signatory's Name

Lieutenant Hyun Kim

Signatory's Title

Corps Officer

Signatory's Phone

4087819079 ext. 40878

Signatory's Email Address

hyun.kim@usw.salvationarmy.org

Signatory's Mailing Address

10370 Old Placerville Rd
107
sacramento, California 95827

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #82

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Thursday, March 17, 2022 9:46 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537330
IP Address:	198.153.255.2
Submission Date:	03/17/2022 9:46
Survey Time:	32 minutes, 32 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Soil Born Farms: Center for Food, Health and the Environment

Project Synopsis

New entrance signage and landscaping will be installed at Soil Born Farms, marking the final phase of major driveway and parking lot developments at the historic American River Ranch. These improvements are key steps in developing the site into a premier interpretive facility for food, health and the environment.

Project Description

Please see the full Project Description included as an attachment.

Project Team

- Shawn Harrison of Soil Born Farms, project lead. - Mark Thomas and Associates, designer and construction manager. - Theron Roschen and Paul Junker from Interwest Consulting Group, permitting and project management assistance. - Liz Bellas of Sacramento County Regional Parks Department, landowner. - Cordova Recreation and Park District leadership and planning staff.

Project Goals

GOAL: Elevate the visibility and appeal of Soil Born Farms through the development of a welcoming and attractive entrance, readying the American River Ranch for further improvements that will enable the site to serve as a preeminent interpretive center for issues of food, health and the environment. OBJECTIVES: 1. Finalize design and installation of entrance and marquee signage. 2. Complete landscape design, permitting and site preparation, and install plantings at site entrance and along the driveway corridor.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$313,969

Estimated Breakdown of Project Expenditures

Construction: $200,969; Design Support: $63,000; Construction Management: $50,000; Total Project Cost: $313,969

Matching Funds

Soil Born Farms will contribute Shawn Harrison's time for project coordination as in-kind match.

Include Any Other Funding Contributions

Matching funds totaling $2,400,000 have been sourced to date, detailed here: 1) Interpretive Center Entrance, Driveway and Parking Lot Upgrades: a) Entrance Signage and Landscape: Requested under this proposal; b) Driveway widening and tree mitigation: Funded by the City of Rancho Cordova; c) Parking Lot Construction: Design funded by the City of Rancho Cordova; $950,000 construction funding provided by Wildlife Conservation Board under direction of Lower American River Conservancy. 2) Utility Upgrades (water, gas, sewer lines; electrical service): Design and installation funded by the City of Rancho Cordova and County of Sacramento. All upgrades are near completion in 2022. 3) Farm Stand and Culinary Building Design: Funded by the City of Rancho Cordova. Design is under review with the City of Rancho Cordova. 4) Animal Barn and Program Design: $25,000 awarded from the Confluence Program administered by Sacramento Area Sewer District & Sacramento Regional County Sanitation District; $142,545 awarded from the Wildlife Conservation Board Lower American River Conservancy Program. 5) Pathways Design: $19,500 awarded from the American River Parkway Foundation Teichert-Parkway Fund to design a pedestrian pathway system for the American River Ranch, enhancing the property as an education and recreation resource of the American River Parkway. 6) Other: Private Donation of $1,000,000 has been pledged for construction of the Farm Stand and Kitchen building.

Ongoing Operations and Maintenance Costs (if applicable)

Ongoing maintenance of plantings and infrastructure will be provided by Soil Born Farms.

Total Community Enhancement & Investment Funds Requested

$313,969

Is this a multi-year request?

No

How many years have you received funding for this project?

4

When will your request for funding sunset for ongoing programs?

This request is for one year, but the development of Soil Born Farms' Center for Food, Health and the Environment as a regional destination and community education resource is a multi-year process.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Soil Born Farms will solicit funding for additional site development phases through the Wildlife Conservation Board's Lower American River Conservancy Program; the CA Farm to School Incubator Grant Program; from private donors including Dave and Maxine Clark who have made a $1,000,000 donation pledge to future construction; and continued funding requests to the City of Rancho Cordova's Measure H funding.

Project Schedule, Timeliness and Adaptability

Project Schedule

Project design finalization and permitting will take place July - October 2022, followed by site preparation, sign fabrication and installation, irrigation, planting and mulching. Installation is expected to be complete by April 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

No delays are anticipated for the final design and installation of entrance signage and landscaping proposed here. Driveway and parking lot installation are near completion and will be finalized in the spring of 2022, well before this scope of work begins in July. Initial design work has already been completed with Mark Thomas and Associates (see attached Scope of Work document), readying the project for final design and permitting upon award.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This is a construction and design project and should not be impacted by shifting health orders.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2140 Chase Drive
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Soil Born Farms has permission to operate programs and conduct development projects at the American River Ranch through our long-term lease with the County of Sacramento, which is on file with the City of Rancho Cordova.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Elizabeth Powell

Title

Grant Writer

Submitting As

Non-Profit

Phone

9163639685

Email Address

grants@soilborn.org

Organization's Legal Name (if applicable)

Soil Born Farm Urban Agriculture Project

Mailing Address of Submitter

2140 Chase Drive
Rancho Cordova, CA 95670

Signatory's Name

Mr. Shawn Harrison

Application #83

Signatory's Title

Founder and Co-Director

Signatory's Phone

9163639685

Signatory's Email Address

sharrison@soilborn.org

Signatory's Mailing Address

2140 Chase Drive
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Project Description; Scope of Work; Estimate - Soil Born Farms.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #83

Project Description

Describe the project in detail and how it benefits the community based on the City's Community Enhancement & Investment Fund guidelines and selection criteria. If you need more room to answer the question, please attach a separate document to your application.

The terminus of Chase Drive in Rancho Cordova offers direct access to a rare combination of community amenities not found anywhere else in the Sacramento Region. The corridor includes the 55-acre historic American River Ranch, the 63.5-acre Hagan Park, Cordova High School including the new Theater Arts center, Mills Middle School, Cordova Gardens Elementary and unprecedented access to the American River Parkway. These combined amenities currently attract a diversity of visitors and have the potential to engage many more through the development of dynamic health, recreational, educational, entertainment, agriculture, environmental and culinary experiences. Toward this end, Soil Born Farms is working diligently with the City of Rancho Cordova and other regional partners to create a Center for Food, Health and the Environment at the American River Ranch. This legacy project will anchor and tie these community amenities together, creating a preeminent location for visitors to access vital health resources, learn, celebrate and recreate.

PROPOSED SCOPE of WORK

The City of Rancho Cordova has been instrumental in funding backbone infrastructure improvements necessary to activate next steps of the interpretive center construction. The entrance signage and landscaping proposed here will bring completion to recent driveway and parking lot upgrades, which have created major improvements to the site's accessibility, safety, aesthetic appeal, and capacity to host visitors. Proposed actions under this request include:

- Design and installation of attractive Soil Born Farms entrance and marquee signage at Chase Drive. This will replace the temporary signage currently in place. Conceptual designs for this element and the landscaping plan were previously done by Mark Thomas and Associates. These plans will be modified slightly based on changes to the new driveway alignment.
- Design and installation of landscaping at the site entrance and along the length of the newly installed driveway. Landscaping will include a combination of native and drought tolerant plants consistent with landscaping in the completed parking lot.
- Please see Scope of Work and Project Drawing attachment for detail.

These steps will add to the charm of the Chase Drive corridor, and will increase Soil Born Farms' visibility to visitors from the Sacramento region and beyond. The upgraded entrance look will tie seamlessly into new bike/pedestrian pathway installation under the City of Rancho Cordova's Chase Drive - American River Parkway Connection Project (which also includes lighting, ADA design, and high visibility crosswalks). Combined, these improvements will ready Soil Born Farms to install a planned bike/pedestrian connector pathway paralleling the new driveway, providing safe, dedicated access from our site to 5 schools within walking distance, Hagan Community Park, and the American River Parkway pathway used by millions of recreationalists each year.

Application #83

SITE DEVELOPMENT ACCOMPLISHMENTS

With support from the City of Rancho Cordova and other partners, many major infrastructure upgrades are underway or have been completed. These are essential steps in preparing the site for new construction outlined in the American River Ranch Master Plan, toward the goal of establishing the Center for Food, Health and the Environment. Accomplishments to date include:

- Widened 2-way driveway entrance (completed)
- Paved, lighted parking lot with ADA stalls (completing spring 2022)
- Backbone utility upgrades of water, gas, sewer and electrical (completing in 2022)
- Farm Stand and Culinary Building final design (In final design review)
- Animal Barn design (currently underway in partnership with Cordova High School's Agriculture Academy, with funding from the Wildlife Conservation Board)
- ADA pathways with interpretive signage throughout the property (design planning currently underway with funding from the American River Parkway Foundation)
- This recent infrastructure complements the existing equipment barn, caretaker house, schoolhouse, farmhouse kitchen, outdoor theater, office building and outdoor patio - many of which have been constructed or renovated by Soil Born Farms.

These upgrades have paved the way for future site and program development including:

- Entrance Bike/Pedestrian Path: A dedicated, paved pathway paralleling the driveway, and connecting to Hagan Park and Chase Drive.
- Demolition, Drainage and Paving: Final preparation in advance of construction of the Farm Stand and Culinary Building and Animal Barn requires demolition of the existing buildings, drainage work, basic grading and paving.
- Animal Barn Construction: An animal program plan is currently being developed in consultation with the Cordova High School Agriculture Academy. A new joint-use Animal Barn will serve as a learning ground for high school students to practice research, holistic land management, animal science, sustainable agriculture and job skills. It will also provide exciting interpretation and education for visiting youth field trips and drop-in visitors. The barn and farm pastures will host a variety of animals including chickens, turkeys, sheep, rabbits and goats.
- Farm Stand and Culinary Building Construction: Providing healthy food access, culinary education for youth and adults, and sales for local farmers and food artisans. The facility will provide dynamic job training for high school aged youth focused on retail, customer service, culinary arts, farm value-added product development, catering, event management and sustainable food production.
- Visitor Center: Design and construction of a facility to interpret the rich history of this land, and the interface between food, health and the environment.

Key community benefits associated with the overall project include:

Community Pride:

- The Center for Food, Health and the Environment at the American River Ranch will anchor a combination of amenities that will draw national attention and create improved livability for local residents once fully developed.

Application #83

Civic Engagement:

- This project supports existing and future programmatic activities along the Parkway, at Soil Born Farms, and in Hagan Park that attract, engage and inspire a diversity of adult and youth visitors.

Quality of Life:

- Uses good design and agency collaboration to encourage reinvestment and renewed interest in a heritage neighborhood of Rancho Cordova.
- Provides low-cost access to healthy food and programs that help residents address diet-related health issues.

Public Safety:

- Creates improved and safer multi-modal access for residents to a facility that historically was not open to the public.

Arts and Culture:

- With the presence of Soil Born Farms at the American River Ranch, CRPD's historic Rescue Barn, and Cordova High Schools Agriculture and Culinary Academies, this project invests in a community site that celebrates and accentuates Rancho Cordova's rich agricultural history and commitment to playing a leadership role in the regional Farm to Fork movement.

Children and Youth:

- Food, agriculture, environmental stewardship and recreational services are all important career pathways that can be accented at this site with proper investment of infrastructure and programs. With five schools within walking distance to this location and easy access to bus and light rail, area youth and adults will have the opportunity to engage in dynamic life and career development activities from early childhood through adulthood. Current activities offered by Soil Born Farms include food production, community events, summer camps, field trips, adult classes, summer youth employment, cooking education, gardening education, animal husbandry, health and wellness education and environmental science education.

Application #83

PROJECT UNDERSTANDING

We are providing this scope and fee to document our understanding of the work required to complete landscape improvements along Soil Born Farms Road, based on our phone conversation of March 10, 2022, and follow up emails. This budgetary scope of services is provided to assist in development of a Measure H grant proposal for the completion of landscape improvements along Soil Born Farms Road. This area is completely within the County Parks property which Cordova Recreation and Parks District manages for maintenance and events. An exhibit showing the scope of the landscape improvements area is attached.

The proposed project intends to utilize previously delivered 100% drawings, prepared by Mark Thomas, and extract plans for construction that would include irrigation and planting along the west side of the road and a small portion to the east side of the entry leading to the new Soil Born Farms parking lot, entry sign design and preparation for future signage lighting. Construction budget is expected to not exceed $320,000, which includes additional engineering costs to complete the plans and construction support. The project may require audit of existing irrigation to satisfy parks department maintenance needs.

Soil Born Farms Road was previously constructed under another phase. Through that effort an arborist report was prepared, and the existing road was realigned and widened to a uniform width of 20-feet.

SCOPE OF WORK

TASK 1. PROJECT MANAGEMENT AND DOCUMENTATION

Task 1.1. Project Management

This task includes management of the scope items listed below. The Mark Thomas Project Manager will prepare progress reports outlining the tasks completed, tasks upcoming, and an overview of the project schedule will be prepared and submitted monthly. As part of this task, Mark Thomas will confirm the intent based on Measure H grant agreements. Mark Thomas will begin this work by preparing a draft estimate based on the 100% drawings to extract costs associated with the relevant programming of the site, as identified above.

Task 1.2. Meetings

Mark Thomas will facilitate and attend up to three (3) internal team meetings with City, SB Farms, and subconsultants. Due to the impact of COVID 19, these meetings are assumed to be web-based. Agendas and minutes will be provided for each meeting.

Task 1 Deliverables

- Agendas and Minutes for up to three (3) meetings

TASK 2. PUBLIC AND STAKEHOLDER OUTREACH (OPTIONAL TASK)

Task 2.1. Outreach Materials and Exhibits

Mark Thomas will produce “Plan View” renderings of the project to present to the public, city council, and various stakeholders. This scope assumes two (2) exhibits will be prepared.

Application #83

Task 2.2. City Council Presentations

Mark Thomas will prepare presentations and present at up to two (2) City council meetings.

Task 2.3. Stakeholder Meetings

Participate in up to three (3) meetings with project stakeholders. Mark Thomas will prepare meeting agendas and minutes. The anticipated meetings include:

- County Parks – 1 Meeting
- CRPD – 1 Meeting
- Cordova Community Council – 1 Meeting

Task 2 Deliverables

- Outreach Exhibits (2) (PDF)
- Council Meeting PowerPoint Presentation (1)
- Attendance at two (2) City Council Meetings
- Attendance, Agendas, and Minutes for up to three (3) Stakeholder Meetings

TASK 3. PLANS, SPECIFICATIONS AND ESTIMATE

Task 3.1. 100% PS&E

Based on the scope of work outlined above, Mark Thomas will prepare PS&E for the project area. This will include archiving the previous 100% plans prepared, editing the base plan to illustrate the project area, and revising the plans for the intended programming of the site. Specifications will be provided as a complete draft of all relevant sections. Specifications will be merged with the contract boilerplate provided by the City. Estimate will encompass all items identified on the plans at this level. This task will include an internal and external (to Soil Born Farms Director) QA/QC review prior to submittal.

Y&C will update the lighting plan, specifications, and cost estimate (PS&E) for SB Farms to current City of Rancho Cordova Standards and submit updated 100% PS&E to the City of Rancho Cordova for review.

The plan set will include the following sheets:

- title sheet and general notes (2 sheets)
- project control (1 sheets)
- demolition/tree protection plan (1 sheets)
- layout plan and construction details (2 sheets)
- irrigation plan and details (2 sheets)
- planting plan and details (2 sheets)
- electrical plan and details (to show lighting and conduit locations, lighting specification, and future connections) (2 sheets)

Task 3.2. FINAL PS&E PREPARATION

PS&E will be finalized with comments incorporated, supporting notes and necessary coordination. Mark Thomas and Y&C will prepare final plans, specifications, bid schedule, and estimate (stamped and signed) for permitting to required agencies.

Application #83

Task 3.3. BIDDING PS&Es

PS&E will be finalized with comments incorporated, supporting notes and necessary coordination. Mark Thomas and Y&C will prepare final plans, specifications, bid schedule, and estimate (stamped and signed) for bidding and construction.

Task 3 Deliverables

- 100%, Final, and Bidding Plans (Full Size 34x22 PDF)
- 100%, Final, and Bidding Engineer's Estimate (PDF)
- 100%, Final, and Bidding Specifications (PDF and MS Word)

TASK 4. DESIGN SUPPORT DURING CONSTRUCTION

Task 4.1. Bidding Support

During the bidding phase, Mark Thomas will assist the City and SB Farms by providing the following services:

- Assist with pre-bid questions, clarifications, and necessary addenda
- Attend a single pre-bid meeting

Task 4.2. Design Support During Construction

Mark Thomas will provide design support through the construction period to develop a conform set of plans for construction that reflect constructability review comments, addenda and RFI's from the bidding period, in addition to rectifying questions that cannot be answered by the Client's construction management team.

Task 4.3. As-Built Drawings

Based on red-lines provided by the contractor, Mark Thomas will prepare Record Drawings (As-Builts) for the City and Soil Born Farms Records. Drawings will be provided in PDF format.

Task 4 Deliverables

- Pre-Construction Meeting
- RFI Responses (PDF)
- Submittal Review
- As-Built/Record Drawings (Full Size 34x22 PDF)

ASSUMPTIONS AND EXCLUSIONS

- This scope assumes that Soil Born Farms will coordinate with County Parks to obtain the required permission to construct the project.
- Existing CEQA and IS/MND documentation will not be revised or recirculated.
- Drawings and plans for the Farm Stand will be provided by SB Farms.
- No utility design included with this scope (water, fire service, sewer facilities)
- No drainage design, analysis, or modifications to the sub-surface systems are proposed.
- Front-end or boilerplate specifications will be provided by the Client
- This scope assumes that no SWPPP will be required. The contract will include language directing the contractor to obtain the WDID number from the State Board.
- No roadway lighting is provided.
- No ADA improvements at Chase Drive or within the Soil Born Farms parking lot are needed.

- City will provide a no-cost encroachment permit to the contractor to construct.
- Contractor will be required to prepare a traffic control plan and comply with stormwater requirements.
- Outreach and Support will be completed by the County and/or Soil Born Farms. No additional exhibits are necessary for project approvals.
- Building permit processing will be provided by Soil Born Farms
- Tree Mitigation – Construction plans for mitigating removed trees will be completed by Soil Born Farms.
- Construction Management, inspection, construction staking, contractor pay estimating, coordination with grant administrator, and materials testing will be provided by Soil Born Farms.

DESIGN FEE ESTIMATE

COST PROPOSAL FOR PROJECT SCOPE: Soil Born Farms Road Landscape Improvements

	MARK THOMAS	LAUD Division Manager $242	LAUD Project Manager $188	Landscape Architect $147	Landscape Designer $112	Sr. Project Accountant $142	Sr. Project Coordinator $129	Total Hours	Total MT Cost
1.0	Project Management and Documentation	2	12	10	6	2	8	40	$6,198
2.0	Public and Stakeholder Outreach (Optional)	2	20	30	20			72	$10,894
3.0	Plans, Specifications, and Estimates	4	36	90	180			310	$41,126
4.0	Design Support During Construction		8	4	8			20	$2,988
								0	$0
								0	$0
	Subtotal Phase	**8**	**76**	**134**	**214**	**2**	**8**	**442**	**$61,206**
TOTAL HOURS		**8**	**76**	**134**	**214**	**2**	**8**	**442**	
OTHER DIRECT COSTS									**$1,900**
TOTAL COST		**$1,936**	**$14,288**	**$19,698**	**$23,968**	**$284**	**$1,032**		**$63,106**

Application #83

MASTER PLAN

LEGEND

- Ⓐ Paved Parking Lot
- Ⓑ Biofiltration Plantings
- Ⓒ Current Overflow Parking Area
  Future Configuration and Material Undetermined
- Ⓓ Automatic Gate
- Ⓔ Separate Pedestrian and Bike Entry Gate
- Ⓕ Ex. Baseball Field
- Ⓖ Ex. County Bike Trail Spur
- Ⓗ Multi-Use Trail
- Ⓘ High Visibility Crosswalk
- Ⓙ Entry Sign to Hagan Community Park
- Ⓚ Relocated Hagan Park Entry Kiosk
- Ⓛ Ex. Soil Born Farms Access Road
- Ⓜ Ex. Trees to Remain
- Ⓝ Adjust Ex. Soccer Field Location
- Ⓞ Potential Tree Mitigation Area
- Ⓟ Entry Sign to Soil Born Farms with Enhanced Plantings
- Phase 1 Area (Complete)
- Phase 2 Area (In Progress)
- New Measure H Grant Request with Bike Trail Link Option (Alternative)



SOIL BORN FARMS, RANCHO CORDOVA

MARCH, 2022

Soil Born Farm Landscape Estimate

ITEM No.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
	PREPARE STORM WATER POLLUTION PREVENTION PLAN/WATER POLLUTION CONTROL PROGRAM	LS	1	$8,000	$8,000
	CONSTRUCTION AREA SIGNS	LS	1	$1,500	$1,500
	TRAFFIC CONTROL SYSTEM	LS	1	$2,000	$2,000
	JOB SITE MANAGEMENT	LS	1	$15,000	$15,000
	WATER POLLUTION CONTROL	LS	1	$8,000	$8,000
	TEMPORARY FENCE (TYPE ESA)	LS	1	$2,500	$2,500
	GRADING	SF	30464	$0.20	$6,093
	SOIL AMENDMENTS	LS	1	$ 1,500.00	$ 1,500
	TURF AREA RESTABLISHMENT	LS	1	$ 500.00	$ 500
	PLANTING	LS	1	$ 20,000.00	$ 25,000
	BIOSWALE PLANTING	LS	1	$ 15,000.00	$ 15,000
	PLANT ESTABLISHMENT WORK	LS	1	$ 10,000.00	$ 10,000
	IRRIGATION SYSTEM MODIFICATIONS	LS	1	$ 12,000.00	$ 12,000
	MOWBAND	LF	528	$ 20.00	$ 10,560
	COBBLE SPLASH PAD	EA	14	$ 100.00	$ 1,400
	SOIL BORN FARM ENTRY SIGN	LS	1	$ 40,000.00	$ 40,000
	LANDSCAPE BOULDERS	LS	1	$ 10,000.00	$ 10,000
	LIGHTING	LS	1	$12,000	$ 12,000
	MOBILIZATION	LS	1	$18,105	$18,105
	CONTINGENCY (10%)	LS	1	$1,811	$1,811
				CONSTRUCTION SUBTOTAL	**$ 200,969**
	DESIGN SUPPORT	LS	1	$63,000.00	$63,000
	CONSTRUCTION MANAGEMENT	LS	1	$50,000.00	$50,000
	SUBTOTAL CONSULTANT SUPPORT COSTS				***$113,000***
	GRAND TOTAL				**$313,969**

Application #83

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 8:55 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537923
IP Address:	206.15.249.230
Submission Date:	03/18/2022 8:54
Survey Time:	16 minutes, 12 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Homeless Student Servicies

Project Synopsis

Education is a key element for the success of every great city. Students experiencing homelessness face unique challenges in accessing and succeeding in school. In partnership with the Department of Homeless Student Services of the Folsom Cordova Unified School District we propose to assign a fund to support the most vulnerable students in the Rancho Cordova area.

