



## RANCHO MURIETA COMMUNITY SERVICES DISTRICT

15160 JACKSON ROAD  
RANCHO MURIETA, CALIFORNIA 95683  
916-354-3700

### AGENDA

*"Your Independent Local Government Agency Providing  
Water, Wastewater, Drainage, Security, and Solid Waste Services"*

#### REGULAR BOARD MEETING

**August 21, 2024**

Closed Session 4:00 p.m./Open Session 5:00 p.m.  
Rancho Murieta, CA 95683

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#### BOARD MEMBERS

Tim Maybee	President
Martin Pohll	Vice President
Linda Butler	Director
Randy Jenco	Director
Stephen Booth	Director

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#### STAFF

Mimi Morris	General Manager
Mark Matulich	Director of Finance and Administration
Travis Bohannon	Interim Director of Operations
Patrick Enright	District General Counsel
Amelia Wilder	District Secretary

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

August 21, 2024

## REGULAR BOARD MEETING

Call to Order

Closed Session 4:00 p.m./Open Session 5:00 p.m.

Note that this meeting will be held in-person at the address set forth above, and not via videoconference. In order to comply with the State's COVID-related Guidance for the use of face coverings, it is strongly recommended that all persons, regardless of vaccination status, continue to mask while in indoor public settings and businesses.

All persons present at District meetings will place their cellular devices in silent and/or vibrate mode (no ringing of any kind). During meetings, these devices will be used only for emergency purposes and, if used, the party called/calling will exit the meeting room for conversation. Other electronic and internet enabled devices are to be used in the "silent" mode. Under no circumstances will recording devices or problems associated with them be permitted to interrupt or delay District meetings.

## AGENDA

ESTIMATED RUNNING TIME 5:00

### 1. CALL TO ORDER - Determination of Quorum – President Maybee **(Roll Call)**

### 2. CONSIDER ADOPTION OF AGENDA **(Motion)**

*The Board will discuss items on this agenda, and may take action on those items, including informational items and continued items. No action or discussion will be undertaken on any item not appearing on the agenda, except that (1) directors or staff may briefly respond to statements made or questions posed during public comments on non-agenda items, (2) directors or staff may ask a question for clarification, make a brief announcement, or make a brief report on his or her own activities, (3) a director may request staff to report back to the Board at a subsequent meeting concerning any matter or request staff to place a matter on a future Board meeting agenda, and (4) the Board may add an item to the agenda by a two-thirds vote determining that there is a need to take immediate action and that the need for action came to the District's attention after posting the agenda.*

*The running times listed on this agenda are only estimates and may be discussed earlier or later than shown. At the discretion of the Board, an item may be moved on the agenda and or taken out of order. **TIMED ITEMS** as specifically noted, such as Hearings or Formal Presentations of community-wide interest, will not be taken up earlier than listed.*

### 3. CLOSED SESSION

#### A. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

*Significant Exposure to litigation pursuant to paragraph to Government Code section 54965.9(d)(2) and (e)(1) (one case)*

#### B. Public employee performance evaluation of General Manager (Gov. Code 54957)

#### **4. OPEN SESSION/REPORT BACK FROM CLOSED SESSION**

#### **5. PRESENTATION OF LONGEVITY AWARDS**

- A. Ron Greenfield – 10 years of service

#### **6. CONSENT CALENDAR** (Motion) **(Roll Call Vote)** (5 min.) *All items in this agenda item will be approved as one motion if they are not excluded from the motion adopting the consent calendar.*

- A. Approval of Board Meeting and Committee Meeting Minutes
  - 1. July 17, 2024, Regular Board Meeting Minutes
  - 2. August 1, 2024 Regular Communications and Technology Committee Meeting Minutes
  - 3. August 7, 2024 Special Personnel Committee Meeting Minutes
  - 4. August 7, 2024 Special Improvements Committee Meeting Minutes
- B. Bills Paid Listing

#### **7. Action Item CONSIDER DIRECTION OF PARKS COMMITTEE REPRESENTATIVE VOTE CONCERNING RESIDENCES OF MURIETA HILLS EAST UNIT 2 TRAIL** (Discussion/Action) (Motion) **(Roll Call Vote)**

#### **8. STAFF REPORTS** (Receive and File)

- A. General Manager Report
- B. Utilities Report

#### **9. REVIEW DISTRICT MEETING DATES/TIMES FOR SEPTEMBER 2024**

- A. Personnel Committee – September 3, 2024 at 7:30 a.m.
- B. Improvements Committee – September 3, 2024 at 8:00 a.m.
- C. Communications & Technologies Committee – September 5, 2024 at 9:00 a.m.
- D. Regular Board Meeting – September 18, 2024 - Open Session at 5:00 p.m.

#### **10. CORRESPONDENCE**

- A. Email from Janis Eckard July 18, 2024
- B. Email from Bob Keil July 23, 2024
- C. Email from Janis Eckard July 24, 2024
- D. Email from Mel Outram August 13, 2024

#### **11. Action Item CONSIDER APPROVAL OF TWO (2) WILL SERVE LETTERS FOR REMAINING 670 FSA PARTICIPANTS** (Discussion/Action) (Motion) **(Roll Call Vote)**

#### **12. Action Item CONSIDER APPROVAL OF CHANGES TO DIRECTOR OF OPERATIONS JOB DESCRIPTION** (Discussion/Action) (Motion) **(Roll Call Vote)**

#### **13. Action Item CONSIDER CONTINUATION OF EMERGENCY REPAIR OF LEAK IN PIPE FROM GRANLEES TO CALERO RESERVOIR AND APPROVAL OF RESOLUTION R2024-09 AUTHORIZING REPAIRS** (Discussion/Action) (Motion) **(Roll Call Vote)**

**14. *Action Item* CONSIDER APPROVAL OF CONTRACT WITH DOMENICHELLI & ASSOCIATES FOR PROFESSIONAL ENGINEERING SERVICES AND CONSTRUCTION INSPECTION SERVICES**  
(Discussion/Action) (Motion) **(Roll Call Vote)**

**15. COMMENTS FROM THE PUBLIC**

*Members of the public may comment on any item of interest within the subject matter jurisdiction of the District and any item specifically agendized. Members of the public wishing to address a specific agendized item are encouraged to offer their public comment during consideration of that item. With certain exceptions, the Board may not discuss or take action on items that are not on the agenda.*

*If you wish to speak during Comments from the Public or would like to comment regarding an item appearing on the meeting agenda, please complete a public comment card and submit to the Board Secretary prior to the point in the meeting at which the item is called. Speakers presenting individual opinions shall have 3 minutes to speak. Speakers presenting opinions of groups or organizations shall have 5 minutes per group.*

**16. DIRECTOR COMMENTS/SUGGESTIONS**

*In accordance with Government Code 54954.2(a), directors and staff may make brief announcements or brief reports of their own activities. They may ask questions for clarification, make a referral to staff or take action to have staff place a matter of business on a future agenda.*

**17. ADJOURNMENT (Motion)**

In accordance with California Government Code Section 54957.5, any writing or document that is a public record, relates to an open session agenda item and is distributed less than 24 hours prior to a special meeting, will be made available for public inspection in the District offices during normal business hours. If, however, the document is not distributed until the regular meeting to which it relates, then the document or writing will be made available to the public at the location of the meeting.

In compliance with federal and state laws concerning disabilities, if you are an individual with a disability and you need a disability-related modification or accommodation to participate in this meeting or need assistance to participate in this meeting, please contact the District Office at 916-354-3700 or [awilder@rmcsd.com](mailto:awilder@rmcsd.com). Requests must be made as soon as possible.

Note: This agenda is posted pursuant to the provisions of the Government Code commencing at Section 54950. The date of this posting is August 15, 2024. Posting locations are: 1) District Office; 2) Rancho Murieta Post Office; 3) Rancho Murieta Association; 4) Murieta Village Association.



*Certificate of Appreciation*

*Presented to*

*Ron Greenfield*

*In Recognition of*

*Your Many Years of Dedicated Service*

*Ron Greenfield,*

*We are proud to honor and celebrate your 10 years of outstanding service and commitment to the Rancho Murieta Community Services District. Your dedication, hard work, and loyalty have been instrumental in our success. Your continuous contributions and unwavering support have made a significant impact on our team and our organization as a whole.*

*With heartfelt appreciation, we express our gratitude for your exceptional performance and the invaluable role you have played in our journey. Your efforts and dedication serve as an inspiration to us all.*

*Thank you for your many years of service, and we look forward to many more years of shared success.*

*With Sincere Gratitude.*

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*Mimi Morris, General Manager*

*Rancho Murieta Community Services District*

*August 21, 2024*



## RANCHO MURIETA COMMUNITY SERVICES DISTRICT REGULAR BOARD MEETING MINUTES

July 17, 2024

Closed Session 3:30 p.m./Open Session 5:30 p.m.

### 1. CALL TO ORDER/ROLL CALL

President Maybee called the Regular Board Meeting of the Board of Directors of Rancho Murieta Community Services District to order at 3:30 p.m. in the District meeting room, 15160 Jackson Road, Rancho Murieta. Directors present at the District office were Stephen Booth, Linda Butler, Randy Jenco, Tim Maybee, and Martin Pohll. Also present at the District office were Travis Bohannon, Interim Director of Operations; Patrick Enright, District General Counsel; and Amelia Wilder, District Secretary.

### 2. CONSIDER ADOPTION OF AGENDA

**Motion/Booth** that the Board make the following findings: 1.) That an emergency exists as defined in Section 54965.5 of the Government Code. Section 54965.5 of the Government Code defines an emergency as a work stoppage, crippling activity or other activity that severely impairs public health, safety or both as determined by a majority of the members of the legislative body, and 2.) That upon a determination by a two-thirds vote of the Board that there is a need to take immediate action and that the need for the action came to the District subsequent to the agenda being posted. **Second/Maybee. Roll Call Vote: Ayes: Booth, Butler, Jenco, Pohll, Maybee. Noes: None. Absent: None. Abstain: None.**

**Motion/Booth** to adopt the Agenda with the addition of an emergency item before item #6. **Second/Maybee. Roll Call Vote: Ayes: Booth, Butler, Jenco, Pohll, Maybee. Noes: None. Absent: None. Abstain: None.**

### 3. BOARD ADJOURNED TO CLOSED SESSION TO DISCUSS THE FOLLOWING ITEMS:

#### A. CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

*Significant Exposure to litigation pursuant to paragraph to Government Code section 54965.9(d)(2) and (e)(1) (one case)*

### 4. OPEN SESSION/REPORT BACK FROM CLOSED SESSION

Director Maybee reported that no decisions were made.

### 5. CONSENT CALENDAR

**Motion/Booth** to approve Consent Calendar. **Second/Maybee. Roll Call Vote: Ayes: Booth, Butler, Jenco, Pohll, Maybee. Noes: None. Absent: None. Abstain: None.**

### 6. CONSIDER EMERGENCY REPAIR OF LEAK IN PIPE FROM GRANLEES TO CALERO RESERVOIR

Travis Bohannon, Interim Director of Operations explained to the Board that a water leak was discovered in the pipe from Granlees to Calero. He recommended that the work be done by TNT, Industrial Contractors, Inc. because the District has a Master Services Agreement with them, and they are available to do the work immediately. The necessary repairs are still undetermined, as digging needs to be done to uncover the pipe. This pipe is essential in the filling of Calero each year, and the work must be completed before pumping season begins on November 1. Due to the unknown magnitude of the repairs, the work must be started as soon as possible so that supplies can be ordered. Director Maybee added that this item will stay on the agenda until this project is completed without

the need for RFP's. **Motion/Pohll** to approve the emergency repairs to the Granlees raw water line leak on a time and materials basis with TNT Industrial Contractors, Inc. **Second/Booth Roll Call Vote: Ayes: Booth, Butler, Jenco, Pohll, Maybee. Noes: None. Absent: None. Abstain: None.**

## **7. INSUFFICIENT WATER DISTRIBUTION STORAGE CAPACITY FOR RESIDENCES EAST/WEST**

Mr. Bohannon introduced Joe Domenichelli, District Engineer, who discussed the availability of water in Rio Oso tank to serve Residences East and West. He discussed the water level, and its drop during the hot days this summer. The water level gets low. There was a discussion which included adding a flow meter for this tank, so that the water can be accurately measured. Director Booth expressed his concerns with the storage issue.

Comments were heard from Bob Keil, John Merchant, Janis Echard, Richard Gehrs, and Jay Hannum. Director Maybee asked that Mr. Domenichelli provides a quote to determine the capacity for the entire system and send it to the Improvements Committee.

## **8. STAFF REPORTS**

Complete Staff Reports can be found in the July 17, 2024 Regular board Meeting Packet on the District's website or by clicking [here](#).

Under Agenda Item 8A, Director Maybee informed the Board that the General Manager's report was in the packet including:

- Improving Customer Service
  - Tracking Communication
  - Customer Service
- Developing District Staff
  - Departures and Arrivals
- Strengthening Financial Position
  - 23-24 Year End Results
  - Audits
  - Financial Committee Hiatus
- Ensuring Water Quality and Access
- Keeping the Entire Rancho Murieta Community Safe
- Working with Community Partners
  - RMA
  - CIA Ditch

Director Butler asked several questions about customer meters and bills. She would like to have Security Reports. She also asked why the Finance Committee was taking a hiatus. Finance Committee members replied that the focus of Staff is Audits.

Under Agenda Item 8B Mark Matulich, Director Maybee informed the Board that the Financial and Administration's report was in the packet including:

- Financial Reports
- CIP

Director Booth confirmed that the updated reports provided to the Finance Committee July 11, 2024 had been updated in the Packet.

Under Agenda Item 8C, Travis Bohannon, Interim Director of Operations, gave a summary of the utility update, including:

- Water Treatment Facility
- Water Consumption
- Raw Water Storage & Delivery
- Wastewater Facility
- Emergency Repair of Broken Pipe for 6A Lift Station
- Utility Crew Report
- FY 23-24 Capital Improvement Program (CIP) update
- SB170 Projects Update
  - Water Treatment Facility Sodium Hypochlorite Conversion
  - Recycled Water Disinfection Project
  - Granlees Safety Improvements
- Development
  - Retreats West
  - Retreats North & East
  - Residences of Murieta Hills East & West
  - Riverview Phase 1A&1B and Phase 2
  - Rancho North
  - Murieta Gardens Commercial

John Merchant commented on the raw water storage and delivery, stating that he wanted Clementia removed from the chart.

## **9. REVIEW DISTRICT MEETING DATES/TIMES FOR AUGUST 2024**

The Improvements Committee was moved to August 7, 2024.

## **10. CORRESPONDENCE**

Director Maybee acknowledged the correspondence in the packet.

Janis Eckard commented on her letters and handed a PRA request to the District Secretary.

## **11. CONSIDER APPROVAL OF CHANGES TO DIRECTOR OF OPERATIONS AND SECURITY PATROL OFFICER I/II JOB DESCRIPTIONS**

Director Maybee introduced the topic, and Director Booth asked that the Director of Operations job description be changed to require a bachelor's degree or an equivalent to substitute for the degree. This job description was sent back to the Personnel Committee. **Motion/Booth to approve the changes to the Security Patrol Officer I/II job description. Second/Maybee. Roll Call Vote: Ayes: Booth, Butler, Jenco, Pohll, Maybee. Noes: None. Absent: None. Abstain: None.**

Marie Caldwell agreed with these changes to the Director of Operations job description.



## **12. PUBLIC HEARING TO CONSIDER APPROVAL OF FY24-25 CAPITAL IMPROVEMENT PLAN (CIP) PROPOSED PROJECTS AND RESOLUTION R2024-08 APPROVING THE CIP PROJECTS**

Mr. Bohannon presented the FY24-25 CIP Projects. Director Butler clarified some of the projects, asking how much of the money in the CIP list would also apply to the recommendations provided by Lumos & Associates. Mr. Bohannon replied that the water assessments and lift station rehab would be included. She also asked to have a bathymetric study done for Clementia. This will go through the Improvements Committee. The items on the list are in order of their priority.

- A. Director Maybee opened the Public Hearing. Jay Hannum addressed the Board with a clarification for Director Butler's question about the Lumos study.
- B. Director Maybee closed the Public Hearing.

**Motion/Pohll to approve the proposed CIP and Resolution R2024-08. Second/Booth. Roll Call Vote: Ayes: Booth, Butler, Jenco, Pohll, Maybee. Noes: None. Absent: None. Abstain: None.**

## **13. CONSIDER VOTING FOR CALIFORNIA SPECIAL DISTRICTS ASSOCIATION BOARD OF DIRECTORS SEAT A – SIERRA NETWORK**

Director Maybee recommended Nicholas Schneider. **Motion/Maybee to vote for Nicholas Schneider for CSDA Board of Directors Seat A-Sierra Network. Second/Butler. Roll Call Vote: Ayes: Butler, Jenco, Maybee, Pohll. Noes: None. Absent: None. Abstain: Booth.**

## **14. CONSIDER WATER CODE SECTION 350 PROCEDURAL REQUIREMENTS AND FINDINGS NECESSARY TO DECLARE A TEMPORARY WATER EMERGENCY TO HALT ALL NEW HOOKUPS, DISTRIBUTION EXPANSION, OR CONSTRUCTION APPROVAL UNTIL CAPACITY CAN BE DETERMINED**

Patrick Enright, District Counsel, discussed the topic, including the contractual obligations the District needs to review. He explained that if any action is taken it would include a public hearing, which would need to be published in a newspaper seven days before the hearing. This item will be reported on monthly basis. There was a discussion by the Board and citizens.

## **15. PUBLIC COMMENTS**

Dale Schell discussed his water leak at the village.

## **16. DIRECTOR COMMENTS/SUGGESTIONS**

Director Maybee thanked staff for their work. He welcomed Mr. Enright.

## **17. ADJOURNMENT**

**Motion/Maybee to adjourn at 7:30 p.m. Second/Butler. Roll Call Vote: Ayes: Booth, Butler, Jenco, Maybee, Pohll. Noes: None. Absent: None. Abstain: None.**

Respectfully submitted,

Amelia Wilder  
District Secretary

# MEMORANDUM

Date: August 13, 2024  
To: Board of Directors  
From: Communication & Technology Committee Staff  
Subject: August 1, 2024, Communication & Technology Committee Meeting Minutes

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## 1. CALL TO ORDER

Director Booth called the meeting to order at 9:13 a.m. Present was Director Booth. Director Butler was absent. Present from District staff were Mark Matulich, Director of Finance and Administration; Travis Bohannon, Interim Director of Operations; and Amelia Wilder, District Secretary. Mimi Moris, General Manager participated via teleconference.

## 2. Update on Website and Social Media

Ms. Wilder gave an update on website and Facebook statistics, reporting that the announcement of the VIPS open house had received over 20 likes and comments on Facebook.

## 3. Annual Contract Report

Mimi Morris presented the Report of District Contracts with their status to the Committee. Director Booth asked that it be shared with the Finance Committee and be updated quarterly.

## 4. COMMENTS FROM THE PUBLIC

None.

## 5. DIRECTOR AND STAFF COMMENTS

Director Booth commented on the VIPS Grand Opening. He added that he had received comments from Director Butler. She wondered how two Board Members could attend the Water Briefing meetings, and not be considered a Brown Act violation. Ms. Morris responded that this was at the suggestion of Andrew Ramos, former Legal Counsel. Director Booth continued with another question from Director Butler. She wondered how we are keeping the public informed about the IWMP. Ms. Morris responded that we are waiting for information from the consultants.

Ms. Morris acknowledged Amelia Wilder, District Secretary, for her work getting the area ready for the VIPS volunteers, and Mel Outram and Mark Matulich for their commitment to the VIPS program.

## 6. Adjournment

The meeting was adjourned at 9:18 a.m.

## MEMORANDUM

Date: August 12, 2024  
To: Board of Directors  
From: Personnel Committee Staff  
Subject: August 7, 2024 Special Personnel Committee Meeting Minutes

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### 1. CALL TO ORDER

Director Jenco called the meeting to order at 7:30 a.m. Present were Director Jenco and Director Maybee. Present from District staff were Mark Matulich, Director of Finance and Administration; Travis Bohannon, Interim Director of Operations, and Amelia Wilder, District Secretary. Mimi Morris, General Manager, was present via teleconference.

### 2. DISCUSS UPDATES TO THE DIRECTOR OF OPERATIONS JOB DESCRIPTION

Mimi Morris, General Manager, discussed the changes made to the Director of Operations job description. The Committee recommended the changes go to the Board for approval. ***This item will be on the August 21, 2024 Board Meeting Agenda.***

### 3. PUBLIC COMMENT

None.

### 4. DIRECTOR COMMENTS

Director Maybee discussed the potential for the District to create a Community Services Officer job description, with the hopes that this might bring more candidates to the District.

**5. ADJOURNMENT** The meeting was adjourned at 7:47 a.m.

## MEMORANDUM

Date: August 7, 2024  
To: Board of Directors  
From: Improvements Committee Staff  
Subject: August 7, 2024 Special Improvements Committee Meeting Minutes

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### 1. CALL TO ORDER

Director Jenco called the meeting to order at 8:00 a.m. Present were Director Jenco and Director Pohll. Present from District staff were Mark Matulich, Director of Finance and Administration; Travis Bohannon, Interim Director of Operations; Joe Domenichelli, District Engineer; and Amelia Wilder, District Secretary. Mimi Moris, General Manager was present via teleconference.

### 2. IMPROVEMENTS STAFF REPORT

The following topics were discussed:

#### A. Broken Raw Water Conveyance Pipe from Granlees to Calero Reservoir

Mr. Bohannon updated the Committee on the broken raw water conveyance pipe from Granlees to Calero Reservoir, informing them that the crew from TNT Industrial Contractors was hoping to be able to repair the pipe instead of replacing the pipe, and crews would be onsite later in the day to access the possibility.

#### B. Rio Oso Tank Flow Meter Installation Update

Mr. Domenichelli informed the Committee that he had located a flow meter which can be installed on the external pipes of the Rio Oso tank. The cost would be approximately \$6,000 each, for two.

#### C. District Raw Water Report Methodology

Ms. Morris discussed this topic with the Committee, stating that she had researched the possibility of removing the raw water storage calculations from the monthly report included in the Utilities Report in response to John Merchant's request at the July 17, 2024 Board meeting, because he felt it gave an unrealistic perception of the amount of raw water stored by the District. The Committee agreed to leave Clementia in the calculation.

#### D. Bathymetric Survey of Clementia

Mr. Bohannon discussed this topic, stating that he had researched the cost of a bathymetric survey of Clementia Reservoir in response to Director Butler's request at the July 17, 2024 Board meeting. The cost was estimated to be \$28,400. The committee decided to put this study on hold.

#### E. RFP for Professional Services for District Engineer and Construction Inspection Services

Mr. Bohannon reviewed the outcome of the recent request for proposals (RFP) for District Engineering and Construction Inspection Services, stating that the District received two proposals, one from Domenichelli and Associates and one from SNG & Associates. He and Director Pohll reviewed and scored the proposals. Domenichelli and Associates had the highest score. The Committee recommended moving this proposal to the Board. ***This item will be on the August 21, 2024 Board meeting agenda.***

#### F. Proposed Enhancement of District's Meter Technology/Leak Detection with Advanced Meter Infrastructure (AMI)

Ms. Morris updated the Committee on the availability of advanced meter infrastructure, detailing the currently available models, and their costs. She is exploring possible grant opportunities to aid in the purchase. Director Pohll asked if we could get a few of the different types of meters and try them out.

### **G. Proposal to Authorize a Comprehensive Distribution System Study**

Mr. Domenichelli informed the Committee that the Comprehensive Distribution System Study is on hold until the flow meters can be installed on the Rio Oso tank.

Developer Bob Keil asked about the use of water in Clementia, water conservation measures, and storm water capture.

### **H. Development Update**

Ms. Morris presented the Summarized Development Report.

Resident Jeff Berkheimer addressed the Committee to offer his support for Development.

### **3. COMMENTS FROM THE PUBLIC**

None.

### **4. DIRECTOR AND STAFF COMMENTS**

Ms. Morris mentioned that the District has received requests for Will Serve letters. These will come before the Board at the next Board Meeting. ***This item will be on the August 21, 2024 Board meeting agenda.***

### **5. ADJOURNMENT**

The meeting was adjourned at 9:09 a.m.

## MEMORANDUM

DATE: August 21, 2024  
TO: Board of Directors  
FROM: Mark Matulich, Director of Finance and Administration  
SUBJECT: Receive and File Check Journal

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Attached is a list of checks issued from Banner Bank numbered 001388 through 001466 between July 1, 2024 and July 31, 2024. Invoices were presented by departments, reviewed by administration staff and subsequent checks were issued. All checks were in conformity with the District's policies and procedures. Monies were available to pay the amounts listed.

The Board is asked to receive and file this information.

### FISCAL ANALYSIS

Seventy-nine checks totaling \$916,716.27 were issued and two (2) were voided between July 1, 2024 and July 31, 2024.

### ATTACHMENT

Accounts Payable Vendor Check Register Report from July 1, 2024 and July 31, 2024.