Project Description

The Department of Homeless Student Services identifies and supports students experiencing homelessness as described under federal law McKinney Vento Homeless Student Act. This act was enacted in 1987 to ensure that children and youth experiencing homelessness have access to the same free, appropriate public education and services as their non-homeless peers. Homeless Student Services works in collaboration with schools and community partners towards this goal.

Project Team

M. Elena Cabrera. Director, Categorical Programs and Grants Marjorie Diaz. Education Services Liaison M. Elena Cabrera. Director, Categorical Programs and Grants Marjorie Diaz. Education Services Liaison

Project Goals

Goals of this project include: 1. Identification of the students in the most need. This is an ongoing task during the school year. 2. Provisions needed to enable homeless children and youths to participate fully in school activities: a. Backpacks b. School supplies 3. Provision of emergency assistance needed to enable homeless children and youths to attend school: a. Shoes. b. Clothing: underwear, socks, hoodies, winter jackets. c. Commodities: Hygiene products, home-care products.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

Application #84

$15,000

Estimated Breakdown of Project Expenditures

$15000 annually in gift cards. The reason to ask for gift cards is because it is the best known and proven method for Homeless Student Services to monitor and control the usage of these resources per family. Students have the opportunity to wear new clothing and choose according to their style. This experience has proven to be positive for students in the homeless program. The fund will be distributed as follows: $10 000 for clothing, shoes, commodities and other needs for the families: Distributed in equal parts of $2500 per each one of the following stores: Target, Walmart, Amazon and Kohls. $5 000 for food needs: Distributed in equal parts of $500 per each one of the following: Restaurants: McDonalds, Taco Bell, Subway, Wendy's, Burger King, KFC and Domino's. With a much closer monitoring: Winco, Grocery Outlet and AMPM.

Matching Funds

. Free meals provided by schools. . District Transportation and Public Transportation (RT Cards). . Immunizations clinics for students attending Folsom Cordova Unified School District. . Free eye exams and prescription glasses for students without insurance. . Support for after school programs. . Support on individual interventions. . Connection to mental and emotional wellness providers. . Support on costs related to missed documents or enrollment deadlines, fines, or fees; records required for enrollment, including immunization or other required health records, proof of residency, or other documentation; or academic records, including documentation for credit transfer. . Connection to resources from local partners. Some examples are: . Department of Human Assistance . Rancho Cordova Navigator . Folsom Cordova Community Partnership . Rancho Cordova Food Locker

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$15,000 Annually

Is this a multi-year request?

Yes

Number of Years

3

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 23, 2026

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

N/A

Project Schedule, Timeliness and Adaptability

Project Schedule

Once funds are secured, the Homeless Student Services Department will distribute the resources on a per student need basis throughout the school year.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

This is a multi year grant request. All funds earmarked for 2022-2023 will be given to students before the end of the school year.

Application #84

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2460 Cordova Lane
Rancho Cordova, CA 95630

Other Physical Addresses (if project/program is at multiple sites)

Cordova Lane Center 2460 Cordova Lane, Rancho Cordova, CA 95630

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Elena Cabrera

Title

Director, Categorical Programs and Grants

Submitting As

Public Agency

Phone

9162949090

Email Address

ecabrera@fcusd.org

Organization's Legal Name (if applicable)

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr

Application #84

Rancho Cordova, CA 95742

Signatory's Name

Dr. Sarah Koligian

Signatory's Title

Superintendent

Signatory's Phone

9162949000

Signatory's Email Address

skoligian@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Homeless Student Services Supplemental Endorse (00000002) (2).pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #84

CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Homeless Student Services Support

Name of Organization: Homeless Student Services Department.Folsom Cordova Unified School Dis

Name of Applicant and Title: M.Elena Cabrera. Director, Categorical Programs and Grants

Applicant's Phone: (916)294-9000 ext.103410 **Applicant's Email:** ECabrera@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/22

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #84

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 9:18 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1537999
IP Address:	206.15.249.230
Submission Date:	03/18/2022 9:18
Survey Time:	8 minutes, 5 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Outdoor Kindergarten Learning Area at Cordova Meadows

Project Synopsis

We want to build an outdoor learning area with a shaded structure and tables in the kindergarten playground area.

Project Description

There is an area of our kindergarten playground that once housed a large redwood tree. As parts of the tree were dying and creating a safety hazard it had to be removed. Unfortunately when the tree was removed, the shade it provided was eliminated. Since it has been removed, we would like to turn the area into an inviting, outdoor learning area. We will cement part of it with tables and a shade structure. In the other part of it we will include bark and tree stump jumping stones for the students to play on. In this area we would put some garden boxes for the children to grow plants.

Project Team

Amber Fontaine -Principal, Amanda Walsh-Assistant Principal, and district facilities team (Matt Washburn and Mike Hammond)

Project Goals

We want to make an area on our kindergarten playground where students can go outside to learn and play. The area would be used by our kindergarten and preschool class during the school day. We would also use it as another space for our after school ASES program. Our long term goal is to use this space to support parent connection events for our School Site Council, English Learner Advisory Committee, and Black Student Union Parent Advisory. It would be a lovely space to host our family events in the evenings or the weekends.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$27,000

Application #85

Estimated Breakdown of Project Expenditures

4 Tables-$6,000 Tree Stump Jumping Stones- $1,000 Concrete- $20,000 https://adventurouschild.com/product/fitness/stepping-stumps-set-5/

Matching Funds

None

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

None

Total Community Enhancement & Investment Funds Requested

27,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None

Project Schedule, Timeliness and Adaptability

Project Schedule

We will work with district facilities to get this project done in a year. The timeline will depend on availability of shade structure, tables, and tree stump jumping stones. We will work with facilities to coordinate timelines on laying down the cement as well.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

See above

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we will be able to adjust our project if any California Public Health or Sacramento County Health Orders change.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Application #85

2550 La Loma Drive
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

Yes, at a public K-12 school site

Which school district is the public K-12 school site located in?

Folsom Cordova Unified

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Amber Fontaine

Title

Principal

Submitting As

Public Agency

Phone

9162949120

Email Address

afontain@fcusd.org

Organization's Legal Name (if applicable)

Folsom Cordova Unified School District

Mailing Address of Submitter

1965 Birkmont Dr
Rancho Cordova, CA 95742

Signatory's Name

Dr. Sarah Koligian

Signatory's Title

Superintendent

Signatory's Phone

9162949000

Signatory's Email Address

skoligian@fcusd.org

Signatory's Mailing Address

1965 Birkmont Dr
Rancho Cordova, CA 95742

Application #85

Attach Any Additional Documents Here

Outdoor Learning for Kindergarten Supplemental App.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #85



CITY OF RANCHO CORDOVA
FISCAL YEAR 2022/2023 SUPPLEMENTAL ENDORSEMENT FORM
FOR SCHOOL SITE USAGE

The Fiscal Year 2022/2023 grant application period is open from February 7, 2022 through March 18, 2022. The City is accepting applications from individuals, organizations, businesses, and community partners who are interested in enhancing our community. If your project/program is intended to operate or take place at a public K-12 school site, you must request the endorsement of the school superintendent of that school district.

One supplemental form is required per school district.

By the deadline, the City of Rancho Cordova must also receive the supplemental endorsement form that has been signed and dated by the corresponding school superintendent for the application to be considered complete. It is the applicant's responsibility to ask for the endorsement in the time allotted. Each participating school superintendent reserves the right to withhold their endorsement of a project/program. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

To be filled out by grant applicant

Project/Program Name: Outdoor Learning for Kindergarten

Name of Organization: Cordova Meadows

Name of Applicant and Title: Amber Fontaine-Principal, Amanda Walsh - AP

Applicant's Phone: 916-294-9120 **Applicant's Email:** afontain@fcusd.org

Submit a copy of your application with this page to the school superintendent(s). For your application packet to be considered complete the signed and dated endorsement form must be received by the City of Rancho Cordova by March 18, 2022. The superintendent will submit the form directly to the City's Community Enhancement & Investment Fund team. You must submit this form and a copy of your application to the appropriate superintendent or his or her designee no later than March 4, 2022. For Elk Grove Unified School District use BGrewal@egusd.net. For Folsom Cordova Unified School District use agriffin@fcusd.org. For Sacramento City Unified School District use dianne-brown@scusd.edu.

To be filled out by School Superintendent or designee

Endorsement Given Yes

Endorsement Withheld

Conditional approval of facility rental only

Superintendent's or Designee's Printed Name: Dr. Sarah Koligian Sarah Koligian

Date: 3/17/20

School District: Elk Grove Unified Folsom Cordova Unified ■ Sacramento City Unified Other

Comments (Optional):

The school superintendent or designee will send this form directly to CEIFGrants@cityofranchocordova.org no later than March 18, 2022. Incomplete applications are generally not considered for funding, or the nature of the incompleteness may result in an application being ranked at the bottom or recommended to receive no funding.

Application #85

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 11:42 AM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1538428
IP Address: 65.78.178.30
Submission Date: 03/18/2022 11:42
Survey Time: 1 day, 44 minutes, 52 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Spark Mobile

Project Synopsis

Through our artistic box truck, Sacramento Valley Spark will bring interactive games, a cooling center and neighborhood cleanup tools to community events around the region.

Project Description

The Spark Mobile will provide a flexible platform for taking Sacramento Valley Spark's unique creative energy to numerous (at least 6) Rancho Cordova events over the course of a year. Through the "Spark" drive-thru and "art stops" events Sacramento Valley Spark has shared the art, music and energy of the local Burning Man community. These socially-distanced events provided a safe artistic outlet for thousands of people. Now as Covid-19 restrictions diminish, the demand for community events and human interaction is expected to soar. Rather than focusing our energy on one event, we want to make our energy available for multiple community events. The artistically wrapped Spark Mobile will bring hula hoop lessons, silent disco and scores of additional interactive games to events in Rancho Cordova and contingent on funding, around the region. In addition to the interactive activities, the spark mobile will include a water tank to provide a cooling zone (misters) and tools to help the community clean up. Global warming will mean more and more event producers will grapple with how to keep guests safe during extreme heat events. Our truck will provide a cooling zone for guests to rest and escape the heat. Sacramento Valley Spark and other groups have taken action to clean up our communities. Our truck can support those efforts by providing grabber sticks, buckets and other supplies to these trash pickups. While we envision seeking funding from additional agencies, contingent on funding, we'll commit to activities at least 6 Racho Cordova events. We project that our project – with four volunteers at the event – will directly impact 2,100 people over those six events.

Project Team

The project is a creation of the 501c3 nonprofit Sacramento Valley Spark. Our project team has successfully managed Community Enhancement Fund grants in 2020 and 2021. Galvanizing more than 300 volunteers, we hosted "Summer Spark drive-thru" in 2020 and in 2021 we hosted a "Spring Spark drive-thru" and the "Art Stops" activations in conjunction with Regional Transit. Ed Fletcher, SVS President Ed Fletcher is a Sacramento-based journalist with two decades spent between Capital Public Radio and The

Sacramento Bee, where he served as the guild leader. Jon Thompson, Vice President Jon Thompson is a metal artist and journeyman union electrician. Thomas Hall, Treasurer Hall is the executive director of CleanStart Inc the regional cleantech Non-Profit. Angela Gentry, Secretary Gentry is a marketing professional with extensive experience in sales and brand management. Krista Gurko, Board Member (Artistic, Leadership) Krista has experience in performance and community art engagement, nonprofit leadership, managing volunteers in civic engagement, higher education instruction, and innovative exchanges with diverse populations. Arthur Zwern, Board Member (Artistic, Leadership) Arthur is a real estate developer, inventor, entrepreneur, investor, and creator of one of the world's most popular crowdsourced art projects. DamenQuincy Hayes, Director (Artistic, Technical) DamenQuincy is a long-time recruiter and manager of artistic and technical talent for SVS events and promotional materials.

Project Goals

The goals of the "Spark Mobile" are to promote interaction with strangers, community safety through the cooling zone, and community pride through the support of trash cleanups. Interaction Human interaction through art, learning, and play creates stronger, happier communities and has been sorely missed during Covid restrictions. An example of similar, stationary publicly available activities can be seen at Sacramento's Downtown Commons activity area including cornhole (toss game) before Kings games. Hosted activities may include Hula hoop making + lessons Tutu making Name tag games Silent disco Community safety Global warming will result in the increasing frequency of extreme heat events that threaten the safety of event attendees and the viability of the overall experience. The Spark Mobile through an onboard water tank and deployable misting towers and shade structures will be able to provide a cooling zone that will allow attendees to lower their body temperatures and avoid the dangers of heatstroke or heat exhaustion. The vehicle and cooling zone can be deployed for humanitarian safety reasons that do not have community event elements. Community Pride Keeping our communities free of trash and rubbish is an increasingly difficult task. While we can't immediately solve all of the factors that lead to littering and blight, we can encourage citizens to care about their community and to actively work to make it cleaner. Rancho Cordova has long been home to river cleanups hosted by the foundations linked to the American River. Since 2019, Sacramento Valley Spark has been hosting now quarterly "Moop Your City" trash collection events. M.o.o.p. is an acronym in the Burning Man community for Matter Out Of Place. With grabber sticks, buckets, bags and sharps disposal boxes, the Spark Mobile will support these efforts and make trash collection a fun, community-bonding experience.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

18500

Estimated Breakdown of Project Expenditures

Expenses (12 months) Vehicle Lease $3000 Vehicle Storage $3000 Insurance $2000 fuel $2400 wrap $2000 Mister build $2000 silent disco $2000 other-equipment $2000

Matching Funds

In addition to in-kind support from a vehicle provider, we are seeking additional funding through foundation support, direct fundraising, and government grants. Project costs may have to be cut to fit available funding. Funding sources In-kind vehicle subsidy $9,000 SVS Fundraising, Support $2,000 Sac County $2,000 City of Sacramento $2,000 Office of Emergency Services $2,000 Corporate, Foundation Funds $3,000

Include Any Other Funding Contributions

(see above)

Ongoing Operations and Maintenance Costs (if applicable)

Projected annual costs Vehicle Lease 3000 Vehicle Storage 3000 Insurance 2000 fuel 2400

Total Community Enhancement & Investment Funds Requested

$10,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

Application #86

This project is designed so that it can easily be continued (without startup costs) in future years however, we are not seeking multiyear funding at this time.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

We will be seeking additional funding through foundation support, direct fundraising, and government grants. Project costs may have to be cut to fit available funding. Funding sources In-kind vehicle subsidy $9,000 SVS Fundraising, Support $2,000 Sac County $2,000 City of Sacramento $2,000 Office of Emergency Services $2,000 Corporate, Foundation Funds $3,000

Project Schedule, Timeliness and Adaptability

Project Schedule

March 2022 RC Grant Submitted April - June 2022 Additional Grants Submitted July 2022 RC Grant Awarded Sept 2022 Vehicle Received Sept. -Dec. 2022 Vehicle Buildout Jan. April Kid's Day May Rancho Cordova International Festival June July 2023 Rancho Cordova July 4 celebration August Sept project closed

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Based on the project timeline, 'Spark Mobile' will attend Rancho Cordova events as early as September 2022 and into June 2023. Planned events include Kids's Day, International Festival, Sacramento International Marathon and the California Capital Airshow. We'll discuss whether the vehicle will be available for Rancho Cordova's July 4 celebration. Unless ongoing funding is secured project winds down in September 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Sacramento Valley Spark has demonstrated through our drive-thru events, our ability to alter our events to accommodate current public health orders. All Spark mobile activities will be outdoors and will employ social distancing as needed. We're committed to public safety and are adaptable to changing conditions.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2197 Chase Drive
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

2300 Mine Shaft Lane various other parks, contingent upon event approvals

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Support for Spark Mobile.pdf

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Application #86

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Ed Fletcher

Title

President

Submitting As

Non-Profit

Phone

9165240775

Email Address

president@sacvalleyspark.org

Organization's Legal Name (if applicable)

Sacramento Valley Spark

Mailing Address of Submitter

4221 56TH ST
Sacramento, California 95820

Signatory's Name

Ed Fletcher

Signatory's Title

President

Signatory's Phone

9165240775

Signatory's Email Address

majorfletcher@gmail.com

Signatory's Mailing Address

majorfletcher@gmail.com
Sacramento, CA 95820

Attach Any Additional Documents Here

Spark mobile balanced.png

Read-Only Content

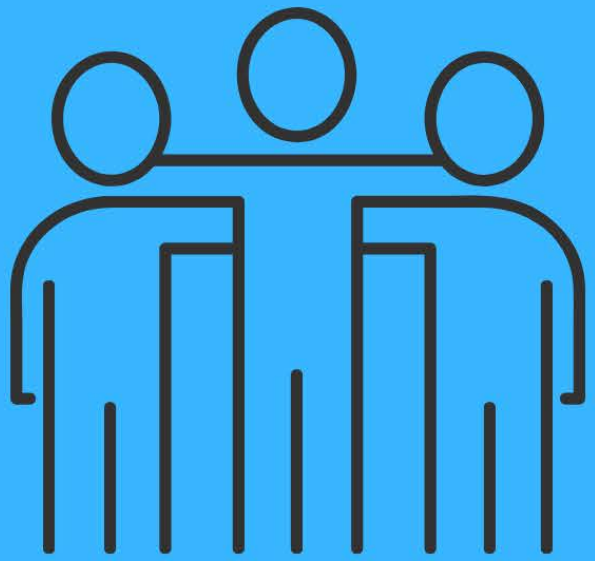
Thank you,
City of Rancho Cordova

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Application #86

SPARK MOBILE

Art, Music, Play





Application #86

INTERACTIVE PLAY

COOLING ZONE

SILENT DISCO

CORDOVA COMMUNITY COUNCIL

March 18, 2022

Ed Fletcher
Sac Valley Spark
Via email

Re: Support for Spark Mobile

Dear Ed,

The Cordova Community Council is delighted to support Sacramento Valley Spark's proposal to create a "Spark Mobile."

The Cordova Community Council – through our Mine Shaft event center – has worked with Sacramento Valley Spark as you hosted the 2020 Summer Spark Drive-Thru and 2021 Spring Spark Drive-Thru events. Both events operated safely and contributed a much-needed boost of artistic energy to the community. The COVID-safe events allowed thousands to enjoy art, music and food without leaving their vehicles.

As we understand, the Spark Mobile will bring art, interactive games, a silent disco, and a cooling center to Rancho Cordova events. We would be excited to incorporate participation at events such as Kids' Day, July 4 celebration, iFest, and our outdoor movie and concert nights. It sounds like fun!

The Spark Mobile activities would add new energy to our longstanding events benefiting the community. I hope the Community Enhancement and Investment Fund process supports this innovative idea and I look forward to busting some moves of my own via Silent Disco!

Sincerely,

Shelly Blanchard

Shelly Blanchard, Executive Director
Cordova Community Council Foundation

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 12:47 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538613
IP Address:	98.232.147.165
Submission Date:	03/18/2022 12:47
Survey Time:	33 minutes, 15 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Cordova School-Year Service Program

Project Synopsis

Sierra Service Project seeks funding to continue its long-standing home repair and youth service program. This project will focus on engaging groups of local middle and high school students during the school year in hands-on home repair and community-based service projects. Youth will gain skills, and the community will benefit!

Project Description

Since 2015, Sierra Service Project (SSP) has hosted over 1,400 volunteer days and completed 106 exterior home repair projects for 74 low-income City residents. In 2022, we are focusing our projects on equipping local youth volunteers. Objectives of this program are reciprocal and benefit youth volunteers and the home repair or community-based project beneficiaries, including: - To provide high school and middle school youth with meaningful service-learning opportunities, a positive and fun volunteer experience, and inspire a life-long passion for service. - To equip youth with invaluable home repair life skills. - To increase civic engagement through youth volunteers from local groups. - To enhance the quality of life of Rancho Cordova residents by providing safer homes, beautifying neighborhoods, and increasing community pride. In 2022, we plan to reboot our long-standing Rancho Cordova School-Year Service Program with a new approach: 1) In coordination with the City of Rancho Cordova staff and their new volunteer platform, coordinate two regular monthly work days to aid in volunteer recruitment and project scheduling. 2) Work with school, church, and other youth volunteer groups to commit to multiple work days during the school year in advance of the funding cycle. This proactive approach will keep interested groups accountable, and help us plan projects for faster completion and set clear expectations for beneficiaries. 3) Focus on building long-term relationships within the community. Elderly residents need home repairs, and are often lonely. Volunteer home repair not only makes a home safer and increases community pride, but is an opportunity for young people to develop intergenerational relationships with the homeowner and adult volunteers they are working with. 4) While focused on youth, we welcome volunteer groups of all ages! Skilled volunteers can help prepare the project for a youth work day, or tackle any particularly challenging aspects.

Project Team

Application #87

A Program Manager will be responsible for the development and delivery of this project. They will be supervised by our Executive Director, Megan Taylor, who has spent the last seven years involved in our Rancho Cordova program. SSP's Business Manager, Jake Bailey, will provide bookkeeping, insurance, budgeting, and HR support, and SSP's Project Manager will advise the Program Manager with their deep construction and project planning expertise. The Program Manager will work closely with the City, low-income homeowners, community-based organizations, and youth volunteer groups to plan projects and lead work days. They will focus: 1) Externally on outreach, building new relationships with volunteer groups. They will spend at least one day a month at community events in Rancho Cordova, getting the word out about our service-learning opportunities for youth. 2) Internally on maintaining existing relationships, documentation and database records, and proactive communication with constituents via phone, email, and mail. We are in the process of identifying school, church, and other youth-focused partners to commit to work days next school year. Cordova High School's construction teacher Andre Leineke has already committed to two volunteer days in fall 2022. We will partner with at least two different community-based organizations to engage youth in service-learning beyond home repairs. This could be gleaning citrus with Soil Born Farms to donate to local food pantries, volunteering on environmental conservation projects and community gardens, or painting a nonprofit or school building.

Project Goals

1) To complete between 20 and 30 home repair project units between July 2022 and June 2023. These projects will improve the quality of life and safety for the homeowner, and increase community pride by repairing or replacing fences, porches, stairs, ramps, exterior paint, and installing drought tolerant front yards. 2) To spend at least one work day per quarter devoted to a community-based project. This is a new goal for our work in Rancho Cordova, but an extension of the community partnerships we have at our other sites. We will connect our volunteer groups to local nonprofits that need an infusion of volunteer labor or a repair project on their facility. SSP will supervise the work, provide volunteer support, and building supplies as needed. 3) To work with at least three dedicated groups of youth over the course of the school year. These groups will provide regular, repeat volunteers for work days. The frequency will be determined by each group, but we will recommend one day per quarter. 4) To complete high quality home repairs which are a source of pride for the homeowner, volunteers, and staff. Overall homeowner satisfaction survey responses will be over 80%. 5) To provide a positive service-learning experience for youth volunteers to enjoy their work, learn new skills, build intergenerational relationships, all while having fun. Overall volunteer satisfaction survey responses will be over 80%.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$70,700

Estimated Breakdown of Project Expenditures

See attached budget PDF. SSP has been the recipient of six funding cycles since 2015, although this year we are requesting funds for two different projects. This funding request is an increase from previous grant cycles to account for rising wages and increased building material and gas costs due to inflation. To fund a half-time, qualified, Program Manager, it is essential that we raise the wage to $20 per hour.

Matching Funds

At minimum, SSP will host on average two volunteer days each month, 22 work days total across 11 months. With an average of seven volunteers per work day, we estimate 154 volunteers working on average 5 hours per day for a total of 770 volunteer hours. This volunteer time is valued at $33.61 per hour for a total of $25,880 of matching funds.

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$70,700

Is this a multi-year request?

No

How many years have you received funding for this project?

6

Application #87

When will your request for funding sunset for ongoing programs?

We anticipate there will always be a need for volunteers within the City, whether for home repairs and maintenance, or community-based projects. Hopefully this ongoing investment in equipping youth volunteers will maintain community pride and investment within the City! Someday these youth will likely be homeowners and will have the skills to repair their homes.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Volunteering will be free to participate, so there will be no fees (earned revenue). To keep our costs low, we will seek business support through donations and discounts including restaurants, building supply stores, etc. These efforts will offset only a small portion of costs.

Project Schedule, Timeliness and Adaptability

Project Schedule

In advance of the project timeline, once approved for funding, SSP will begin scheduling groups for work days during the summer and beyond. Our goal is to have work days scheduled a quarter in advance, with the flexibility to host interested volunteer groups on shorter notice. The project timeline for this request is July 1, 2022 to June 30, 2023. July 2022: Begin hosting two work days per month with youth on summer break. We will also begin attending one community outreach event per month to get the word out about youth service-learning opportunities, focusing on signing up repeat groups for the school year. Each quarter we will host a work day for community-based projects for youth volunteers. Also quarterly, we will check in with the City to make sure we are on the same page. Fall 2022: Work with Cordova High School's Advanced Construction class taught by Andre Leineke. During two school days, an estimated 15 students will work at two homes each day. During winter and spring breaks, and long holiday weekends, we will host out of town volunteers for work days in Rancho Cordova. At least once per year, we will host our board of directors and staff for a work day in Rancho Cordova. This is usually in January, but may be in April or October. May 2023: Host a special gathering to honor youth who volunteered two or more times throughout the school year. We would celebrate their commitment to community service and validate any required hours needed for school (at this time or in advance). We will present a small token of appreciation to any seniors. June 2023: Focus on final project completion and reporting.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Proactive scheduling of youth volunteer groups will be the key to success for this project. Through outreach in advance of the project start, focusing on repeat volunteer groups, adding monthly participation in local events, and utilizing the City's new volunteer platform, we anticipate a stronger connection with volunteer groups during the 2022-2023 school year. The Advanced Construction class at Cordova High School has already committed in March 2022 to join us for two volunteer days in the fall. We are excited to connect students learning about carpentry and construction techniques with real world application repairing homes within their community. This can aid in inspiring young people to pursue a career in construction trades, by connecting their skills and interests with local homeowner and family needs. We also have a small team of retired, weekly volunteers who can move projects toward completion between volunteer groups, and we are actively seeking skilled individuals to join them.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

SSP has taken the safety of our volunteers, staff, and homeowner beneficiaries very seriously throughout the COVID-19 pandemic, pausing volunteer groups for almost a full year. In April 2021 we shifted to begin hosting a group of skilled, retired, weekly volunteers who were vaccinated and eager to get back to work. Since then, they have spent 38 Wednesday mornings completing home repairs in Rancho Cordova! We now have access to better tools and knowledge about limiting the spread of COVID to prevent interruptions in our work projects. Staff and volunteers are required to be fully vaccinated for COVID, including a booster as eligible. Currently, we require KN94, KN95, or N95 masks inside, and COVID testing for any overnight volunteers. Through this funding, our projects have always been outside, focusing on improving community pride and homeowner quality of life. This means all of our projects have a built-in safety measure. While we are not requiring masks outdoors, we are providing masks and hand sanitizer to all volunteers. We are confident these protective measures have set us up for sustained success, and with only minor additional precautions, we will be able to adapt to any state or county restrictions without interruption to our goals.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Various
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Various private homes and community-based organization sites.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Megan Taylor

Title

Executive Director

Submitting As

Non-Profit

Phone

9164886441

Email Address

megan.taylor@sierraserviceproject.org

Organization's Legal Name (if applicable)

Sierra Service Project

Mailing Address of Submitter

PO Box 13009
Sacramento, California 95813

Signatory's Name

Ms. Megan Taylor

Signatory's Title

Executive Director

Application #87

Signatory's Phone

9164886441

Signatory's Email Address

megan.taylor@sierraserviceproject.org

Signatory's Mailing Address

PO Box 13009
Sacramento, California 95813

Attach Any Additional Documents Here

Rancho Cordova School Year Service Program Budget.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #87

2022-2023 Rancho Cordova School-Year Service Program Budget

Wages	$26,500
Taxes and Insurance (25%)	$6,625
Building Materials	$16,500
Community-Based Projects	$4,000
Volunteer T-Shirts & Lunches	$5,353
Transportation	$2,000
Miscellaneous	$500
Total Direct Expenses	$61,478
Overhead (15%)	$9,222
Grand Total	$70,700

Application #87

From: City of Rancho Cordova
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW
Date: Friday, March 18, 2022 1:31:21 PM

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1538754
IP Address:	98.232.147.165
Submission Date:	03/18/2022 1:31
Survey Time:	40 minutes, 36 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Cordova Summer Service Program

Project Synopsis

Sierra Service Project seeks funding for a new youth summer program in Rancho Cordova. This project focuses on engaging middle and high school students in hands-on home repair and community-based service projects during a week of their summer break. Youth will gain skills, have fun, and the community will benefit!

Project Description

Since 2015, Sierra Service Project (SSP) has hosted over 1,400 volunteer days and completed 106 exterior home repair projects for 74 low-income city residents. We are proposing a summer service-learning program in 2023. Objectives of this program are reciprocal and benefit local youth, youth from outside the community, and home repair and community-based project beneficiaries, including: 1) To provide high school and middle school youth with meaningful service-learning opportunities, a positive and fun volunteer experience, and inspire a life-long passion for service. 2) To equip youth with invaluable home repair life skills. 3) To increase civic engagement through youth volunteers from local and traveling groups. 4) To enhance the quality of life of Rancho Cordova residents by providing safer homes, beautify neighborhoods, and increase community pride. For the first time, SSP is proposing to establish a summer site in Rancho Cordova. Currently our other summer community partners are based throughout California in Del Norte and San Diego Counties, and in the Navajo Nation in Arizona. In 2022, our summer program will host over 800 volunteers who dedicate a week of their summer to service-learning. By adding a site in Rancho Cordova, we will be adding a closer option for our pool of volunteers from the middle of the state, including the Bay Area and the greater Sacramento region. We will invite youth volunteers from Rancho Cordova, and other regions, to join together to spend a week completing home repairs for low-income residents, and projects with community-based organizations. The program will offer day and overnight programs, to accommodate the needs and interests of both local and outside volunteer groups.

Project Team

A team of seven young adult staff will run our summer program. We will seek applicants from Rancho Cordova, and our broader constituent base. Staff don't need any prior experience, and will spend 10 days in training prior to hosting volunteers. The staff will be supervised by our Executive Director, Megan Taylor, who has spent 7 years

involved in our Rancho Cordova program, and 12 years managing SSP's summer program. The headquarters staff in Sacramento that will support the team includes our Business Manager and Director of Engagement and Impact. The staff will consist of: 1) A Site Director who will serve as the team lead and be a liaison between the staff, volunteers, City, homeowners, and community partners. This person will have at least one year of experience on SSP staff. 2) Three Construction Coordinators who will meet with homeowners and community partners to plan projects and lead work days. They will rotate between work projects, providing instruction and support. 3) Two Food Service Coordinators who will prepare meals for volunteers and staff. At least one dinner per week will be open to the public as a community dinner. They will manage food inventory, kitchen volunteers, and provide a meal plan that accommodates all dietary needs. 4) A program coordinator who will plan activities and discussions for volunteers to process their service-learning experience. This includes coordinating with community speakers and weekly full group community-based service activities. We will work with 10 to 25 groups of youth and adult volunteers. Individual youth will be welcome. Local volunteers will be invited to participate either just during the day, or for the full week staying overnight. In addition to community-based project partners, our host facility will be another major partner. SSP will seek a school, church, or other space to house volunteers and staff overnight and a place to prepare meals, provide showers, etc.

Project Goals

1) To complete between 40 and 50 home repair project units between June and August 2023. These projects will improve the quality of life and safety for the homeowner and community pride by repairing or replacing fences, porches, stairs, ramps, exterior paint, and installing drought tolerant front yards. 2) To spend at least one work day per week devoted to a community-based project. This is a new goal for our work in Rancho Cordova, but an extension of the community partnerships we have at our other sites. We will connect our volunteer groups to local nonprofits that need an infusion of volunteer labor or a repair project on their facility. SSP will supervise the work, provide volunteer support, and building supplies as needed. 3) To work with at least one local group of youth per week. Local groups and outside groups who travel to Rancho Cordova will serve side by side, learning about each other and the various backgrounds they come from. Peer relationships will be formed across communities. 4) To complete high quality home repairs which are a source of pride for the homeowner, volunteers, and staff. Overall homeowner satisfaction survey responses will be over 80%. 5) To provide a positive service-learning experience for youth volunteers to enjoy their work, learn new skills, build intergenerational relationships, all while having fun. Overall volunteer satisfaction survey responses will be over 80%.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$104,800

Estimated Breakdown of Project Expenditures

See attached PDF for a simplified breakdown of summer program income and expenses. SSP provides week-long volunteers with overnight housing, meals from Sunday night to Saturday morning, building materials for projects, staffing, t-shirt, and more. Volunteers are required to provide their own transportation during the week, and adult volunteers at a ratio of between 1:4 and 1:5 youth.

Matching Funds

SSP will host six weeks of volunteers during summer 2023. This accounts for 200 volunteers who will spend a week serving in Rancho Cordova. This is equivalent to 800 volunteer days. Working 6 hours per day, we estimate a total of 4,800 volunteer hours. This volunteer time is valued at $33.61 per hour for a total of $161,328 of matching funds!

Include Any Other Funding Contributions

Typically SSP's summer program participants pay a fee to cover the costs of volunteering, and we offer scholarships — provided by donors — to low-income participants. It is important to us that our programs are accessible to anyone who wants to participate. For this program we are proposing a small $60 deposit fee per person, to keep

volunteers accountable to their commitment after signing-up. Deposits for 200 volunteers will cover $12,000 in costs. If the City of Rancho Cordova is not able to fulfill our funding request for this program, we would need to offset the difference with greater participant fees from volunteers. For example, if $70,000 was granted by the City, SSP would need to charge 200 participants a $174 fee (including the $60 deposit) to cover the rest of our costs (the remaining $22,800). Our other summer program sites (which are not funded by significant grant awards) have a participant fee of $455 per person, so this would still be a cost-effective summer program for families. We recognize the economic disparity between families including those who have the time to volunteer versus those who need to work to support their families. Eliminating the need to rely on large participant fees would significantly reduce the barrier to participation that fees and traveling long distances requires of families.

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$92,800

Is this a multi-year request?

No

How many years have you received funding for this project?

6

When will your request for funding sunset for ongoing programs?

We anticipate there will always be a need for volunteers within the City, whether for home repairs and maintenance, or community-based projects. Hopefully this ongoing investment in equipping youth volunteers will maintain community pride and investment within the City! Someday these youth will likely be homeowners and will have the skills to repair their homes.

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

To keep our costs low, we will seek business support through donations and discounts including grocery stores, building supply stores, etc. These efforts will offset only a small portion of costs.

Project Schedule, Timeliness and Adaptability

Project Schedule

The project timeline for this request is March 1 to August 31, 2023, spanning two funding cycles. Fall 2022: Volunteer outreach and recruitment begins for Summer 2023. October 2022: Registration opens, $60 deposit to reserve a space. We'll continue to sign-up volunteer groups through winter and spring. December 2022: Staff outreach recruitment begins. March 2023: Hire staff team of seven young adults. April and May 2023: Online training for staff and volunteers. Staff site visit to coordinate with community partners and begin project selection. June 2023: Ten days of in-person staff training on job specifics and conflict resolution, leadership, working with youth and adult volunteers, etc. One week of preparation before volunteers arrive. First session of volunteer groups begins at the end of the month. July 2023: Four week-long sessions of volunteer groups throughout the month. Peak season for project completion. August 2023: Last weeks of volunteer groups, followed by a few days of completing projects (as necessary) and packing up the site by staff. Staff gather from all sites for a few days to debrief their summer, and share highlights and lessons learned with other staff, SSP's board, community partners, etc. A few months after the summer, a survey will be sent to all homeowners and community-based organizations who received work projects to gauge their satisfaction with the work, volunteer, and staff. Weekly schedule: Sunday: Volunteers arrive, in-person orientation. Monday: Tool training and half work day. Tuesday: Full work day, community dinner, and local speaker. Wednesday: Half work day as a full group with a community-based organization, half day at the river and BBQ dinner. Thursday: Full work day, off-site evening program. Friday: Full work day, end of week celebrations. Saturday: Volunteers depart after cleaning up, volunteer survey, group photo,

etc.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Integrated into SSP's flagship, 47-year-old summer program, registration will be streamlined and advertised 9 months in advance. By providing Rancho Cordova as a site location, a large portion of SSP's existing volunteer base will be funneled into this program. This will allow for local outreach to plug into an already-successful program, instead of starting from scratch. Due to multiple volunteer weeks running simultaneously in various locations, our summer program is much more rigorous and scheduled than our year-round program in Rancho Cordova has been. Six weeks of volunteers requires intense staff preparation, a learning curve for staff during the first few weeks, and a number of weeks where the program is running smoothly. Consistent volunteer groups throughout six weeks will aid in timely project completion. More volunteers means more completed projects! Since this program spans two funding cycles, it will not be completed by June 30, 2023 but instead August 31, 2023.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

SSP has taken the safety of our volunteers, staff, and homeowner beneficiaries very seriously throughout the COVID-19 pandemic, pausing volunteer groups for almost a full year. We now have access to better tools and knowledge about how to limit the spread of COVID to prevent interruptions in our programs. Staff and volunteers are required to be fully vaccinated for COVID, including a booster as eligible. Currently, we require KN94, KN95, or N95 masks inside, and COVID testing for overnight volunteers. We have a Medical Advisory Council of health care professionals which advises our safety policies. We meet monthly to review our safety policies and adjust accordingly. We know the world will change significantly in the next 15 months. Our projects in Rancho Cordova have always been outside, focusing on improving community pride and homeowner quality of life. This means all of our projects have a built-in safety measure. While we are not requiring masks outdoors, we are providing masks and hand sanitizer to all volunteers. We are confident these protective measures have set us up for sustained success, and with only minor additional precautions, we will be able to adapt to any state or county restrictions without interruption to our goals.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Various
Rancho Cordova, California 95670

Other Physical Addresses (if project/program is at multiple sites)

Various private homes and community-based organization sites.

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Application #88

Yes

Applicant and Signatory

Application Submitted By

Megan Taylor

Title

Executive Director

Submitting As

Non-Profit

Phone

9164886441

Email Address

megan.taylor@sierraserviceproject.org

Organization's Legal Name (if applicable)

Sierra Service Project

Mailing Address of Submitter

PO Box 13009
Sacramento, California 95813

Signatory's Name

Ms. Megan Taylor

Signatory's Title

Executive Director

Signatory's Phone

9164886441

Signatory's Email Address

megan.taylor@sierraserviceproject.org

Signatory's Mailing Address

PO Box 13009
Sacramento, California 95813

Attach Any Additional Documents Here

Rancho Cordova Summer Service Program Budget.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #88

2022-2023 Rancho Cordova Summer Service Program Budget

INCOME

Volunteer Deposits ($60 per person)	$12,000
City of Rancho Cordova Grant	$92,800
TOTAL INCOME	**$104,800**

EXPENSES

Wages	$33,700
Taxes and Worker's Comp (25%)	$8,425
Building Materials & Tools	$19,355
Transportation & Insurance	$10,200
Food, Kitchen, & Hygiene Supplies	$9,300
Facility Rental & Site Equipment	$4,250
Community-Based Projects	$3,000
Volunteer T-Shirts	$1,700
Speaker Honorariums	$300
Miscellaneous	$900
Total Direct Expenses	**$91,130**
Overhead (15%)	$13,670
TOTAL EXPENSES	**$104,800**

Application #88

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 3:00 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #: 1538973
IP Address: 71.197.127.54
Submission Date: 03/18/2022 3:00
Survey Time: 45 minutes, 7 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Learning Tools For A Successful Community

Project Synopsis

This project is empowering the Rancho Cordova community for economic success through domestic violence awareness and hands-on technical training. By equipping the residents with the new abilities of proven techniques for safety and lifelong learning, this project directly contributes to job placement and retention in Rancho Cordova.

Project Description

The economic damages that family and domestic abuse has on a community may be the single most contributing factor to generational poverty. Victims of intimate partner violence lose a total of 8 million days of paid work each year and the cost of intimate partner violence exceeds $8.3 billion per year. Furthermore, between 21-60% of victims of intimate partner violence lose their jobs due to reasons stemming from the abuse. People try to leave abusive relationships, but they lack the tools to change. [redacted] the residents of Rancho Cordova will benefit with a DV awareness campaign. This project will use technical training and a series of awareness events to equip Rancho Cordova women and the community with the lifelong tools to be economically independent. The participants in the training will learn how to make self-defense tools, DV awareness materials, and artistic displays that reflect their experiences. By using modern manufacturing equipment, the participants will be exposed to viable manufacturing careers. This project will be aligned with the California Mobility Center's Career Pathways model which intends to establish pipelines from underrepresented communities into economically viable manufacturing careers needed to support Clean Mobility. The culmination of job training, self-empowerment, and DV awareness will lead to enhanced community connectedness. In connected communities, members gain a sense of belonging and purpose from the experience of both deriving value from and adding value to their community. Stronger connections increase a person's sense of hope and self-worth, and the ability to cope adaptively in the face of adversity. As a result, community connectedness is a protective factor that enhances well-being, fosters resilience, and promotes prevention. This project will reinforce Rancho Cordova as a model of community connectedness where people build relationships, strong networks, and thrive economically.