Ranges: From: To: From: To:  
 Check Number First Last Check Date 7/1/2024 7/31/2024  
 Vendor ID First Last Checkbook ID First Last  
 Vendor Name First Last

Sorted By: Checkbook ID

\* Voided Checks

Check Number	Check Date	Vendor	Checkbook ID	Amount
001388	7/3/2024	CVCWA	BANNER	\$3,350.00
001389	7/3/2024	Clark Pest Control	BANNER	\$782.00
001390	7/3/2024	Ferguson Waterworks , Inc 1423	BANNER	\$11,758.51
001391	7/3/2024	Folsom Lake Ford, Inc.	BANNER	\$1,010.24
001392	7/3/2024	James Colas	BANNER	\$400.00
001393	7/3/2024	Nor-Cal Lifting and Repairs	BANNER	\$900.00
001394	7/3/2024	Streamline	BANNER	\$375.00
001395	7/3/2024	TNT Industrial Contractors Inc.	BANNER	\$18,647.38
001396	7/3/2024	Univar Solutions USA Inc	BANNER	\$5,658.16
001397	7/3/2024	Vestis	BANNER	\$445.02
001398	7/3/2024	State of California	BANNER	\$77,640.00
001399	7/3/2024	Chemtrade Chemicals US LLC	BANNER	\$3,799.18
001400	7/3/2024	Aqua-Metric Sales Company	BANNER	\$2,758.34
001401	7/3/2024	California Waste Recovery Systems	BANNER	\$106,254.25
001402	7/3/2024	Chemtrade Chemicals US LLC	BANNER	\$3,800.83
001403	7/3/2024	Daily Journal Corporation	BANNER	\$2,447.63
001404	7/3/2024	GSRMA	BANNER	\$490,107.00
001405	7/3/2024	Liebert Cassidy Whitmore	BANNER	\$217.50
001406	7/3/2024	LUXURY CLEANING SERVICE	BANNER	\$2,000.00
001407	7/3/2024	Regional Water Authority	BANNER	\$6,496.00
001408	7/3/2024	State of California	BANNER	\$503.00
001409	7/3/2024	Tyler Technologies, INC	BANNER	\$90.00
001410	7/3/2024	Watchdogs Surveillance	BANNER	\$85.00
001411	7/3/2024	Supply Network	BANNER	\$122.58
001412	7/11/2024	Andy Lee	BANNER	\$75.41
001413	7/11/2024	Vitaliy Perepelka	BANNER	\$105.80
001414	7/11/2024	The Ed Jones Co.	BANNER	\$236.73
001415	7/11/2024	Andy Lee	BANNER	\$17.14
001416	7/11/2024	Applications By Design, Inc.	BANNER	\$2,520.00
001417	7/11/2024	Caltronics	BANNER	\$98.33
001418	7/11/2024	Dewberry Engineers Inc.	BANNER	\$18,352.92
001419	7/11/2024	Domenichelli and Associates, Inc	BANNER	\$18,360.00
001420	7/11/2024	Greenfield Communications	BANNER	\$329.00
001421	7/11/2024	Pace Supply Corp	BANNER	\$2,097.44
001422	7/11/2024	Rancho Murieta Association	BANNER	\$449.83
001423	7/11/2024	Sacramento County Sheriff's Office	BANNER	\$125.00
001424	7/11/2024	Supply Network	BANNER	\$1,100.00
001425	7/11/2024	Tyler Technologies, INC	BANNER	\$968.75
001426	7/11/2024	S. M. U. D.	BANNER	\$25,275.38
001427	7/18/2024	Andy Lee	BANNER	\$122.84
001428	7/18/2024	Bartkiewicz, Kronick & Shanahan	BANNER	\$13,106.48
001429	7/18/2024	Fidelity National Title	BANNER	\$46.88
001430	7/18/2024	Lumos & Associates, Inc.	BANNER	\$5,972.69
001431	7/18/2024	Monika Sobon	BANNER	\$33.84
001432	7/18/2024	Old Republic Title	BANNER	\$377.22
001433	7/18/2024	Stewart Title of Sacramento	BANNER	\$52.45
001434	7/18/2024	Tahnee Lyons	BANNER	\$109.71
001435	7/18/2024	Thatcher Company of California, Inc	BANNER	\$5,498.00
001436	7/25/2024	Adkins Engineering and Surveying, Inc.	BANNER	\$6,284.82
001437	7/25/2024	California Laboratory Services	BANNER	\$3,595.20
001438	7/25/2024	Chemtrade Chemicals US LLC	BANNER	\$3,658.20
001439	7/25/2024	Condor Earth Technologies	BANNER	\$1,468.94
001440	7/25/2024	Domino Solar LTD	BANNER	\$13,756.84
001441	7/25/2024	Operating Engineers Local Union No. 3	BANNER	\$627.60
001442	7/25/2024	Signal Service, Inc.	BANNER	\$428.75
* 001443	7/25/2024	Solitude Lake Management LLC	BANNER	\$8,450.00
001444	7/25/2024	Univar Solutions USA Inc	BANNER	\$4,959.00
001445	7/25/2024	USA Blue Book	BANNER	\$998.14

\* Voided Checks

Check Number	Check Date	Vendor	Checkbook ID	Amount
001446	7/25/2024	Vestis	BANNER	\$222.51
001447	7/25/2024	Operating Engineers Local Union No. 3	BANNER	\$627.60
001448	7/25/2024	State of California	BANNER	\$64.00
001449	7/31/2024	A&D Automatic Gate and Access	BANNER	\$527.00
001450	7/31/2024	ABS Direct	BANNER	\$3,184.69
001451	7/31/2024	Andy Lee	BANNER	\$51.03
001452	7/31/2024	Arnolds For Awards	BANNER	\$25.25
* 001453	7/31/2024	Bartkiewicz, Kronick & Shanahan	BANNER	\$24,457.38
001454	7/31/2024	Bartkiewicz, Kronick & Shanahan	BANNER	\$3,845.98
001455	7/31/2024	Brower Mechanical, Inc	BANNER	\$564.00
001456	7/31/2024	CIT	BANNER	\$475.22
001457	7/31/2024	Clark Pest Control	BANNER	\$782.00
001458	7/31/2024	County of Sacramento	BANNER	\$17,854.00
001459	7/31/2024	GSRMA	BANNER	\$11,000.00
001460	7/31/2024	LUXURY CLEANING SERVICE	BANNER	\$2,000.00
001461	7/31/2024	Pace Supply Corp	BANNER	\$525.28
001462	7/31/2024	Rancho Murieta Association	BANNER	\$532.15
001463	7/31/2024	Solitude Lake Management LLC	BANNER	\$2,366.00
001464	7/31/2024	Thatcher Company of California, Inc	BANNER	\$749.00
001465	7/31/2024	Vestis	BANNER	\$410.56
001466	7/31/2024	Walker's Office Supplies, Inc	BANNER	\$53.05
Total Checks: 79				Total Amount of Checks: \$916,716.27





# Rancho Murieta Association Memorandum

**To:** RMCS D Board of Directors  
**From:** RMA Board of Directors  
**Date:** August 5, 2024  
**Subject:** Residence of Murieta Hills East Unit 2 Trail

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**Recommendation:** To direct the RMCS D Parks Committee representative to vote, alongside the RMA Parks Committee representatives, in favor of Bob Keil's proposal regarding the Residence of Murieta Hills East Unit 2 Trail. Mr. Keil's proposal is as follows:

1. The Developer will build and grade an 8 ft. natural trail.
2. The Developer will deed, to RMA, a 20 ft. wide easement for the route of the trail.
3. When the construction of Unit 2 is completed and approved by the County of Sacramento, the Developer will deed the Unit 2 trail and easement parcel to RMA, and deposit \$50,000.00 into an account to be used by RMA to pave the Unit 2 trail. RMA will have five (5) years to utilize the funds once the parcel is deeded.

**History:** The RMA Board of Directors held a special Board meeting on Friday, August 2, 2024 to discuss a proposal from Bob Keil, the developer of the Residence of Murieta Hills East, regarding the Unit 2 trail. The Board voted and approved directing the RMA Parks representatives to approve Mr. Keil's proposal at the next Parks Committee meeting.

## **GENERAL MANAGER'S REPORT TO THE BOARD OF DIRECTORS**

### **AUGUST 21, 2024**

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First off, I want to thank the Board and the staff for their patience with my health issues of the last several months and I want to apologize for missing the Board Meeting on July 17<sup>th</sup>. I had surgery on my eyes the week before and my vision was still impaired at that time. I had not anticipated this back in November when we hired Mark Matulich and I had authorized his family reunion trip. I've listened to the audio recording and, of course, was involved in the preparation of the meeting materials, so I am caught up on the issues and we will make sure that no gap in staff management representation at Board Meetings occurs in the future.

#### **DEVELOPING DISTRICT STAFF**

##### **Departures and Arrivals**

Director of Ops Recruitment – Final Filing Date was extended to August 19<sup>th</sup> following some changes requested by the Board to the education requirements. First Round Interviews are scheduled for September 9<sup>th</sup> and we hope to have a candidate in place by October 1<sup>st</sup>.

Other staff changes: Phil Sergent was hired to be our newest Plant Operator. Mr. Sergent fills the spot vacated by Mr. Foeldi in May. Mr. Sergent comes to us from the City of Colfax and received strong recommendations from his former employers.

Ron Whitaker was hired to be our newest Utility Operator. Mr. Whitaker fills the spot vacated by Mr. McClure in June. Mr. Whitaker comes to us from Elk Grove Plumbing and received solid recommendations from his former employers.

An offer of employment for the newly budgeted patrol officer was made in July and then rescinded after the individual failed to show up.

Supervising Sergeant Mel Outram gave notice of his resignation from the District on August 9<sup>th</sup>. Sargent Outram was with the District for two years and we are grateful for his contributions to the District and the community.

We had a 10-Year Longevity Bonus awarded to Ron Greenfield, Utility Supervisor, earlier in this meeting and are very grateful for his ongoing commitment to providing services to the community. His knowledge and abilities are respected and appreciated by everyone who interacts with him, and we are lucky to have him with us.

We're also lucky to have our new IT Manager who started just as all my eye issues began in April, so he has not been formally introduced to the Board yet. Please welcome Andy Lee who worked in Information Technology at California State University Sacramento for over twenty years. Mr. Lee is well-equipped to address the District's IT issues.

The District's IT system has been much like the District's financial system over the last decade – a bit of a patchwork quilt of short-term fixes that have led to reliability issues. Mr. Lee has been establishing more reliable approaches to our information system-- reducing and eliminating many of the frustrating and recurring server crashes that have disabled both gate functionality and office work. These have included proper physical set up of devices, installation of software patches, replacement of Uninterruptible Power Supplies (UPS) or their batteries (at the gates, headquarters, and the Water Treatment Plant), and more.

He has also been working to establish our ability to streamline data intake by patrol officers by establishing remote capture of information into a central repository, a key approach that will prevent both the duplication of effort and extensive editing involved in the Security Logs.

Mr. Lee has also handled many fixes that are very back of house and under-appreciated but critical to our information security. These include networking and security issues, Virtual Private Network (VPN) hardware repairs and user connectivity issues. He is preparing a comprehensive report documenting the IT environment and making recommendations. Due to the outsourced nature of the District's Information Technology approach, there is no documentation on key elements like network or system mapping that would help to institutionalize the District's information technology system. Much like process and procedural documents in the accounting world, these documents help to ensure stable transitions of staff for organizations. We are grateful for Mr. Lee's contributions and look forward to more advancements in the future.

### **ENSURING WATER QUALITY AND ACCESS**

Staff put together some internal staff and board briefings last week to deepen understanding of the IWMP model that is so critical to ensuring the resiliency of the community's water system. The IWMP Consultants are working on the final draft report, which is a detailed document that includes their methodology and calculations. The Board will likely receive that in the next week or two and then enter a technical review assessment before making any formal decisions regarding the report and its recommendations.

### **KEEPING THE ENTIRE RANCHO MURIETA COMMUNITY SAFE**

The reinstatement of **security logs** is underway and I've attached a sample report of the proposed format which will not require extensive re-entry and editing. We are finalizing the training of staff on the new approach and hope to have them fully integrated by the end of September.

The County of Sacramento **Sheriff's Service Center** held a very well-attended Grand Opening of the VIPS program at Rancho Murieta on July 31<sup>st</sup>. About 40 individuals from the community, the CSD, and the Sheriff's Office were in attendance. VIPs are Volunteers in Partnership with the Sheriff. These" volunteers help citizens with neighborhood and **law enforcement related** issues and questions, crime reports, fingerprinting, safety fairs."

District staff met with RMA Staff last week to discuss further the Security needs behind the gates. District staff have also been working on a plan to revamp the security program at the District and hope to share those ideas in the coming months. An interim staffing plan is being put together to address the unexpected resignation of the Supervising Sergeant.

### **STRENGTHENING FINANCIAL POSITION**

**GRANTS** – There are many state and federal grants available for water districts to upgrade their water systems and their electrical infrastructure/transition to self-generated power/electric vehicles and we need to start applying for them. I met with an RWA representative yesterday regarding a federal grant program that would cover 50% of the cost of an upgrade to our overall meter infrastructure and would have the potential to reduce the current water loss from system leakages. These leaks – called NonRevenue Water) were 200 acre feet (AF) per year in 2022. That is a 12% loss rate and one that hurts the resiliency of the community's water supply). There is not currently spare staff capacity to tackle grants, but I'm looking into the idea of a grant consultant who could identify and prepare grants for us to assist in this regard.

**CONTRACTS** - Board Secretary Amelia Wilder shared the attached report of current contracts with the Communications Committee earlier this month and will post updates to the report to the District website each quarter as a way of providing transparency regarding use of District financial resources.

**NEW FY: The 24-25 Fiscal Year started July 1<sup>st</sup>.** Quarterly Finance Committee Meetings will resume in October with FY results allowing staff to focus on finalizing the outstanding audits.

### **AUDITS**

Staff is working on the audits for **21-22 and 22-23** and has taken all the financial history (revenues and expenditures) and is rebuilding the journal entries because the 20-21 audit experience revealed that prior staff was not coding journal entries to the correct enterprise funds and often had duplicate entries because of the faulty approaches to posting revenues and expenses.

There were older systems no longer in use that were in play in 21-22 so that has required gaining an understanding of how these systems work (e.g. Utility Star and Paymentus). The knowledge gained in these efforts will help with the 22-23 audit, but the work of learning how should and did work is a major undertaking. However, taking the proper time and care to get it right will lay the foundation for reliable and accurate financial reporting going forward.

FY 21-22 is also taking a bit longer due to competing Finance and Administration priorities (cleaning up issues with the meters and billings, establishing day-to-day accounting procedures, working on developer issues including uncollected connection and security impact fees and reconciling developer deposits, tackling neglected operations issues like ensuring allowable and full use of grant funding before their expiration (SB 1383 -organic waste \$\$ and SB 170 (Budget Act of 2021 \$\$ for Granlees Dam upgrades and chlorine conversions), and handling Security Unit issues).

### **OVERALL WORKLOAD**

I just want to take a moment to commend both Mark and Travis for helping the District through our current vacancies and juggle the extra workload created by those vacancies. Both individuals have really demonstrated their commitment and dedication to the organization in working to get the job done. Travis and his team show up and get the job done. Both Mark and Travis are seemingly always working. When I email over the weekend, I get quick responses even though I don't expect it. There is a very strong sense of what needs to be done to protect and rebuild the organizational systems and we are fortunate to have their support at the District.

# # #



# Rancho Murieta Community Services District

15160 Jackson Road • P.O. Box 1050 Rancho Murieta, CA 95683 • 916-354-3700 • Fax 916-354-2082

Visit our website [www.rmcsd.com](http://www.rmcsd.com)

## Public RMCS D Security Log July 2024

INCIDENT ID#, DATE, & TIME	INCIDENT NAME, LOCATION, & REPORT AUTHOR	BRIEF INCIDENT DESCRIPTION
24-07-0057 7/4/24 8:20 PM	GOLF CART ACCIDENT  NORTH MURIETA PARKWAY & DOMINGO  Warlito Gabriel	Golf Cart overturned at 8:20 PM on July 4th. Driver and passengers stated that the golf cart malfunctioned and swerved and tipped over on its side. Four passengers were ejected and injured. Fire Dept emergency vehicles responded
24-07-0174 7/17/24 8:00 AM	RESIDENT COMPLAINT/FOLLOW UP  NEBLINA COURT  Warlito Gabriel	Two disputing neighbors got into a loud verbal dispute regarding cutting a branch of a tree that extended over the fence into the neighbor's yard. RMA had authorized the trim. The neighbors have a history of disagreements.
24-07-0221 7/23/24 2:00 AM	VANDALISM  VERONA DRIVE  Warlito Gabriel	Three male juveniles slashed three of four tires and smashed the back window of the car. The vandalism was caught on Ring video and shared over social media. The homeowner contacted the sheriff to report the vandalism. The identity is suspected due to subsequent threatening text messages.
24-07-0233 7/24/24 2:00 AM	Vandalism  DE LA CRUZ DRIVE  Warlito Gabriel	Three of four tires were slashed on a car parked at the homeowner's address. No known suspects. No video footage
24-07-0250 7/27/24 3:00 AM	SHOPLIFTING  TRACTOR SUPPLY  Warlito Gabriel	Suspected shoplifting at Tractor Supply. Unclear what was stolen. CSD Patrol Officer informed the suspect that she was not welcome to shop in the store again. Suspect was shocked but agreed to stay away from the store.

# Report of District Contracts

Contract #	Vendor Name	Start/End Date: Timeline	Any amendments?	Amount
2024.006	RWG	6/3/24 Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget
<b>Services</b>			<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	Augmentations
Legal Services	CIP Project Number none			Total Budget 0
2024.005	AT&T	4/9/24 2 years	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget
<b>Services</b>			<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	Augmentations
Land Line Phone Service	CIP Project Number none	4/8/26		Total Budget 0
2024.004	California Public Employees' Retirement	5/15/24 Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget
<b>Services</b>			<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	Augmentations
OPEB	CIP Project Number none			Total Budget 0
2024.003	NMI Holdings, Inc.	5/3/24 Until Complete	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget 486,500
<b>Services</b>			<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations
Granlees Safety Rehab	CIP Project Number 23-04-01			Total Budget 486,500
2024.002	OnSolve - CodeRed	4/9/24	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget 2,366
<b>Services</b>			<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations
Emergency Notification Svstem	CIP Project Number none	4/8/25		Total Budget 2,366
2023.013	Adkins Engineering and Survevina. Inc.	1/19/23 open	<input type="radio"/> Yes <input checked="" type="radio"/> No	Initial Budget 0
<b>Services</b>			<input type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations
General Services	CIP Project Number			Total Budget 0
2023.012	TNT Industrial Contractors	1/19/23 Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget
<b>Services</b>			<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	Augmentations
Industrial Contractors. MSA	CIP Project Number none			Total Budget 0
2023.011	Sacramento County Elections Department	8/28/23 Until Complete	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget 1,000
<b>Services</b>			<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations
11/5/2024 Polling Facility	CIP Project Number none	11/8/24		Total Budget 1,000
2023.010	Stratus	10/3/23 1 Year	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget 17,217
<b>Services</b>			<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations
FOG & IDDE Reporting	CIP Project Number none	10/3/24		Total Budget 17,217

2023.009	Liebert Cassidy Whitmore (LCW)	9/13/23	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
Services			Contract Type	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	Augmentations	
Legal Services	CIP Project Number none				Total Budget	0
2023.008	Condor	9/11/23	Until Complete	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	6,600
Services			Contract Type	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations	
Process Hazard Analysis	CIP Project Number none				Total Budget	6,600
2023.007	Lumos & Associates	8/28/23	Until Complete	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	159,437
Services			Contract Type	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations	
CIP Planning & 5 Year Rate Study	CIP Project Number 24-200-01 &				Total Budget	159,437
2023.005	Economic and Business Planning Systems	8/10/23	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	10,000
Services			Contract Type	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	Augmentations	
670 FSA Advisor	CIP Project Number none				Total Budget	10,000
2023.004	Crime Alert Security	8/10/23	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	40
Services			Contract Type	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations	
Keyless entry at District Office	CIP Project Number none				Total Budget	40
2023.002	Solitude Lake Management	1/19/23	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	23,400
Services		?	Contract Type	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations	
Bi-Monthly Water Testing	CIP Project Number none				Total Budget	23,400
2023.001	Solitude Lake Management	1/19/23	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	27,300
Services			Contract Type	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations	
Monthly Maintenance to	CIP Project Number none				Total Budget	27,300
2022.010	California Waste Management Services	11/17/22	10 years	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
Services		1/1/33	Contract Type	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	Augmentations	
Waste Hauler	CIP Project Number none				Total Budget	0
2022.009	Tyler Technologies	1/17/22		<input checked="" type="radio"/> Yes <input type="radio"/> No	Initial Budget	176,852
Services			Contract Type	<input type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations	
Financial Software & Svcs	CIP Project Number				Total Budget	176,852
2022.008	Ring Central	2/18/22	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	8,853
Services			Contract Type	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	Augmentations	
VOIP Phone Service	CIP Project Number none				Total Budget	8,853

2022.007	Adkins		12/22/22	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	295,000
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	113,368
IWMP	<b>CIP Project Number</b>	24-200-02				<b>Total Budget</b>	408,368
2022.006	Dewberry		10/7/22	Until Complete	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	214,668
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	
WWTP Sodium Hypochlorite Design	<b>CIP Project Number</b>	23-14-02				<b>Total Budget</b>	214,668
2022.005	Luxury Cleaning Services		6/2/22	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Facilities Cleaning	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
2022.002	HDR		4/13/22	Until Complete	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	238,310
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	24,866
Design for WTP Sodium Hypochlorite	<b>CIP Project Number</b>	21-02-01				<b>Total Budget</b>	263,176
2022.001	Del Rio Advisors		2/2/22	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Bond Advisors	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
2021.002	CalCad		8/23/21	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	19,595
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	41,458
GIS 2021	<b>CIP Project Number</b>	none				<b>Total Budget</b>	61,053
2021.001	Dominichelli & Assoc		3/19/21		<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>			3/19/24	<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Engineering & Const Insp	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
2020.002	Richardson & Company		9/20/20	5 Years	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	26,350
<b>Services</b>			9/20/25	<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Auditing Services	<b>CIP Project Number</b>	none				<b>Total Budget</b>	26,350
2020.001	Pitney-Bowes		6/24/20	5 Years	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	483
<b>Services</b>			6/24/25	<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	
Stamp Machine	<b>CIP Project Number</b>	none				<b>Total Budget</b>	483
2018.001	Clark Pest Control		11/11/18	6 years	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>			11/10/24	<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Pest Control	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0



2017.001	Brower		6/19/17	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Quarterly Maintenance	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
2013.001	ALAIT aka ITS		3/1/13	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
IT Services	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
2011.001	ABDi		9/22/11	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Gate and Patrol Security Software	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
2005.001	Sacramento County Waste Management		8/24/05	10 years	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input type="radio"/> Standard Agreement <input checked="" type="radio"/> Master Services	<b>Augmentations</b>	
Waste Collection Services	<b>CIP Project Number</b>	none	10/31/15			<b>Total Budget</b>	0
2004.001	Murieta Village		1/1/04	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	
Key Services	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
2000.001	Rancho Murieta Association		6/6/20	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	
Security Services	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
1988.001	Rancho Murieta Country Club		5/16/88	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	
Reclaimed Water with Country Club	<b>CIP Project Number</b>	none				<b>Total Budget</b>	0
1956.001	Cosumnes Irrigation Association		4/30/56	Ongoing	<input type="radio"/> Yes <input type="radio"/> No	Initial Budget	
<b>Services</b>				<b>Contract Type</b>	<input checked="" type="radio"/> Standard Agreement <input type="radio"/> Master Services	<b>Augmentations</b>	
CIA Ditch	<b>CIP Project Number</b>	none	12/16/27			<b>Total Budget</b>	0

## Director of Operations - Utility Staff Report

Date: August 21, 2024  
To: Board of Directors  
From: Travis Bohannon, Interim Director of Operations  
Subject: August Utility Report

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### WATER

#### Water Treatment Facility

Both plants are currently in operation and the plant is producing about 2.88 MGD to meet demand. In regard to the recent taste and odor issues, we are currently feeding Powder Activated Carbon (PAC) into plant 2. We cannot feed the PAC into plant 1 because it will damage the membranes. The water will blend in the distribution system, but due to the constraints of plant 1, there might be some small residual taste and odor in the water until the heat comes down.

#### Water Consumption

As of August 1, 2024, the total potable water production for 2024 is 296 MG or 908.72 acre-ft.

#### Raw Water Storage & Delivery

As of July 31, 2024, the total water currently stored between Clementia, Chesbro, and Calero is 1,391.8 million gallons (MGAL) or 4,271.9 acre-ft.

#### 33" Raw Water Line Update:

After evaluation of the break, it has been decided that a 10' section of the pipe needs to be removed and replaced. I will be giving a complete update later in the meeting on Agenda item #14.

*Table 1. Current water and wastewater storage as of July 31, 2024*

	acre-ft July 2024	acre-ft full	MGal July 2024	MGal Full	%full
Clementia Storage	953.2	907.0	310.5	295.5	105.1%
Chesbro Storage	769.7	1027.0	250.8	372.3	74.9%
Calero Storage	1993.3	2323.6	649.4	756.9	85.8%
<b>Total of all Raw Water Reservoirs</b>	<b>3716.2</b>	<b>4257.6</b>	<b>1210.7</b>	<b>1424.7</b>	87.3%
Wastewater Storage Reservoir available for production	216.8	796.3	70.7	254.6	27.2%

*Figure 1. Cumulative Raw Water Pumping and Cosumnes River Flow Water Year 23-24'*

### Cosumnes Flow vs. Pumped Flow to Calero FY 23-24

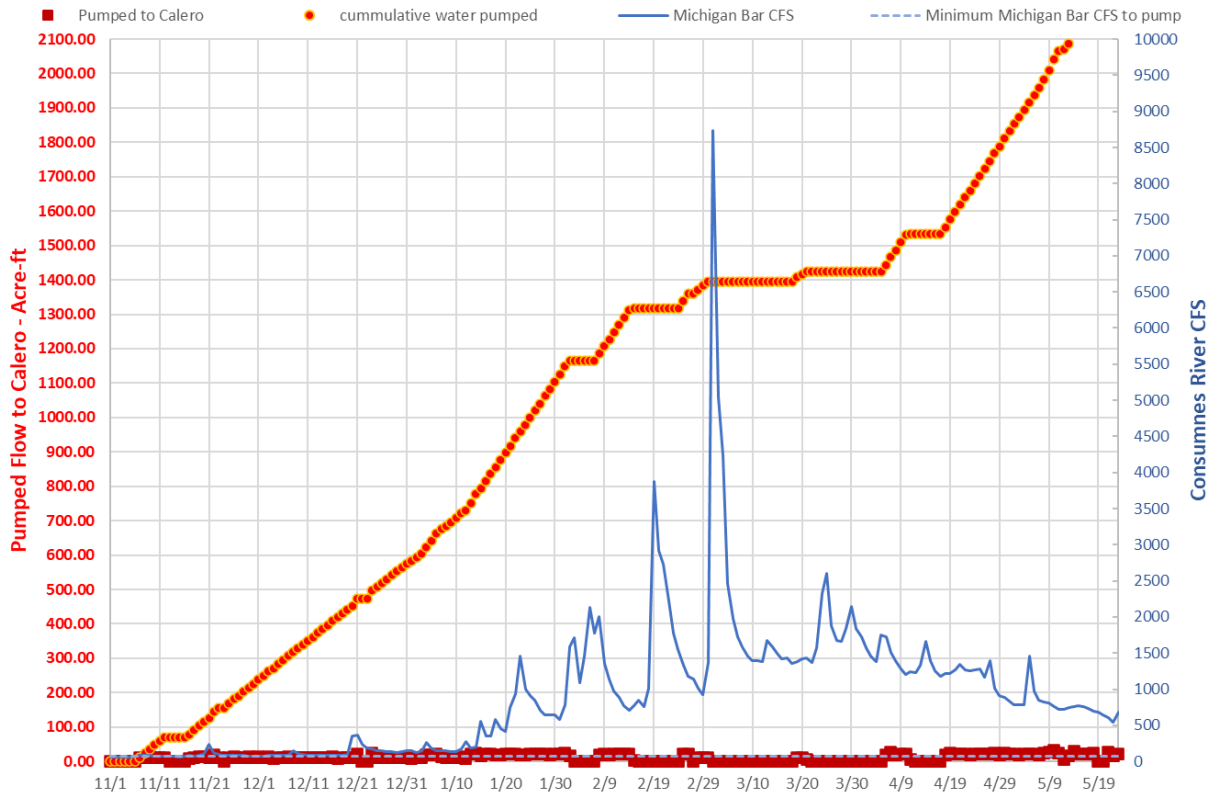


Figure 2. Five-year Combined Chesbro / Calero Storage Curves

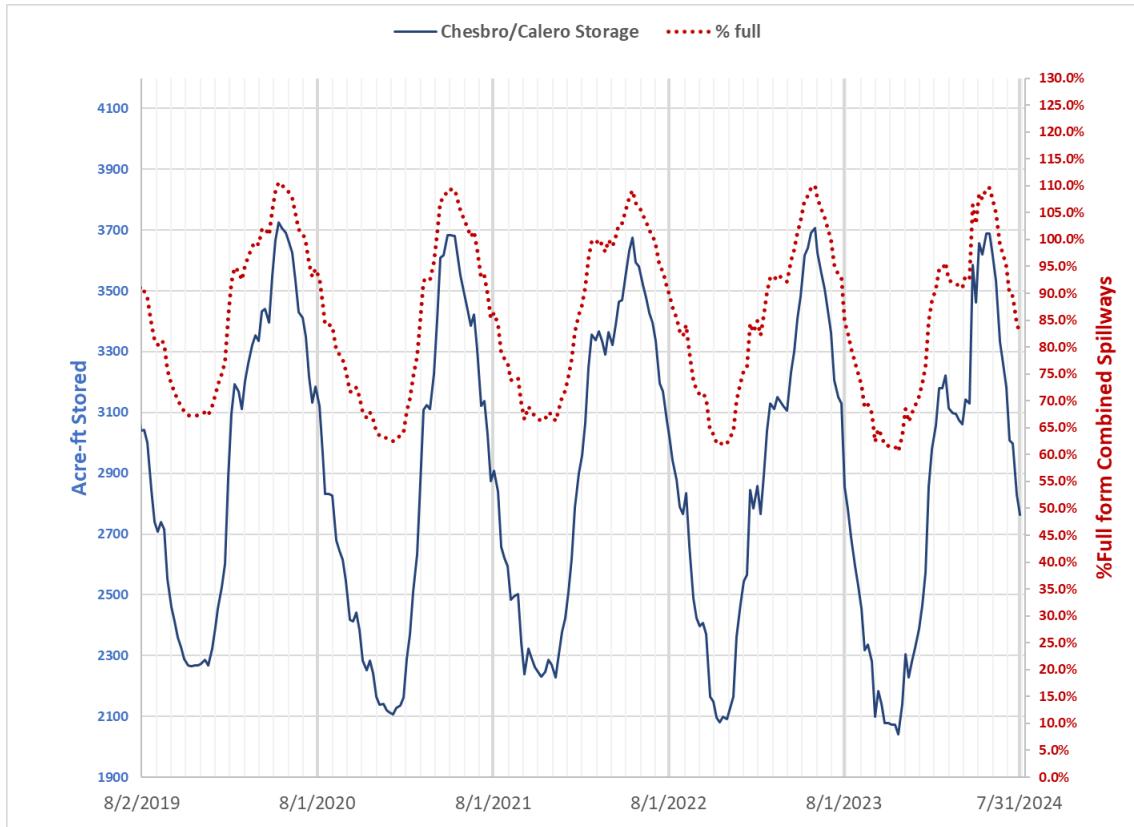
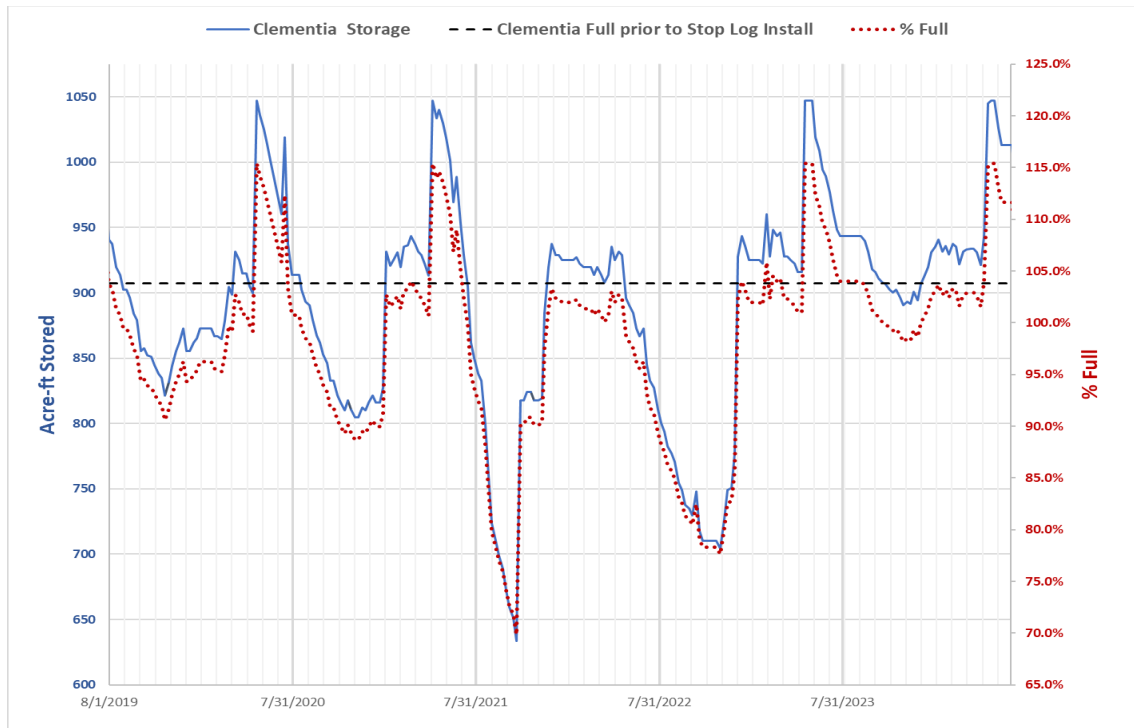


Figure 3. Five-year Clementia Storage Curves



## **SEWER**

### Wastewater Facility

The tertiary process of the wastewater facility is currently running at about .9 million gallons per day (MGD) and is currently sending water to the golf course. The current average influent flow to the wastewater facility for April was 0.38 MGD.

## **UTILITY CREW WORK**

### Utility activity report for July 2024

Utility field service crew responded to and completed the following.

- 1) The district had eleven work orders in the month of July. The work orders are for final reads, rebates, meter swap requests, issues with homeowner water usage concerns and water lock offs and or restore a water service.
- 2) USA North, we had 25 field markings for 811 USA locations completed. This is to mark RMCSO utilities before any dirt work is completed.
- 3) Homeowner Water Issues, we had five homeowners call in for water taste and odor complaints, the utilities crew flushed the distribution system in their areas, and it helped with the problem. Other issues were high water bill issues. Three homeowners complained of high-water bills. These turned out to be a water leak on the homeowner's side of the meter and they were notified that they would be responsible for repairing it.
- 4) District Water Issues, we had five water leaks to repair in the month of July. The water leaks had new service lines installed and or repaired.
- 5) Water Meter Work is on hold currently while looking into new water meter system for the district. Six water meters were installed at the Riverview development.
- 6) Sewer Issues, Utilities crew spent five days hydro jetting all the sewer main lines in unit six. This was for preventative maintenance along with preparing for unit six to have the contracted sewer camera person in to complete a NASSCO sewer pipe rating. This is to place a condition assessment on all the gravity sewer pipes in this area. There were several areas that needed work, and we are waiting for the report as of now.
- 7) Several days were spent cleaning the Chesbro protection ditch (V-Ditch) in the month of July along with cutting weeds in ditches.

## **FY 23-24 CAPITAL IMPROVEMENTS PROGRAM (CIP) UPDATE**

Information for capital projects has been updated for the current fiscal year 23-24. The attached matrix has been created to track and maintain the status of projects.

## SB 170 PROJECTS UPDATE

### **Water Treatment Facility Sodium Hypochlorite Conversion** – (No change since last month)

**Recycled Water Disinfection Project** – Dewberry has provided a 90% completion drawing. They will be focusing on getting the hypo conversion part of the drawing completed to be able to send to bid by September.

**Granlees Safety Improvements** – This project is scheduled to start in the first week of September. The contractor is waiting for parts to begin.

## DEVELOPMENT

### **Retreats**

**West** – This project was completed back in 2019.

Total build out lots: 22      Total Existing Connections: 22

**North & East** – The District has come to an agreement with the developer for the last 17 service connections based on the terms of the Interim Security Agreement.

Total build out lots: 62      Total Existing Connections: 45

**Residence of Murieta Hills East & West** – The Developer is finished with the rough grading. Veerkamp started doing the underground sewer line input throughout the whole development and started installing water main lines on August 12, 2024.

Total build out lots: 198      Total Existing Connections: 0

**Riverview** – Phase 1B is in the current construction phase for new homes. Phase 2 underground work has started with 95% of new sewer and water main lines installed. The drainage system is about 80% complete, and currently working on drainage inlets.

#### **Phase 1A/1B**

Total build out lots: 30      Total Existing Connections: 26

#### **Phase 2**

Total build out lots: 110      Total Existing Connections: 0

**Rancho North** – Currently there are no outstanding review items.

Total build out lots A-H : 697 (multiple phases)      Total Existing Connections: 0

Total build out lots 39-acre Parcel: 248 units including 160 multi-family units and 88 single family lots

Total Existing Connections: 0

**Murieta Gardens Commercial** – No Update

Total build out lots: 14

Total existing connections: 10

CIP MATRIX FY 23-24 as of July 11, 2024

								TOTAL PROJECT SPENDING						
Project Number	Project Name	Original FY 23-24 Project Budget	Added in FY 23-24	Total Approved FY 23-24	Amounts approved in prior year budget	Requested Funds to complete project	Total Estimate to Project Completion	Prior Year(s)	Current Year	Spent to Date	Balance from Current Project Budget	% Spent from original budget	% Spent from current est.	Estimated % Complete
WATER (200)														
23-04-01	Granlees Safety Rehabilitation	\$ 822,000		\$ 822,000	\$ -	\$ (176,005)	\$ 645,995	\$ 45,309	\$ 51,016	\$ 96,325	549,670	11.7%	14.9%	35%
23-06-01	Rio Oso Improvement Study	\$ 61,000	\$ -	\$ 61,000	\$ -	\$ -	\$ 61,000	\$ -	\$ 10,240	\$ 10,240	50,760	16.8%	16.8%	20%
23-10-01	WTP Chlorine to NaOCI Replacement	\$ 700,000	\$ -	\$ 700,000	\$ -	\$ 136,710	\$ 836,710	\$ 181,550	\$ 19,351	\$ 200,900	499,100	28.7%	24.0%	30%
23-20-01	*Integrated Water Master Plan (INCLUDED IN OPERATING BUDGET)	\$ 200,000	\$ 72,632	\$ 272,632	\$ 135,737	\$ -	\$ 408,369	\$ 108,058	\$ 243,566	\$ 351,624	56,745	175.8%	86.1%	70%
24-200-01	Water portion of CIP/5-year rate study (INCLUDED IN OPERATING BUDGET)	\$ 225,000	\$ -	\$ 225,000	\$ -	\$ -	\$ 225,000	\$ -	\$ 31,665	\$ 31,665	193,335	14.1%	14.1%	75%
24-200-03	Water GIS Updates	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ 7,275	\$ 7,275	17,725	29.1%	29.1%	29%
24-200-04	Water Condition Assessment	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -	30,000	0.0%	0.0%	0%
22-03-01	RIO OSO Pump Replacement	\$ -	\$ -	\$ -	\$ 165,009	\$ 5,645	\$ 170,654	\$ 165,009	\$ 5,645	\$ 170,654	(5,645)	103.4%	100.0%	100%
17-02-2	Dam inundation/EAP	\$ -	\$ -	\$ -	\$ 85,618	\$ 7,375	\$ 92,993	\$ 85,618	\$ 7,375	\$ 92,993	(7,375)	108.6%	100.0%	100%
W.WATER (250)														
23-11-02	Complete Lift Station Generator Projects	\$ 450,000	\$ -	\$ 450,000	\$ -	\$ -	\$ 450,000	\$ 9,123	\$ 15,098	\$ 24,220	425,780	5.4%	5.4%	10%
23-11-02	Complete Lift Station Rehabilitation Projects	\$ 300,000	\$ -	\$ 300,000	\$ -	\$ -	\$ 300,000	\$ 78,562	\$ 190,190	\$ 268,752	31,248	89.6%	89.6%	65%
23-14-02	Complete WWTF Chlorine to NaOCI & Contact Tank Rehabilitation	\$ 1,400,000	\$ -	\$ 1,400,000	\$ -	\$ (65,203)	\$ 1,334,797	\$ 141,922	\$ 50,997	\$ 192,919	1,207,081	13.8%	14.5%	25%
24-250-01	Wastewater portion of CIP/5-year rate study	\$ 175,000	\$ -	\$ 175,000	\$ -	\$ -	\$ 175,000	\$ -	\$ 15,556	\$ 15,556	159,444	8.9%	8.9%	75%
24-250-02	Wastewater GIS Updates	\$ 25,000	\$ -	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ 13,090	\$ 13,090	11,910	52.4%	52.4%	52%
24-250-03	Wastewater Condition Assessment	\$ 30,000	\$ -	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -	\$ -	\$ -	30,000	0.0%	0.0%	0%
24-250-07	Main Lift North Pump Replacement	\$ 65,000	\$ -	\$ 65,000	\$ -	\$ 6,775	\$ 71,775	\$ -	\$ 71,775	\$ 71,775	(6,775)	110.4%	100.0%	100%
24-250-08	Main Lift North Roof Repair	\$ 15,000	\$ -	\$ 15,000	\$ -	\$ -	\$ 15,000	\$ -	\$ -	\$ -	15,000	0.0%	0.0%	0%
23-16-02	Wastewater Drying Bed Pump Station Rehab	\$ -	\$ -	\$ -	\$ 75,000	\$ -	\$ 75,000	\$ 22,075	\$ 47,551	\$ 69,626	5,374	92.8%	92.8%	100%
23-23-02	Comminuter	\$ -	\$ 26,885	\$ 26,885	\$ 30,918	\$ -	\$ 57,803	\$ -	\$ 53,275	\$ 53,275	4,528	92.2%	92.2%	100%
ADMIN (100)														
22-09-04	Financial Software	\$ -	\$ -	\$ -	\$ 230,000	\$ -	\$ 230,000	\$ 93,683	\$ 3,765	\$ 97,448	132,552	42.4%	42.4%	TBD
SECURITY (250)														
23-19-03	Security Compound Replacement	\$ 250,000	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000	\$ 22,496	\$ -	\$ 22,496	227,504	9.0%	9.0%	0%
23-17-03	Security Cameras	\$ -	\$ -	\$ -	\$ 332,350	\$ -	\$ 332,350	\$ 48,601	\$ 4,681	\$ 53,283	279,067	16.0%	16.0%	TBD
<b>TOTALS (Budget/Funds Remaining/Spending to Date)</b>		<b>\$ 4,773,000</b>	<b>\$ 99,517</b>	<b>\$ 4,872,517</b>	<b>\$ 1,054,632</b>	<b>\$ (84,703)</b>	<b>\$ 5,842,446</b>	<b>\$ 1,002,004</b>	<b>\$ 842,111</b>	<b>\$ 1,844,116</b>	<b>\$ 3,907,028</b>			

**Approved Budget**

**\$ 4,773,000**

approved changes to CIP 23-24

**\$ 99,517**

Adjusted CIP Budget FY 23-24

4,872,517  
(99,517)

\*In March of 2023, Board approved ratifying the IWMP contract amount of \$295,000 and to amend the contract by \$40,737 for a total of \$335,737. In August of 2023, contract amendment #2 was approved for \$72,632 to bring the total budget to \$408,369.

# Rancho Murieta Community Services District

## September

### Board/Committee Meeting Schedule

#### September 3, 2024

Personnel	7:30 a.m.
Improvements	8:00 a.m.

#### September 5, 2024

Communications	9:00 a.m.
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#### September 18, 2024

Regular Board Meeting - Open Session	5:00 p.m.
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*All meetings will be held in person at the District Office: 15160 Jackson Rd.*



**From:** [Janis](#)  
**To:** [Mimi Morris](#); [Martin Pohll](#); [Randy Jenco](#); [Linda Butler](#); [Amelia Wilder](#); [Stephen Booth](#); [Tim Maybee](#); [Travis Bohannon](#)  
**Subject:** CSD engineer's comment.  
**Date:** Thursday, July 18, 2024 1:55:48 PM  
**Attachments:** [Augmentation+Well+-+Technical+Memo.pdf](#)

---

Hi Amelia,

Please include this email and attached well report in next month's Board packet and forward both to the CSD engineer. Thank you!

To Mimi Morris, Board Members and Travis Bohannon,

During the July 17, 2024 Board meeting, CSD's engineer stated that Rancho Murieta's water tank storage capacity shortfall might be resolved through the use of a backup well.

The two well test sites drilled in 2013 had unhealthy levels of iron and manganese. One also contained high levels of arsenic. Water from both wells would require treatment, before public usage. As a result, the well water would require storage in the water tanks, where the capacity shortfall already exists. Water from the subject wells cannot be pumped directly to the community.

In addition, the 2024 Draft Integrated Water Master Plan states that a 1,200 gpm well is required for the current population and a 2,000 gpm well would be needed for full build out. The well report goes on to say it may take two wells to generate 370 gpm

If a backup well is a realistic possibility, why did CSD's 1990 study state a backup well is not feasible due to underlying ground formations that are not conducive to producing enough ground water to sustain the community?

More importantly, if a well is a realistic solution, then why has Rancho Murieta been without a backup water supply since 1976-1977, when the original emergency plan failed?

Sincerely,  
Janis Eckard

Sent from my iPhone

**TECHNICAL MEMORANDUM  
PRODUCTION WATER WELL ASSESSMENT**

PREPARED FOR

**RANCHO MURIETA COMMUNITY SERVICES DISTRICT**

PREPARED BY:



**2945 Natomas Park Drive, Fourth Floor  
Sacramento, CA 95833**

**Project No.: SAB115703**

**December 12, 2013  
Revision 0**

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## APPENDICES

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APPENDIX C.....	LABORATORY ANALYTICAL REPORTS
APPENDIX D.....	DRAFT REQUEST FOR BID - TECHNICAL SPECIFICATIONS

## 0 EXECUTIVE SUMMARY

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A phased approach task order program was initiated by the Rancho Murieta Community Services District (RMCS D, Client, or District) in 2012. The program's goal is to find a sustainable ground water resource in RMCS D's service area. Dunn Environmental, Inc., An NV5 Company (DE) was retained by RMCS D to identify a suitable location for ground water well development.

Currently, RMCS D relies solely on surface water supplies from the Cosumnes River to meet water demand. Based on a water supply and demand analysis completed by RMCS D, surface water supplies may be augmented with ground water. Drought period planning indicated that 600 acre-feet annually, which correlates with a ground water yield of 370 gallons per minute (gpm), will meet projected water demand. Grant funding, which has been awarded to RMCS D through the State of California Local Ground Water Assistance Program, may be used to assist in ground water resource development to supplement existing supplies.

To prepare this Technical Memorandum, DE reviewed five previous hydrogeologic reports, area well logs, developed a preliminary hydrogeologic conceptual model for the work plan, performed a 2012 surface geophysical analysis using electrical resistivity profiles and completed two testholes in 2013, complete with downhole geophysical logging and limited water quality sampling.

### **Goal:**

- Identify ground water production areas within the confined alluvial basin located on the west margin of the RMCS D that support a demand of 600 acre-feet or 370 (gpm).

The primary investigation summary, findings and conclusions are as follows:

### **Summary and Findings:**

- Past ground water investigations, completed by others, generally supported a ground water well specific yield in excess of the anticipated ground water demand for drought preparedness of 600 ac-ft per year (which has been calculated by RMCS D);
- In 2012, surface geophysical electrical resistivity profiles, completed by NORCAL Geophysical Consultants, were generated to aid in determining the preferred geology and testhole locations. Two profile lines were completed using a Wenner array to generate a profile to 300 feet below grade surface (bgs). Findings from the profiles indicated that aquifer permeable sands and silts at

depth were overlain by less permeable clays across the study area. Paleo-channels were identified in the resistivity profiles as higher resistivity;

- Borehole geology, geophysical and water quality information were used to refine the hydrogeology and identify ground water production areas;
- Target geologic features for aquifer recharge, discharge and ground water production are detailed in Section 4;
- Water production zones were generally identified 180 feet bgs. Boring logs indicated basement as shallow as 375 feet in the area of primary interest and close to RMCS D's facilities;
- Based on previous investigations and resistivity profiles, two testhole locations were chosen to identify alluvial aquifers, shorten distance from existing pipeline features and determine specific capacities of a production well. The testholes were drilled in August and September 2013. Bedrock was encountered between 360 and 380 feet bgs in both testholes as metamorphic sedimentary and volcanic rock. Water production zones were identified between 180 and 300 feet bgs for the two testholes. Borehole and surface geophysical responses indicated that each testhole had significant layers with significant water production potential well yields ranging from 150 to 500 gpm;
- Water quality samples were collected from each testhole during the drilling phase. A total of five samples, three from the first testhole (TH-B) and two from the second testhole (TH-A), were collected. Two primary maximum contaminant level (MCL) exceedances were observed for parameter arsenic for TH-A. One secondary MCL exceedance for parameter iron was observed from 280 to 300 feet for TH-B. Five secondary MCL exceedances for parameter manganese were observed for the sampled zones.

### **Conclusions:**

- Up to two production wells may be necessary to achieve the stated well production goal. Production wells should be completed within 50-foot radius of the 2013 testhole locations. The production wells should be constructed with a nominal 8-inch-diameter PVC well casing to allow aquifer pump testing to accurately determine specific well yields. (Refer to the Recommendation Section and Figure 4 for proposed production well design.)
- Production well options:

- Option 1 – Complete one production well (PW-B) near the TH-B location. Construct production well and complete aquifer testing and water quality analysis. Based on the testhole drilling and water quality observed at the TH-B location, a test-well location (PW-B) is more likely to meeting the well production goal of 370 gpm. The nearest connection point to the distribution system is approximately 3,000 feet away, based on a preliminary estimate of \$100/foot for pipeline construction; cost may exceed \$300,000 for the conveyance pipeline alone.
- Option 2 – Complete production well (PW-A) near the TH-A location. Construct production well and complete aquifer testing and water quality analysis. Based on the findings of the first production well, the District can evaluate whether a second production well is necessary near the TH-A site to meet the well production goal of 370 gpm.

# 1 SETTING AND PURPOSE

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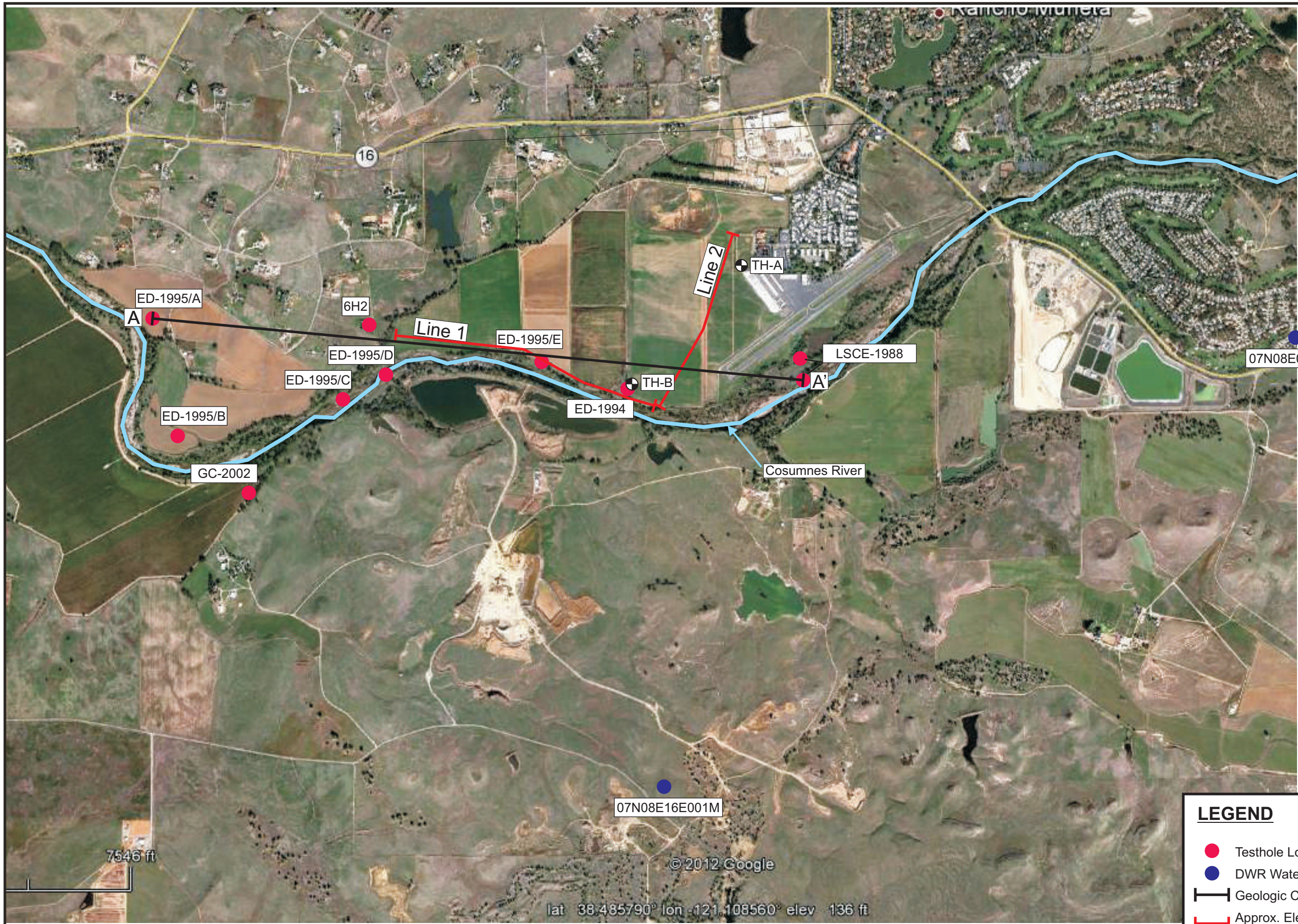
The DE/DA Team was retained by RMCS D to assist with identifying a suitable location for ground water well development. RMCS D relies solely on surface water supplies from the Cosumnes River to meet water demand. As part of RMCS D's drought preparedness plan, the District plans to construct a ground water well or wells to augment surface water supplies during drought years. Grant funding through the State of California Local Ground Water Assistance Program, which has been awarded to RMCS D, may be used to assist in ground water resource development.

RMCS D provides essential services, including drinking water, to the community of Rancho Murieta. RMCS D serves an area of approximately 3,500 acres, which includes about 2,500 households, and an estimated population of 6,000. The RMCS D service area is located in the eastern margin of the Sacramento River Valley, within Sacramento County, approximately 21 miles southeast of downtown Sacramento. State Highway 16 runs through the RMCS D service area and is a major traffic artery connecting Sacramento with Sierra Foothill communities. Surface elevation within the service area ranges from 200 feet Mean Sea Level (MSL) in the east to 120 feet MSL in the west. The Cosumnes River is a significant surface water feature in the general area and drains from east to west; it is fed mainly by rainfall run off and snowmelt from the Sierra Nevada. The Cosumnes River is currently the sole source of drinking water. Surface water is stored and treated in several off-stream reservoirs. The river course is depicted in Figure 1.

Land use to the east of Highway 16 is characterized by residential development and the Rancho Murieta Golf Course. To the west of Highway 16 limited residential and commercial land use is present. The Rancho Murieta Airport, Equestrian Center and irrigated agriculture are the dominant land uses east of Highway 16. Major soil types in the area include the Hadselville-Pentz complex, Keyes sandy loam, Mokelumne gravelly loam, Pardee-Ranchoseco complex and Vina fine sandy loam. These soils are typically well-drained. However, bedrock is commonly found in the near surface and may limit ground water recharge potential.