Project Team

Application #89

Project Team: Heather Morrow / KitnCut - Project manager and administrator - current owner of laser cutting company, DV survivor, project lead experience; will implement all aspects of the project, including outreach, facilitating resource shares, contract administration, and convening meetings for interest in future Peace Institute, events, and training and support. Kitncut serves to set itself as a vital link for the entrepreneur and industry sector of Rancho Cordova. By providing low cost manufacturing services to small businesses in the area, we are in line to bring manufacturing back to the States, ensuring fair pay and sustainable practices for a more solid future. Our mission is to help small businesses level up to that next step, helping them to fly. In the same way, Heather Morrow, owner of Kitncut, has made it out of abusive situations, while working full-time in professional jobs, and raising two children. She can see a clear vision of how to empower people to get out or help their loved ones out of a bad situation. Heather has project management experience from previous work on her resume, and is a great connector of people to people and people to resources. John Brewer -mentor, local NVC affiliate/Qi-Gong Master, licensed marriage and Family Counselor Soroptomist Club - Community outreach and engagement. Works with women and children with years of experience in all aspects of domestic violence and mutual aid with their care programs in Rancho Cordova. Sheryl Longsworth is taking the lead in their group. ASCRIBE Educational Consulting (Author, Educator) - Direct community link and seminar leader for empowerment California Mobility Center - Employer engagement, job placement, community partner engagement, participant mentoring

Project Goals

Project Goals: The project's long-term goal is to build a comprehensive domestic violence awareness and abolishment campaign to raise public safety, awareness, and economic sustainability. Using this project as the launch, KitnCut intends to lead efforts to establish Rancho Cordova's own Nonviolent Communication Center for Family Health. This is based on the NVC teachings of Dr Martin Luther King Jr and the King Center in Georgia which focuses on attacking the root causes of poverty like unemployment, domestic violence, and lack of resources and education. The project goals for 2022-2023 are to: Host at least 2 community-based domestic violence and anti racism trainings hosted by ASCRIBE Educational Consulting Recruit at least 3 other women-owned businesses as mentors and consulting support Host at least 4 women-led technical training sessions Host at least 1 career fair specifically for Rancho Cordova manufacturing companies Host at least 1 diversity, equity, inclusion (DEI) awareness training for employers Participate and distribute awareness materials at at least 4 community events (e.g. Kids Day in the Park, Hoppin at Hagan, houses of worship, Bliss Marketplace, etc) Align with Women in Manufacturing summit in October 2022 (also sponsor tickets) Metrics: Job Placement in Rancho Cordova Manufacturing Sector Total participant intake to existing programs Number of inquiries to help line Number of external resources leveraged Number of people enrolled in technical training Number of responses to community awareness and education surveys or interviews

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

Year 1 Rancho Cordova Funding Request: $112,000

Estimated Breakdown of Project Expenditures

Equipment/Curriculum: $30,000 Program Implementation Manager: $54,000 Training Materials: $10,000 Professional Consulting/Staff: $15,000 Tools/carepaks: $3,000

Matching Funds

Community Fundraising will be done for the culminating event

Include Any Other Funding Contributions

Family contributions from the Morrows: $2,000

Ongoing Operations and Maintenance Costs (if applicable)

none

Total Community Enhancement & Investment Funds Requested

$204,000

Is this a multi-year request?

Yes

Application #89

Number of Years

3

If you answered yes above, describe your sustainability plan and whether the project is viable as a single year request.

Multiyear Request: Yes. 3 years (through 2024). The ongoing budget will not include additional equipment. Future funding requests from Rancho Cordova will be $92k. Since the project is connected to the larger CMC program, this project will be viable as a feeder to the larger CMC program over multiple years. If only funded for one year, Kitncut will be able to gainfully employ at least 5 more people over 2 years while increasing production capability to 500%. This falls in line with our placement on the state and county contracts vendor lists, and ability to employ DV survivors, while also enabling more small clothing designers access to the cutting services, thus growing the textile and clothing manufacturing in Rancho Cordova.

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 20, 2026

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Community Donations via kickstarter, fundraising sales of sewn products, Heather Morrow public art auctions via Natomas Art and Garden Center

Project Schedule, Timeliness and Adaptability

Project Schedule

Ongoing carepack production and info giveaway Ongoing outreaches via community event vendor table Recruit 3 additional woman-owned business owners Faith-based community partner outreach meetings June 2022-june 2023: technical training for interested parties/ continued outreach/ monthly partner meetings to reach the most vulnerable populations/one on one support October 2022: 3 day culminating accessible event of speakers, creation intensives, NVC workshops (ASL, interpreters, ADA access provided) October 2022: Women in Manufacturing Expo Expand real time knowledge of how to prevent violence and encourage thoughtful communication in the community. Will be measured by reduction in domestic violence. Begin talks to create a safe space (long term goal) in Rancho Cordova for survivors to rebuild through entrepreneurship and education.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

The project team lead is Heather Morrow (proprietor of KitnCut) and she will dedicate the majority of her time to this project. The total project team has the ability and resources to support Heather in the execution and administration of this project through June 30,2023 and beyond.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This project will be able to adapt to any health advisories as the training sessions can be hybrid with virtually delivered sessions combined with hands-on training in an open warehouse space. The public events can be hosted in outdoor venues as well.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

11275 Sunrise Gold Cr Ste V
Rancho COrdova, CA 95742

Other Physical Addresses (if project/program is at multiple sites)

Application #89

Community Events that are already licensed (vendor booths), and churches

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Heather Morrow

Title

Submitting As

Individual

Phone

9166000634

Email Address

kitncut916@gmail.com

Organization's Legal Name (if applicable)

KITNCUT

Mailing Address of Submitter

11275 Sunrise Gold Cr Ste V
Rancho COrdova, CA 95742

Signatory's Name

Ms. Heather Morrow

Signatory's Title

Signatory's Phone

9166000634

Signatory's Email Address

kitncut916@gmail.com

Signatory's Mailing Address

11275 Sunrise Gold Cr Ste V
Rancho COrdova, CA 95742

Attach Any Additional Documents Here

IBL-P3XHEWFSH_verifly_3ce20c26-3e3a-4918-bc86-467c62ce7807.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #89

SUPPLEMENTAL INFORMATION
Learning Tools for A Successful Community

LEVERAGE:
Kitncut currently offers immediate mutual aid on a per-case basis to DV survivors and the unhoused, giving hygiene products, clothes, and resource referrals. Once you've been through DV, it's like an unspoken bond. This is how survivors make it out. By engaging with the public at ground level and meeting people where they are, we can direct more people to the services already in place, like weave, women's empowerment, and women's business center, harm reduction services, 12-step recovery programs, and self defense classes, while equipping them with better skills through our complimentary services. This will directly help stabilize them and prepare them for our job placement features.

COMMUNITY BENEFIT:
Raising awareness about domestic violence is a benefit to everyone. Once the conversation is started, people can learn how to get out of bad situations, and know how to safely help. Reducing violence reduces health issues, improves study habits, reduces truancy and makes for a more wholly functioning and contributing person to the community.

CHILD/YOUTH EDUCATION: Knowing the signs and how to get help for violence in the home leads to more stable families, and breaks generational trauma. Children are often aware even when we don't tell them. The sooner they can own their truth and believe in themselves, the stronger they are as a person, and more able to help others.

COMMUNITY PRIDE: To make a house a home, we must create a feeling of safety, helping people to understand that they are not alone, and there is a way out. We can teach each other to be the most helpful in de-escalating a violent situation and making it safe for all.

QUALITY OF LIFE: Community events that share education, joy, and
Social interactions are core memories for our children. Getting together for positive change encourages healthy habits and friendships. Friendships inspire care and concern for one another, and that is what a good life is made of. When tv and the internet are filled with all kinds of violence and bad decisions, let's show each other that we care. Violence free homes are directly correlated to less disease.

ARTS, CULTURE, HISTORY, ENTERTAINMENT:
Domestic violence awareness helps us all realize our similarities, as it crosses all lines of color, socio-economic background, and ability. And it helps us realize we are all deserving of loving and caring environments. The plaques and motto signs that will be made will be hung in prominent areas, encouraging everyone to take a chance and do better. Also, helping survivors realize art outlets to work through trauma will foster future community arts, and help people celebrate their cultures through artistic expression. We can recognize our history and how knowing it can help us shape a better future. Fostering a safe community allows entertainment to flourish, as people feel safe to express themselves in a safe environment.

BUSINESS/ECONOMIC DEVELOPMENT: see opening of paper: our program will immediately help to alleviate the overreaching community pains and lasting scars that domestic violence has on each of us, and the workforce of our city. Additionally, with more manufacturing equipment for classes, Kitncut will be able to gainfully employ at least 5 more people over 2 years while

increasing production capability to 500%. This falls in line with our placement on the state and county contracts vendor lists, and ability to employ DV survivors.

WORKFORCE/ECONOMIC IMPACT OF DOMESTIC VIOLENCE IN THE COMMUNITY:

- **Victims of intimate partner violence lose a total of 8.0 million days of paid work each year.[6]**
- **The cost of intimate partner violence exceeds $8.3 billion per year.[6]**
- **Between 21-60% of victims of intimate partner violence lose their jobs due to reasons stemming from the abuse.[6]**
- **Between 2003 and 2008, 142 women were murdered in their workplace by their abuser, 78% of women killed in the workplace during this timeframe.[4]**

PHYSICAL/MENTAL IMPACT

- **Women abused by their intimate partners are more vulnerable to contracting HIV or other STI's due to forced intercourse or prolonged exposure to stress.[7]**
- **Studies suggest that there is a relationship between intimate partner violence and depression and suicidal behavior.[7]**
- **Physical, mental, and sexual and reproductive health effects have been linked with intimate partner violence including adolescent pregnancy, unintended pregnancy in general, miscarriage, stillbirth, intrauterine hemorrhage, nutritional deficiency, abdominal pain and other gastrointestinal problems, neurological disorders, chronic pain, disability, anxiety and post-traumatic stress disorder (PTSD), as well as**

noncommunicable diseases such as hypertension, cancer and cardiovascular diseases. Victims of domestic violence are also at higher risk for developing addictions to alcohol, tobacco, or drugs.[7]

You've seen it happen, or maybe you heard it through a wall. Someone got hit, someone is screaming, or you heard a thud that made your heart drop. Why does it matter? How is it your problem? You've heard it before: "Mind your business; what are you looking at? You want next?" Abusers tell us it isn't our problem. But really, it's our only chance.

It's our world. No one will fix it for us. We are all one human race, whether we realize it or not, and we have to start sticking up for each other, or we will be next. Granted, we can't always put ourselves in harm's way for another- I mean, would it make the abuser stop or would they go for you, too? If you called the cops would they show up soon enough, or would they know which person was the aggressor? This is no new fight. It can be confusing when we live in a war fueled world, but it is really only a coward that wants to hit someone out of anger.

Just 5 sick days (the average number of dv callouts by survivors per year, over the allotted sick days) for 10 employees (a conservative number of employees experiencing domestic violence on average in a 100 person company) can cost a company over a million dollars in revenue. This doesn't even touch on the impact it has on bystanders and loved ones that are witness to the violence, and the hopelessness that individuals throughout the community feel when faced with how to make a change or a difference without endangering themselves.

Abusers are lost in their trauma. It is up to them to change. Even leaving abuse, sometimes people do not yet possess the tools to change into what they want to be. A lot of those tools are books and conversations, and when we think we are alone, or that our pain is the worst, as James Baldwin said, we can open a book and see that our suffering is the human condition.

EQUIPPING RANCHO CORDOVA WITH THE TOOLS TO MAKE SAFE AND HEALTHY DECISIONS.

The answer is in the mechanics of our wiring. Just like any job, handyman, or craftsman… any worker needs to be equipped with the proper tools, special tools of building a safe city, where we feel safe to still be the "city of play."

Domestic Violence affects everyone and so it will take a commitment from everyone to help change the narrative. Rancho Cordova is a young city, full of young people, and it's our chance to turn the tide. Women have traditionally been kept from education in many parts of the world, yes, even

here… some even being taken away from their homelands and transferred over here with no knowledge of how to speak the language, and no links to resources, let alone where to begin to find them. These women are the backbone of our society, someone's daughter; someone's mother, someone's sister, someone's wife. Each and every one deserves the chance to support herself at the task she chooses.

We are proposing a support service of immediate and ongoing outreach to supply women and children with self defense access and mindfulness/situational awareness training to lead to employment.
Included is at least 2 community-based domestic violence and anti racism trainings, to empower women to financial independence and security, with translators offered. This will be accomplished with working models of women- owned businesses as mentors, consulting support, and at least 4 woman- led technical training sessions. These will lead to careers in manufacturing at local companies here in Rancho Cordova through the California Mobility Center support of job placement services.
As seen in the statistics above, helping to end domestic violence helps solidify the local economy by reducing turnover and encouraging safety and accountability from all of us. Having people with stable relationships gives the community people that keep their jobs and keep roles filled so that business can keep going. We intend to do mass marketing, show up at every community event to do giveaways of supplies that they will let us attend, especially Kids Day in the Park, Hoppin at Hagan, and Bliss Marketplace, also Fusion Rose First Thursday. We will also complete targeted marketing to all houses of worship in the area, and all women's and local groups. In addition to the education, we will offer a stress buster/ art break at the booths for trauma survivors and anyone who wants to partake. A focus will be on womeninmanufacturing.org and their 3 day summit on October 8th. We would like to sponsor tickets for a certain number of individuals for their virtual offering, and also offer scholarships to the King Center's Online Course offerings to interested parties.

Support letters to be included from:
John Brewer (local NVC affiliate)
Soroptomist Club (already work with women and children)
LGBTQ Center
Antirecidivism Space

Our overreaching, long-term goal is to build a comprehensive domestic violence awareness and abolishment campaign to raise public safety and awareness. This will span the next ten years, and culminate in the housing of Rancho Cordova's own Nonviolent Communication Center for Family Health. This is based on the teachings of NVC of Dr Martin Luther King Jr and the King Center In Georgia that focus on attacking the root causes of poverty like

unemployment, domestic violence, and lack of resources and education.

*** *Community connectedness* refers to the nature and quality of engagement among community members, including individuals, families, neighborhoods, groups, organizations, institutions, and social networks (i.e., schools, cultural-based organizations, faith communities, social media). It involves the relationships people have with each other as well as their level of engagement with the broader community. In connected communities, members gain a sense of belonging, purpose, and mattering from the experience of both deriving value from and adding value to their community. Stronger connections increase a person's sense of hope and self-worth, and the ability to cope adaptively in the face of adversity. As a result, community connectedness is a protective factor that enhances well-being, fosters resilience, and promotes prevention. A connected community is where people build relationships, strong social networks, and thrive.https://preventipv.org**

Application #89

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 3:36 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539046
IP Address:	73.220.52.17
Submission Date:	03/18/2022 3:36
Survey Time:	18 minutes, 23 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Rancho Cordova Elk's Facilitiy Improvements - for Use by Local Fundraising Entities

Project Synopsis

The Elk's Lodge is an ideal place to host local fundraising events. Elk's is requesting funds to improve the kitchen capacity, efficiency and to reduce operating expenses. With a great location just off Sunrise Blvd just 4 miles south of Highway 50, a large main dining/meeting room, parking on site, a full service bar and complete commercial kitchen - the Lodge can be adapted to provide the ideal location for any number of events at a significantly lower cost than commercial providers.

Project Description

It is difficult to find locations in the Rancho Cordova area that provide meeting space, access, parking and a full commercial kitchen to provide a location for non-profit events that support the community – and at an affordable price. Elk's cannot currently fund the improvements to improve capacity and the flexability needed to support a variety of events. But with a small amount of funding, this Lodge can provide a significant asset to the Community. The Rancho Cordova Elk's Lodge has most basic items needed to support a variety of events. Currently the Elk's host 50 to 60 events per year. That leaves over 300 days per year that the Lodge can be available for non-profit organizations to host fundraising, educational seminars, shows, or other events. Costs can be kept to a minimum, with no mark-up on food costs or labor – straight pass through on support costs and a minimal rate to cover Lodge operating expenses (estimating 15 – 20% of revenues). The current Lodge has some shortcomings that should be addressed to maximize it's potential. The Kitchen has a limited capacity to provide enough meals in a timely manner, and to adapt to a variety of uses. The only griddle is small, and needs to be replaced with a larger unit for breakfast and quick meal preparation. The dishwasher is undersized and it's capacity is not adequate for proposed needs. Upgrading and adding several other appliances will also improve the capacity and flexibility of use (coffee maker, cleaning equipment, a food warming steam-table, sneeze-guards, cold salad bar table, etc.) A successful project will provide a great location with the equipment needed to support a variety of events and the lowest cost, with minimal energy use and overhead. The community will benefit for years to come across a wide array of needs. Any small investment can contribute to a number of future events and needs.

Project Team

Chairman of the Board Bob Roe Secretary Gary McCoy Trustee Scott Anderson Trustee Norm Mayer Trustee Jerry Miller

Application #90

Project Goals

To allow for tracking of the events and success, the following metrics can be tracked for each event. 1. Event Sponsor 2. Number of attendees 3. Gross sales revenue for all event related sales 4. Total cost of goods sold and any labor to support the event 5. Net proceeds after a percent sharing agreements with Elk's (fully disclosed) 6. Attendee feedback will be requested and tracked (quality of the food, service and overall facility ranking). A successful year will show increasing use of the Lodge, larger and more efficient fundraising events (actual dollars provided as a result of the event) and community awareness of the capabilities of the facilities and it's Elk's members and supporters. Also, by providing a central location for events, it is hoped that like minded supporters of Rancho Cordova non-profits - may join the Elks and increase the pool of talent and experience available to further support the community going forward.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$45,245.34

Estimated Breakdown of Project Expenditures

Food Serving Equipment 36" griddle/Oven $2,774.00 6" 6-burner Range w/ Oven $2,466.00 4 Well Steamtable Hot Food $1,196.00 Portable Sneeze Guard $671.00 Table Top Food Bar (salads) $1,113.00 Coffee Brewer Decanter (3 pots) $796.00 Sanitizing Dishwasher $4,506.00 High Temp Glass Washer $3,899.00 Subtotal $17,421.00 Taxes at 8.75% $1,524.34 Installation/electrical $8,500.00 (for steamtable and kitchen equipment) Additional Meeting/Dining Chairs $8,500.00 updating - refresh dining/meeting area paint $4,500.00 LED lighting in Main Dining area $4,800.00 (clean bright lighting and lower energy costs) Total $45,245.34

Matching Funds

none

Include Any Other Funding Contributions

none at this time

Ongoing Operations and Maintenance Costs (if applicable)

No increase to existing costs, energy savings will decrease costs.

Total Community Enhancement & Investment Funds Requested

$45, 245.34

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

TBD

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

Rancho Cordova Elk's Lodge will provide additional funds to support Lodge updating and improvements.

Project Schedule, Timeliness and Adaptability

Project Schedule

Upon approval of project, equipment and improvements will be ordered. Currently, suppliers are quoting 2 to 3 month delays. But fully expect to complete the installation of all equipment by August 2022. Lodge is fully useable and availble currently with minor closures to complete the larger installs.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

As long as supplier delays don't change or improve, full project completing should be August 2022.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

We will adapt to any changes in Health Orders as needed. Only complete closure would alter planned timing and project completion.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

11440 Elks Circle
Rancho Cordova, CA 95742

Other Physical Addresses (if project/program is at multiple sites)

none

Have you received a letter of support for the project/program from the property owner?

No

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

SCOTT ANDERSON

Title

Trustee

Submitting As

Non-Profit

Phone

9165026455

Email Address

scottanderson99@hotmail.com

Organization's Legal Name (if applicable)

Benevolent and Protective Order of Elks, Rancho Cordova Lodge #2484

Mailing Address of Submitter

4479 RUBY LANDING WAY
RANCHO CORDOVA, CA 95742

Application #90

Signatory's Name

Scott Anderson

Signatory's Title

Trustee

Signatory's Phone

9165026455

Signatory's Email Address

scottanderson99@hotmail.com

Signatory's Mailing Address

4479 Ruby Landing Way
Rancho Cordova, CA 95742

Attach Any Additional Documents Here

Elks hall3.jpg

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #90


EXIT
Tips

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 4:17 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539116
IP Address:	73.116.203.213
Submission Date:	03/18/2022 4:17
Survey Time:	58 minutes, 35 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Sacramento Children's Museum Exterior Entryway Enhancements

Project Synopsis

Sacramento Children's Museum requests $194,652 in funding to renovate the Museum's exterior entryway – adding a new colorful canopy and a seating area bench at the main entrance – to make the building more identifiable as the Sacramento Children's Museum and to create a more captivating Museum entry experience for visitors.

Project Description

Sacramento Children's Museum (SCM) requests $194,652 in funding support to renovate the Museum's exterior front entrance. There are two components to this project. The first is the construction of an exterior canopy above the entrance doors. This canopy will be composed of aluminum columns and beams draped with woven wire mesh panels in the Museum's brand colors. The second component is the addition of a concrete seating area bench outside the front doors. This seating area bench will match that at the entrance to Rancho Cordova City Hall, with a gathering area in front. This project supports the City's focus area of Arts, Culture, History, and Entertainment. As the first and only children's museum of its kind in the Greater Sacramento region, Sacramento Children's Museum is a favorite family destination for Rancho Cordova residents and families from afar. Because we are such a regional draw, it is in our best interests for our building to stand out, and these renovations would achieve that goal. This new exterior entryway design will differentiate the building from others nearby and make the building more identifiable as a Children's Museum. This also has the potential to draw in more families who simply pass by the Museum. These transformations also will enhance the Museum experience for the thousands of children and adults who visit each year. The colorful canopy will provide guests with a glimpse of the playful adventures awaiting them inside, leaving a lasting impact for children and their families. The outdoor seating bench area is another great addition for guests. It can serve as a gathering area for school field trips, family picnics, and outdoor Museum-led programs.