The DE/DA Team presented a phased approach proposal on June 22, 2012, for the investigation effort. The proposal was approved at the July 18, 2012 RMCS D board meeting and a contract was issued. A draft Technical Memorandum was prepared as a deliverable, per Tasks 1 and 2 of the contract. A second draft Technical Memorandum was provided to RMCS D in the fall of 2012 for review of activities completed through that time period. This Technical Memorandum has been updated to include the 2012 and 2013 investigation findings.



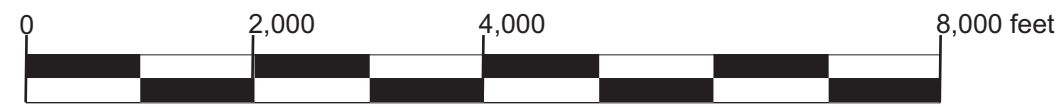


**LEGEND**

- Testhole Location (Approx.)
- DWR Water Level Well (Approx.)
- Geologic Cross Section
- Approx. Electrical Resistivity Profile Location
- Proposed Testhole Location

SITE MAP WITH CROSS SECTION LINE,  
GEOLOGICAL PROFILES AND TESTHOLE  
LOCATIONS  
RANCHO MURIETA CSD  
SACRAMENTO COUNTY, CALIFORNIA

DATE: 12/02/2013
SCALE: 1"=1,680'
PROJECT NO: 157-03
DRAWN: JF, MM
CHECKED: PFD
FIGURE: 1



lat 38.485790° lon -121.108560° elev 136 ft

© 2012 Google

7546 ft

## 2 REGIONAL GEOLOGY AND HYDROGEOLOGY

---

RMCS D is located along the eastern margin of the South American subbasin of the Sacramento Valley Ground Water Basin (Ground Water Basin No. 5-21.65). The South American subbasin is bounded on the north by the American River, to the west by the Sacramento River, to the south by the Mokelumne and Cosumnes Rivers and the Mesozoic basement rocks of the Sierra Nevada Foothills to the east. The ground water resources of the South American subbasin are described in considerable detail in Bulletin 118, Individual Basin Description. The surface geologic map indicates that the Modesto Formation, Mehrten Formation, Valley Springs Formation and Salt Springs Slate are located within close proximity to the site. The eastern margin of the South American subbasin is characterized by non-water bearing Jurassic-age Salt Spring Slate Formation (Jss) (see Figure 2). The Salt Spring Slate consists of metamorphosed sedimentary rocks on which water-bearing formations were deposited.

Significant recharge and water bearing geologic formations within the subbasin are described as follows:

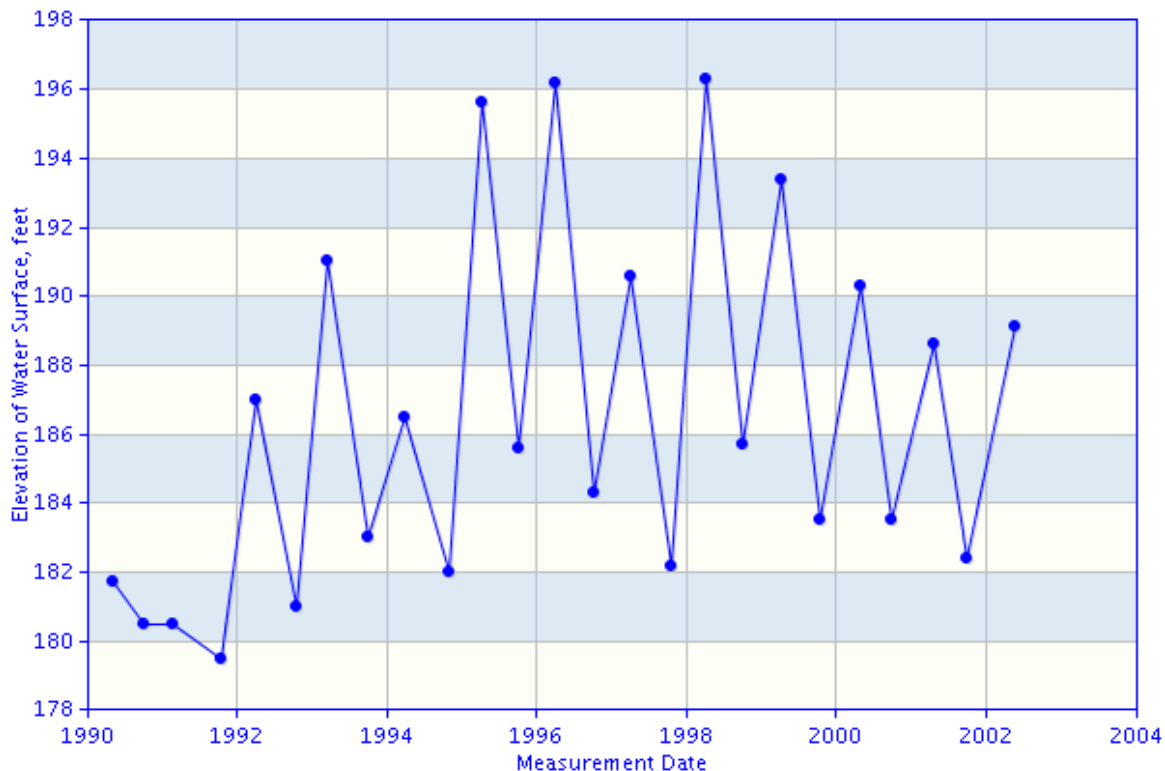
- Older alluvium consists of loosely to moderately compacted sand, silt and gravel deposited in alluvial fans during the Pliocene and Pleistocene. In the study area (Figure 2), these deposits are identified as the Modesto Formation (Qm2) and Riverbank Formation (Qr). These units are moderately permeable, however. Due to the shallow nature, ground water quality impacts from agriculture or other man-made activities are common.
  - Alluvial and Tertiary Sand and Gravel Erosional and Depositional Sequences – As documented throughout the Sierra Foothills, and of significance hydrogeologically, are the erosional and depositional sequences that contain significant sand and gravels from historical channel deposition within the laterally confined alluvial basins.
- The Mehrten Formation (MPm) underlies the Modesto and Riverbank Formation and outcrops along the eastern edge of the subbasin and consists of interbedded clays, silts, “black sands” and gravels. Mehrten Formation sands and gravels are permeable and have known water well high specific yields. Additional sands and gravels related to alluvial systems and buried stream channels may provide additional aquifer recharge potential and target zones for water well production.
- Valley Springs Formations (Mvs) and Ione Formation (Ei) exist beneath the Mehrten Formation and are thought to be a transitional aquifer system. The Ione

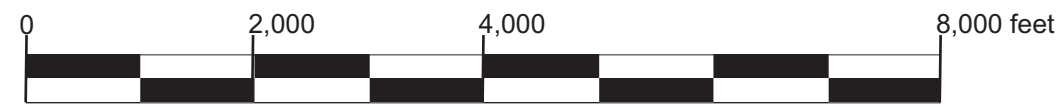
Formation has limited sands and gravels regionally, and this formation is known for extensive fine-grained, silty, clay layers.

## 2.1 GROUND WATER LEVEL INFORMATION

Two historic monitoring wells were identified close to the RMCSD on the Department of Water Resources website. The first monitoring well (07N08E16E001M) has water level data from 1968 to 1970 and indicates water levels between 110.5 and 113.5 feet MSL. As depicted in Figure 1, the well is located approximately 1.5 miles south-southwest of the Rancho Murieta Airport. The second monitoring well (07N08E02L001M, depicted below) has water level data from 1990 to 2002. It was destroyed in 2002. The well is located approximately 1.5 miles east of the Rancho Murieta Airport. The well is identified as a stock well. Monitoring data indicates water levels fluctuate between 179 to 197 feet MSL. Water level drops and increases of up to 14 feet have been observed historically. These water level responses support a non-overdraft condition (or stable water conditions) within this part of the basin.

**Ground Water Level Data**  
**Well 07N08E02L001M (Ground Surface Elevation 198 feet MSL)**





LEGEND	
af	Artificial Fill
Qa	Alluvium
Qm	Modesto Formation
Qr	Riverbank Formation
PI	Laguna Formation
MPm	Mehrten Formation
Mvs	Valley Springs Formation
Ei	Ione Formation
Jss	Salt Spring Slate Formation
● (Red)	Testhole Location (Approx.)
● (Blue)	DWR Water Level Well (Approx.)
—	Geologic Cross Section
— (Red)	Approx. Electrical Resistivity Profile Location
⊕	Completed Testhole Location

GEOLOGY MAP WITH CROSS SECTION LINE,  
 GEOPHYSICAL PROFILES AND TESTHOLE  
 LOCATIONS  
 RANCHO MURIETA CSD  
 SACRAMENTO COUNTY, CALIFORNIA

DATE: 12/02/2013  
 SCALE: 1"=1,680'  
 PROJECT NO: 157-03  
 DRAWN: JF, MM  
 CHECKED: PFD  
 FIGURE: 2



### 3 PREVIOUS INVESTIGATIONS

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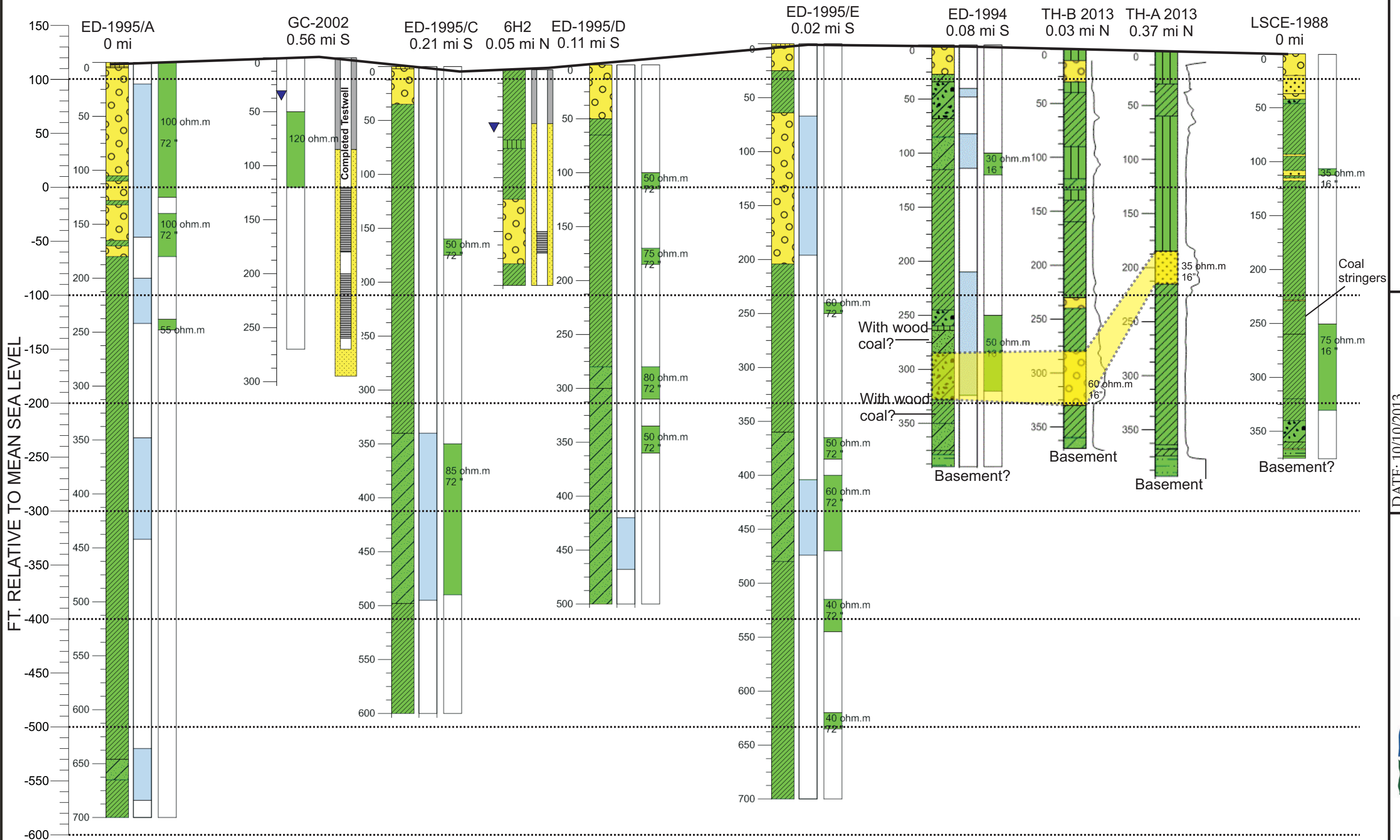
Several previous investigations have been conducted on the potential for ground water resources in the RMCSD area. Investigation reports dating from 1988 to 2003 were reviewed. The following summarizes these reports:

- 1988 Ludhorff & Scalmani Consulting Engineers: Myers Bros Well Drilling completed two testholes south of the Rancho Murieta Airport near the Cosumnes River. Downhole geophysical was completed by Welenco and was available for review. The investigation report, if one was prepared, was not available for review.
- 1994 Eaton Drilling & Helmick-Lerner: Eaton Drilling completed a testhole to a depth of 390 feet. The consulting firm Helmick & Lerner completed a Testhole Log Interpretation Report and zones for water-well development were identified from 240 to 330 feet bgs.
- 1995 Eaton Drilling & Helmic-Lerner: Eaton Drilling completed an additional five testholes to depths ranging from 500 to 700 feet bgs. Driller's logs and partial geophysical logs for the five testholes were available for review.
- 2002 GeoConsultants: Electrotulleric soundings were completed for 17 locations; one location was selected for testhole drilling and sampling. Electrotulleric logs, boring log and downhole geophysical logs were reviewed.
- 2003 HDR: Completed a review of previous work and available regional hydrogeologic information. No additional testholes were completed as part of this investigation.

#### 3.1 1988 – LUDHORFF & SCALMANINI

During 1988, Ludhorff & Scalmanini Consulting Engineers (LSCE) directed the completion of two testholes south of the Rancho Murieta Airport, north of the Cosumnes River. Refer to Figure 1 for testhole locations. A well driller's log and geophysical log were available for Testhole No. 1 (southern testhole shown on Figure 1). The testhole was completed to 375 feet bgs. The well driller's log identified the following sand or gravel intervals: 9 to 42, 93 to 95, 108 to 113, 115 to 118, 228 to 229 and 366 to 367 feet. Based on the geophysical log, potential sand and gravel (high resistivity zones) were identified from 0 to 40, 56 to 60, 104 to 114, 220 to 224 and 250 to 332 feet. Based on the testhole findings, basement was encountered at 367 feet. LSCE estimated the encountered strata could achieve production of 400 to 500 gpm, but below the 1988 stated project goal of 1,000 to 1,500 gpm. Geologic formations encountered were interpreted as follows: Modesto Formation from 0 to 118 feet, Valley Springs 118 to 220 feet and Ione Formation 220 to 367 feet. Refer to Figure 3 for a depiction of the LSCE-1988 boring.

**A - WEST** Note: Boreholes are projected onto the cross section line and geologic unit correlation depicted in the figure may not accurately represent real world spatial relationships between boreholes. **A' - EAST**



HYDROGEOLOGIC CROSS SECTION A-A'  
 RANCHO MURIETA CSD  
 SACRAMENTO COUNTY, CALIFORNIA

DATE: 10/10/2013  
 SCALE: Horz 1":900', Vert 1":84'  
 PROJECT NO: 157-03  
 DRAWN: MM/JF/CT  
 CHECKED: PFD  
 FIGURE: 3



### **3.2 1994 & 1995 – EATON DRILLING**

Eaton Drilling in association with Helmick-Lerner, completed a total of six testholes between 1994 and 1995. Well driller's logs and downhole geophysical logs were available for review; however, geophysical logs were not available for the entire borehole depth of each completed testhole. In 1994 Eaton completed the testhole shown on Figure 1 as ED-1994. The testhole was completed to 390 feet bgs and well driller and geophysical logs were available. The well driller's log identified sand and gravel horizons from 2 to 27 and 68 to 115 feet. Below 115 feet, sand and gravel were found with significant amounts of clay present. The Helmick-Lerner assessment identified zones for ground water production development from 40 to 48, 82 to 114 and 210 to 324 feet. The referenced investigation concluded that a production well with screen from 240 to 330 feet bgs will have an estimated production capacity of 500 gpm, comparable to the 2013 test-hole findings. Refer to Figure 3 for a depiction of this information.

During the summer of 1995, Eaton Drilling completed an additional five testholes to evaluate ground water resources. Testholes were completed to depths of 500 to 700 feet. Refer to Figure 1 for a depiction of testhole locations shown as ED-1995/A through ED-1995/E. A testhole evaluation prepared by Helmick-Lerner identified four potential water-bearing formations in testhole ED-1995/A, found between 20 and 684 feet bgs; thickness ranged from 42 to 142 feet. Testholes ED-1995/B, C and D each found one water-bearing formation. The depth of water-bearing formations ranged from 70 to 468 feet bgs and thickness ranged from 45 to 155 feet. Testhole ED-1995/E encountered two water-bearing formations from 67 to 196 and 404 to 474 feet. Refer to Figure 3 for depiction of the depth information. The Eaton Drilling cover letter concluded that, based on the available data completed, production wells would not meet the 1995 stated project goal of 2,000 gpm.

### **3.3 2002 – GEOCONSULTANTS**

In 2002, two separate work efforts were completed by GeoConsultants to investigate ground water resources in the area. In late 2001, electro-tulleric soundings were completed at 17 sites around the RMCS D service area. Electro-tulleric soundings estimated the depth and thickness of saturated horizons below the surface. The most promising electro-tulleric site was selected to complete a testhole and water well. The location of the testhole is shown as GC-2002 on Figure 1. The testhole was completed to 295 feet bgs; Mehrten Formation was identified above 190 feet bgs. The testhole was reamed to 12-inches diameter and a testwell constructed using 6-inch-diameter casing. The testwell had 120 feet of screened interval at 120 to 180 and 200 to 260 feet. Refer to Figure 3 for the testhole and well completion information.

Once the testwell development was done, constant rate aquifer testing was completed. Static water level before the pump test was 39.00 feet bgs, water level declined to 63.95 feet bgs or 24.92 feet of drawdown. Average pump rate over the 24 hours was 108.19 gpm. During recovery, the well achieved 97 percent recovery within 2 hours of pump shutdown. The calculated specific capacity is 4.3 feet/gpm. Based on the pump and recovery test average transmissivity was estimated as 14,317 gallons per day(gpd)/foot. Save yield for 6 inch diameter well was estimated as 350 gpm.

GeoConsultants collected field parameters during the pump test. The report indicates that RMCSD staff collected a water sample near the end of the 24-hour test. However, water quality data was not included in the report.

### **3.4 2003 – HDR**

In 2003, HDR complete a review of four different drought preparedness options. Three options included new or increased surface reservoir storage and one option evaluating ground water resource options. Options ranged from \$3.5 to 41.2 million in cost. No new ground water investigation boreholes were completed as part of this work effort.



## 4 CONCEPTUAL HYDROGEOLOGIC MODEL

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The 2010 updated geologic map of the project area is presented on Figure 2. The geologic map shows the Mesozoic basement rocks to the east of Highway 16 and north of the Cosumnes River. Based on the geologic map, Cenozoic units have an estimated regional dip of 4.5° to the southwest (400 feet drop over approximately 1 mile). The previous testhole investigations identified basement rock at depths ranging from 360 to greater than 700 feet bgs. Target geologic features for aquifer recharge, discharge and ground water production can be summarized as follows:

- Well sites are located in the existing Cosumnes River alluvial basin.
- Sand and gravel horizons have been identified with depth above basement material.
- The alluvial paleo-channel target horizons consist of the sand and gravel units within the Mehrten, Valley Springs and Ione Formations. The Hydrogeologic Cross Section A-A' presented in Figure 3 shows the presence of potential water bearing formations to depths greater than 400 feet bgs.
- Water bearing units range in thickness from 10 to 50 feet.
- Due to potential erosional features and a regional dip to the southwest, water bearing formations are expected be better developed further west than near bedrock highs.
- Testholes LSCE-1988 and ED-1994 noted the presence of coal or lignite layers below 250 feet. Water quality may be adversely affected by the presence of these formations.
- Stratified sequences of paleo-channel sand and gravels facilitate recharge and water well production areas.
- Surface geophysical Electrical Resistivity (ER) profiling was completed. ER profiles identified high-resistive material from surface to 50 feet bgs. This resistive material is correlated to the sand and gravel deposits identified in previous testholes. Resistive material is typically underlain by layers of less resistive material ranging in thickness from 50 to 200 feet and is interpreted as fine-grained material identified in testholes. Resistivity increases with depth, with the interval from 200 to 300 feet bgs typically more resistive than the immediately overlying unit. This increased resistivity was correlated to sand and gravel horizons in testhole ED-1994 and the testhole TH-B location.

The resistive material at surface is interpreted to be the Modesto and Riverbank Formation with possible Mehrten Formation at the western portion of Profile Line 1. This interpretation is based upon the Modesto Formation deposits at surface for both the profile locations as shown on Figure 1. The Mehrten and Valley Springs contact as shown on Figure 1 can be projected through the Modesto deposits and intersects the

Profile Line 1 approximately midway. The low-resistive material below the Modesto/Mehrten formations is interpreted to include the fine grained members of the Valley Springs and Ione Formations. The moderately resistive material present at the base of the profile is interpreted to be interbedded sands within the Ione clays.

## 5 SURFACE GEOPHYSICS AND TESTHOLE DRILLING

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### 5.1 SURFACE GEOPHYSICS RATIONALE – 2012

Based on the previous investigations, the conceptual hydrogeologic model, and in consultation with NORCAL Geophysical Consultants, surface ER profiling was selected to assist in identifying preferred hydrogeology and testhole locations for future production well development. ER profiling has historically been successful in identifying electrically resistive layers or buried stream channel deposits to depths of 300 feet bgs. Two geophysical profiles, Line 1 and 2, are shown on Figure 1 and Appendix B – Plate 1.

Geophysical profile Line 1 has a general east-west orientation and was completed sub-parallel to the regional dip. The profile covers approximately 5,000 feet and passes through the vicinity of testholes ED-1994 and ED-1995/E. This profile identifies potential water-bearing horizons along dip direction.

Geophysical profile Line 2 was completed in a north-south orientation nearly parallel to regional strike. This profile assists in identifying buried migrating stream channels with depth. The profile covers approximately 3,500 feet and passes through the vicinity of testhole ED-1994.

The completed geophysical profiles are used to refine testhole locations and target areas of high resistivity, which can be correlated to sand and gravel horizons.

### 5.2 METHODS

The ER survey was conducted from August 21 through 24, 2012, by NORCAL Geophysical Consultants of Cotati, California (NORCAL). ER surveys were completed for profiles Line 1 and Line 2, which were 4,950 and 3,480 feet in length respectively. Figures produced by NORCAL are included in Appendix B as Plates 1 through 3. Refer to the Appendix B – Plate 1 for the location of each line. Geophysical interpretation and the resistivity profiles are provided as Plate 2 and Plate 3.

The ER survey was completed as a Wenner array of 56 electrodes. Electrode spacing was 30 feet. Data acquisition was completed using an Advanced Geosciences Inc. (AGI) SuperSting R1 IP Earth Resistivity/IP Meter. The profiles were located and staked in the field using an aerial photo map and a 300-foot-measuring tape. Completed profiles were surveyed by NORCAL using a Trimble GEOXH6000 handheld GPS. Data processing to determine the best fit model was completed using EarthImager, written by AGI of Austin, Texas. Contoured ER profiles were generated using Surfer 9.0, written by Golden Software of Golden, Colorado.

### 5.3 2012 SURFACE GEOPHYSICAL FINDINGS

The general features of the two profiles are similar. High resistivity material (greater than 30 ohm-m) exists from 0 to 100 feet of ground surface, underlain by approximately 50 to 200 feet of low-resistive material or clay (less than 11 ohm- m), with moderately resistive material (greater than 11 and less than 30 ohm-m) from 200 to the maximum depth of the profile at 300 feet. Higher resistive sediments are observed with depth. Note that with depth, geophysical resolution does decrease due to the stratigraphic variation and the averaging of resistive nature of the overlying sediments. The ability to identify thin, interbedded layers of gravel with depth is limited with this investigation tool.

#### RESISTIVITY PROFILE LINE 1

Along the eastern half of the profile, near-surface, high-resistive units (greater than 80 ohm-m) attain a thickness of up to 100 feet. To the west, these near-surface deposits thin to 25 to 50 feet thick deposits and are also less resistive (30 to 80 ohm-m). A section of moderately resistive material is present at surface from 2,000 to 2,400 horizontal feet. The low resistive layer (less than 11 ohm-m) is present 50 to 100 feet bgs, and attains thickness of 125 to 200 feet. The contours between this low resistive layer and overlying moderately resistive material undulate, a possible indication of an erosive contact and penetration to depth. This low resistive layer is not horizontally continuous at two locations: Stations 1,800 and 2,700 feet. Moderately resistive material exists at the base of the profile, appearing at depth of 175 feet bgs or greater.

#### RESISTIVITY PROFILE LINE 2

At surface, deposits of up to 50 feet in depth of higher resistivity (greater than 50 ohm-m) material are present. Moderately resistive (22 to 50 ohm-m) material is sporadically present at surface at the northern 1,200 feet of the profile. A low-resistive layer, approximately 50 to 200 feet in thickness, is present at depths of 50 to 100 feet bgs. This low-resistive layer is thickest from Station 1,600 to 2,700 feet horizontal, is approximately 50 to 100 feet thick at the southern end, and pinches out at the northern end. Moderately resistive material is present below the low resistive clay layer. This moderately resistive layer is dominant from 400 to 1,200 horizontal feet and resistivity ranges up to approximately 25 ohm-m, and appears at 100 to 150 feet bgs at the northern end of the profile.

## REFINED CONCEPTUAL MODEL AND DATA OBJECTIVES

One of the data objectives of the surface geophysics is to identify basin wide sequences and variations which may indicate preferred bedding, erosion patterns and infill deposits that will increase both the production capacity and sustainability of a ground water resource. Both geophysical profiles depict, in general, a bedded sequence of the coarse grained deposits, underlain by a thick low permeable (low resistivity) clay bed and then further by a higher permeable interbedded sands and silts. Inference from the resistivity increases with depth support—a coarsening downward sequence from approximately 50 feet bgs to a depth of 300 feet bgs.

Paleo-channels or historic tertiary sand and gravel resistive features have been identified near RMCSD. The increased resistivity noted on Line 1, included as Appendix B – Plate 2, at Station 1,850 feet can be interpreted as a paleo-channel. This is due to the u-shaped nature of the feature and the increased resistance relative to the surrounding material. The increased resistivity at Station 2,700 feet does not display the same u-shape, but can also be interpreted to be an erosional feature associated with fluvial processes.

The geophysical profile results corroborate the boring log and areas of interest indicated in Figure 3. Permeable sediments are generally correlated with resistive layers, and zones of interest identified by Eaton and DE are correlated with increased resistivity. The sandy clays and gravel and clays identified in the ED-1994 boring log from 250 to 300 feet bgs are correlated to the moderately resistive materials (11 to 30 ohm-m) seen near the bottom 50 to 100 feet of the resistivity profile. The surficial gravels found at ED-1995/E are reflected in resistivity profile Line 1. Borehole geophysics of ED-1995/E identified downhole geophysics resistivity exceeding 50 ohm-m from 60 to 205 feet bgs. This interval is described on the driller's log as silty, sandy gravel. This interval corresponds to the increased surface ER noted at Line 1, Station 2,700 feet.

ER profile Line 2 shows formations within the 50 to 100 feet bgs have resistivity above 50 ohm-m, which corresponds to the near surface sand and gravel layers identified in testholes and Line 1. The increased resistivity observed on Line 2, included as Appendix B – Plate 3, from Station 400 to 1,200 feet can be correlated to sand and gravel deposits. From Station 2,800 feet to the end of Line 2, increased resistivity is observed within 50 to 250 feet bgs. This increased resistivity can be correlated to sand and gravel units. It is important to note that Jurassic basement material can also result in increased resistivity. Basement material was found at 380 feet bgs in ED-1994; several testholes completed for the Elk Grove Unified School District northwest of Jackson Rd and Stonehouse Rd found basement material from 20 to 200 feet bgs; the surface geologic map (Figure 2) identifies basement less than 5,000 feet east of Line 2. The presence of

basement material above 300 feet bgs may also result in increased resistivity noted in the north end of Line 2.

The refined conceptual model from the geophysics was used to locate the referenced 2013 testholes. Target depths were between 200 and 600 feet for the 2013 drilling program.

## **5.4 2013 TESTHOLE DRILLING, WATER QUALITY SAMPLING DURING DRILLING AND DOWNHOLE GEOPHYSICS**

### **5.4.A FIRST TESTHOLE (TH-B)**

Testhole drilling was performed by Fredrick Well Drilling of Jackson, California, C-57 License Number 333800. Testhole drilling activities were initiated on August 20, 2013 at location TH-B (refer to Figure 2). A temporary conductor casing was installed to 40 feet on August 20th. Drilling at TH-B was completed using a T3W rig. Air rotary techniques were used to a depth of 340 feet bgs where a gravelly sand sequence was encountered, which caused the driller concerns regarding borehole stability. The driller switched to a mud-rotary technique and continued drilling from 340 feet bgs on August 30, 2013. The total depth of 378 feet was reached on August 30th with refusal to very hard metamorphic bedrock. A geophysical log was run after drilling was completed. Geophysics consisted of temperature, gamma, 16- and 64-inch normal and SP logs and was performed by West Coast Well Logging Services of Rancho Cordova, California. Water producing zones of sandy gravel or gravelly sand were encountered from 230 to 240 feet bgs and 280 to 330 feet bgs and were confirmed with geophysical logging. Wood fragments were noted from 240 to 280 feet bgs.

Three water samples were collected from TH-B on August 20, 2013: the first was collected at first-encountered water (110 to 120 feet bgs) with a flow of 30 gpm, the second was collected at 230 to 240 feet bgs with a cumulative flow of 60 gpm, and the final sample was collected from 280 to 300 feet bgs, with a cumulative flow of approximately 150 gpm. Water quality results are presented in Table 1 and are discussed in more detail below. TH-B was abandoned as per Sacramento County Well Permit requirements, from the borehole bottom to surface on September 10, 2013 using 10.3 sack cement slurry. A representative from the Sacramento County Environmental Management Department (SCEMD) was present for the abandonment.

### **5.4.B SECOND TESTHOLE (TH-A)**

Drilling activities at TH-A (Figure 2) were initiated on September 13, 2013 using air-rotary techniques. A sand interval encountered at 185 feet bgs resulted in a switch to mud rotary drilling techniques at a depth of 200 feet bgs. Drilling using mud rotary

commenced on September 14th and the total depth of 393 feet bgs was reached on September 17th. A geophysical log was run after drilling was completed on September 17th and consisted of temperature, gamma, 16- and 64-inch normal and SP logs. Geophysical logging was performed by West Coast Well Logging Services of Rancho Cordova, California. A water producing zone of sand was encountered from 185 to 215 feet bgs and was confirmed with geophysical logging.

Two water samples were collected from TH-A on September 13, 2013: the first was collected at 100 feet bgs with a flow of 20 gpm and the second was collected at 200 feet bgs with a cumulative flow rate of 100 gpm. Water quality results are summarized in Table 1 and discussed in detail below. TH-A was abandoned on September 18th using 10.3 sack cement slurry as required by the Sacramento County Well Permit. A representative from SCEMD was present for the abandonment.

## **5.5 TESTHOLES FINDINGS AND SURFACE GEOPHYSICAL PROFILES**

Borehole geologic logging and downhole geophysical findings support the surface geophysics and hydrogeologic conceptual model. Both TH-A and TH-B encountered significant sand layers with depth. TH-A is located at Station 2960 feet on Line 2, which shows increasing resistivity with depth. For Line 2, it appears that the 11 ohm-m surface resistivity is a good indicator of sand or gravel material that is laterally continuous.

Testhole TH-B is located near ED-1994 shown on Line 1. Line 1 shows increased resistivity with depth and 11 ohm-m resistivity contour line shown at 220 feet bgs on Line 1 corresponds with the first significant sand units observed in TH-B at around 230 feet bgs.

The hydrogeologic cross section shown on Figure 3 shows a correlation between sand layers found in TH-A and TH-B and ED-1994. Based on the horizontal distance between the boreholes, the apparent dip is 2°; this is consistent with a regional dip of approximately 4°. The depth of water-bearing sand ranges from 180 to 270 feet in depth and thickness ranges from 30 to 50 feet.

## **5.6 GROUND WATER SAMPLING RESULTS**

Water quality grab samples were collected during the air rotary phase of the testhole drilling and submitted to California Laboratory Services of Rancho Cordova, California under chain-of-custody documentation. Grab samples were collected from the borehole returns. Temporary well casing installations were not used and the water quality reflects a composite of water producing zones at the point of sampling. Elevated turbidity required the completion of laboratory filtering of water samples. Upon receipt

by the analytical laboratory, samples were laboratory filtered to reduce potential elevated metals related to the turbidity of the samples. Field parameters of pH, specific conductance, temperature and turbidity were also collected for the sampled zones.

Field parameters for TH-B were as follows: pH ranged from 6.56 to 8.27, conductivity ranged from 409 to 497  $\mu\text{S}/\text{cm}$ , temperature ranged from 19.57 to 19.85  $^{\circ}\text{C}$ , and turbidity ranged from 259.0 to 974.3 NTU.

Field parameters for TH-A were as follows: pH ranged from 8.18 to 8.23, specific conductance ranged from 576 to 639  $\mu\text{S}/\text{cm}$ , temperature ranged from 21.9 to 23.5  $^{\circ}\text{C}$ , and turbidity was noted as cloudy.

**Table 1**  
**Water Quality Results – Selected Parameters**  
**RMCS D Testhole Drilling**

Sample Name			TH-A 100	TH-A 200	TH-B 110-120	TH-B 230-240	TH-B 280-300
Sample Date			9/13/2013	9/13/2013	8/20/2013	8/20/2013	8/20/2013
Parameter	Units	MCL†					
pH (Field)		6.5-8.5*	8.18	8.23	6.56	8.27	8.18
Specific Conductance (Field)	$\mu\text{S}/\text{cm}$	900*	576	639	439	409	497
Temperature (Field)	$^{\circ}\text{C}$		21.9	23.5	19.70	19.57	19.85
Turbidity (Field)	NTU	5	Cloudy	Cloudy	974.3	259.0	278.1
Chloride	mg/L	250*	8.6	85	19	18	43
Fluoride	mg/L	2	0.20	0.16	0.13	0.19	0.15
Nitrate as NO <sub>3</sub>	mg/L	45	4.4	<0.50	0.72	0.56	13
Sulfate	mg/L	250*	55	120	140	110	120
TDS	mg/L	500*	290	420	390	390	420
Arsenic	mg/L	0.01	<b>0.018</b>	<b>0.013</b>	0.0029	0.0053	0.0032
Calcium	mg/L		23	30	36	34	22
Iron	mg/L	0.3*	<0.100	<0.100	<0.100	<0.100	<b>0.5</b>
Magnesium	mg/L		13	11	13	9.7	9.1
Manganese	mg/L	0.05*	<b>0.15</b>	<b>0.12</b>	<b>0.37</b>	<b>0.14</b>	<b>0.33</b>
Potassium	mg/L		3.8	5.1	3.6	4.4	2.1
Sodium	mg/L		33	83	33	36	72

† CCR Title 22 Section 64431 and 64449 MCL

\* Title 22 Secondary MCL, Values are dissolved analyses except for the field parameters.

Water quality results, provided in Table 1, were as follows: chloride ranged from 8.6 to 85 mg/L, fluoride ranged from 0.13 to 0.20 mg/L, nitrate as NO<sub>3</sub> ranged from 0.56 to 13



mg/L, sulfate ranged from 55 to 140 mg/L, total dissolved solids ranged from 290 to 420 mg/L, arsenic ranged from 0.0029 to 0.018 mg/L, calcium ranged from 22 to 36 mg/L, iron ranged from non-detect to 0.500 mg/L, magnesium ranged from 9.1 to 13 mg/L, manganese ranged from 0.12 to 0.37 mg/L, potassium ranged from 2.1 to 5.1 mg/L and sodium ranged from 33 to 83 mg/L. Refer to Appendix C for analytical laboratory reports.

Water quality was compared to California Code of Regulations (CCR) Title 22 Maximum Contaminant Limit (MCL). Two primary MCL exceedances were observed for parameter arsenic for TH-A. One secondary MCL exceedance for parameter iron was observed from 280 to 300 feet for TH-B. Five secondary MCL exceedances for parameter manganese were observed for samples collected from both TH-A and TH-B.

Water quality sampling shows that both testhole locations would require some form of water treatment. The primary MCL exceedance for arsenic in TH-A may indicate more expensive treatment will be required at TH-A location. It is important to note that observed metal parameter exceedances may be related to sample turbidity. Ground water produced from wells with a gravel envelope that have undergone proper well development with turbidity meeting the Title 22 requirement of 5 NTU, may not exhibit metal parameter MCL exceedances.

## 6 POTENTIAL GROUND WATER PRODUCTION

---

Based on the surface geophysical profile and completed testholes, water bearing sand layers were found below 180 feet bgs and thickness ranged up to 50 feet. During 2013, airlifting flow was measured and ranged from 100 to 150 gpm. A flow estimate during airlifting is typically a conservative estimate of expected ground water production from a constructed well. Based on the testhole findings, specific capacity of encountered sand units is expected to range from 5 to 10 gpm per foot of drawdown. Based on these findings, specific capacity and encountered sand unit thickness of 30 to 50 feet, flow at TH-A and TH-B locations can range from 150 gpm up to 500 gpm.

The calculated flow is consistent with the findings presented in previous studies; the following two options are presented:

- Option 1: Based on the investigation findings, a single well located near the TH-B location is more likely to achieve the production goal of 370 gpm than a single well located near TH-A. However, significant expenditure will be required in order to connect a well at this location since the nearest connection point to the existing distribution system is approximately 3,000 feet.
- Option 2: Complete one production well near the TH-A location. Based on the aquifer testing and water quality analysis findings of the first production well, the District can evaluate whether a second production well near TH-A is necessary to meet production goals.

## 7 RECOMMENDATIONS

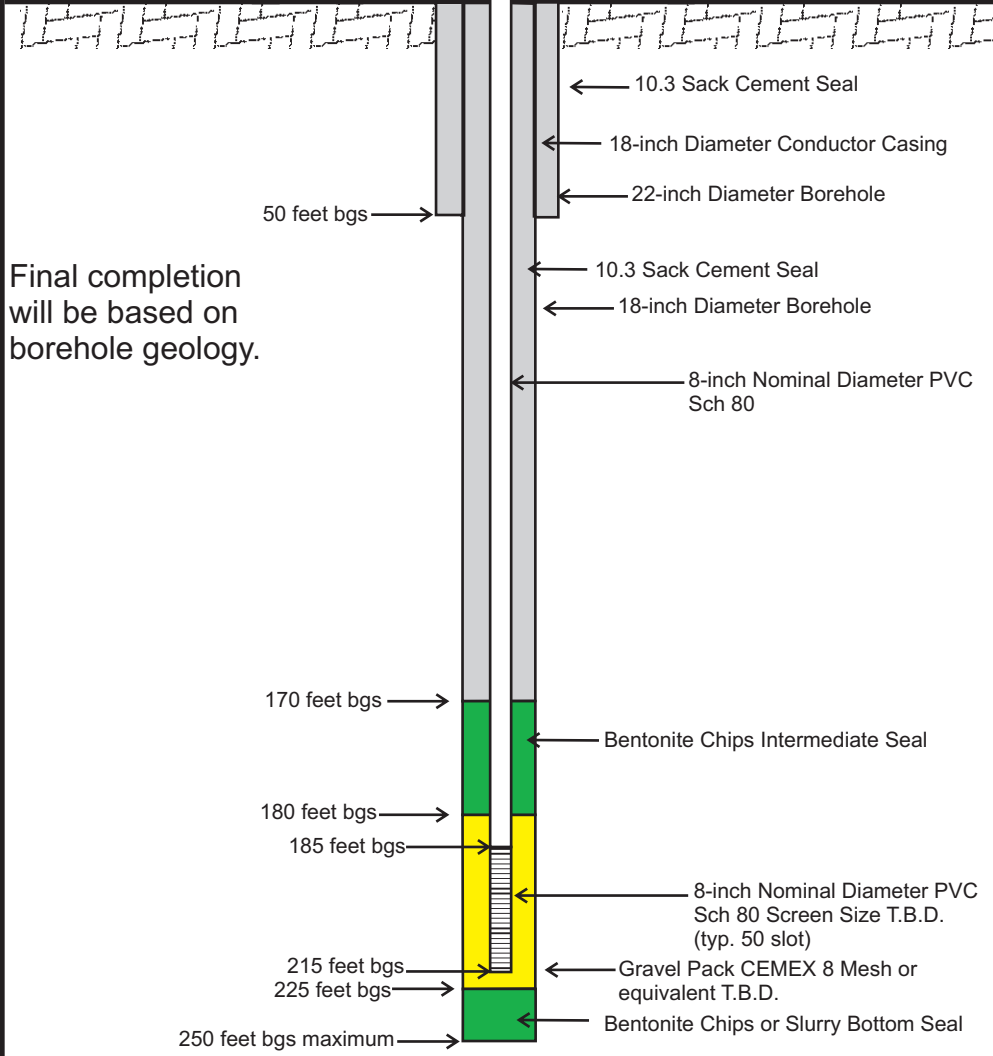
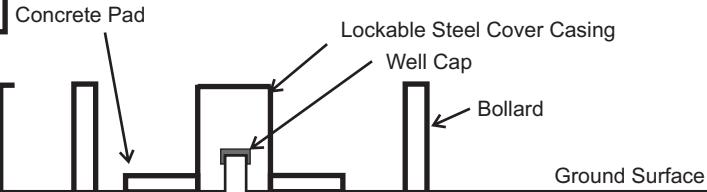
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Based on the investigation efforts to-date, findings summarized above and in the Executive Summary – Section 0, DE recommends the following:

- In order to assess and measure ground water (as referenced in the 2012 DE Proposal – Task 3B), DE recommends that up to two production wells should be considered, using the phased approach discussed below.
- Up to two production wells should be considered. They should be located within 50 feet of the 2013 testhole locations. The production wells should be constructed with a nominal 8-inch-diameter PVC well casing to allow aquifer pump testing to accurately determine specific well yields. Refer to Figure 4 for proposed test-well design. A Request for Bid Technical Specifications is provided in Attachment C. Production well options are as follows:
  - Option 1: Based on the testhole findings and water quality observed at the TH-B, a production well location (PW-B) near TH-B is more likely to meeting the well production goal. This option will result in significant additional cost over and above the well construction cost, since the nearest connection point to the distribution system is approximately 3,000 feet away.
  - Option 2: Complete one production well, possibly two, near TH-A as referenced above. The benefit of this location relates specifically to the cost savings of a distribution pipe.
- Prior to construction, a drinking water source assessment (DWSAP) should be completed, submitted and approved by the California Department of Public Health.
- Pump testing should include step test to determine well and aquifer efficiency and long-term, constant-rate-pump test. Specific yield for each well will be determined from these tests.
- Long-term pump tests will be used to assess aquifer characteristics and aquifer basin sustainability.
- During aquifer testing, additional water quality samples should be collected and analyzed for Title 22 water quality constituents. The parameter list should be based on constituents for concern. An analysis for complete Title 22 list of parameters is not considered warranted. Additional water quality analyses will help refine the need for water quality treatment.

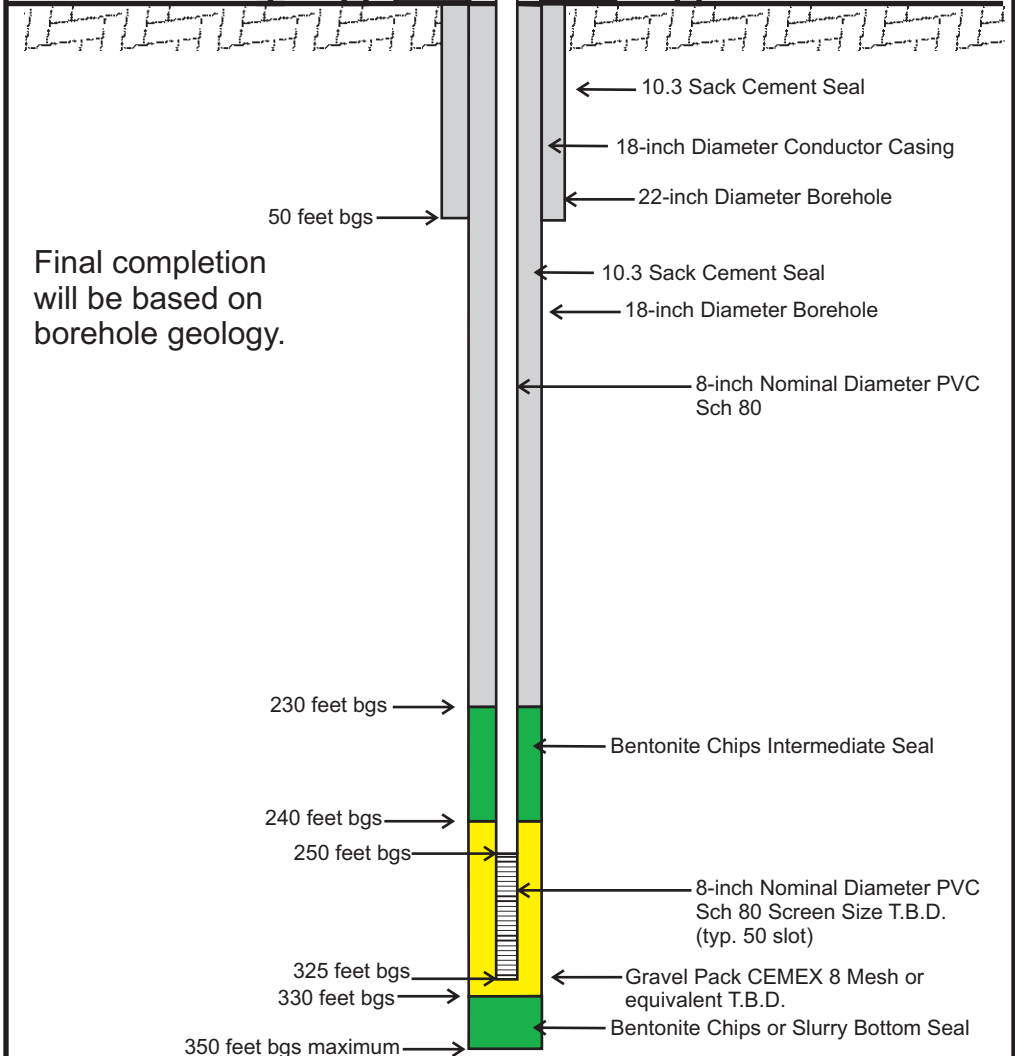
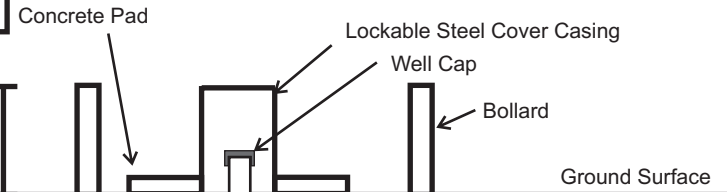
- Based on the results of pump testing and water quality sampling, the production wells can be operated as municipal supply wells.

**Production Well A  
Proposed Design**



Final completion will be based on borehole geology.

**Production Well B  
Proposed Design**



Final completion will be based on borehole geology.



DATE: 12/02/2013
SCALE: Not to Scale
PROJECT NO: SAB115703
DRAWN: CT
CHECKED: PFD, JF
FIGURE: 4

PROPOSED PRODUCTION WELL DESIGN  
RANCHO MURIETA CSD  
SACRAMENTO COUNTY, CA

**APPENDIX A**

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**BORING LOGS TH-A AND TH-B**

**APPENDIX B**

---

**NORCAL GEOPHYSICAL FIGURES**

**APPENDIX C**

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**LABORATORY ANALYTICAL REPORTS**






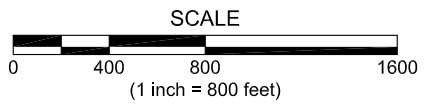
**APPENDIX D**

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**DRAFT REQUEST FOR BID - TECHNICAL SPECIFICATIONS**

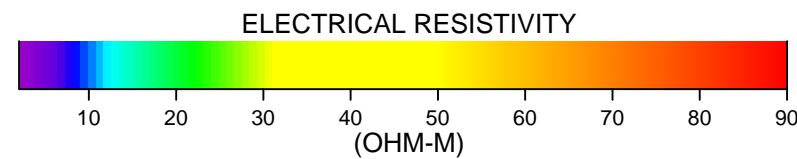
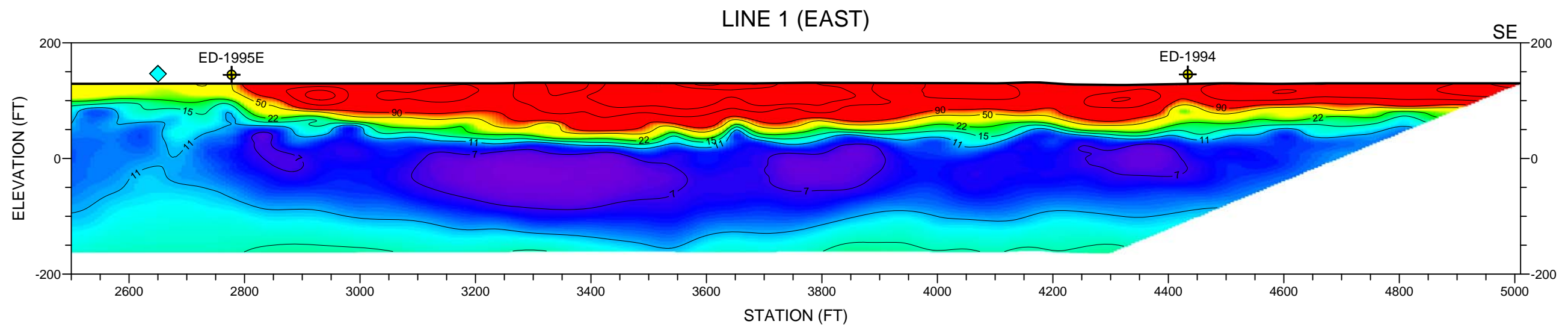
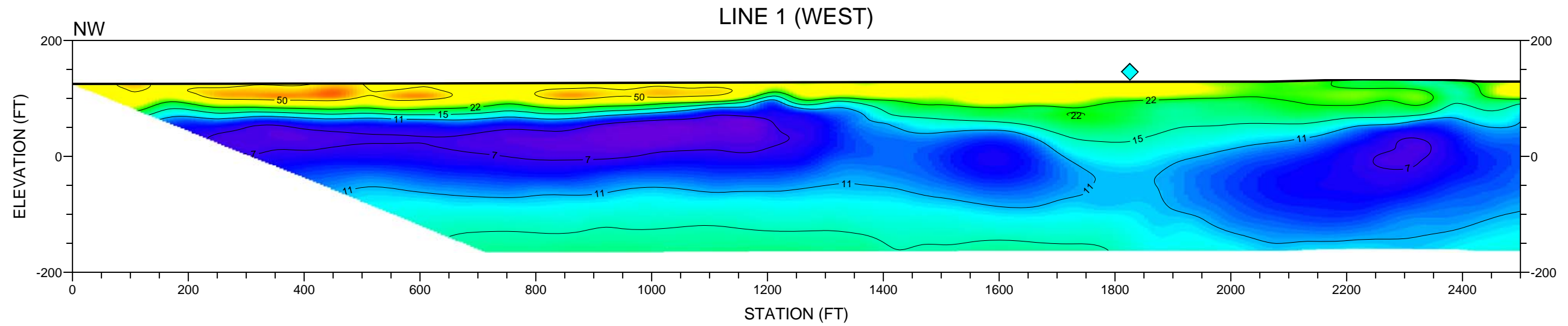


LEGEND	
	ELECTRICAL RESISTIVITY LINE
	APPROXIMATE BORING LOCATION
	PROPOSED TEST HOLE



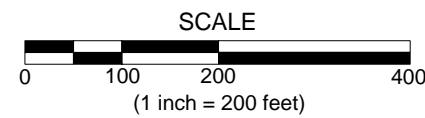
**DRAFT**

	<b>SITE LOCATION MAP</b> RANCHO MURIETA COMMUNITY SERVICE DISTRICT ELECTRICAL RESISTIVITY SURVEY	
	LOCATION: RANCHO MURIETA, CALIFORNIA	
JOB #: 12-952.05	CLIENT: DUNN ENVIRONMENTAL, INCL	<b>PLATE</b> <b>1</b>
DATE: SEP. 2012	NORCAL GEOPHYSICAL CONSULTANTS INC. DRAWN BY: G.RANDALL    APPROVED BY: DJK	