Project Team

The project designer is Marthe Aston, RID, NCIDQ, of Aston Design, and the contractor is MarketOne Builders, Inc. Sharon Stone Smith, SCM's Executive Director, will oversee the project.

Project Goals

Application #91

The project's goals are to improve the building's branding – making the building more identifiable as the home of the Sacramento Children's Museum – and to create a captivating Museum entry experience for visitors. We will measure our success in meeting these goals by seeking visitors' feedback through in-person conversations and surveys.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$194,652

Estimated Breakdown of Project Expenditures

$7,500 - Design, development, and management services by Marthe Aston, of Aston Design; and $187,152 - Contractor fees by MarketOne Builders, Inc. The breakdown of the contractor fees are as follows: $1,500 - Demolition; $136,147 - Cost of materials: concrete, metal and steel, and paint and caulking; $18,610 - Contractor insurance & fees; and $30,895 - General supervision, permit, and inspection fees.

Matching Funds

N/A

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$194,652

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None

Project Schedule, Timeliness and Adaptability

Project Schedule

Construction is expected to start by December 2022 and end by June 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

SCM will work closely with the project designer and contractor to ensure that construction remains on schedule, as outlined in the project timeline.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Application #91

This project would not affect the Museum's operations/guest experience, as this is for construction work to be completed on the exterior of the building.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Sherry Anne Dayag

Title

Grants Coordinator

Submitting As

Non-Profit

Phone

9167305079

Email Address

grants@sackids.org

Organization's Legal Name (if applicable)

Sacramento Children's Museum

Mailing Address of Submitter

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Signatory's Name

Sharon Stone Smith

Signatory's Title

Executive Director

Signatory's Phone

9167305079

Application #91

Signatory's Email Address

sharon@sackids.org

Signatory's Mailing Address

2701 Prospect Park Dr
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

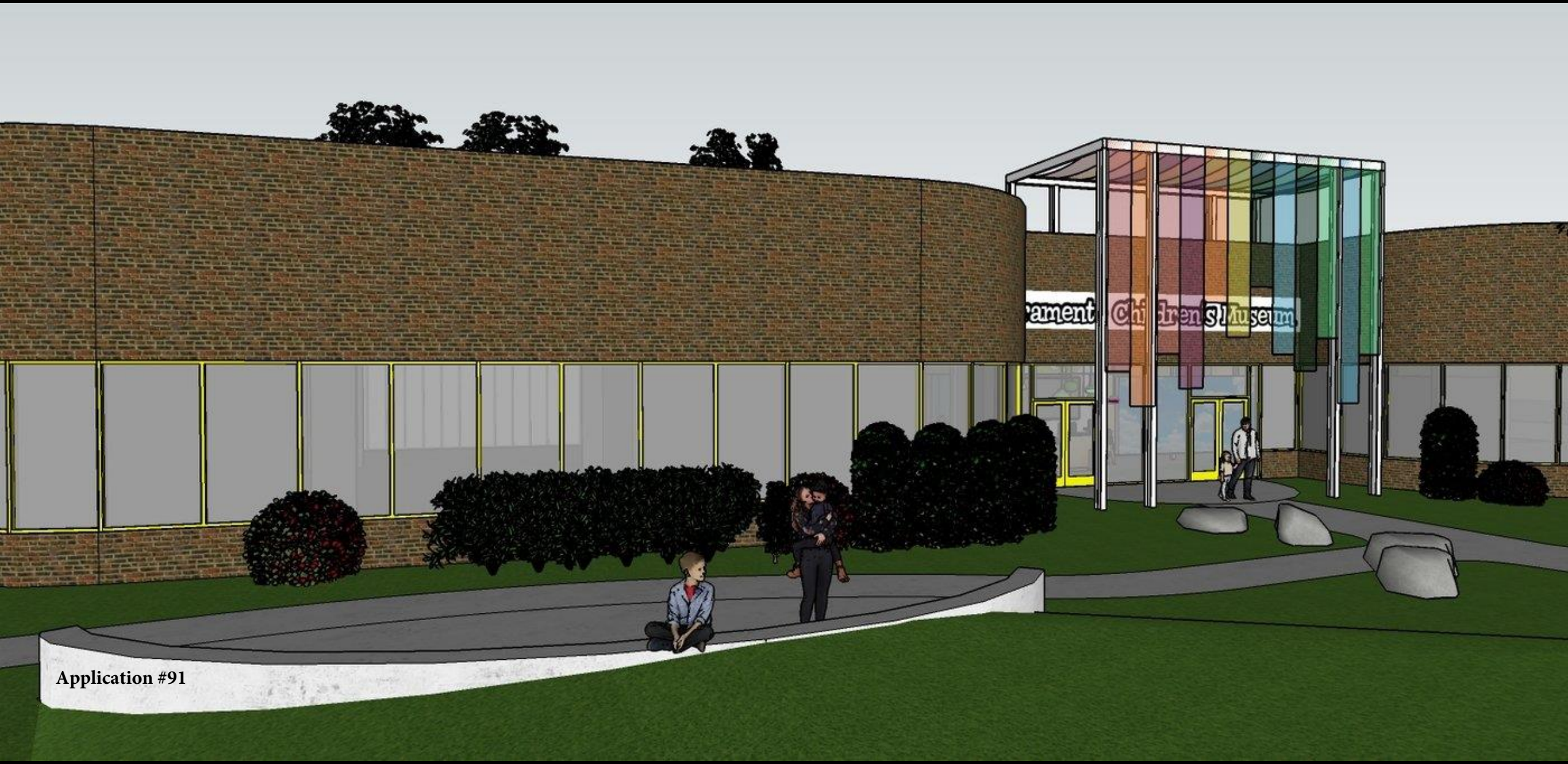
SCM_Entryway Renovations Docs.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #91


Application #91



Application #91

3 March 2022

Sharon Stone Smith
Executive Director
Sacramento Children's Museum
2701 Prospect Park Drive
Rancho Cordova, CA 95670
916.638.7225
sharon@sackids.org

PROPOSAL

This proposal is between Sacramento Children's Museum and Marthe Aston, Aston Design, for the design, development and management of a new exterior canopy and seating area at the entrance to the museum.

SCOPE OF WORK

The exterior canopy above the entrance doors will be composed of aluminum columns and beams draped with woven wire mesh panels in the museum's brand colors. The seating area bench will match that at the entrance to the City of Rancho Cordova, with a gathering area in front.

Marthe Aston will provide the following:

Design Development

- Finalize design for canopy and seating area

Construction Drawings

- Prepare drawings necessary to obtain Permit. Drawings to include but not limited to:
  - Cover Sheet with General Notes and Project Data, and ADA requirements
  - Outline Site Plan
  - Dimensioned Site Plan
  - Elevations and Details as required by City of Ranch Cordova
- Issue drawings to third party services and coordinate (civil and structural engineers)
- Prepare Building Department permit application forms and coordinate submittal documents.
- Submit the Permit application to City of Rancho Cordova.
- Monitor the permit review process.
- Prepare and coordinate submittal of additional requested information and revisions to obtain approvals.

Construction Administration

- Coordinate and respond to Requests for Information from GC.
- Review submittals and shop drawings.
- Visit the site as requested by Museum to ensure construction is progressing in accordance with the construction documents.
- Assist in final walk-through with GC and Sacramento Children's Museum. Prepare Punch List and distribute to Museum and GC.
- Includes (1) Travel/ trip for one person – expenses per trip not to exceed $750.00

<u>Not in Scope of Services:</u>

- Third Party Services to be contracted directly with Sacramento Children's Museum:

- Civil and Structural Engineering
- Cost of Plan Review and Permit Fees
- Changes to Design after finalized and approved.

FEES:
Fees are based on the Scope of Work listed above.

Design Development	Fixed fee of	$1,000.00
Construction Drawings	Fixed fee of	$4,750.00
Construction Administration	Fixed fee of	$1,750.00
TOTAL		**$7,500.00**

PAYMENT SCHEDULE:
Payments to be made as follows:

- **$2,000.00** will be paid at signing of contract and before commencement of work.
- **$2,750.00** will be paid upon submission of construction drawings to City for Permit.
- **$1,000.00** will be paid upon Permit approval.
- Remaining **$1,750.00** amount will be paid on a monthly basis according to actual percentage of work complete.

Sincerely,

Marthe Aston
Aston Design

Accepted by,

_____
Sacramento Children's Museum

_____
Date

Application #91

ATTACHMENT 3

ESTIMATE SUMMARY

PROJECT: Sacramento Children's Museum
CLIENT: Marthe Aston, RID, NCIDQ
LOCATION: 2701 Prospect Park Dr, Rancho Cordova, CA 95670
ARCHITECT:

DATE: 3/8/2022
REV: 1

LINE #	DESCRIPTION	PREVAILING WAGE - Budgetary Proposal	NOTES	CURRENT	TOTAL
1	**GENERAL REQUIREMENTS**				**$30,895**
	General Supervision / GC Management			$12,975	
	Permits & Plan Check Fees	**Allowance**		$12,000	
	Special Inspections - 3rd Party	**Allowance**		$5,000	
	Utility Fees/Hot Tap Fees	**By Owner**		$0	
	Construction Final Cleaning			$920	
2	**EXISTING CONDITIONS**				**$1,500**
	02 40 00 Demolition			$1,500	
3	**CONCRETE**				**$28,500**
	03 00 00 Concrete Total			$28,500	
	03 50 00 Canopy footings (up to 4'x4'x24" d) - Included with Concrete Total			$0	
	03 60 00 Concrete seat wall ~38' long, natural gray concrete, formed finish, w/ 30" w x 12" d footing - Included with Concrete Total			$0	
5	**METALS / STEEL**				**$100,593**
	05 00 00 Metal Total			$70,593	
	05 00 00 (4) Vertical Al or Steel Posts @ 25' long - Included with Metal Total			$0	
	05 00 00 (4) Vertical Al or Steel Posts @ 8'-1" long - Included with Metal Total			$0	
	05 00 00 (2) Horiztonal Al or Steel Beams @ 12'6" long - Included with Metal Total			$0	
	05 00 00 (2) Horiztonal Al or Steel Beams @ 23'10" long - Included with Metal Total			$0	
	05 00 00 2' Wide Coiled Woven Wire Mesh - Allowance of $55/sf			$30,000	
9	**FINISHES**				**$7,055**
	09 90 00 Painting and Caulking			$7,055	
31	**EARTHWORK**				**$0**
	31 00 00 Earthwork outside of footing excavation is excluded			$0	
	SUBTOTAL				**$168,543**
	Liability Insurance	1.20%			$2,023
	Contractor Fee	4.50%			$7,675
	Construction Contingency	5.00%			$8,912
	CONSTRUCTION SUM TOTAL				**$187,152**

ALTERNATES / ALLOWANCES	PROPOSED	ACCEPTED
ALTERNATE TOTALS	**$0**	**$0**

PROJECT AREA SUMMARY

OFFICE BUILDING		SF
TOTAL PROJECT AREA	**-**	**SF**

COSTS PER SF	**#DIV/0!**

Application #91

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 4:39 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539137
IP Address:	71.197.127.54
Submission Date:	03/18/2022 4:38
Survey Time:	45 minutes, 13 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Empowering Our Peace-Keepers to De-escalation

Project Synopsis

Our police operate on outdated training that relies heavily on gun usage. We propose to enforce the training of officers to de escalation techniques. We purport to accomplish this by having Jiu Jitsu trainer and author, Tom Deblass in for a conference to teach against use of excessive force. This, pared with training from the Dr. King Center, in Georgia, will keep our communities safer and our police relevant to our ever growing people of color residents. Dr. King Center is on board and looking forward to the conversations.

Project Description

The project will consist of coordinating a visit and seminar for all the RC police with the King Center for Peace out of Georgia, and Jiu Jitsu instructor and motivational speaker and author, Tom Deblass. Travel and lodging and seminar price will be covered, and we would like to host Q and A for the officers with both parties. LEVERAGE: We will partner with and encourage local jiu jitsu gym owners to attend, so they can further the lessons offered by Tom. We will leverage existing mental health services in the community to bridge the divide of reactive to responsive in our officers. The Non-Violent Communication talks will be continued by John Brewer, certified NVC specialist in town. COMMUNITY BENEFIT: The de-escalation techniques already being taught would help our officers stay safer in dangerous situations, giving them more tools to communicate with people they are in contact with. This will empower police officers and give them pride in their ability to not discharge their weapons unnecessarily. Quality of life: 40% of cops abuse their spouses. This training will not only help them to de escalate on the job, but also at home, creating healthier generations Arts, culture, history: When a community is less violent, arts flourish. People feel safe to create. This directly enhances the beauty of the town and the people that live in it. We can be a huge part of history and lead the way for the country to a more relevant police unit, safer for all. Business\economic development:. Providing police with NVC and deescalation techniques, and holding them accountable to use them, will encourage economic growth. No one likes to live where the cops are known to be aggressive. Businesses will want to open here, knowing the cops won't arrive with guns drawn.

Project Team

Application #92

Project Team: Heather Morrow: Recovered Anger Addict, DV survivor, business owner: responsible for overall management of the project, from police meetings to event organizing, and speaker arrangements John Brewer: NVC Specialist: Ongoing Education Felipe Bragiao- Ongoing Jiu Jitsu Training

Project Goals

To decrease excessive force of officers by 75% over the next year, and to establish a healthier relationship between the cops and people of color and youth in the city by implementing empathy training. Expand Continuing education of nonviolent communication techniques for police officers, metrics measured by surveys and report analysis of incidents.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$111,000

Estimated Breakdown of Project Expenditures

Staffing: $30k (2 people) Speakers/ Seminars: $80k

Matching Funds

no

Include Any Other Funding Contributions

will community fundraise

Ongoing Operations and Maintenance Costs (if applicable)

n/a

Total Community Enhancement & Investment Funds Requested

$111,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30,2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Private Donor Support

Project Schedule, Timeliness and Adaptability

Project Schedule

July- Talk with Dr. King Center and Tom DeBlass to arrange conferencing/ speak with police to schedule conferences August2022- June 30, 2023- Onboard Police Units, schedule classes, accomplish seminars

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Heather Morrow plans to commit one third of her time this year to this project, and the team has the means to accomplish the goals with the community connections and gym owners involved.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Application #92

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes, we can hold these conferences virtually or in large arenas with small groups.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

11347 Folsom Blvd
St B
Rancho Cordova, CA 95742

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Requested, and will submit to city by March 18, 2022

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Heather Morrow

Title

Submitting As

Individual

Phone

9166000634

Email Address

kitncut916@gmail.com

Organization's Legal Name (if applicable)

KITNCUT

Mailing Address of Submitter

11275 Sunrise Gold Cr Ste V
Rancho COrdova, CA 95742

Application #92

Signatory's Name

kitncut Heather Morrow

Signatory's Title

Signatory's Phone

9166000634

Signatory's Email Address

kitncut916@gmail.com

Signatory's Mailing Address

11275 Sunrise Gold Cr Ste V
Rancho COrdova, CA 95742

Attach Any Additional Documents Here

IBL-P3XHEWFSH_verifly.pdf

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #92

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 4:43 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539151
IP Address:	12.200.142.66
Submission Date:	03/18/2022 4:43
Survey Time:	34 minutes, 43 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Black Child Legacy Campaign Rancho Cordova Service Extension

Project Synopsis

For decades, Black children have died at higher rates than other children in Sacramento County, a tragic, shameful and preventable loss of precious lives. These persistent disparities reflect systemic racism and the barriers it creates to the health and life chances of Black children. To address the disparities and break down the barriers, Sacramento County's Board of Supervisors asked The Center at Sierra Health Foundation, working with community leaders, public officials, and advocates, to create a plan for change. In response, the Black Child Legacy Campaign (BCLC) was launched in 2015 with the goal of saving children's lives by transforming community systems of support. Currently, seven neighborhoods within the City of Sacramento - Arden-Arcade; Del Paso Heights/North Sacramento; Fruitridge/Stockton Boulevard; Meadowview; North Highlands/Foothill Farms; Oak Park; and, Valley Hi – have full-fledged BCLC operations and offer a comprehensive menu of programs and services managed by seven community-based organizations (CBO) in each respective neighborhood. Greater Sacramento Urban League is the CBO leading the BCLC efforts in Oak Park. While our formal, and priority service population is residents of Oak Park, a significant number of Rancho Cordova residents come to our Oak Park office for services and to participate in our programs. However, due to the strictures of our BCLC funding agreement and limited staff capacity, we are not always able to provide the level of support and allow participation in our programs to residents of Rancho Cordova to the extent needed or to meet demand. An award of Ranco Cordova Community Enhancement and Investment Funds will allow us to provide fuller and better services and program participation to Ranco Cordova residents reaching out to us in Oak Park, as well as allow us to actually deliver services and offer programs on occasion physically within the City of Rancho Cordova.

Project Description

BCLC uses five strategies to spark its transformational goals: building community advocacy for anti-racist, pro-community policies; advancing equitable investment and systemic impact; coordinating systems of support for children and their families; establishing a system of accountability and collective impact; and creating communications that spur neighborhood pride and activism.

Project Team

Application #93

The project team is led by Jedida Gomes, GSUL Director of Health & Quality of Life Empowerment, and also includes GSUL Oak Park staff members Christopher Clark (also Folsom-Cordova Unified Board of Education), a crisis intervention worker and a case manager. The Oak Park office houses a County of Sacramento probation officer and asocial service worker who are assigned full-time to support the BCLC effort.

Project Goals

The Black Child Legacy Campaign (BCLC) has the goal of saving children's lives by transforming community systems of support. Fulfillment of the BCLC's goal is not only already saving children from dying but also building community capacity to end the generational cycle of trauma and heartbreak. By starting with community leadership and advocacy and building an infrastructure of care for children and their families, it is possible to change the trajectory of tragedy for Black children and families in Sacramento County and Rancho Cordova, specifically, with funding support from the city's Community Enhancement and Investment Fund. BCLC draws on the power inherent in Black communities to provide a legacy of health, pride, and love to our children.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$110,000 for Rancho Cordova-specific program and service extension. The overall BCLC cost is $442,000 annually.

Estimated Breakdown of Project Expenditures

- Rancho Cordova-designated BCLC team member (.75 FTE) wages and benefits: $45,000; this is a new hire - Rancho Cordova-held Program/Event costs: $17,500 - Rancho Cordova-specific Supplies/Materials/Printing/Marketing costs: $7,500 - GSUL Overhead/Administration: $40,000

Matching Funds

The Center at Sierra Health Foundation provides $400,000 annually for the BCLC efforts in Oak Park. GSUL anticipates leveraging this funding to cover an estimated $40,000 in our overhead/administration costs incurred by the Rancho Cordova service extension.

Include Any Other Funding Contributions

City of Sacramento: $42,000

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$70,000

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30, 2023

Do you plan to ask annually for funding?

Yes

What other funding will you seek to support your project?

Other funding is already secured as identified above.

Project Schedule, Timeliness and Adaptability

Project Schedule

July 1, 2022 to June 30, 2023.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

Application #93

GSUL has been operating the Black Child Legacy Campaign in Oak Park for five July to June fiscal years. Given our experience with operating on this timeline we do not anticipate any issues with meeting our projected timeline.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

Yes. BCLC in Oak Park has been adjusted for the past two years to adhere to California Public Health and/or Sacramento County Health Orders.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

2331 Alhambra Blvd. Suite 300 Sacramento, CA 95817 (updated at applicant's request)

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Dwayne Crenshaw

Title

President & CEO

Submitting As

Non-Profit

Phone

6192868600 ext. 8655

Email Address

dcrenshaw@gsul.org

Organization's Legal Name (if applicable)

Greater Sacramento Urban League

Mailing Address of Submitter

3725 Marysville Boulevard
Sacramento, CA 95838

Application #93

Signatory's Name

Greater Sacramento Urban League Dwayne Crenshaw

Signatory's Title

President & CEO

Signatory's Phone

6192868600 ext. 8665

Signatory's Email Address

dcrenshaw@gsul.org

Signatory's Mailing Address

3725 Marysville Boulevard
Sacramento, CA 95838

Attach Any Additional Documents Here

Read-Only Content

Thank you,
City of Rancho Cordova

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Application #93

Randi Kay Stephens

From: City of Rancho Cordova <ranchocordova@enotify.visioninternet.com>
Sent: Friday, March 18, 2022 5:53 PM
To: Stacy Delaney; Randi Kay Stephens
Subject: *NEW SUBMISSION* Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Apply for Community Enhancement Fund Grant Funding 2022/23 NEW

Submission #:	1539239
IP Address:	172.58.39.174
Submission Date:	03/18/2022 5:52
Survey Time:	25 minutes, 28 seconds

You have a new online form submission.
Note: all answers displaying "*****" are marked as sensitive and must be viewed after your login.

Project Information

Project Name

Pack 387 Pinewood Derby/ Space Derby Tracks

Project Synopsis

Pack 387 is in need of a pinewood derby and space derby track so our scouts can participate in these annual pack events. We currently have to borrow a track from another pack in the pocket area so we can hold these events.

Project Description

One of the most popular events that people think of when looking back on their Cub Scouting past is the Pinewood Derby. Pack 387 is a new pack in Rancho Cordova located down the street from city hall, making us 1 of 3 Cub Scout packs in the Rancho Cordova area. We are looking to provide a Pinewood Derby and Space Derby track for the Scouts of Pack 387, the tracks will be used for our annual Pinewood Derby and Space Derby races. These events teach our youth about camaraderie and sportsmanship as well as experience the sense of accomplishment and excitement of competition. These tracks would also be a great event to bring out for youth events in Rancho Cordova that Pack 387 participate in.