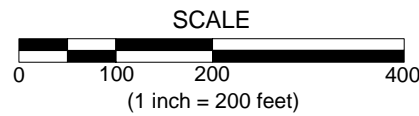
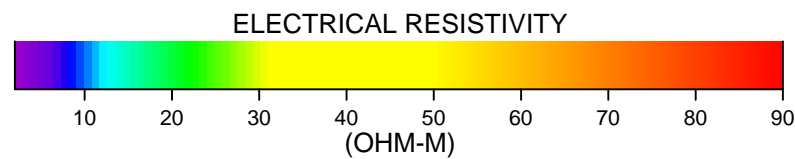
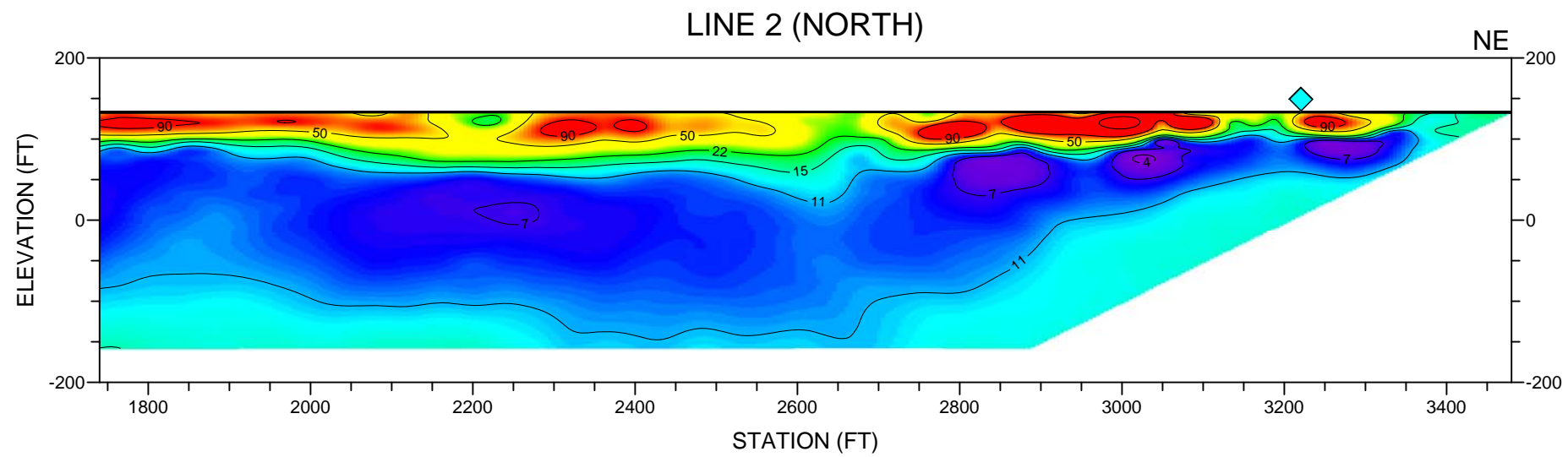
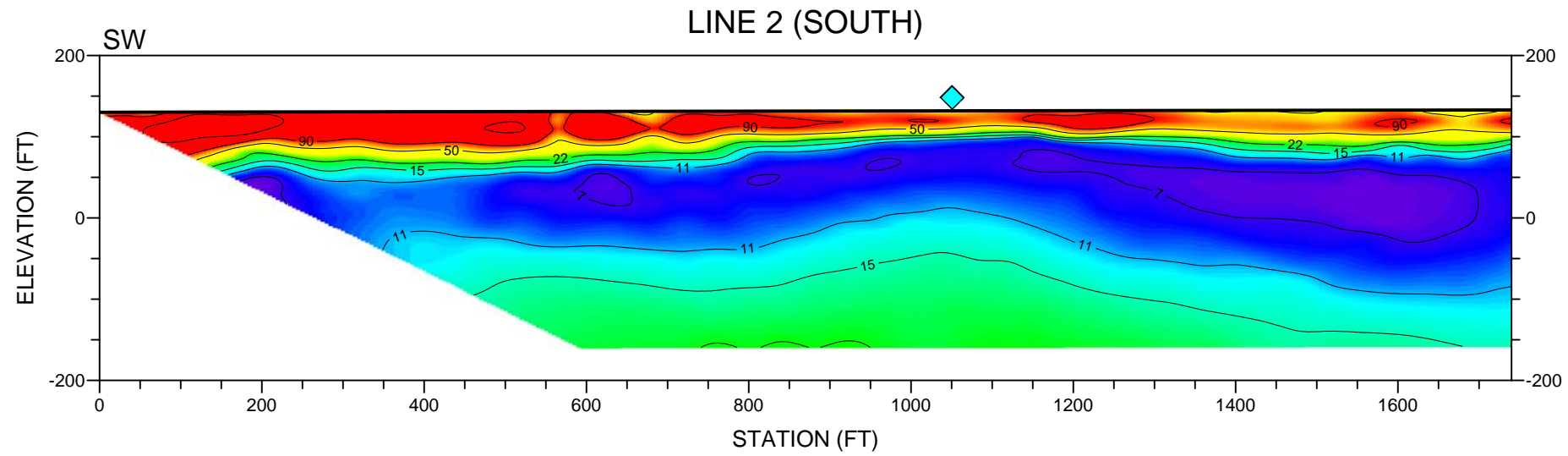


**DRAFT**

LEGEND	
	APPROXIMATE BORING LOCATION
	PROPOSED TEST HOLE



	ELECTRICAL RESISTIVITY PROFILE - LINE 1		<b>PLATE</b> <b>2</b>
	RANCHO MURIETA		
	COMMUNITY SERVICE DISTRICT		
	LOCATION: RANCHO MURIETA, CALIFORNIA		
JOB #: 12-952.05	NORCAL GEOPHYSICAL CONSULTANTS INC.		
DATE: SEP. 2012	DRAWN BY: G.RANDALL	APPROVED BY: DJK	



**DRAFT**

LEGEND	
	PROPOSED TEST HOLE

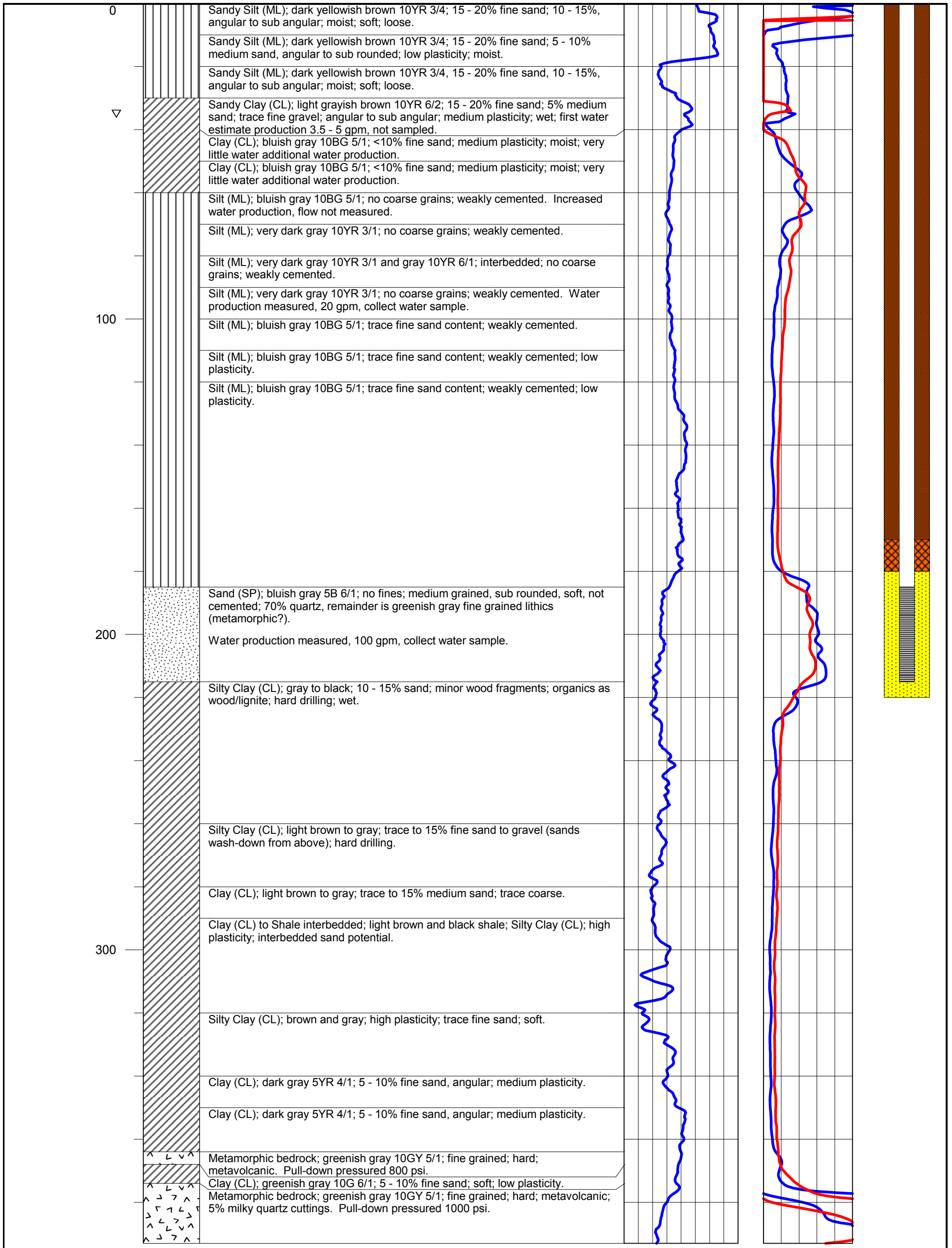
 <b>NORCAL</b>	ELECTRICAL RESISTIVITY PROFILE - LINE 2 RANCHO MURIETA COMMUNITY SERVICE DISTRICT		<b>PLATE</b>  <b>3</b>
	LOCATION: RANCHO MURIETA, CALIFORNIA		
	CLIENT: DUNN ENVIRONMENTAL, INC.		
	NORCAL GEOPHYSICAL CONSULTANTS INC.		
DATE: SEP. 2012	DRAWN BY: G.RANDALL	APPROVED BY: DJK	

DE Project No.: 157-03  
DE Project: Rancho Murieta Community Service District  
Test Hole (TH)-A

Location: Rancho Murieta, CA  
Driller: Fredrick Pump and Supply  
Drilling Method: Air and Mud Rotary, 6" Bore  
Geologist: J. Fourie, P.G., Patrick F. Dunn C.Hg.  
Reviewed by: J. Fourie, Patrick F. Dunn  
Published Date: December 12, 2013

▽ First Encountered Water

Date and Time	Depth (ft)	Geologic Log	USCS Description	SP (mv)					16" (blue) 64" (red) (ohmmeter <sup>2</sup> /m)			Proposed Production Well Completion
				100	125	150	175	200	0	20	40	



DE Project No.: 157-03  
DE Project: Rancho Murieta Community Service District  
Test Hole (TH)-B

Location: Rancho Murieta, CA  
Driller: Fredrick Pump and Supply  
Drilling Method: Air and Mud Rotary, 6" Bore  
Geologist: C. Tremblay  
Reviewed by: J. Fourie, Patrick F. Dunn  
Published Date: December 12, 2013

▽ First Encountered Water

Date and Time	Depth (ft)	Geologic Log	USCS Description	SP (mv)			16" (blue) 64" (red) (ohmmeter <sup>2</sup> /m)			Proposed Production Well Completion
				0	20	40	0	20	40	
	0		Sandy Silt (ML); dark brown (10YR 3/3); 10% clay, 30% fine sand, <5% coarse sand; soft, loose, low to no plasticity, dry.							
			Silty Gravel (GM); dark brown (10YR 3/3); 35% silt, 20% fine to medium sand; soft, loose, no plasticity; gravel is up to 20mm long, subrounded to angular; appears to be pieces of siltstone, sandstone and metamorphics; moist.							
			Silty Gravel (GM); brown (10YR 4/3); 30-35% silt, 10% fine sand; soft, loose, no plasticity; gravel coarse (20-40mm), rounded to subangular; metamorphics, igneous/volcanics; wet.							
			Silty Sand (SM); brown (10YR 4/3); 25% silt, 5-10% gravel; soft, loose, no plasticity; gravel generally fine (<20mm) with isolated coarser pieces; wet.							
			Sandy Clay (CL); greenish gray (Gley 1 6/10GY); 10-15% fine sand; loose, hard, no plasticity; sand is fine grained pieces of siltstone to claystone; wet.							
			Sandy Clay (CL) as above; clay is softer, sand still claystone pieces.							
			Silty Clay (CL); greenish gray (Gley 1 5/5G); 15% silt, <5% fine sand; very hard, consolidated; claystone pieces 10-15mm long.							
			Silty Clay (CL); greenish gray (Gley 1 6/10GY); 15% silt, trace fine sand; cohesive, soft, moderate plasticity.							
			Clay (CL); greenish gray (Gley 1 5/5G); claystone - hard, consolidated pieces up to 10mm long.							
			Silt (ML); dark greenish gray (Gley 1 4/5G); siltstone pieces slightly hard and consolidated.							
	100		Silty Sand (SM); greenish gray (Gley 1 5/5G); 30% silt; soft, loose, no plasticity.							
			Silt (ML); dark greenish gray (Gley 1 4/5G); siltstone pieces slightly hard and consolidated; dark grayish brown clay (soft, cohesive, moderate plasticity) at 117 feet; 30 GPM flow, sample collected.							
			Clayey Sand (SC); bluish gray (Gley 2 5/10B); 25-30% fine sand; moderately hard, cohesive, low plasticity.							
			Siltstone (ML); hard green siltstone and soft brown-black clay (possibly lignite); 70% siltstone, 30% clay.							
			Clay (CL); dark greenish gray (Gley 1 4/5GY); <10% fine sand; soft, cohesive, moderate to high plasticity, sticky.							
			Claystone (CL); dark greenish gray (Gley 1 4/5G); very hard, cohesive, claystone pieces 10mm and smaller.							
			Sandy Silt (ML); greenish gray (Gley 1 5/10GY); 10-15% fine sand; siltstone pieces with sand; hard, cohesive, no plasticity.							
			Sandy Clay (CL); dark greenish gray (Gley 1 4/10GY); 15-20% fine sand; claystone and soft clay mixture; claystone is hard, consolidated; clay is soft, cohesive, low plasticity.							
	200		Sandy Clay (CL) as above; greenish gray Gley 1 6/5G.							
			Sandy Clay (CL) as above; <10% fine sand.							
			Sandy Clay (CL); greenish gray (Gley 1 5/5G); 35-40% fine sand; soft, slightly loose, low plasticity.							
			Sandy Clay (CL) as above with 10-15% siltstone/claystone pieces.							
			Sandy Gravel (GM); mottled green, white and black; 15% clay, 20% silt, 25-30% fine to coarse sand; fine to coarse gravel (up to 25mm long); metamorphics and igneous; loose, soft. 60 GPM total flow, sample collected.							
			Sandy Clay and Wood (CL); greenish gray (Gley 1 5/10GY); 25-30% fine sand, 50-60% wood fragments; clay is soft, slightly cohesive.							
			Claystone and Wood (CL); dark greenish gray (Gley 1 4/5G); hard, consolidated; 35-40% wood fragments.							
			Claystone and Wood (CL); dark greenish gray (Gley 1 4/5G); claystone is coarse sand sized, hard, consolidated; fine sand in collection bin and limited sand in sample.							
			Claystone and Wood as above; 10-15% wood, potentially washout from above.							
	300		Gravelly Sand (SW); mottled green, white and black; 50% fine sand, 35-40% coarse sand, 10% fine gravel; little fines; siltstone, metamorphics, igneous; trace wood fragments; 150 GPM total flow.							
			Gravelly Sand (SW) as above; increase fine sand to 60%, decrease gravel to 10-15%.							
			Gravelly Sand (SW) as above; increase gravel to 20-25%, fine gravel; flow at 150 GPM, sample collected.							
			Sandy Clay (CL); black (5Y 2.5-1) to dark gray (10YR 4/1); 25-30% sand; soft, cohesive, some hard siltstone pieces, low plasticity.							
			Sandy Clay (CL); greenish gray (Gley 1 5/5G); 15-20% fine to medium sand; slightly stiff, cohesive, low to moderate plasticity.							
			Clayey Sand (SC); dark greenish gray (Gley 1 4/5G); 25-30% clay; sand fine to coarse sized; soft, slightly cohesive, no plasticity; siltstone, metamorphics and volcanics.							
			Shale bedrock (Sh); dark greenish gray (Gley 1 4/10GY) to black (Gley 1 2.5/1); very hard, consolidated shale with some green crystals (secondary crystallization?); does not appear weathered.							

# CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

August 27, 2013

**CLS Work Order #: CWH0800**  
**COC #:**

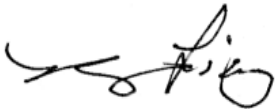
Cassie Tremblay  
Dunn Environmental  
5060 Robert J. Mathews, Ste 2  
El Dorado Hills, CA 95672

**Project Name: RMCSO**

Enclosed are the results of analyses for samples received by the laboratory on 08/20/13 16:10. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.  
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 5060 Robert J. Mathews, Ste 2 El Dorado Hills, CA 95672	Project: RMCSO Project Number: 157-03 Project Manager: Cassie Tremblay	CLS Work Order #: CWH0800 COC #:
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CWH0800 191

Chain of Custody										Page 1 of 1				Report To					
Project No. 157-03		Project Name: RMCSO								Parameters				Preservative		Dunn Environmental 5060 Robert J Mathews Ste 2 El Dorado Hills CA 95762			
Sampler (Signature) <i>Cassie Tremblay</i>		(Print) Cassie Tremblay																	
Sample Identification Number	Date	Time	Water	Soil	Other	Sampling Location	No. of Containers	TDS, <del>ppm</del> <sup>mg/L</sup>	As, Fe, Mn, Ni, Pb	Total Coliforms + Anions									
TH-B 110-120	8/20/13	11:52	✓				2	✓	✓	✓								Remarks: all parameters * Run <del>As, Fe, Mn, Ni, Pb</del> as lab dissolved	
TH-B 230-240	8/20/13	13:35	✓				2	✓	✓	✓									
TH-B 280-300	8/20/13	14:45	✓				2	✓	✓	✓									
															-email copy of results to catremblay@dunneniro.com and pfdunne@dunneniro.com and jfarie@dunneniro.com		Invoice To: Paul Siebensohn Rancho Mureta Comm Service Dist. 15800 Jackson Rd PO Box 1050 Rancho Mureta, CA 95683		
															Copy To:				
Relinquished By: <i>Cassie Tremblay</i> (Signature)		Date/Time: 8/20/13 10:10		Received By: <i>[Signature]</i> (Signature)		Date/Time:		Company: <i>Dunn Env</i> (Print)		Company:		Company:		Company:		Company:		Company:	
Relinquished By: (Signature)		Date/Time:		Received By: <i>[Signature]</i> (Signature)		Date/Time:		Company:		Company:		Company:		Company:		Company:		Company:	



# CALIFORNIA LABORATORY SERVICES

Page 2 of 8

08/27/13 09:28

Dunn Environmental  
5060 Robert J. Mathews, Ste 2  
El Dorado Hills, CA 95672

Project: RMCS D  
Project Number: 157-03  
Project Manager: Cassie Tremblay

CLS Work Order #: CWH0800

COC #:

## Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TH-B 110-120 (CWH0800-01) Water    Sampled: 08/20/13 11:52    Received: 08/20/13 16:10</b>									
Chloride, Dissolved	19	0.50	mg/L	1	CW05454	08/21/13	08/21/13	EPA 300.0	
Fluoride, dissolved	0.13	0.10	"	"	"	"	"	"	
Nitrate as NO3, Dissolved	0.72	0.50	"	"	"	"	"	"	
Sulfate, Dissolved	140	2.5	"	5	"	"	"	"	
Total Dissolved Solids	390	10	"	1	CW05462	08/21/13	08/22/13	SM2540C	
<b>TH-B 230-240 (CWH0800-02) Water    Sampled: 08/20/13 13:35    Received: 08/20/13 16:10</b>									
Chloride, Dissolved	18	0.50	mg/L	1	CW05454	08/21/13	08/21/13	EPA 300.0	
Fluoride, dissolved	0.19	0.10	"	"	"	"	"	"	
Nitrate as NO3, Dissolved	0.56	0.50	"	"	"	"	"	"	
Sulfate, Dissolved	110	2.5	"	5	"	"	08/22/13	"	
Total Dissolved Solids	390	10	"	1	CW05462	08/21/13	08/22/13	SM2540C	
<b>TH-B 280-300 (CWH0800-03) Water    Sampled: 08/20/13 14:45    Received: 08/20/13 16:10</b>									
Chloride, Dissolved	43	2.5	mg/L	5	CW05454	08/21/13	08/21/13	EPA 300.0	
Fluoride, dissolved	0.15	0.10	"	1	"	"	"	"	
Nitrate as NO3, Dissolved	13	0.50	"	"	"	"	"	"	
Sulfate, Dissolved	120	2.5	"	5	"	"	"	"	
Total Dissolved Solids	420	10	"	1	CW05462	08/21/13	08/22/13	SM2540C	

CA DOHS ELAP Accreditation/Registration Number 1233

3249 Fitzgerald Road Rancho Cordova, CA 95742

www.californialab.com

916-638-7301

Fax: 916-638-4510

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 5060 Robert J. Mathews, Ste 2 El Dorado Hills, CA 95672	Project: RMCS D Project Number: 157-03 Project Manager: Cassie Tremblay	CLS Work Order #: CWH0800 COC #:
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## Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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**TH-B 110-120 (CWH0800-01) Water**    **Sampled: 08/20/13 11:52**    **Received: 08/20/13 16:10**

Arsenic	2.9	2.0	µg/L	1	CW05510	08/22/13	08/26/13	EPA 200.8	
Calcium	36000	1000	"	"	CW05511	08/22/13	08/23/13	EPA 200.7	
Iron	ND	100	"	"	"	"	"	"	
Magnesium	13000	1000	"	"	"	"	"	"	
Manganese	370	20	"	"	"	"	"	"	A-COM
Potassium	3600	1000	"	"	"	"	"	"	
Sodium	33000	1000	"	"	"	"	"	"	

**TH-B 230-240 (CWH0800-02) Water**    **Sampled: 08/20/13 13:35**    **Received: 08/20/13 16:10**

Arsenic	5.3	2.0	µg/L	1	CW05510	08/22/13	08/26/13	EPA 200.8	
Calcium	34000	1000	"	"	CW05511	08/22/13	08/23/13	EPA 200.7	
Iron	ND	100	"	"	"	"	"	"	
Magnesium	9700	1000	"	"	"	"	"	"	
Manganese	140	20	"	"	"	"	"	"	A-COM
Potassium	4400	1000	"	"	"	"	"	"	
Sodium	36000	1000	"	"	"	"	"	"	

**TH-B 280-300 (CWH0800-03) Water**    **Sampled: 08/20/13 14:45**    **Received: 08/20/13 16:10**

Arsenic	3.2	2.0	µg/L	1	CW05510	08/22/13	08/26/13	EPA 200.8	
Calcium	22000	1000	"	"	CW05511	08/22/13	08/23/13	EPA 200.7	
Iron	500	100	"	"	"	"	"	"	
Magnesium	9100	1000	"	"	"	"	"	"	
Manganese	330	20	"	"	"	"	"	"	A-COM
Potassium	2100	1000	"	"	"	"	"	"	
Sodium	72000	1000	"	"	"	"	"	"	

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 5060 Robert J. Mathews, Ste 2 El Dorado Hills, CA 95672	Project: RMCS D Project Number: 157-03 Project Manager: Cassie Tremblay	CLS Work Order #: CWH0800 COC #:
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## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW05454 - General Prep

Blank (CW05454-BLK1)				Prepared & Analyzed: 08/21/13						
Nitrate as NO <sub>3</sub> , Dissolved	ND	0.50	mg/L							
Chloride, Dissolved	ND	0.50	"							
Sulfate, Dissolved	ND	0.50	"							
Fluoride, dissolved	ND	0.10	"							

LCS (CW05454-BS1)				Prepared & Analyzed: 08/21/13						
Sulfate, Dissolved	5.22	0.50	mg/L	5.00		104	80-120			
Nitrate as NO <sub>3</sub> , Dissolved	2.16	0.50	"	2.00		108	80-120			
Fluoride, dissolved	2.05	0.10	"	2.00		102	80-120			
Chloride, Dissolved	5.39	0.50	"	5.00		108	80-120			

LCS Dup (CW05454-BSD1)				Prepared & Analyzed: 08/21/13						
Chloride, Dissolved	5.47	0.50	mg/L	5.00		109	80-120	1	20	
Fluoride, dissolved	2.19	0.10	"	2.00		109	80-120	7	20	
Sulfate, Dissolved	5.28	0.50	"	5.00		106	80-120	1	20	
Nitrate as NO <sub>3</sub> , Dissolved	2.17	0.50	"	2.00		109	80-120	0.6	20	

Matrix Spike (CW05454-MS1)				Source: CWH0780-01		Prepared & Analyzed: 08/21/13				
Sulfate, Dissolved	25.0	0.50	mg/L	5.00	20.3	94	75-125			
Nitrate as NO <sub>3</sub> , Dissolved	5.49	0.50	"	2.00	3.39	105	80-120			
Chloride, Dissolved	47.9	0.50	"	5.00	45.2	54	75-125			QM-4X
Fluoride, dissolved	2.16	0.10	"	2.00	0.110	103	75-125			

Matrix Spike Dup (CW05454-MSD1)				Source: CWH0780-01		Prepared & Analyzed: 08/21/13				
Chloride, Dissolved	47.7	0.50	mg/L	5.00	45.2	49	75-125	0.5	25	QM-4X
Fluoride, dissolved	2.12	0.10	"	2.00	0.110	101	75-125	2	25	
Sulfate, Dissolved	24.8	0.50	"	5.00	20.3	89	75-125	0.9	25	
Nitrate as NO <sub>3</sub> , Dissolved	5.42	0.50	"	2.00	3.39	102	80-120	1	20	

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 5060 Robert J. Mathews, Ste 2 El Dorado Hills, CA 95672	Project: RMCS Project Number: 157-03 Project Manager: Cassie Tremblay	CLS Work Order #: CWH0800 COC #:
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## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW05462 - General Preparation

<b>Blank (CW05462-BLK1)</b>	Prepared: 08/21/13 Analyzed: 08/22/13									
Total Dissolved Solids	ND	10	mg/L							
<b>Duplicate (CW05462-DUP1)</b>	Source: CWH0800-01 Prepared: 08/21/13 Analyzed: 08/22/13									
Total Dissolved Solids	ND	10	mg/L		386				20	

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 5060 Robert J. Mathews, Ste 2 El Dorado Hills, CA 95672	Project: RMCS D Project Number: 157-03 Project Manager: Cassie Tremblay	CLS Work Order #: CWH0800 COC #:
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## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW05510 - EPA 3020A

**Blank (CW05510-BLK1)** Prepared: 08/22/13 Analyzed: 08/26/13

Arsenic	ND	2.0	µg/L							
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**LCS (CW05510-BS1)** Prepared: 08/22/13 Analyzed: 08/26/13

Arsenic	104	2.0	µg/L	100		104	85-115			
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**Matrix Spike (CW05510-MS1)** Source: CWH0862-01 Prepared: 08/22/13 Analyzed: 08/26/13

Arsenic	116	2.0	µg/L	100	6.77	109	70-130			
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### Batch CW05511 - EPA 3010A

**Blank (CW05511-BLK1)** Prepared: 08/22/13 Analyzed: 08/23/13

Calcium	ND	1000	µg/L							
Iron	ND	100	"							
Magnesium	ND	1000	"							
Manganese	ND	20	"							
Potassium	ND	1000	"							
Sodium	ND	1000	"							

**LCS (CW05511-BS1)** Prepared: 08/22/13 Analyzed: 08/23/13

Calcium	11300	1000	µg/L	10000		113	85-115			
Iron	5350	100	"	5000		107	85-115			
Magnesium	10400	1000	"	10000		104	85-115			
Manganese	566	20	"	500		113	85-115			
Potassium	12700	1000	"	12500		102	85-115			
Sodium	12900	1000	"	12500		103	85-115			