Project Team

Committee Members of Pack 387

Project Goals

We have already done research on the needs for the tracks and found what is the best fit for our needs. If funding is approved our committee will place the order for the tracks and submit all necessary paper work into the city.

Funding Request

Funds are generally not intended to be used for deferred maintenance and ongoing operational needs. The funds are intended for community enhancement & investment.

Total Project Cost

$2573.00

Estimated Breakdown of Project Expenditures

Best Track 3 Lane 49' Pinewood Derby Track - $966.00 Best Track Space Derby Track - $310.00 Champ Track Timer - $575.00 Grand Prix Race Manager Software - $75.00 Best TrackStart Gate Servo - $230.00 Shipping $387.00

Matching Funds

N/A

Include Any Other Funding Contributions

N/A

Ongoing Operations and Maintenance Costs (if applicable)

N/A

Total Community Enhancement & Investment Funds Requested

$2,573.00

Is this a multi-year request?

No

How many years have you received funding for this project?

0

When will your request for funding sunset for ongoing programs?

June 30th, 2023

Do you plan to ask annually for funding?

No

What other funding will you seek to support your project?

None

Project Schedule, Timeliness and Adaptability

Project Schedule

Once funding is approved the tracks and necessary components will be ordered. With a 3-4 week lead time we hope to have everything ready for our first race next March.

In addition to providing the project timeline identified above, describe how you will be able to complete your project by June 30, 2023.

If lead times are extended due to material shortages we will look into an alternative track manufacturer.

Please note, if selected for funding, you will be required to submit a narrative Outcomes Report and a financial Use of Funds Report at least two times during the grant period.

Will you be able to adjust your project if California Public Health and/or Sacramento County Health Orders change? For example, the program could operate virtually or with other modifications made. Please describe.

This project only requires virtual contact with the suppliers.

Project Location

Please note that projects or programs that are proposed on property owned or operated by outside agencies or a private party will require the coordination with and potentially approvals from outside agencies, organizations, and/or the private party.

Physical Address of the Project Location

Application #94

2720 Kilgore Road
Rancho Cordova, CA 95670

Other Physical Addresses (if project/program is at multiple sites)

Have you received a letter of support for the project/program from the property owner?

Yes (includes if you are the property owner)

Letter of Support from Property Owner (not K-12 schools or park/park facility)

City of Rancho Cordova.docx

Is your project/program intended to operate or take place at a public K-12 school site and/or a park/park facility?

No

Read-Only Content

Please acknowledge that you read and understand the above Supplemental Endorsement Form requirements.

Yes

Applicant and Signatory

Application Submitted By

Robert Young

Title

Cubmaster Pack 387

Submitting As

Non-Profit

Phone

9167963137

Email Address

ryoung@pack387.org

Organization's Legal Name (if applicable)

Boy Scouts of America - Cub Scout Pack 387

Mailing Address of Submitter

2505 Angie Way
Rancho Cordova, CA 95670

Signatory's Name

Amber Young

Signatory's Title

Committee Chair Pack 387

Signatory's Phone

9167963138

Signatory's Email Address

hall-amber@att.net

Signatory's Mailing Address

2505 Angie Way
Rancho Cordova, CA 95670

Attach Any Additional Documents Here

Read-Only Content

Application #94

Thank you,
City of Rancho Cordova

This is an automated message generated by Granicus. Please do not reply directly to this email.

Application #94

City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Subject: Measure H Community Enhancement and Investment Fund 2022-23

To: City Enhancement Board

I am in support of Cub Scout Pack 387 requesting funding for (1) pinewood derby track and (2) space derby track. Cub Scout Pack 387 was re-established in Rancho Cordova after the former Pack was re-absorbed into Pack 380 and under the Rosemont and South Sacramento/Elk Grove area during the Golden Empire Council re-districting of area District boundaries.

Robert Young, the current Cub Master of Pack 387, was an original member of Pack 387 and is an accomplished Eagle Scout and trained leader and Camp Committee Chair in the Golden Empire Council. He is an active member of our community and working to rebuild and grow this new pack. Cub scouts are recruited through current members (i.e. school friends) as well as public community events (i.e. Kids Day in the Park).

The equipment request is essential to having quality driven events that the current scouts and future scouts will be able to utilize and enjoy for many years to come. The Pack is very new and they have had very little opportunity to fundraise in these past two years of covid restrictions. It is our hope to reach as many of our local youth as possible and get them involved in scouting at an early age. If you have ever been to one of these events, you can see why they are popular and enjoyed by scouts, siblings, parents, friends and neighbors.

I am a former Cub Scout Leader, parent of an Eagle Scout, a current Committee Member of a local Scout Troop and the Chartered Org Representative of this young Cub Scout Pack. We are committed to ensure that this youth organization continues to receive support through training, volunteers and community support activities.

Thank you for your time and for consideration for funding this well-deserved organization.

Respectfully,

Debbie Rumsey
2909 Hunt Drive
Rancho Cordova, CA 95670

Application #94

MEMORANDUM

ITEM 12.2.

DATE:	April 4, 2022
TO:	Honorable Mayor and Council Members
FROM:	Stacy Delaney, Community Enhancement and Investment Senior Management Analyst Randi Kay Stephens, Management Analyst II
SUBJECT:	**ARTS STRATEGIC PLAN UPDATE AND DISCUSSION ON THE UPCOMING CALL FOR PUBLIC ART PROPOSALS**

RECOMMENDATION

Staff to provide an update on the first two years of accomplishments (near-term actions) related to the Arts Strategic Plan, review the objectives for years three to five (mid-term actions), and receive feedback and discuss the focus of the current fiscal year's funding allocation for public art.

RESULT OF RECOMMENDED ACTION

The Arts Strategic Plan provides visionary concepts, programs, and projects that help further the City's goals to make Rancho Cordova an artful place. This update is to provide the Council and the public with a recap of the Arts Strategic Plan to showcase the art programs and efforts undertaken in years one and two, and review the objectives for years three to five (mid-term actions). Council feedback on the established arts in public places funding is needed to provide staff direction for the current fiscal year's public art project focus. Following the update and direction from City Council, staff will proceed with the next call for public art proposals.

BACKGROUND

The City Council has been a generous supporter of the arts in Rancho Cordova through the award of numerous Community Enhancement & Investment Fund grants. In partnership with stakeholders and the arts community, the City has sponsored events, funded programs, purchased instruments, and established the Mills Station Arts and Culture Center (MACC). In addition, the Cordova Community Council, with the help of City funding, has been an active participant in producing events in the City and generally supporting the arts community. There are many other local organizations and artists that contribute to the cultural offerings in the City and that participated in the drafting of the Rancho Cordova Arts Strategic Plan. Their partnership and ongoing collaboration are key to long-term success in reaching our desired outcomes.

In December 2019, the City Council adopted the City of Rancho Cordova Arts Strategic Plan that was developed based on direction from the City Council and input from stakeholder

organizations and individuals, including students. The plan included near-term, mid-term, and long-term actions to accelerate its impact and demonstrate the city's support and investment of the arts in the community. The desired outcome of the Rancho Cordova Arts Strategic Plan is, "In 20 years, when viewing the community, we will see accomplishments that have changed the community for the better."

The document is an action-oriented strategic plan with a section called "Taking Action" describing programs and projects to assist in achieving the vision. Since the plan's adoption, staff and the arts community have worked to implement the Arts Strategic Plan. This is a two-year update on the actions taken to continue building art programs and public art in the community.

Artists and art organizations identified adequate facilities as a critical need for creating a vibrant art scene/art community within the Arts Strategic Plan. City staff work with our local arts community to support our vibrant performing arts organizations with space to rehearse, perform and showcase theatrical, documentary film, and musical programs. Creating new spaces, sharing facilities, and modifying existing venues are approaches to meeting the needs of our arts community.

The Arts Strategic Plan's success is dependent upon an effective, collaborative partnership for the arts. Many existing organizations contribute to this robust and evolving partnership. The City will continue to provide funding for art projects and programs via the Community Enhancement & Investment Fund. Funding for public art projects is provided through visual arts grants with the next opportunity anticipated later this fiscal year. In addition to City funding, in 2021, the City of Rancho Cordova received a Local Early Action Planning (LEAP) grant from the California Department of Housing and Community Development. The funding is available through June 30, 2024, and $65,000 is designated for an affordable housing (for artists) feasibility study and market study. Artist housing was a long-term action identified in the Arts Strategic Plan.

The following is an update on some of the many projects and work done in the first two years following the adoption of the Arts Strategic Plan.

- Public art selections for FY 2019/2020 and FY 2020/2021 funding cycles
- Established art selection criteria with input from artists and art organizations
- Assisted with planning the Mills Crossing Civic Center (this is an ongoing effort)
- Continue to build and foster relationships with local schools/school districts
- Provided local art display opportunities
- Art, events, and cultural experiences in neighborhood greens
- Creation of murals and decorative signs
- Created artistic community gateways
- Promotion and visibility of the arts
- City Hall improvements include sconce wall lighting and an improved sound system
- Completed the pilot Utility Box Art Wrap program with local artists and vendors
- Supported community art events, festivals, concerts, and activities
- Expanded events at the MACC
- Installed art along the Art Block
- Sponsored pop-up concerts
- Funded mobile art classes for youth

- Provided grants to artists, schools, and nonprofits to expand the arts experiences in Rancho Cordova
- Provided grants to create or enhance black box theatres, additional rehearsal space, more functional gallery space, and other facility improvements to build upon the art venues in Rancho Cordova

In the next three years (encompasing years three to five in the Arts Strategic Plan), staff will continue to work with artists, art organizations, partners and others to further the goals of the Arts Strategic Plan, including, but not limited to, the following activities:

- More fully utilize the MACC as a center of Rancho Cordova arts and the Art Block
- Identify, connect and develop the use of interim facilities for arts purposes (underutilized buildings, etc.)
- Create signature art projects including temporary or permanent art projects such as mosaic and wall pieces, annual exhibits, art installations in public facilities, art festivals, community concerts, art walks

The long-term actions (five years and beyond) include things such as a permanent performing arts center as part of the Mills Crossing Civic Center, monumental art installations, a community maker space, and artist housing. Long-term actions will take additional City investments of time and money and are not part of the two-year update or discussion planned as part of this agenda item.

On June 7, 2021, the City Council passed resolution 75-2021 authorizing Measure H funds for Community Enhancement & Investment projects and programs. The resolution included $50,000 for future arts in public places projects. Staff would like to receive feedback from the City Council before making a call for public art proposals later this fiscal year. Previous public art projects have included things such as utility box art wraps, murals, mosaics, and art installations/events.

FISCAL IMPACT AND FUNDING SOURCE

The funding for arts in public places was established as part of Resolution 75-2021 in June of 2021. The funding approved through the Measure H allocation was $50,000.

ATTACHMENT(S)

1. 2019 Arts Strategic Plan
2. Arts Strategic Plan Update_Presentation WO Video

City of Rancho Cordova Arts Strategic Plan



RANCHO CORDOVA
CALIFORNIA

Ver. 12/2019



ACKNOWLEDGEMENTS

City Council

Robert J. McGarvey, Mayor
David M. Sander, Ph.D., Vice Mayor
Donald Terry, Council Member
Garrett Gatewood, Council Member
Linda Budge, Council Member

City Staff

Cyrus Abhar, City Manager
Micah Runner, Deputy City Manager
Stacy Delany, Community Enhancement Analyst II
Megan Siren, Senior Management Analyst

Interwest Consulting Group

Paul Junker, Planning Services Leader

Special Thanks to

Shelly Blanchard, Cordova Community Council
Cheryl Gleason, Cordova Community Council
Rick and Rebecca Sloan
Members of the Rancho Cordova Arts Council

CITY OF RANCHO CORDOVA
2729 Prospect Park Drive
Rancho Cordova, CA 95670
916.851.8700
cityofranchocordova.org





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***Appendix B**, Visual Arts Needs & Opportunities Assessment, September 6, 2019, AMS Planning and Research*

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Strategic Plan Purpose Statement

The *Rancho Cordova Arts Strategic Plan* provides a road map for continuing to build art programs in the community. After adoption by the City, successful implementation of this Strategic Plan will rely on many agency partners and the artists and art patrons of Rancho Cordova. Key elements of this Strategic Plan are described below.

Vision - This section provides the measure of our success. Achieving the vision will be an accomplishment for the entire community and will bring the creative energy of art to all of Rancho Cordova.

Facilities - Facilities are those places where artists come together, create and interact with the public. This section seeks to maximize the function and availability of existing facilities and providing new facilities.

Cultivating Our Artists - Supporting local artists and bringing talented artists to Rancho Cordova offers many benefits to the local art scene. Creating places for artists to live and work and creating opportunities for artists to sell their artwork will establish Rancho Cordova as a "place for art and artists."

Partnerships - Implementing this Strategic Plan cannot be accomplished by a single person or organization. We will build on the strengths of community members and organizations, partner agencies and the City to implement this Plan.

Leadership - Leadership will come from the City Council, leaders within the arts community and leaders of institutions such as Cordova Recreation and Park District, Folsom Cordova Unified School District, Los Rios Community College District, Regional Transit and, most importantly, the artists of Rancho Cordova and their organizations.

City Funding for Art and Artists - The City Council has and will continue to support the arts in Rancho Cordova, providing opportunities for residents to view and attend art events as well as public exposure for our artists.

Staff - A robust and sustainable art scene also requires organizational and management skills. Managing volunteers, maintaining websites, marketing activities, scheduling events and many other tasks are all required to connect artist to patron and to support community art programs.

Taking Action - This section identifies the specific actions required to achieve the vision. The proposed actions will be reviewed and updated every two years prior to and within the City's budget process.

VISION: RANCHO CORDOVA – A PLACE FOR ART AND ARTISTS

Guiding Principles

The following Guiding Principles will inform decisions on funding, staffing, facilities and programs for the arts in Rancho Cordova.

Inclusion

Art is inclusive and diverse. From children to seniors, from students to artistic individuals to professional artists and patrons — all are important and welcome.



Engaging our Youth

Involvement in the arts at a young age fosters creativity and can promote a life-long love of the arts. Every youth should have the opportunity to participate in performing arts and visual arts.



Art Makes Business Sense

Art is good business. A vibrant art scene attracts new residents and new businesses, supports local businesses, and attracts investment and economic growth to the community.



Quality of Life

The arts are one of the foundational elements that create a great community. Art attracts creative people, adds richness to our local culture, and allows our residents to express their creativity.



Participation

Our community is committed to participation in the arts. The transformative power of art is realized through performances, exhibits, and public art installations that build community through a shared experience available to all members of the community.



Art is Everywhere

Gallery showings, live performances, temporary displays and permanent installations, public buildings and local restaurants are all pieces of the Rancho Cordova art mosaic. Art should be found almost anywhere in the community.



Support the Artist

We will seek ways to support and nurture the artist. We will provide spaces to create, rehearse, perform, and display art. We will help artistic people become artists.

Desired Outcomes

In 20 years, when viewing the community, we will see accomplishments that have changed the community for the better.

Art will be intrinsic to and infused throughout the community, transforming the mundane and nurturing creativity.

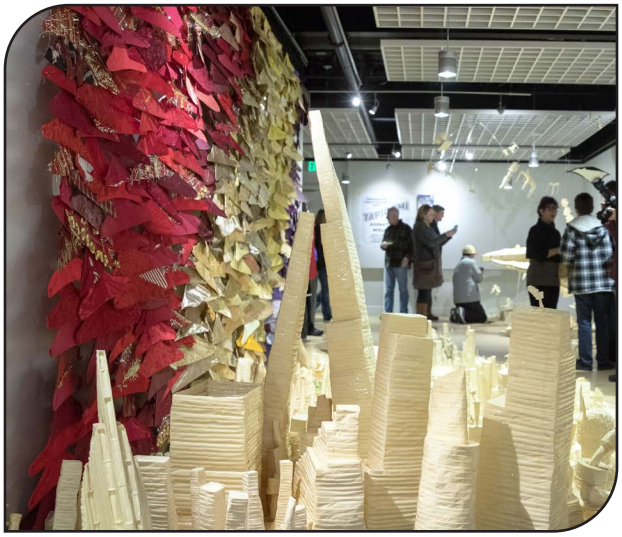


Art will reflect the diversity of the community (ethnic, financial, age) and include works that range from abstract to realism and topical to historical.



Art will help build a greater community by improving our quality of life and driving investment and economic activity.

Art will be broad and encompassing in form — temporary and permanent, music and theater, bold installations and small shows, aspiring students and accomplished professionals.



Art will be accessible to every student in our schools and to every member of the community.



Rancho Cordova will ***foster and support*** the arts and artists - in our schools, on our streets, in our parks, in our theaters and galleries.

Rancho Cordova will ***support*** local artists and ***attract*** prominent artists from outside the region.

Partnerships are the foundation of the Rancho Cordova community, relying on shared programs, shared facilities and shared goals.

Our programs will help to transform artistic people into artists by providing resources, education and venues for the arts.





Rancho Cordova supports a ***life-long relationship*** with the arts that begins in our elementary, middle and high schools, extends through community programs and sustains through all ages.

Rancho Cordova will promote ***places and opportunities*** that allow artists to develop their skills, share their art with the community and offer artwork for purchase.

BIG IDEA: THE ART BLOCK

The Art Block is a defined area within Rancho Cordova that places an emphasis and priority on promoting the arts. The Art Block will be the center of activity for arts-oriented programs in Rancho Cordova. It will be a place where artists connect with one another and with the community. While the Art Block will be a center of activity, the relationships and programs nurtured in the Art Block will foster and promote the arts throughout the community.



What's Special About the Art Block

The Art Block includes a collection of public uses - the Mather Field/Mills Station light rail station, the Mills Station Arts and Culture Center (The MACC) and the Rancho Cordova Center of Folsom Lake College – all creating opportunities to support and celebrate the arts. This area can be accessed from within Rancho Cordova and from outlying areas via nearby Highway 50 and public transportation.

The Art Block is easily accessible to Rancho Cordova residents, providing convenient access to activities and cultural opportunities to portions of the community that are somewhat underserved.

The Art Block includes the site of the future Rancho Cordova Civic Center project, a multiuse project that will, among other roles, provide opportunities to celebrate the arts.

What Happens in the Art Block

The arts are not the only use and function of the Art Block. Rather, supporting the arts is an underlying theme and quality of land uses and development in the Art Block.

Features and activities in the Art Block could include:

- Inclusion of artwork and artistic features in future construction

- Spaces and improvements to display art and conduct art shows (informal gallery displays)
- Production and/or rehearsal spaces for performing arts and visual arts
- Performing art venues and permanent art galleries
- Educational programs – classes for residents
- Maker space – support artists and community programs

The MACC is a key piece of the Arts Block, providing spaces for art exhibitions that range from local artists to displays of regional or national significance, bringing art to the residents of Rancho Cordova.

The Civic Center project will be a focal point of the community and could include facilities such as a flexible performance/meeting space, multi-purpose rooms to accommodate artist studios and/or workshops, office space to support the administrative functions of the arts community and spaces for the permanent and short-term display of artworks. The Civic Center project concept is under consideration and specific uses have yet to be finalized.

The Civic Center project site may include housing and, if so, some portion of housing would likely be maintained as affordable. If provided, a portion of the affordable housing could be offered to "artists in residence." Such a program would provide housing opportunities to professional artists to reside in the Art Block, thus bringing artistic energy to the community. Typically, such artists in residence would make commitments to teach classes, provide artwork or make other contributions.

Art studio spaces could be provided on either a monthly rental basis or at a reduced cost to artists that volunteer to teach classes, work in gallery/theater spaces, mentor youth art programs or make similar contributions.

The Rancho Cordova Center of Folsom Lake College draws students to the Art Block, provides education programs and could be a partner in providing facilities and/or conducting arts-related programs. Facilities in the College and the Civic Center project can be programmed to be complimentary and the College might consider offering classes based in the Civic Center project.

Making the Art Block a Reality

The Art Block should be an identifiable place within the community. Over time, the construction of new buildings and associated outdoor spaces will create inviting destinations. Installation of unique banners and signage could further identify the Art Block. Strong pedestrian connectivity and visual connectedness between The MACC, the Folsom Lake College campus and the Civic Center project will be critical to unifying the Art Block.

Ensuring new construction is creative, providing public gathering spaces, coordinating efforts among all involved agencies and programming art performances and displays will all help to create a vibrant Art Block in Rancho Cordova.



FACILITIES

Artists and art organizations have identified adequate facilities as a critical need for creating a vibrant art scene/art community. The MACC is an example of how a facility can serve as a hub for artists and events that links together the art community of Rancho Cordova. While there are opportunities for crossover, there are two primary types of art programs that require facilities: Performing Arts and Visual Arts.

Performing Arts

Performing Arts includes all forms of live performance – music, theater and dance being primary forms. Currently, the Rancho Cordova River City Concert Band, Symphony d'Oro Rancho Cordova RC Swing Band, Cordova Accelerated Performing Arts (CAPA) and Hummingbird Theatre Company all operate in Rancho Cordova. It is hoped and expected that future performance companies will include additional music ensembles, theater companies, dance companies and other live performance programs. Such performance companies share two basic facility needs: a place to prepare and rehearse and a place to perform.



Rehearsal Space. Rehearsal space has certain requirements that include sufficient acoustics, stage setting, audio equipment, set/props/costume production space and storage. With thoughtful planning and coordination, a single rehearsal space can serve the needs of multiple performance companies. Rehearsal space must be secure, but it need not be elegant. An underutilized light industrial building could be improved to provide a vibrant rehearsal space. Alternatively, a well-designed multi-purpose facility could accommodate both community events and some of the needs associated with rehearsals/preparing for performances.