**Matrix Spike (CW05511-MS1)** Source: CWH0806-01 Prepared: 08/22/13 Analyzed: 08/23/13

Calcium	65300	1000	µg/L	10000	55100	102	70-130			
Iron	5390	100	"	5000	313	102	70-130			
Magnesium	36300	1000	"	10000	26600	97	70-130			
Manganese	552	20	"	500	4.60	110	70-130			
Potassium	18100	1000	"	12500	5620	100	70-130			
Sodium	29400	1000	"	12500	16700	102	70-130			

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 5060 Robert J. Mathews, Ste 2 El Dorado Hills, CA 95672	Project: RMCS D Project Number: 157-03 Project Manager: Cassie Tremblay	CLS Work Order #: CWH0800 COC #:
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## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW05511 - EPA 3010A

#### Matrix Spike (CW05511-MS2)

Source: CWH0850-04

Prepared: 08/22/13

Analyzed: 08/23/13

Calcium	10200	1000	µg/L	10000	91.8	101	70-130			
Iron	4930	100	"	5000	ND	99	70-130			
Magnesium	9650	1000	"	10000	ND	96	70-130			
Manganese	518	20	"	500	ND	104	70-130			
Potassium	11400	1000	"	12500	ND	91	70-130			
Sodium	12100	1000	"	12500	147	96	70-130			

# CALIFORNIA LABORATORY SERVICES

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08/27/13 09:28

Dunn Environmental  
5060 Robert J. Mathews, Ste 2  
El Dorado Hills, CA 95672

Project: RMCSD  
Project Number: 157-03  
Project Manager: Cassie Tremblay

**CLS Work Order #: CWH0800**  
COC #:

## Notes and Definitions

- QM-4X The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration. The QC batch was accepted based on LCS and/or LCSD recoveries within the acceptance limits.
- A-COM Run by ICP-MS (EPA200.8)
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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CA DOHS ELAP Accreditation/Registration Number 1233

3249 Fitzgerald Road Rancho Cordova, CA 95742

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916-638-7301

Fax: 916-638-4510

# CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

September 20, 2013

**CLS Work Order #: CWI0576**  
**COC #: 139665**

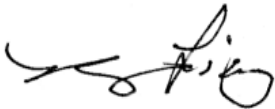
Jaco Fourie  
Dunn Environmental  
2495 Natomas Park Dr. 4th floor  
Sacramento, CA 95833

**Project Name: RMCS D**

Enclosed are the results of analyses for samples received by the laboratory on 09/13/13 14:44. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.  
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233



# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 2495 Natomas Park Dr. 4th floor Sacramento, CA 95833	Project: RMCSO Project Number: [none] Project Manager: Jaco Fourie	CLS Work Order #: CWI0576 COC #: 139665
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CLS - Labs		CHAIN OF CUSTODY				CLS ID No.: CWI0576		LOG NO. 139665																													
<b>REPORT TO:</b> NAME AND ADDRESS: <i>Jaco Fourie</i> <i>2495 Natomas Park Dr. 4th floor</i> <i>Sacramento, CA 95833</i> PROJECT MANAGER: <i>Jaco Fourie</i> PHONE # _____ PROJECT NAME: <i>RMCSO</i> SAMPLED BY: <i>J.F.</i> JOB DESCRIPTION: _____ SITE LOCATION: _____			CLIENT JOB NUMBER: _____ DESTINATION LABORATORY: <input checked="" type="checkbox"/> <b>CLS (916) 638-7301</b> 3249 FITZGERALD RD. RANCHO CORDOVA, CA. 95742 <input type="checkbox"/> OTHER		<b>ANALYSIS REQUESTED</b> TDS, NO <sub>3</sub> Total Carbon & anions As Fe Mn Mg		<b>GEOTRACKER:</b> EDF REPORT <input type="checkbox"/> YES <input type="checkbox"/> NO GLOBAL ID: _____ COMPOSITE: _____ FIELD CONDITIONS: _____																														
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>TIME</th> <th>SAMPLE IDENTIFICATION</th> <th>MATRIX</th> <th>CONTAINER NO.</th> <th>TYPE</th> <th>1 DAY</th> <th>2 DAY</th> <th>3 DAY</th> <th>5 DAY</th> </tr> </thead> <tbody> <tr> <td>9/13/13</td> <td>12:05</td> <td>TH-A 100 ft</td> <td>H<sub>2</sub>O</td> <td>2</td> <td>1LPoly</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> <tr> <td>9/13/13</td> <td>13:00</td> <td>TH-A 200 ft</td> <td>H<sub>2</sub>O</td> <td>2</td> <td>110</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> </tr> </tbody> </table>		DATE	TIME	SAMPLE IDENTIFICATION	MATRIX	CONTAINER NO.	TYPE	1 DAY	2 DAY	3 DAY	5 DAY	9/13/13	12:05	TH-A 100 ft	H <sub>2</sub> O	2	1LPoly	X	X	X	X	9/13/13	13:00	TH-A 200 ft	H <sub>2</sub> O	2	110	X	X	X	X	<b>PRESERVATIVES</b> (1) HCL (2) HNO <sub>3</sub> (3) COLD (4) NaOH (5) H <sub>2</sub> SO <sub>4</sub> (6) Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> (7) =		<b>TURN AROUND TIME</b> SPECIAL INSTRUCTIONS OR ALT. ID:			
DATE	TIME	SAMPLE IDENTIFICATION	MATRIX	CONTAINER NO.	TYPE	1 DAY	2 DAY	3 DAY	5 DAY																												
9/13/13	12:05	TH-A 100 ft	H <sub>2</sub> O	2	1LPoly	X	X	X	X																												
9/13/13	13:00	TH-A 200 ft	H <sub>2</sub> O	2	110	X	X	X	X																												
INVOICE TO: <i>Paul Siebensohn</i> <i>RMCSO, 15160 Jackson Rd,</i> <i>P.O. Box 1050, Rancho</i> <i>PO Murietta, CA 95683</i> QUOTE # _____																																					
RELINQUISHED BY (SIGN): <i>Jac</i>		PRINT NAME / COMPANY: <i>J. Fourie Dunn Env.</i>		DATE / TIME: <i>9/13/13 14:44</i>		RECEIVED BY (SIGN): _____		PRINT NAME / COMPANY: _____																													
REC'D AT LAB BY: <i>[Signature]</i>		DATE / TIME: <i>9/13/13 1444</i>		CONDITIONS / COMMENTS: <i>180°C</i>		SHIPPED BY: <input type="checkbox"/> FED X <input type="checkbox"/> UPS <input type="checkbox"/> OTHER <input type="checkbox"/> AIR BILL # _____																															

# CALIFORNIA LABORATORY SERVICES

Page 2 of 8

09/20/13 14:07

Dunn Environmental  
2495 Natomas Park Dr. 4th floor  
Sacramento, CA 95833

Project: RMCS D  
Project Number: [none]  
Project Manager: Jaco Fourie

**CLS Work Order #: CWI0576**  
COC #: 139665

## Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TH-A 100ft (CWI0576-01) Water    Sampled: 09/13/13 12:05    Received: 09/13/13 14:44</b>									
Chloride, Dissolved	8.6	0.50	mg/L	1	CW06047	09/13/13	09/14/13	EPA 300.0	
Fluoride, dissolved	0.20	0.10	"	"	"	"	"	"	
Nitrate as NO3, Dissolved	4.4	0.50	"	"	"	"	"	"	
Sulfate, Dissolved	55	2.5	"	5	"	"	09/16/13	"	
Total Dissolved Solids	290	10	"	1	CW06138	09/17/13	09/18/13	SM2540C	
<b>TH-A 200ft (CWI0576-02) Water    Sampled: 09/13/13 13:00    Received: 09/13/13 14:44</b>									
Chloride, Dissolved	85	5.0	mg/L	10	CW06047	09/13/13	09/16/13	EPA 300.0	
Fluoride, dissolved	0.16	0.10	"	1	"	"	09/14/13	"	
Nitrate as NO3, Dissolved	ND	0.50	"	"	"	"	"	"	
Sulfate, Dissolved	120	5.0	"	10	"	"	09/16/13	"	
Total Dissolved Solids	420	10	"	1	CW06138	09/17/13	09/18/13	SM2540C	

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 2495 Natomas Park Dr. 4th floor Sacramento, CA 95833	Project: RMCS D Project Number: [none] Project Manager: Jaco Fourie	<b>CLS Work Order #: CWI0576</b> COC #: 139665
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## Metals (Dissolved) by EPA 200 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>TH-A 100ft (CWI0576-01) Water    Sampled: 09/13/13 12:05    Received: 09/13/13 14:44</b>									
Arsenic	18	2.0	µg/L	1	CW06228	09/19/13	09/19/13	EPA 200.8	
Calcium	23000	1000	"	"	CW06232	09/19/13	09/19/13	EPA 200.7	
Iron	ND	100	"	"	"	"	"	"	
Magnesium	13000	1000	"	"	"	"	"	"	
Manganese	150	20	"	"	"	"	"	"	
Potassium	3800	1000	"	"	"	"	"	"	
Sodium	33000	1000	"	"	"	"	"	"	
<b>TH-A 200ft (CWI0576-02) Water    Sampled: 09/13/13 13:00    Received: 09/13/13 14:44</b>									
Arsenic	13	2.0	µg/L	1	CW06228	09/19/13	09/19/13	EPA 200.8	
Calcium	30000	1000	"	"	CW06232	09/19/13	09/19/13	EPA 200.7	
Iron	ND	100	"	"	"	"	"	"	
Magnesium	11000	1000	"	"	"	"	"	"	
Manganese	120	20	"	"	"	"	"	"	
Potassium	5100	1000	"	"	"	"	"	"	
Sodium	83000	1000	"	"	"	"	"	"	

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 2495 Natomas Park Dr. 4th floor Sacramento, CA 95833	Project: RMCS D Project Number: [none] Project Manager: Jaco Fourie	CLS Work Order #: CWI0576 COC #: 139665
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## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW06047 - General Prep

#### Blank (CW06047-BLK1) Prepared & Analyzed: 09/13/13

Chloride, Dissolved	ND	0.50	mg/L							
Fluoride, dissolved	ND	0.10	"							
Sulfate, Dissolved	ND	0.50	"							
Nitrate as NO3, Dissolved	ND	0.50	"							

#### LCS (CW06047-BS1) Prepared & Analyzed: 09/13/13

Nitrate as NO3, Dissolved	2.14	0.50	mg/L	2.00		107	80-120			
Chloride, Dissolved	5.31	0.50	"	5.00		106	80-120			
Sulfate, Dissolved	5.18	0.50	"	5.00		104	80-120			
Fluoride, dissolved	2.12	0.10	"	2.00		106	80-120			

#### LCS Dup (CW06047-BSD1) Prepared: 09/13/13 Analyzed: 09/14/13

Sulfate, Dissolved	5.19	0.50	mg/L	5.00		104	80-120	0.2	20	
Nitrate as NO3, Dissolved	2.08	0.50	"	2.00		104	80-120	3	20	
Fluoride, dissolved	2.20	0.10	"	2.00		110	80-120	3	20	
Chloride, Dissolved	5.36	0.50	"	5.00		107	80-120	0.9	20	

#### Matrix Spike (CW06047-MS1) Source: CWI0516-03 Prepared: 09/13/13 Analyzed: 09/14/13

Fluoride, dissolved	2.70	0.10	mg/L	2.00	0.720	99	75-125			
Chloride, Dissolved	26.7	0.50	"	5.00	21.8	98	75-125			
Sulfate, Dissolved	35.9	0.50	"	5.00	31.5	89	75-125			
Nitrate as NO3, Dissolved	2.92	0.50	"	2.00	0.840	104	80-120			

#### Matrix Spike Dup (CW06047-MSD1) Source: CWI0516-03 Prepared: 09/13/13 Analyzed: 09/14/13

Fluoride, dissolved	2.70	0.10	mg/L	2.00	0.720	99	75-125	0.2	25	
Nitrate as NO3, Dissolved	2.89	0.50	"	2.00	0.840	103	80-120	1	20	
Chloride, Dissolved	26.5	0.50	"	5.00	21.8	94	75-125	0.9	25	
Sulfate, Dissolved	35.9	0.50	"	5.00	31.5	89	75-125	0.04	25	

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 2495 Natomas Park Dr. 4th floor Sacramento, CA 95833	Project: RMCS Project Number: [none] Project Manager: Jaco Fourie	CLS Work Order #: CWI0576 COC #: 139665
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## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW06138 - General Preparation

<b>Blank (CW06138-BLK1)</b>	Prepared: 09/17/13 Analyzed: 09/18/13									
Total Dissolved Solids	ND	10	mg/L							
<b>Duplicate (CW06138-DUP1)</b>	Source: CWI0578-02 Prepared: 09/17/13 Analyzed: 09/18/13									
Total Dissolved Solids	592	10	mg/L		588			0.7	20	

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 2495 Natomas Park Dr. 4th floor Sacramento, CA 95833	Project: RMCS D Project Number: [none] Project Manager: Jaco Fourie	CLS Work Order #: CWI0576 COC #: 139665
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## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW06228 - EPA 3020A

**Blank (CW06228-BLK1)** Prepared & Analyzed: 09/19/13

Arsenic	ND	2.0	µg/L							
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**LCS (CW06228-BS1)** Prepared & Analyzed: 09/19/13

Arsenic	97.4	2.0	µg/L	100		97	85-115			
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**Matrix Spike (CW06228-MS1)** Source: CWI0764-01 Prepared & Analyzed: 09/19/13

Arsenic	106	2.0	µg/L	100	4.80	102	70-130			
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**Matrix Spike (CW06228-MS2)** Source: CWI0737-02 Prepared & Analyzed: 09/19/13

Arsenic	117	2.0	µg/L	100	15.6	102	70-130			
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### Batch CW06232 - EPA 3010A

**Blank (CW06232-BLK1)** Prepared & Analyzed: 09/19/13

Calcium	ND	1000	µg/L							
Iron	ND	100	"							
Magnesium	ND	1000	"							
Manganese	ND	20	"							
Potassium	ND	1000	"							
Sodium	ND	1000	"							

**LCS (CW06232-BS1)** Prepared & Analyzed: 09/19/13

Calcium	9630	1000	µg/L	10000		96	85-115			
Iron	4800	100	"	5000		96	85-115			
Magnesium	9920	1000	"	10000		99	85-115			
Manganese	500	20	"	500		100	85-115			
Potassium	13200	1000	"	12500		106	85-115			
Sodium	13800	1000	"	12500		110	85-115			

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental 2495 Natomas Park Dr. 4th floor Sacramento, CA 95833	Project: RMCS D Project Number: [none] Project Manager: Jaco Fourie	CLS Work Order #: CWI0576 COC #: 139665
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## Metals (Dissolved) by EPA 200 Series Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CW06232 - EPA 3010A

#### Matrix Spike (CW06232-MS1)

Source: CWI0764-01

Prepared & Analyzed: 09/19/13

Calcium	33100	1000	µg/L	10000	17200	159	70-130			QM-7
Iron	5990	100	"	5000	671	106	70-130			
Magnesium	13700	1000	"	10000	3340	104	70-130			
Manganese	758	20	"	500	171	117	70-130			
Potassium	15100	1000	"	12500	1970	105	70-130			
Sodium	28600	1000	"	12500	16300	98	70-130			

#### Matrix Spike (CW06232-MS2)

Source: CWI0736-01

Prepared & Analyzed: 09/19/13

Calcium	57400	1000	µg/L	10000	46900	105	70-130			
Iron	5220	100	"	5000	ND	104	70-130			
Magnesium	21600	1000	"	10000	11500	101	70-130			
Manganese	541	20	"	500	ND	108	70-130			
Potassium	15500	1000	"	12500	2650	103	70-130			
Sodium	32300	1000	"	12500	18700	109	70-130			

# CALIFORNIA LABORATORY SERVICES

Dunn Environmental  
2495 Natomas Park Dr. 4th floor  
Sacramento, CA 95833

Project: RMCS  
Project Number: [none]  
Project Manager: Jaco Fourie

**CLS Work Order #: CWI0576**  
COC #: 139665

## Notes and Definitions

- QM-7 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS/LCSD recovery.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit (or method detection limit when specified)
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference





An NV5 Company

## Request for Bid – Technical Specifications

**Draft Request for Bid:** Proposed Rancho Murieta Community Services District  
Production Well Installation, Sacramento County, California  
**Date:** October 2013

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Dunn Environmental, Inc. (DE), an NV5 Company, has prepared this Request for Bid (RFB) for planned drilling activities for the Rancho Murieta Community Services District (RMCS D) in Sacramento County, California. Drilling activities are required to provide suitable production wells for ground water well development. RMCS D relies solely on surface water supplies from the Cosumnes River to meet water demand. As part of the RMCS D drought preparedness plan, the District plans to construct a ground water well or wells to augment surface water supplies during drought years. Grant funding through the State of California Local Ground Water Assistance Program awarded to RMCS D may be used to assist in ground water resource development. The Technical Memorandum No 1 - New Water Well Background Data Summary, Surface Geophysics, Hydrogeologic Conceptual Model, Testhole Drilling and Water Quality Findings, dated October 2013 (TM1) is available upon request.

The drilling effort will install two production wells close to previously drilled test holes. Up to two ground water production wells are planned. Anticipated borehole depths range from 250 to 350 feet below ground surface (bgs) for each well. Previously completed test hole locations are shown on Attachment C- 1 as TH-A and TH-B and proposed production well locations are shown as PW-A and PW-B.

### **Bid Item No. 1 – Mobilization and Demobilization**

Mobilization and demobilization costs should be quoted as a **lump sum**. Driller will obtain the required County well drilling permits. The mobilization fee should include costs for relocating between production well sites and restoring each drilling site to suitable development conditions. Additional efforts for flood protection using grading and well pad construction will be completed by RMCS D or another contractor.

Material submittals must be approved by the district representative before mobilization.

### **Bid Item No. 2 – Production Well Drilling (Two Alternatives)**

As referenced two production wells are planned. Drilling depths range from 250 to 350 feet bgs. For bidding purposes, total production well drilling depth is estimated at a total of **600 feet for two water wells**. Soil samples are to be collected every ten (10) feet during production well drilling. DE has determined that mud rotary drilling is the preferred technique to achieve the project goals. The anticipated production well diameter is a minimum of eighteen inches. Down hole equipment shall be decontaminated between borings. Decontamination will be high pressure wash at a minimum.

The bid should be provided on a **per foot** basis. During production well drilling, soil samples should be collected every ten (10) feet and presented to the on-site geologist for logging. Drill cuttings are not expected to be contaminated and may be disposed of on-site.

### **Bid Item No. 3 – Geophysical Logging**

At borehole termination, the borehole will be stabilized for down hole geophysical logging consisting of focused resistivity, resistivity (16-inch and 64-inch), conductivity and spontaneous potential geophysical logs. Close attention will be paid to the drill fluid resistivity and the potential impact on geologic and pore water quality interpretation.

Upon completion of borehole drilling, geophysics and grain size analyses, aquifer zones for production well construction will be finalized.

## **Bid Item No. 4 – Production Well Construction**

### *Conductor Casing*

Prior to drilling activities, an 18-inch steel conductor casing will be installed to 50 feet bgs. A minimum 22-inch diameter bucket auger or equivalent will be used to drill to 50 feet bgs with soil samples collected every ten (10) feet for logging. After placement of the conductor casing, a 10.3 sack cement slurry will be installed to seal the conductor casing. No drilling activities will occur for a minimum of 24-hours to allow the cement to cure. Drilling activities will commence after the conductor casing has been installed.

### *Well Casing and Screen*

Once the boring has been advanced to final depth, screen placement will be based upon observed lithology and geophysical logging. Production wells will be constructed using 8-inch inside diameter Schedule 80 PVC casing. Well casing and screen shall meet the ASTM Standard D-1785. Casing will be manufactured by Monoflex™, Certainteed™ or approved equivalent. Refer to the Attachments C-2a and C-2b for typical well casing installation depths. The riser pipe and screen casings will be flush thread joints with O-rings. The bottom cap will be flush-thread jointed or slip cap secured with stainless steel screws. The proposed well screen design is then 0.050-inch machine slotted screen. Screen size will be determined based on quick turnaround sieve analysis to be completed. Anticipated screen length is 30 to 70 feet for each well.

The well casing will be centered in the borehole using adjustable stainless steel centralizers. Centralizers will maintain a separation of two inches minimum between the casing and borehole wall. Centralizers will not be placed opposite well screen or within the gravel pack interval. Centralizers will be spaced a maximum of 50 feet apart, with at least 1 centralizer within 50 feet from surface. The “j” plug design will be used for the Well caps. Refer to Attachments C-2a and C-2b for Proposed Production Well Detail for PW-A and PW-B.

### *Filter Pack*

Based on aquifer formation grain size analyses, the gravel pack design will be finalized. The proposed gravel pack is a CEMEX No. 8 Mesh Sand (or approved equivalent based on grain size) for a proposed 0.050 inch slot screen. Alternative filter pack may be used if approved by the DE Project Manager. Filter pack will be placed using a tremmie pipe.

### *Bentonite Seal*

At least ten feet of bentonite chips will be used for well seals between the filter pack and cement grout. Bentonite seal will consist of sodium bentonite graded chips. Bentonite shall be a Baroid HolePlug™ 3/8" or approved equivalent. Bentonite seals are expected to be below the water table and will be placed using a tremmie pipe. The tremmie pipe will be removed slowly to allow filter pack and bentonite to settle into the annular space opposite the well screen and prevent borehole collapse.

### *Cement Grout*

A neat cement grout will be installed in the borehole from above the bentonite seal to ground surface. Cement grout will consist of a 10.3-sack cement slurry. Cement grout will be placed using a tremmie pipe and pumped into place. Once the cement grout is allowed to settle, more will be added until it is brought to the surface. A Sacramento County Environmental Health Representative must be present for seal placement unless directed otherwise by the County.

Refer to the Bid Table for an estimate of materials needed. The bid should be provided on a **per foot** basis for well building materials (well casing, screen, filter pack, bentonite, grout seal, and centralizers).

### **Bid Item No. 5 – Production Well Development and Pump Testing (pump sizing)**

Once production well construction is complete, production wells will be developed. Full well development will not be performed until at least 48 hours after well seal placement. Development will consist of surging the well with a swab, then bailing the well to remove sediments brought into the well. The procedure will be repeated until coarse sediment is removed. After surging and bailing activities, a variable speed pump or airlift may be used to further develop the well, if possible, to obtain the lowest turbidity attainable. Development will continue until the water retrieved is substantially free of visible, settleable solids and field parameters of pH, specific conductivity, temperature, and turbidity stabilize. A minimum of ten well casing volumes will be removed during well development. A turbidity of 5 Nephelometric Turbidity Units (NTU) or lower will be the goal.

After the production wells have been developed, a 4-hour step test will be conducted to determine the well performance, assist in the pump design and long term pump test. The potential step tests will be 100, 250, 350 and 400 gpm. A 24 hour constant pump test will be completed after the step test.

A total of **24 hours** of development time is anticipated for both production wells. Estimate should be provided on a **per hour** basis. An additional 8 hours is anticipated for the step test.

**Bid Item No. 6 – Above Ground Completion**

Once construction is completed and development is completed, production wells will be protected above grade using a lockable steel security casing. Security casing should extend approximately three feet above and three feet below grade surface. A minimum three feet square concrete pad shall be constructed around each security casing. Security casings shall be protected using three inch diameter steel bollards. Additional sets of bollards may be necessary to protect clustered installations. Necessary grading activities for flood protection are addressed under the mobilization/demobilization bid item. Refer to Attachments 2a and 2b for a depiction of the anticipated well design. Above ground completions must be quoted on a **per well** basis.

**Schedule**

Pursuant to RMCS D requirements production wells should be constructed within a one month time frame per well. Please indicate equipment capability and availability to complete the required work effort.