Performance Space. Ultimately, numerous venues of differing types and scales may be required to support music, theater and





dance in the community. The firm AMS Planning and Research was retained by the City to better define the unmet needs of the performing arts community and how those needs can best be served. Major findings of the AMS work include:

- Compared to national averages, Rancho Cordova residents and our nearby communities have a higher than average likelihood to attend arts and cultural events.
- A small-to-medium size flexible performance space with 100-200 seats would support and encourage growth of the performing arts.
- Wider access agreements for existing large performance venues, such as the Performing Arts Center at Cordova High School, should be negotiated.
- There is local interest in a new large fixed-seating theater (500 – 800 seats). However, market/ demand research does not support construction of such a facility at this time.[1]

Use of Existing Theater Venues. The Performing Arts Center of Cordova High School provides a high-quality venue that can accommodate a large audience. Past District policies and practices have limited the ability for community-based programs to use the Performing Arts Center. A key need of the arts community is to reserve space as much as a year in advance to plan and provide performances. Additionally, standard requirements for compensated District staff could be prohibitive for some community programs. The City should explore arrangements with the High School and Folsom Cordova Unified School District to allow early booking of a limited number



[1] Based upon the research completed by AMS Planning and Research, inclusion of a large, fixed-seating theater in the Civic Center project may not be an appropriate investment at this time. Due to somewhat low demand, such a theater would require committed and ongoing effort to book performances and likely an ongoing local subsidy to support operations. If pursued, determining the operational and management structure for the theater would be an important consideration. The full AMS Planning and Research report titled Performing Arts Center Feasibility Study, May 15, 2019 is attached as **Appendix A** of this Strategic Plan.

of community-sponsored programs and options for staffing that assure appropriate use of the facility in a cost-effective manner.

Visual Arts

Visual Arts includes the many varied art forms that create a physical product. Paintings, photography, sculpture, glass-blowing, woodworking, steelwork, fabrics and clothing, and many more artistic forms are referred to as Visual Arts. Similar to Performing Arts, there are two basic facility needs for Visual Arts: a place to produce artworks and a place to display and/or sell artworks.

Production Space. Production space can range from individual artist studios to shared shop spaces and includes spaces that support group activities, workshops and classes. Due to the varied needs of artists, particularly when specialized equipment is required, the approach for production space for Visual Arts may involve smaller, specialized facilities tailored to a particular medium or group of compatible mediums.





One model for production facilities is referred to as Maker Spaces - shared facilities that may be privately owned and operated, public-private partnerships or public facilities. Typically, such facilities operate in a cooperative manner with individuals renting space and provision of shared tools and work spaces for the members of the facility.

Spaces dedicated to working artists need not be located in high profile locations. The desire to keep costs down and the nature of working studios may best be accommodated in a more industrial setting. By comparison, classrooms and workshop spaces that invite community members to participate should be conveniently located near residents and the participant traffic generated by such activities can have positive impacts on surrounding uses.

The firm AMS Planning and Research was retained to help the City better understand the demand for Visual Arts facilities.[2] Key findings of their study include:

[2] AMS Planning and Research analyzed visual arts programs in Rancho Cordova and the region and evaluated specific needs for the Rancho Cordova arts community. The resulting report, Visual Arts Needs & Opportunities Assessment, September 6, 2019, is attached as **Appendix B** of this Arts Strategic Plan.



» The region is generally underserved, lacking adequate spaces for art classes, studios, exhibits and events.

» Access to specialized equipment (photography, printmaking, ceramics, glasswork, etc.) is limited or non-existent. It is anticipated such specialized spaces for teaching and professional use would be in high demand.

» As of 2019, studio rents of $1.00 to $1.50 per square foot would be considered a good deal; studio sizes could range from 100 to 400 sq. ft.

» It is estimated Rancho Cordova could support 6 to 12 individual studios; a building of 3,000 to 6,000 sq. ft. could accommodate studios and shared classroom space.

Display Space. Sharing artwork with members of the community is a primary goal of this Strategic Plan. The potential for places to display artwork in Rancho Cordova are many and varied. Art displays can generally be classified as:

» **Art Shows.** Displays in galleries, restaurants, public office spaces and similar settings. Show may be a single artist or multiple artists and art is often available for purchase.

» **Exhibitions.** Displays in larger venues often featuring a subject or theme. Art at exhibitions is generally not available for purchase.

» **Permanent Installations.** Examples can include sculpture, features incorporated in public projects (sidewalk tile mosaics) and other permanent works.

Relatively inexpensive improvements to Rancho Cordova's City Hall transformed bare walls into rotating shows that display the work of local artists. These shows are made possible through the efforts of Cordova Community Council staff that manage the logistics of the shows. Expanding such shows will require identifying display sites in the city and ongoing efforts to manage shows (recruit artists, select works, install art, etc.).

Strategic Approaches

Appropriate spaces of varied size and character will be required to support performing and visual arts in Rancho Cordova. However, such facilities can



require substantial investment to construct, maintain, and operate. The City will consider how existing facilities can be leveraged to maximum benefit and how shared facilities can serve to meet the needs of the art community.

Improve Existing Facilities

The most immediate facility projects will focus on improving existing facilities in the community, such as The MACC, City Hall facilities, and the stage of Village Green Park. Identifying cost-effective improvements to existing facilities could provide additional functional capacity for performing arts in a relatively short time frame.

Shared Use Facilities

While it might be optimal from an artist's perspective to have facilities dedicated to a single type of use or even a single organization, such a focused approach is costly to construct, operate, and maintain.

The City, Folsom Cordova Unified School District and Cordova Recreation and Park District have the opportunity to coordinate programs to assist each other in meeting facility needs. While balancing competing priorities or arts groups and agencies can be challenging, benefits can include a greater range of facilities for all, reduced duplication of facilities and overall cost savings.

Visual Arts Displays

Displaying artwork in the community has the dual benefits of enriching the lives of our residents and providing public exposure for our artists. A small gallery or cooperative space for the ongoing sale of local artists that is staffed by those artists who have space in the gallery/retail space would highlight local artists and provide a bridge from aspiring artist to professional artist. Similarly, arranging for artwork to be displayed in rotating shows in public settings grants our artists important public exposure.

Civic Center Project

The City is currently exploring plans for the Civic Center Project directly adjacent to the Rancho Cordova Center of Folsom Lake College. This project offers numerous opportunities to support and/or incorporate the arts, including performance spaces, artist work spaces, gallery/display spaces, and artwork integrated into the overall project design.

Workshop/Class Space

There is a general need for spaces in which classes and workshops can be held in the community. A relatively modest room size with a flexible layout could serve the needs of many groups within the community, including both performing arts and visual arts. One key feature of such meeting/workshop space would be low cost or no cost use, as arts groups often operate on modest budgets and such classes/workshops could be important sources of revenue to support the activities of our local arts organizations.



CULTIVATING OUR ARTISTS



A vibrant art scene in Rancho Cordova will be supported by artists living, working and earning a living in the community. Accomplished artists can add much to the community, including regional recognition of our artists and our programs, mentorship through leading classes and workshops and the installation of artwork or performances in the community. Two challenges limit many artists' ability to pursue their love of art – unique needs related to housing/work space and the ability to earn a living from their passion for art.

Artist Housing

Artists have somewhat unique needs with respect to living and working space. Unless well-established and successful, artists typically generate rather low incomes and therefore may not be well served by the traditional housing market. This is particularly true for artists that might be highly talented, but are not yet well established. Many artists have a desire to live and work in a single location, both for cost savings and for personal convenience. An artist may wish to sell directly from the home/studio, something that may not be allowed in all residential settings. Finally, artists can benefit from proximity to other artists – a cluster of homes can create a micro community of people dedicated to the arts.

Artist housing solutions can take various forms based on current opportunities and the goals of the City. Options that could be pursued include:

- *Multi-Family Housing Cluster.* This would likely occur in a proposed multi-family project and would be a component of affordable housing. A cluster of up to five units could be built around a shared courtyard space. Location would ideally have good visibility for public access to studio spaces. Dwellings would likely be designed in vertically-integrated mixed use units with studio space at ground level.
- *Industrial Conversion.* This approach would involve converting an existing building to a combination of residential units and production studios. Such a use would likely be on Light Industrial zoned land, raising issues of zoning consistency and compatibility with neighboring uses.
- *Existing Single-Family Homes.* There are artists already in Rancho Cordova who are working in their homes. The City's Zoning Code is generally accommodating of such uses, with certain limitations. Unfortunately, artist homes are dispersed in the community, offering little synergy among artists and the

community. Also, there is currently no provisions for affordability to attract artists to the community.

There are significant benefits that would result from attracting artists to live and work in Rancho Cordova and there are also operational challenges to implementing such a program. Details that would require attention and resolution include:

- *Duration.* How long would an artist reside in an artist-dedicated dwelling? The City could establish an Artist-in-Residency program that rotates artists on a regular basis, possibly every two years.
- *Funding.* Funding strategies would vary based upon the housing type. A cluster of multi-family or high-density homes in a new development project might be constructed by a developer to meet affordable housing requirements. Conversion of an existing building or establishing artist affordability in existing single-family homes would likely require up-front investment by the City or some type of foundation.
- *Ownership/Management.* Ownership of units must be determined. Similar to funding, ownership approaches vary based on dwelling type. Unless owned and managed by an affordable housing provider, such projects would require an entity to own and manage the artist dwellings.

Providing artist housing in Rancho Cordova will be a complex program that may require initial financial contributions by the City. While the challenges of such a program may be significant, the long-term benefits to a Rancho Cordova art scene could be substantial.

Earning a Living from Art

Developing an income from producing artwork is a key transition from enthusiast to fine artist. The transactional side of art has little to do with the passion of an artist for his or her craft, but the inability to generate a living wage income can greatly hamper the pursuit of art. Rancho Cordova will work to create opportunities for artists to offer their work for sale to their patrons through the following strategies.

- *Small Gallery.* Permanent galleries allow artists to place their work for display and viewing by the public. A small City sponsored gallery could be a good initial step as the commercial art scene in Rancho Cordova develops. Such a facility could be located in the Civic Center project or, possibly, in The MACC.



- *Public Art Displays.* This Strategic Plan assumes outreach to local businesses will occur to identify semi-public locations for the display of art. Such displays can provide artist contact information or offer displayed work for sale.
- *Teaching Classes.* Sharing knowledge gained through personal experience enriches the art community. Providing a space for classes and allowing the instructor to charge an attendance fee can benefit both community and artist.
- *Artwork Grants.* The Community Enhancement Fund is one funding opportunity for artists. There are many other funding announcements that solicit proposals from artists. Increasing awareness of funding opportunities and supporting artists in their applications could bring additional revenue/income to Rancho Cordova artists.
- *Studios with Sales Area.* Artists may wish to invite the public to their studio space to view work and possibly purchase artwork. A review of City codes can determine whether there are restrictions against such activities.
- *Art Fairs and Events.* Art Fairs provide short, high visibility opportunities to offer artwork for sale to the public. Such events could be conducted within a larger community event or sponsored by local entities and organizations.



PARTNERSHIP FOR THE ARTS



The goal of infusing art throughout Rancho Cordova will require the support of many individuals and organizations within the community. Each group noted below brings unique resources and strengths that will contribute to a successful, diverse, and dynamic Rancho Cordova art scene. Over time, the roles and contributions of these organizations are expected to evolve and grow.

City of Rancho Cordova

- » Facilities – The MACC and City Hall
- » Sponsor/guide programs
- » Install art in public facilities and improvements
- » Organization support – funding for staff

The City of Rancho Cordova is uniquely situated to support the arts in Rancho Cordova. The City has made a commitment to create a great community, has a role in providing/operating public facilities and has the ability to fund art projects and programs.

Cordova Community Council

- » The MACC – plan and execute events, day-to-day operations
- » Promote and support the Rancho Cordova Arts Council
- » Organize volunteers to support community events
- » An organization that connects artists with businesses and patrons of the arts

The Cordova Community Council has strong organizational skills and resources, relationships with community volunteers, and a mission to bring great events to Rancho Cordova.

Rancho Cordova Arts Council

- » A coalition of art organizations – Symphony d'Oro Rancho Cordova, Rancho Cordova River City Concert Band, RC Swing Band and Rancho Cordova Arts.
- » A resource to provide guidance and direction to art programs

The Rancho Cordova Arts Council now represents five established community organizations that are dedicated to the arts and artists within the community. This role will grow as new organizations and programs develop within the community.

Cordova Recreation & Park District

- Programs and classes
- Public facilities
- Art installations in parks

The Cordova Recreation and Park District touches residents throughout Rancho Cordova with its parks and programs. The District's parks offer the opportunity to install artwork in highly visible and well-visited parks. The parks provide key gathering locations for residents and can be the stages for wonderful events.

Educational Institutions

- Folsom Cordova Unified School District, Elk Grove Unified School District and Sacramento City Unified School District
- Los Rios Community College District
- Youth programs in the classrooms
- Adult programs – workshops, informal groups, classes
- Performance spaces

Schools provide opportunities to touch young minds, spark a love for the arts, and offer the first steps toward a lifetime of participation in the arts. The City envisions art programs available to every student in Rancho Cordova. Public education partners also have facilities that can provide rehearsal, production, and performance spaces for the art community.

Rancho Cordova Chamber of Commerce

- Connection to business community
- Events

The Rancho Cordova Chamber of Commerce has contacts and relationships with local businesses that can be partners in a vibrant local art scene. Whether supporting through contributions, providing spaces to display art, or opening production space to community members, the local business community can be an important partner in promoting the arts.

Regional Partnerships

Rancho Cordova's local partnerships will be strengthened with partnerships with agencies, programs, organizations and companies from the region. Such opportunities include but are not limited to partnering with Regional Transit and engaging with community theater groups, visual artists and youth-oriented programs within the greater Sacramento region.



LEADERSHIP

Leadership and Implementation

The creation and enjoyment of art are inherently creative activities that can be inspiring and emotional, and that create common shared experiences and build relationships. The implementation of a successful arts program relies on less creative activities of administration, volunteer organization, and event promotion. Leadership and a sustainable organizational structure will promote successful and long-term art programs in Rancho Cordova.

Program Direction

The City of Rancho Cordova, and more specifically the City Council, have placed a high priority on integrating art within the community. The City's support for the arts has resulted in many wonderful programs and outcomes, including: educational programs in our schools; improvement of facilities such as The MACC; support for community organizations that champion the arts in Rancho Cordova; art showings at City Hall and in the community; and amazing community events throughout the year.

It is anticipated that the City Council will continue to provide high-level guidance and direction for art programs in the community. For the foreseeable future, efforts identified in this Strategic Plan will be guided at the administrative and organizational level by staff/consultant of the City of Rancho Cordova, with direction provided by the Rancho Cordova City Council.

Program Implementation

Currently, the Cordova Community Council manages and supports various art programs in the community. Funding of programs and administrative support for the Rancho Cordova River City Concert Band and RC Swing Band are provided through the Cordova Community Council. The Cordova Community Council staff also manage The MACC, support the City Hall art exhibitions and coordinate art programs throughout the community. The roles and responsibilities undertaken by the Cordova Community Council result in a robust program of free concerts, art exhibitions and interface at community events.





Future Leaders

The Summer@City Hall program[3] and the Arts Club of Mitchell Middle School are two examples of Rancho Cordova youth demonstrating their commitment to arts in the community. A concerted effort should be made to engage Rancho Cordova's youth in implementing arts programs. Many opportunities exist, including:

- Creating youth positions on key boards such as the Community Enhancement Fund (CEF) Visual Arts Stakeholder Group
- Creating dedicated funding under the CEF program or the CEF visual arts grants for youth art projects and/or programs
- Coordinating City efforts with local schools/school districts to engage students



[3] The student participants of the 2019 Summer@CityHall program focused on Art in Public Places. The group's presentation, attached as **Attachment C**, includes results of a community survey of students, proposed criteria for City-funded artwork and suggestions for a Rancho Cordova Arts Commission.

CITY FUNDING FOR ART AND ARTISTS

Through its generous support, the City of Rancho Cordova is a patron and sponsor of the arts within the community. Much of the City's ongoing funding for the arts has been directed to the Cordova Community Council to implement programs on behalf of the City.

This Strategic Plan anticipates the City will continue to provide funding for art projects and programs through the Cordova Community Council as well as select projects for funding under the Community Enhancement Fund program.

Funding for the Arts

Substantial City funding for the arts occurs through the annual Community Enhancement Fund (CEF) process. Annual support for performing arts companies, educational programs, capital projects such as The MACC and similar programs and projects has been provided through the CEF. It is anticipated that support for the arts will continue in the future with funding requests to be approved by the City Council.

Some art programs and events in Rancho Cordova generate revenue to support and promote programs. Ultimately, providing access to the arts, offering classes, engaging the community and creating art in Rancho Cordova are the primary goals. Generating revenue from such programs is considered a secondary goal and cost of attendance or participation should not be a barrier to community members.

A long-term and comprehensive plan for funding art programs in Rancho Cordova should be developed. To the extent the City will continue to provide financial support, predictable funding allows for planning events and programs on a longer horizon.



Community Enhancement Fund (CEF) Visual Arts Grants

One source of City funding of artists is the annual CEF visual arts grant process. Historically, the City has allocated a set funding amount and accepted proposals as generated by community artists. While this has resulted in great proposals and projects in the community, this approach does not guide artists in any given direction. It is proposed that CEF funding for visual arts be a more directed process.

Such guidance should not be highly specific or restrictive. Rather, the guidance can assist artists with understanding the City's desires and expectations for City funded art projects and programs.

Arts Stakeholder Group

It is recommended that the City establish an informal Arts Stakeholder Group to assist with CEF arts grants process. The Arts

Stakeholder Group could assist with the CEF visual arts grants process as follows:

- Annual Guidance to Artists. Develop guidance for the upcoming year's CEF visual art grants for City Council approval. Such guidance could stipulate a medium (murals, utility box wraps, tile mosaics, etc.), approved locations for proposed projects and possibly general themes for artwork
- Call for Proposals. The Arts Stakeholder Group could assist with generating a call for proposals. A more robust "call for artist proposals" could reach further into the local arts community and generate proposals that are diverse and inclusive of the local arts community.
- Selection Criteria. The Arts Stakeholder Group should prepare evaluation criteria to assist with its recommendations for funding projects under CEF visual arts grants.
- Recommendations to City Council. The Arts Stakeholder Group would provide recommendations on the awards of CEF visual arts grants to City staff that would then forwarded to City Council. The City Council, supported by these recommendations, would make final CEF awards.

Art/Artist Selection Criteria

The following is a preliminary outline of guidance for selecting artists and artwork to receive City funding. This guidance is preliminary and will be refined by the Arts Stakeholder Group prior to use for evaluating funding requests.

- Local Artist Preference. Any artist is eligible to apply for City sponsorship of art projects. In general, a preference is given first to artists residing in Rancho Cordova, second to artists residing in the region, and third to artists from outside the region.
- Visibility/Impact. A general preference is given to artwork that will be highly visible and have a significant impact on the community due to location, activity levels, placement, scale, character or other factors that may apply.
- Relevant to All Groups. In total, projects selected for funding should include works relevant for various age groups, ethnic groups and socio-economic groups. Collectively, projects selected for CEF visual arts funding should be reflective of the diversity of the Rancho Cordova community and should be relevant to current social issues of the community.



Public versus Private Art

CEF visual arts funding is primarily intended for art that will benefit the community in general and is generally not intended for private projects. Appropriate locations include, but are not limited to, publicly owned facilities and properties (buildings and grounds, landscape areas, roads, utilities, etc.) and private property that is highly visible to the public (walls for murals, landscape areas adjacent to public rights-of-ways, etc.). Projects in such locations must receive authorization from the affected public agency or property owner prior to consideration as a project for CEF visual arts funding.

By comparison, private art projects are any projects located on private property that are generally for the enjoyment of the property owner, employees and visitors to the property. Such projects typically would be funded by the property owner and would not be subject to City review and approval. Examples of private art include any installations inside a private building, sculptures in courtyards or internal open space areas, artist enhancements to building architecture and similar projects.



The distinctions between public and private art projects described above are guidelines and do not prohibit the City Council from funding arts projects on private property if such projects are determined to produce significant benefits to the Rancho Cordova community.



STAFF



The artists of Rancho Cordova are passionate about their work. They are less passionate about the administrative tasks required to plan, promote, and execute events within the community. Support functions and roles that promote a vibrant art scene include organized and up-to-date promotion (primarily through a web presence), organizing and delivering volunteers to support and conduct major events, programming of an events calendared many months in advance, and oversight of facilities during events.

These are tasks that will be best undertaken in part by paid staff. Assigning such duties to volunteers without the support of paid staff is not a long-term sustainable strategy.

To guide current and future efforts, the City will consider funding a Rancho Cordova Arts Coordinator position. There are various options for creating the Arts Coordinator position, including staffing the position through existing partners, consultants or City staff and the level of participation, full time or part time, remains to be determined. This position would be dedicated to the functions below and would draw on professional experience in the unique functions described in the Arts Strategic Plan. As a professional engaged in the greater arts community, the Coordinator would bring benefits of networking and audience building for the Rancho Cordova community and arts patrons, fully maximizing the community vitality benefits associated with the planned civic amenities.

The programs contemplated in this Strategic Plan – development of community resources, production of events, organizational support – may require additional staff members to support the Arts Coordinator. Ultimately, it may be appropriate to establish a stand-alone organization or foundation to promote the arts in Rancho Cordova.

Key duties of Art Coordinator would include:

- Preparing workplans (either annual of two-year plans) for City Council consideration that:
  - *Describe events to be produced and major efforts to be undertaken*
  - *Activities described under Near-Term Efforts comprise the first two-year workplan*
- Programming events
  - *Regular events at The MACC*
  - *Annual calendar of events*
- Support and build internal capacity of the Rancho Cordova Arts Council
- Identify facility needs – performance, rehearsal, production spaces –and champion efforts to make facilities available
- Coordinate with partner agencies/organizations
- Provide guidance and recommendations on City-funded art projects
- Guide and promote installation of art in the community
- Near-term organizational focus:
  - *Build volunteer base*
  - *Align volunteers with community art events*
- Create web-based presence that is supported by engaged partners and community relationships
- Prepare guidelines for the selection of City-funded art programs, exhibitions and installations

TAKING ACTION

Below is the action plan to guide art programs and efforts for the near-term (1 to 2 years), mid-term (3 to 5 years), and long-term (5 years and beyond). Individuals and organizations promoting art in Rancho Cordova have two fundamental needs:

1) Facilities to produce, rehearse, perform, and display art; and

2) Organizational support to promote, facilitate, organize, and execute programs.

The programs noted below, particularly under Near-Term, are ambitious and exceed current staff capacity. Priorities among these efforts will be pursued based on available staff capacity. Additionally, priorities and opportunities may shift over time and designations and near, mid and long term will likely be adjusted through preparation of bi-annual action plans.

A. Near-Term Actions

1. **CEF Visual Arts Selections:** Establish the process for CEF visual arts recommendations and complete reviews in the 2020 funding cycle.
2. **Establish Art Selection Criteria:** Prepare and seek City Council approval of guidelines for the selection of City-funded art projects.
3. **Inventory of Facilities:** Key facilities needs include spaces for production, rehearsal, display, and performance. Conduct an inventory to determine what is available and what is lacking. Consider near-term solutions for additional facilities.



4. **Assist with Planning for a Civic Center project:** Current City plans for a community-oriented project offer opportunities that could include production, rehearsal, and event space, as well as integrating art within the overall design program.
5. **Continue to build relationships with local schools/school districts:**
   - » Expand programs for students in schools and coordinate efforts with community-based theater companies
   - » Streamline process for use of school performance facilities
   - » Explore partnerships for programming and use of space in the Civic Center project
6. **Local Art Display Opportunities:** Identify businesses willing to display works by local artists – restaurants, bars, brew pubs, coffee shops, etc. Facilitate connection of businesses to artists.

7. **Art in Neighborhood Greens:** Develop guidelines for art in City Neighborhood Greens that include level of funding and City expectations for art (general character, durability and other selection criteria).

8. **Promotion and Visibility:** Create and maintain a dedicated media presence — a centralized location for art news of all types to market art programs/events in Rancho Cordova that includes a website and social media.

9. **City Hall Improvements:** Consider enhancements to the City Hall's American River Rooms to better support performances — improvements such as theatrical stage lighting, sconce wall lighting, and improved sound system should be considered.

10. **Utility Box Art:** Consider implementation of a utility box art wrap program for SMUD utility boxes. If determined appropriate define procedures for approval of installations, artist selection process, and provisions to replace art wraps over time.

11. **Art Block.** Begin conceptualizing the Art Block and pursue opportunities for its implementation. Consider whether adjustments to City regulations are required.

12. **Community art events/activities, possibly including:**
    - » Expanded events at The MACC
    - » Pop-up concert venues
    - » Mobile art class on wheels that has a summer schedule visiting neighborhood parks to teach simple art projects
    - » Crocker Art Museum's Art Ark



13. **Art Implementation Handbook:** Prepare a handbook to inform artists of the opportunities and requirements to install artwork in Rancho Cordova.
    - » Guidelines for installing art in the community
    - » Prequalified locations for public art installations
    - » Process for artists to propose and install art in Rancho Cordova
    - » Artist requirements — insurance, documentation of costs, prevailing wage, etc.

14. **A Cadre of Volunteers:** Promote and expand opportunities for volunteers to assist with events. Identify interests and skills of volunteers and provide opportunities for groups of volunteers to work as teams.

15. **Mills Station/Regional Transit Contract:** Enter into a new contract with Regional Transit for the operation and use of the Mills Station transit station site that recognizes and allows events on the Mills Station site that are held in conjunction with The MACC.

B. Mid-Term Actions

1. **The MACC:** The MACC is the premier setting in Rancho Cordova to connect with artists and to conduct shows and small events. A key mid-term action is to more fully realize the potential of this venue as a center of Rancho Cordova arts.
2. **Interim Facilities:** While a new performing arts theater may be a long-term goal of the City, it is unlikely such a facility will be constructed in the mid-term horizon. Interim solutions may rely on increased access to existing major venues, upgrades to improve the performance value of existing facilities, and conversion of existing underutilized buildings to support performing arts.
3. **Signature Art:** Rancho Cordova will develop signature art forms and/or events.
   - » Art display examples:
     - *Mosaics in walkways throughout the city*
     - *A location or locations that is/are recreated annually*
     - *All public facilities incorporate clear and obvious artistic features*
     - *Install artistic "RC" markers (sculpture, paint, tile, etc.) throughout the community*
   - » Event examples:
     - *Annual Art Festival, Art on the River in Hagan Park, or Art Farm at Soil Born Farms*
     - *Community Concert Series at the Performing Arts Center at Cordova High School or other locations in the community*
     - *4th Saturday Art Walk*
     - *Local program of Wide Open Walls/Murals*



4. **Collaborative Programs:** Within the mid-term horizon, work with community partners and organizations to expand local schools' programs for youth performing arts and visual arts.
5. **Artistic Community Gateways:** Entry points to the community should provide a sense of arrival. Artistic gateways can add beauty and community identity to Rancho Cordova.
6. **Art Block:** Formalize designs for public improvements in the Art Block, including but not limited to design of the Civic Center project, enhanced streetscape improvements and other opportunities to inject artistic character in the District.

C. Long-Term Actions

1. **Performing Arts Center/Exhibition Space:** Ultimately, as Rancho Cordova continues to grow, an additional performing arts center will likely be needed to support Rancho Cordova performance companies. Whether music, dance, or theater, venues in Rancho Cordova are limited and our performing companies do not have priority. A performing arts center to showcase local artists and to provide a venue for visiting companies will be a key component of a vibrant Rancho Cordova arts scene.
2. **Monumental Art Installations:** In decades past, large art installations were included in private development projects. The City is not contemplating a developer obligation for such placemaking installations, but the impact of significant art installations remains a priority that will require creative solutions.
3. **Rancho Cordova Theatrical Company:** Theater programs for youth and adults will support life-long engagement in the arts. Local theater companies will be encouraged to build on local school programs. Identifying space for rehearsals and performances is a priority for establishing local theatrical companies.
4. **Community Maker Space:** Maker spaces can take many different forms. For aspiring artists, one of the barriers to developing skills and pursuing a career in the arts is access to production space. This applies equally to music, photography, woodworking, pottery, and many other physical media. A multi-purpose maker space would provide a place for artists of diverse media to come together and pursue their passions.
5. **Artist Housing:** Pursue housing opportunities and studio spaces for artists. Artists often are not seeking the traditional setting of a single-family home. Artist housing might be incorporated in a mixed-use setting such as the Civic Center project or in non-traditional settings such as Light Industrial zoned land. The goal is to create a setting supportive of artists' needs – both housing and production/studio space. While care and a thoughtful approach would be required to establish such housing, elements that might prove supportive to creating such housing include:
    - » Unique development standards – rough industrial might be just fine
    - » Dwellings that combine living and production spaces
    - » Mixed use district – housing, fabrication, performance, and retail all allowed
    - » Alternative housing form – size, design, density – that is affordable and conducive to artists.





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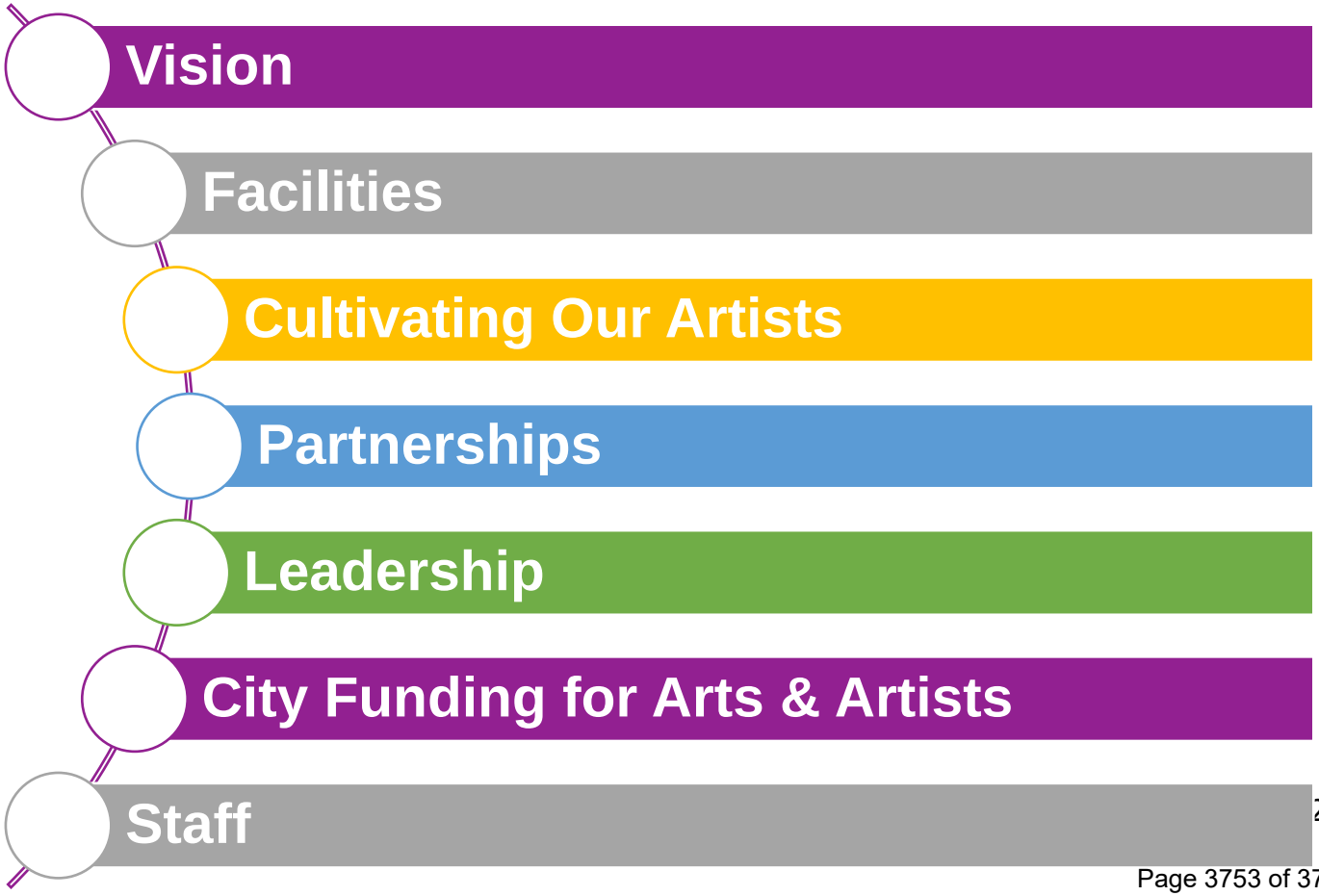
Arts Strategic Plan

Two-Year Update

RANCHO CORDOVA
CALIFORNIA

ABOUT THE ARTS STRATEGIC PLAN

Adopted in December 2019, the plan provides a roadmap for continuing to build art programs in the community. The key elements of the strategic plan include:





GUIDING PRINCIPLES AND DESIRED OUTCOME

The strategic plan's **Guiding Principles** are:

- Inclusion
- Engaging Our Youth
- Art Makes Business Sense
- Quality of Life
- Participation
- Art is Everywhere
- Support the Artist

The Desired Outcome: In 20 years, when viewing the community, we will see accomplishments that have changed the community for the better.

ART BLOCK

A defined area within Rancho Cordova that places an emphasis and priority on promoting the arts. It contains the MACC, the Rancho Cordova Center of Folsom Lake College, and the future Mills Crossing Civic Center.



FACILITIES

Artists and art organizations have identified adequate facilities as a critical need for creating a vibrant art scene/art community.

Performing Arts	Rehearsal Space	Performance Space	Use of Existing Theatre Venues
Visual Arts	Production Space	Display Space	Improve Existing Facilities
Shared Use Facilities	Visual Arts Display	Mills Crossing Civic Center	Workshop / Class Space

PARTNERSHIPS FOR THE ARTS



City of Rancho Cordova

Rancho Cordova Arts

Educational Institutions

Local and Regional Partnerships

Cordova Community Council

Cordova Recreation & Park District

Rancho Cordova Chamber of Commerce

LEADERSHIP

The City's support of the arts has resulted in many programs and outcomes including:

- Educational programs in our schools
- Improvements of facilities such as the MACC
- Support for community groups that champion the arts
- Art showings at City Hall, the MACC, and in the community
- Community events throughout the year
- Permanent and temporary public art installations
- Performances and art-centric events



CITY FUNDING FOR ART AND ARTISTS

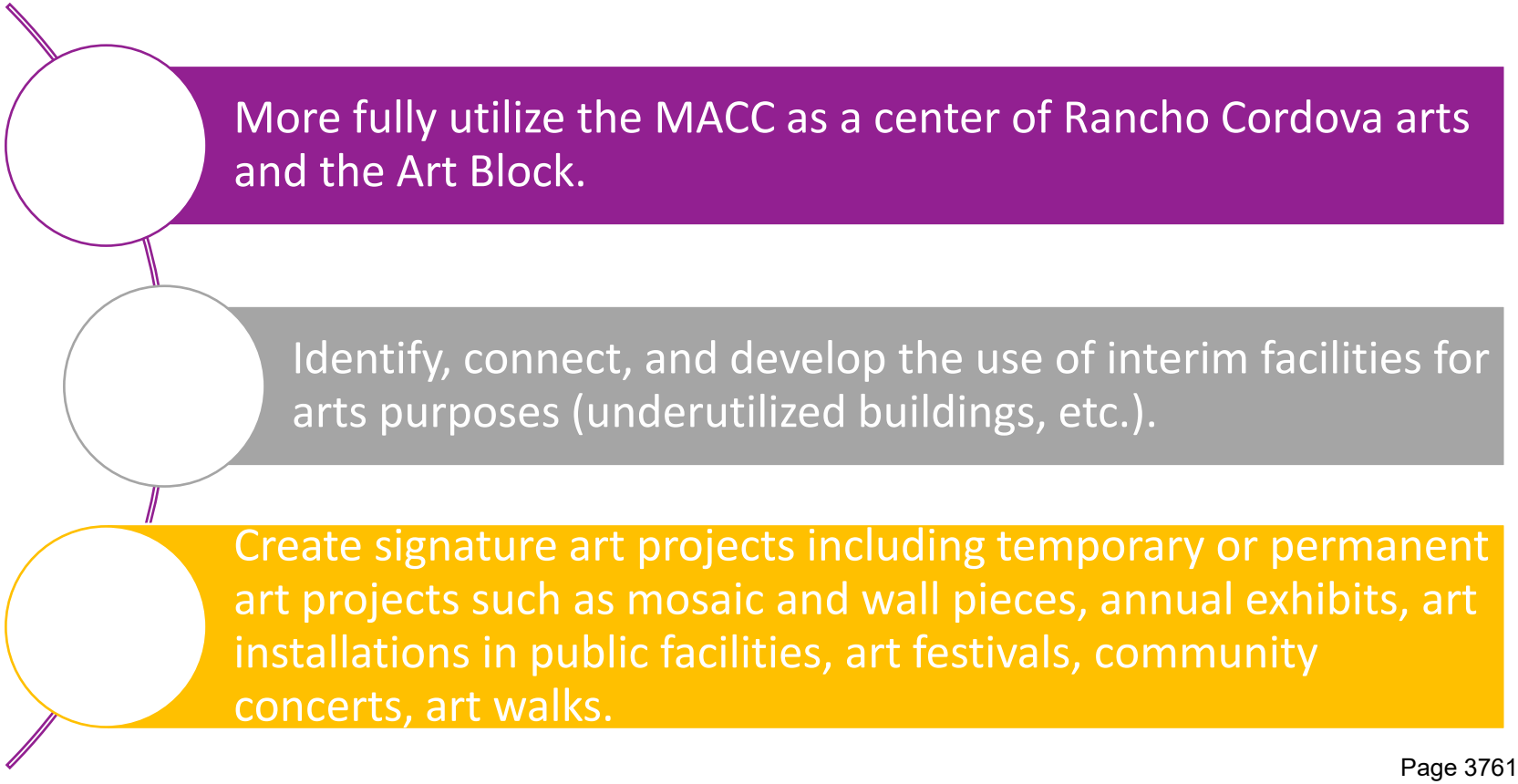
The City of Rancho Cordova is a patron and sponsor of the arts. The City will continue to provide funding for art projects and programs via the Community Enhancement & Investment Fund.

VIDEO CELEBRATING OUR PUBLIC ART

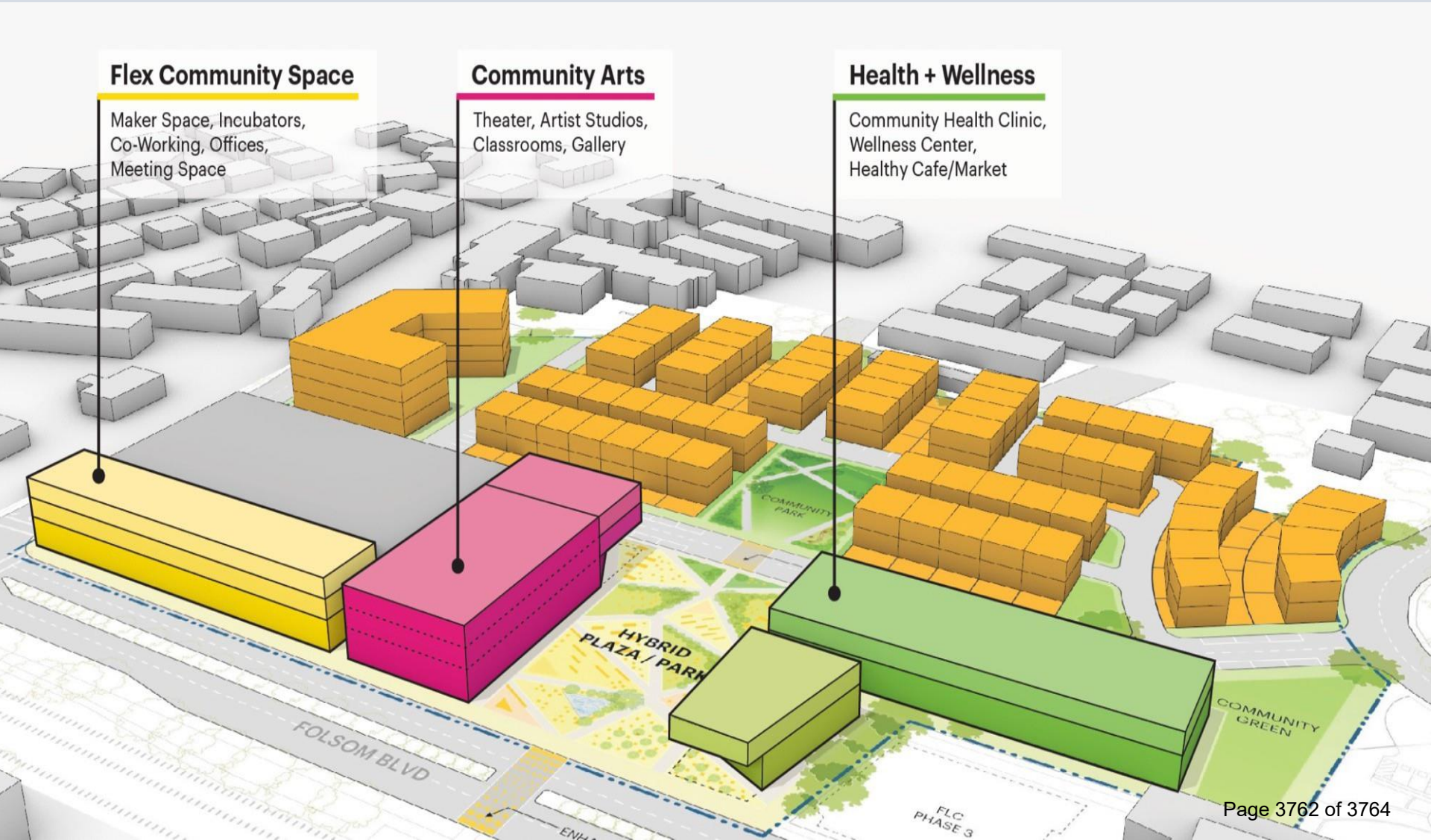


MID-TERM ACTIONS

In the next phase of the Arts Strategic Plan, staff will continue to work with artists, art organizations, partners and others to further the goals of the Arts Strategic Plan.



LONG-TERM ACTIONS: MILLS CROSSING CIVIC CENTER



WHERE ARE WE HEADED NEXT?

City Council approved $50,000, in June 2021, for public art projects

City Council will have the opportunity to approve additional funding for next fiscal year's public art projects



RECOMMENDATIONS & ALTERNATIVES

Staff recommends the following for Council consideration:

- Another round of utility box wraps
- Murals or mosaics on targeted properties or areas of the city

Alternatives could include:

- Other types of art, such as:
  - Sculptures
  - Lighting
  - Benches
  - Bike racks
  - Artistic elements
- A hybrid approach