**Attachments**

- Attachement C-1 - Site Map with Test Hole Locations
- Attachment C-2a - Proposed Production Well Detail PW-A
- Attachment C-2b - Proposed Production Well Detail PW-B
- Bid Table



SITE MAP WITH TEST HOLE LOCATIONS  
 RANCHO MURIETA CSD  
 SACRAMENTO COUNTY, CALIFORNIA

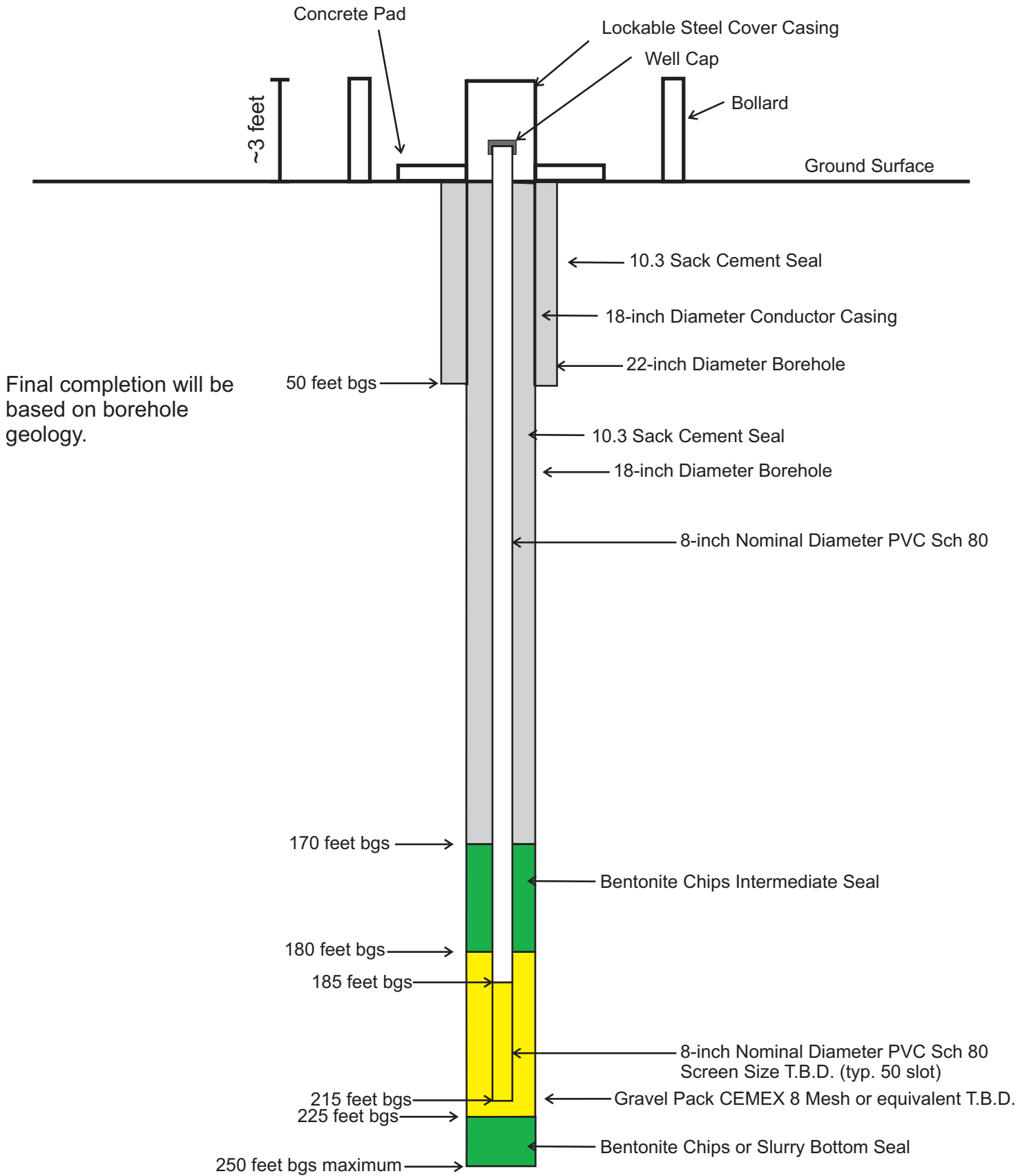
DATE: 10/22/2013
SCALE: As Shown
PROJECT NO: SAB115703
DRAWN: JE, MM, CT
CHECKED: PFD
FIGURE: 1

**LEGEND**

- Proposed Testhole Location
- Permanent Easement
- Temporary Easement
- Approximate Parcel Boundary

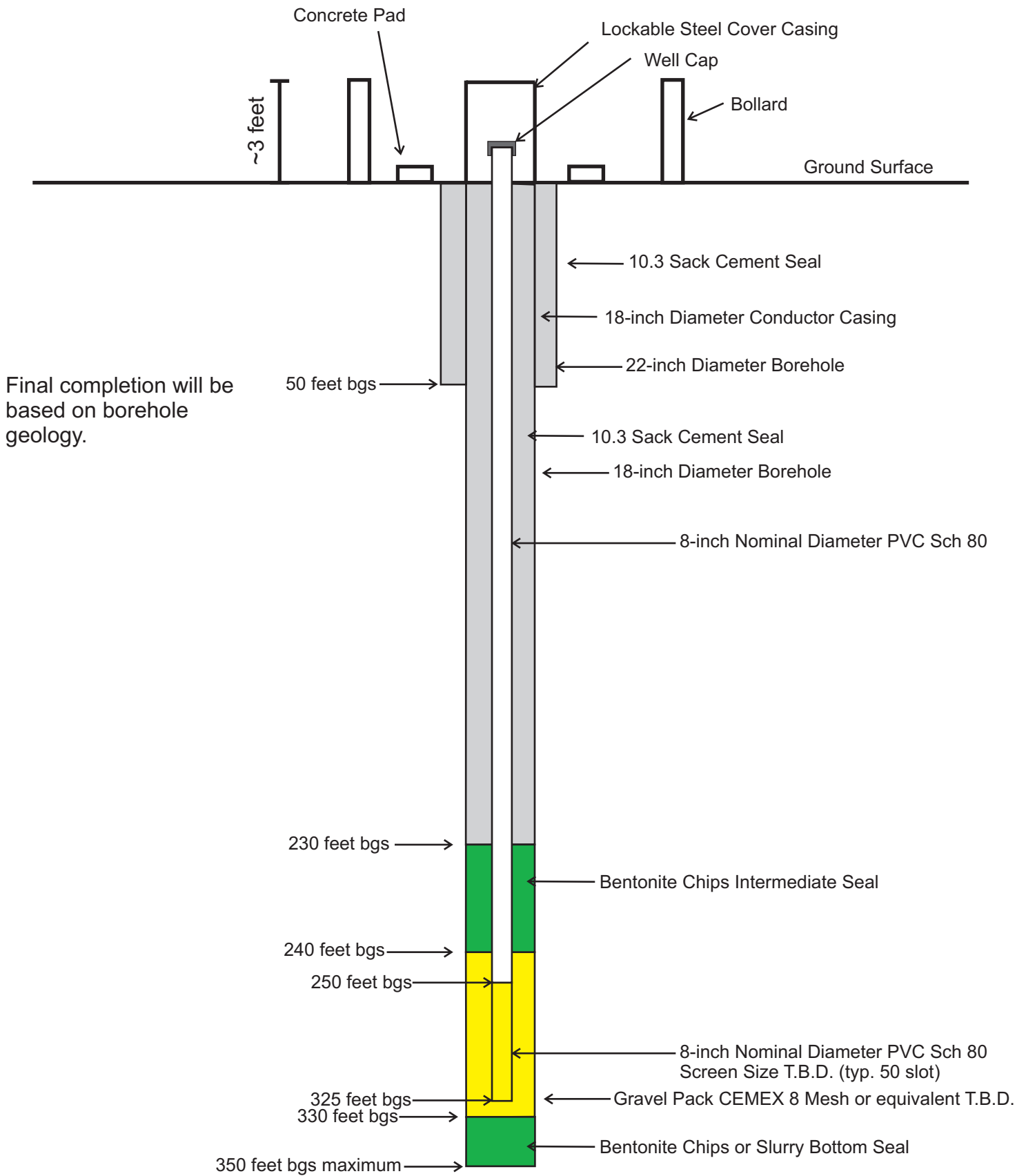
Permanent easement is 50'x50'





DATE: 10/22/2013
SCALE: Not To Scale
PROJECT NO: SAB115703
DRAWN: CT
CHECKED: PFD
FIGURE: 2a

PROPOSED PRODUCTION WELL  
 DESIGN PW-A  
 RMCS D  
 SACRAMENTO COUNTY, CALIFORNIA



DATE: 10/22/2013
SCALE: Not To Scale
PROJECT NO: SAB115703
DRAWN: CT
CHECKED: PFD
FIGURE: 2b

PROPOSED PRODUCTION WELL  
 DESIGN PW-B  
 RMCS D  
 SACRAMENTO COUNTY, CALIFORNIA



**Bid Tab Sheet**  
**Production Well Driling and Construction**  
**Rancho Murieta Community Services District**

Bid Item No.	Item Description	Unit*	Estimated Quantity	Unit Price (\$)	Item Price (\$)
1	Mobilization and demobilization	LS	2	\$0.00	\$0.00
2	Production Well drilling	FT	600	\$0.00	\$0.00
3	Geophysical Logging	EA	2	\$0.00	\$0.00
4	Production Well Construction				
	8 Inch diameter Sch 80 PVC Casing	LF	440	\$0.00	\$0.00
	8 Inch diameter Sch 80 PVC 0.050 Screen	LF	70	\$0.00	\$0.00
	Filter Pack	LF	135	\$0.00	\$0.00
	Bentonite Seal	LF	20	\$0.00	\$0.00
	10.3 Sack Cement Grout	LF	500	\$0.00	\$0.00
	Stainless Steel Centralizers	EA	9	\$0.00	\$0.00
5	Well Development	HR	24	\$0.00	\$0.00
5a	Step Test	HR	8	\$0.00	\$0.00
6	Above Ground Completion	EA	2	\$0.00	\$0.00
	<b>Total Base Bid</b>				<b>\$0.00</b>

\*EA: Each, HR: Hourly Rate, LF: Lineal Feet, LS: Lump Sum.

July 23, 2024

Mimi Morris  
General Manager  
RMCS D  
15160 Jackson Road  
Rancho Murieta, Ca 95683

RE: Maddaus Water Study

Dear Mimi,

It has come to our attention that a few of the CSD Board members are interested in declaring a state of emergency and therefore implementing a moratorium on water connections under California code section A350. To bring an alternative solution to the table, we would like to request a discussion with The Maddaus Water Group to run some additional modeling.

The existing models only account for an “all or nothing” approach to development. We would like Maddaus to prepare a model that only considers projects with approved tentative maps or are currently under construction (670 FSA Group: Riverview, The Retreats, and The Residence). We would like to see what impact the phased connections will have over the next few years. A majority of the Residence connections won't even be requested until 2026 and beyond. Even in the best-case scenario, the Rancho North development would not require any water connections until 2028. This gives CSD and the community time to thoughtfully consider water augmentation options without instituting a moratorium which may lead to legal liability to the District.

We would like to start the conversation with Maddaus Water Group at the earliest possible time to get ahead of the Board action. We would be happy to meet in person if required to move this forward.

Sincerely,

Bob Keil  
River Canyon Properties, LLC  
[Bobkeilmrk@gmail.com](mailto:Bobkeilmrk@gmail.com)  
916.521.8856

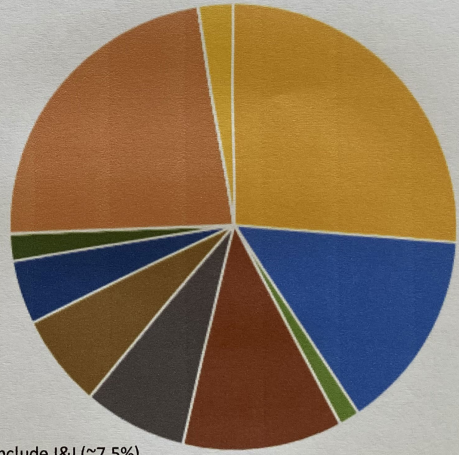
CC: CSD Board, Doug Veerkamp General Engineering, Tony Velez, Les Hock

# Recycled Water Options

## Existing Recycled Water Supply by Source

- Estate > 24,500 sf
- Estate 14,500-24,500 sf
- Estate 12,000-14,500 sf
- Estate > 12,000 sf
- Estate < 12,000 sf
- Halfplex
- Other
- Circle
- Cottage
- Townhouse (includes Villas lots)
- Murieta Village
- Murieta Gardens
- ADU
- Commercial
- Park
- Miscellaneous Public Uses

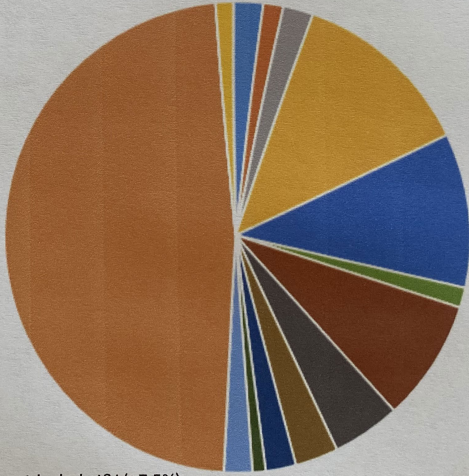
\*Does not include I&I (~7.5%)



# Recycled Water Options

Build-Out Recycled Water Supply by Source

- Estate > 24,500 sf
- Estate 14,500-24,500 sf
- Estate 12,000-14,500 sf
- Estate > 12,000 sf
- Estate < 12,000 sf
- Halfplex
- Other
- Circle
- Cottage
- Townhouse (includes Villas lots)
- Murieta Village
- Murieta Gardens
- ADU
- Commercial
- Park
- Miscellaneous Public Uses



\*Does not include I&I (~7.5%)

**From:** [Mel Outram](#)  
**To:** [Tim Maybee](#); [Linda Butler](#); [Randy Jenco](#); [Martin Pohl](#); [Stephen Booth](#)  
**Cc:** [Mark Matulich](#); [Mimi Morris](#); [Amelia Wilder](#)  
**Subject:** Full resignation Letter  
**Date:** Tuesday, August 13, 2024 2:47:18 PM

---

Good afternoon Board members.

I would like to clarify why I have decided to withdraw my current employment with CSD Security. I started this job in good faith, explaining what services I could provide with my extensive background with being a retired law enforcement officer with 23 years of service, in addition to previously working as lieutenant for the Shasta Dam security force. I made it very clear I did not want to be Chief of Security if Chief Benitez ever vacated his position and be the person responsible for everything it entails. I especially wanted to stay away from the politics I have been told that occur during board meetings with the public. Unfortunately, when Chief Benitez resigned back in February, no one from management or the Board informed me that CSD decided not to ever fill that position but pass on additional work to myself and Finance director Mark Matulich.

At first, it appeared a fair deal with me receiving my salary increase early and an additional 5 % for the extra workload, however I was never informed the management and board members were going to allocate the Chief's salary for other things that I am not aware of and never fill the security Chiefs position. Instead, I was informed that CSD was in a transition period. To have Mark Matulich be the interim Chief, who already has a full time position with CSD and works remotely from home several days a week, is not sustainable to maintain the operations of a Security Chief, nor did Matulich obtain any security credentials, which are required for a Chief to be in charge of security and be able to fill vacancies, which could be required for someone holding the position of Security Chief with the understaffing of security personnel, which is an ongoing issue.

I recently contacted a person on Board and explained my frustrations with how the security department is currently be run. Especially with managers working remotely and there are hardly any managers in the office managing the employees in the building. I proposed to be promoted to Chief of Security and take over the role and responsibilities of that specific position. I proposed CSD absorb the Sergeant position I was currently working, and I would work both positions, however I wanted the title of Chief and the salary that comes with it. Unfortunately, I was informed those funds have been allocated for something else and I could not receive any definite conformation with a promotion or the title of Chief of Security in the future. I have been doing the duties of chief for the last six months, other than board meetings, stats for Riverview Valley Times and payroll, since CSD has several people working in the finance department. However,

stated I would add the additional responsibilities to my workload. In addition, I was informed if I was told the truth back in February, that CSD has decided not to fill the vacancy of Security Chief, management was concerned I was going to resign at that time. Unfortunately, that is a hard pill to swallow and gives me doubt I could trust the current management in the future.

It is very unfortunate CSD does not think security is important for this growing community and does not spend the necessary money on security and allocates the money for other things when security is drastically dissolving. Even though I gave 100% while I was working for CSD Security during not the best conditions and circumstances, I got to know a lot of great people throughout my tenure and really had a vested interest in making Rancho Murieta a safer community. In addition, I raised the work ethic and standards for nearly all the employees I supervised.

I do not understand how CSD was able to let the prior Chief of Security sit in his office eight to nine hours a day and rarely put on a uniform or conduct any patrol duties, other than attending special meetings and conduct special investigations from his office. The last Chief passed on a lot of responsibilities which he had time to do himself. I have had boots on the ground since day one! I engage with members of the community while I am conducting patrol checks and answering calls for service. I conduct the weekly and monthly schedules for all the security employees, maintain maintenance on all security vehicles, in constant contact with A & D Gates for gate repair, watch dog security for camera operations, RMA maintenance for maintenance issues when observed or reported, conduct yearly employee evaluations, assist payroll with concerns on employee work pay and schedule conflicts, monitor daily patrol activities, answered employee and resident calls and concerns on my time off and conduct thorough investigations and reports to provide law enforcement when required and observed camera operations throughout the community and at both gates on my time off when available.

If the Board of CSD and management thinks all this can be done without having a full time Chief Of Security, I think you are fully mistaken. In addition, if the District continues to let managers resign and leave the positions vacant and pass the extra workload to additional employees in that field, the District is setting themselves up for failure. Employees get burned out, mistakes happen more often, service to the community suffers, employees get injured and call off sick more often and your productivity goes down. I am a simple-minded person; however it does not take a genius to figure out something needs to change for all the employees who are working at the ground level and are not in the upper management, which decisions do not affect their large salaries

you provide.

To make it crystal clear, I did not resign to retire! I resigned because of the decisions made by management and the current board members to not fill the position of Security Chief, and hand those duties off to another employee for no additional pay.

Sincerely, Sgt. Outram



**SOMACH SIMMONS & DUNN**

A PROFESSIONAL CORPORATION  
ATTORNEYS AT LAW

500 CAPITOL MALL, SUITE 1000, SACRAMENTO, CA 95814  
OFFICE: 916-446-7979 FAX: 916-446-8199  
SOMACHLAW.COM

August 20, 2024

***Via Electronic Mail Only***

Rancho Murieta Community Services District  
15160 Jackson Road  
Rancho Murieta, CA 95683  
[mmorris@rmcsd.com](mailto:mmorris@rmcsd.com)

Patrick Enright, District General Counsel  
[penright@rwglaw.com](mailto:penright@rwglaw.com)

Re: Rancho North Properties and Murieta Gardens Financing and Services Agreement

To the Board of Directors of the Rancho Murieta Community Services District and Mr. Enright:

We are writing on behalf of Rancho Murieta Properties, LLC (RMP). RMP is informed that, during the meeting of the Rancho Murieta Community Services District's (RMCS D) Board of Directors (Board) on July 17, 2024, the Board discussed the possibility of imposing a moratorium on new water service connections pursuant to a water shortage emergency declaration contemplated under Water Code section 350 (Section 350). RMP has concerns that, if RMCS D chooses to take this path, RMCS D will fail to meet its obligations under the Rancho North Properties and Murieta Gardens Financing and Services Agreement (Rancho North FSA). These concerns are heightened by RMCS D's counsel's recent public representation that Rancho North is "at ground zero" and therefore easily denied service.

To the contrary, the Rancho North FSA collectively entitles RMP and other contracting owners to 1.5 million gallons per day of produced water capacity from RMCS D, in exchange for considerable financial contributions, ultimately exceeding \$5.7 million for improvements of the two water treatment plants, including bond expenditures. RMCS D is contractually obligated to provide RMP, and other contracting owners, water service for specifically identified developments, following compliance with the Rancho North FSA. As RMP has fully performed its obligations under the Rancho North FSA, RMP is legally entitled to a guarantee of water service. Should RMCS D take action to impose a moratorium



on new connections and, in accordance with that moratorium, fail to begin RMP's requisite Water Supply Assessment or take any other action to deprive RMP of its contractual water supply, such action will constitute a material breach of the Rancho North FSA and RMP will seek legal relief under the contract to the fullest extent authorized by law.

Moreover, RMP may also bring legal action based on RMCS D's compliance with the requirements of Section 350 *et seq.* Relief is available against any water distributor whose actions in declaring a water shortage emergency and instituting regulations or restrictions are arbitrary, capricious, fraudulent, or fail to comply with the procedure and notices required by law. (Wat. Code, § 358; *Swanson v. Marin Mun. Water Dist.* (1976) 56 Cal.App.3d 512, 517-518 (*Swanson*)). Distributors are warned against relying on Section 350 to effectively institute a "no growth" policy, which they have neither the power nor authority to impose, rather than in response to legitimate emergency conditions. (*Swanson, supra*, at p. 524.) The record does not support a declaration of a water shortage emergency. Even if RMCS D did not have sufficient water to fulfill its contractual duties under the Rancho North FSA, which RMP does not concede and there is no evidence to support, RMCS D has a continuing obligation to exert every reasonable effort to augment its supplies – at which time any moratorium must cease. (Wat. Code, § 355; *Swanson, supra*, at p. 524.) Critically, RMCS D's own consultants have already demonstrated that it will have sufficient water supplies for development based on reasonable actions to augment its supply. Failure to take those actions would be a violation of RMCS D's affirmative duty under the Water Code and case law.

We trust that RMCS D will give this matter its immediate attention and will promptly be in contact to discuss the issues presented herein.

Very truly yours,



Stuart L. Somach  
Theresa C. Barfield

cc: Greg Dyer (gdyer@jonesdyer.com)  
Tony Velez (tonyv@liveoaklegacy.com)  
Melinda Morris, RMCS D General Manager (MMorris@rmcsd.com)

TCB;jlc



Patrick L. Enright

T 415.421.8484

F 415.421.8486

E penright@rwglaw.com

1 Sansome Street, Suite 2850

San Francisco, CA 94104-4811

rwglaw.com

# MEMORANDUM

VIA ELECTRONIC MAIL

TO: Honorable Members of the Board of Directors  
Rancho Murieta Community Services District

CC: Mimi Morris, General Manager

FROM: Patrick L. Enright

DATE: August 21, 2024

SUBJECT: Will Serve Letters for Residences and Riverview

---

## BACKGROUND:

The Rancho Murieta Community Services District (“**RMCS**D”) has received requests for will-serve letters from the developers of the Riverview and the Residences of Murieta Hills East and West. The Riverview development was approved for 140 dwelling units, and the Residences was approved for 198 residential units (99 in the East and 99 in the West). RMCS D previously issued 30 will serve letters for Riverview and 68 will serve letters for Residences. The request is to issue 110 will serve letters for Riverview, and 130 will serve letters for the Residences, for a total of 240 will serve letters. It is anticipated that each development will be built out over the next three to four years.

Both developments are signatories to the 2014 670 Financing and Services Agreement (“670 FSA”) between the developers and RMCS D. The 670 FSA provided, in part, that the developers funded, in part, the expansion of the Water Treatment Plant in exchange for:

- (a) will-serve commitments from the District and
- (b) the right to reimbursement from those developer parties that did not initially help fund the water treatment plant expansion.

The 670 FSA was so named because it initially included 670 EDUs; however, a last minute withdrawal of one signatory and corresponding development project reduced the authorized number to 521 residential units as follows:<sup>1</sup>

Riverview	140
Residences East)	99
Residences (West)	99
Lakeview	99
Murieta Retreats	84
	521

The Lakeview development has recently been transferred to the Sacramento Tree Foundation, so the 99 units will not be built, leaving 422 residential units. Murieta Retreats has received will-serve letters for their 84 units, of which all but 13 are connected to the water system. Therefore, with the previously approved units for Retreats (84), Residences (68), and Riverview (30), 182 will-serve letters have been issued. This leaves the remaining 240 units being requested now. If the 240 will-serve letters are granted, all the will-serve letters will have been issued under the 670 FSA.

## **WATER SUPPLY**

The 670 FSA addressed the water treatment plant capacity but not the water supply to the treatment plant, except through increasing the Water Supply Augmentation Fee (“**Fee**”) to be paid by the developers. This Fee was updated in 2017, requiring the developers to pay \$5,938 upon connection to the water system. RMCS D is evaluating the sources and uses of the WSAF Reserve Account.<sup>2</sup> The District needs to review the Water Supply Augmentation Fee and determine if it needs to be adjusted to ensure sufficient water supply for new developments.

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<sup>1</sup> Exhibit H of the FSA also list Murieta Gardens (residential) and Murieta Gardens (commercial) although the Murieta Gardens developments were transferred to the Rancho North FSA prior to finalization of the 670 FSA. Murieta Gardens provides for 99 residential units and 50 commercial units. The residential units have been constructed and are connected to water, although the actual number was reduced to 78. The commercial units are substantially built and connected to the water system, except for the Extended Stay Hotel and a few commercial sites.

<sup>2</sup> The fee was enacted under the Mitigation Fee Act (sometimes called AB 1600) which requires that the funds be placed in an enterprise account and can only be spent on the items for which the fees are collected. Generally, this is to augment the water supply. The last rate study report completed for the fee was in 2017.

The 670 FSA can be found by clicking [here](#).

RMCS D is finalizing an Integrated Water Master Plan (“IWMP”). This is the first such review since 2010. The expectation is that the IWMP will be completed in the fall of 2024 or early 2025. The initial draft of the IWMP demonstrates that RMCS D has just enough water supply for both the current water connections and all projected connections from future development but does not have sufficient water supplies in the event of a severe drought.

The capacity of Calero Reservoir with stop logs is 2,565.3 acre-feet, and Chesbro is 1,142.97 acre-feet for a total of 3,708.27 acre-feet. This figure translates to approximately 2,400 to 2,500 AF of storage in the two reservoirs due to deep space requirements, evaporation, seepage. Whether RMCS D adds any new connections, RMCS D needs to build resiliency in the water system to address droughts.

The draft IWMP projects the Riverview development will use 92 acre-feet annually for 140 units, and the Residences will use 165 acre-feet for 198 units. Connections have been made for 30 Riverview homes, but no connections yet exist for the Residences because the houses have not yet been built. For simplicity, I use 257 additional acre-feet to reflect the water needed to fully serve Riverview and Residences at full build-out of both projects, which is likely in 2026.

Given fluctuations in annual usage (1,580 AF in 2023; 1,684 in 2022; the average of those two years: 1,632), it is difficult to say with precision how much actual usage will be, but a rough estimate is 1,923 AF (1,632 plus 257 = 1,889) with the additional 670 FSA developments fully built out<sup>3</sup>. Therefore, whether the Board grants the will-serve letters, RMCS D needs to augment its water supply for drought conditions.

**RECOMMENDATION:**

I recommend the Board direct the General Manager to approve the requested Will Serve letters with specific conditions for the remaining 670 FSA projects. I make the recommendation for several reasons:

1. The developments are fully entitled and vested; no additional entitlements are needed from the County or RMCS D. Unlike in some cases dealing with a moratorium, the developments are not speculative, with the projects being conceptual. Here, the properties have been re-zoned as needed, a subdivision map has been approved, and the environmental

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<sup>3</sup> This number should reduce gradually as residents install more water efficient appliances, landscaping, and of course the requirement of the State of California to reduce indoor water usage. For instance, while in recent years the number of connections have increased slightly, the annual water usage has decreased slightly.

review has been completed, including addressing the water issue. The developers have already expended a significant amount of money.

2. The developers have complied with the 670 FSA's conditions. The water treatment plant has been expanded, and the developments will pay the Water Supply Augmentation Fee to increase the water supply to serve its residential units.

3. The developers have agreed, and the Board will mandate that the development be water-efficient to the maximum extent possible in 2025. Furthermore, the developers have agreed to a 50% reduction in water usage during droughts.

4. The developments will be phased in over the next three to four years, given RMCS D's time to augment the water supply before all the residential units are connected to the water system.

# # #



## Rancho Murieta Community Services District

15160 Jackson Road • P.O. Box 1050 Rancho Murieta, CA 95683 • 916-354-3700 • Fax 916-354-2082

Visit our website [www.rmcsd.com](http://www.rmcsd.com)

August 21, 2024

Mr. Bob Keil  
River Canyon Properties, LLC  
Email: [bobkeilmrk@gmail.com](mailto:bobkeilmrk@gmail.com)

**Re: Water and Sewer Will Serve Letter for --  
Development Project: Phase 2 Residences of Murieta Hills East (37 lots)**

Dear Mr. Keil:

This letter responds to your request for a water and sewer letter for the above development project and property ("Residences"). The project property is located within the Rancho Murieta Community Services District ("District"). The District will provide water and sewer services for the parcels above based on the Conditions of Approval (attached as Exhibit A) and the following conditions:

1. New utility service and service connections are subject to the District Code and any other applicable District ordinances, resolutions, rules, regulations, policies, fees, and charges, which may be amended from time to time.
2. Service is also subject to the full execution of and the developer's compliance with a district-maintained extension agreement for the project.
3. Water and sewer service to the project property is also conditioned upon full compliance with that specific Financing and Services Agreement dated March 17, 2014, known as the 670 FSA, including payment of all amounts due as reimbursement for water treatment plant and wastewater improvements provided in the agreement. A copy of the contract is on file with the District and saved on the District's website.
4. The Residences shall implement drought-tolerant landscaping with no lawns. The Residences shall comply with all State mandates for indoor and outdoor water usage. All appliances installed in the homes shall comply with the State of California requirements to maximize water efficiency. The Residences will comply with the RMCS D Water Shortage Contingency Plan per the California Water Code and require a 50% water use reduction during a catastrophic drought as determined by the Board of Directors of RMCS D.
5. An adequate water treatment system for these units is completed and in place. Water transmission pipelines to this subdivision have been installed up to its boundary line by earlier subdivisions.
6. Ample water for everyday use and fire protection is available and will be furnished to each lot/unit upon payment of related District fees on demand.

*Serving the Community for over 30 years*

Board of Directors: Tim Maybee, President • Martin Pohll, Vice-President • Randy Jenco • Linda Butler • Martin Pohll •  
Stephen Booth  
General Manager • Mimi Morris

This letter is a statement of intent to provide water and sewer services as of the date set forth above. It is not a contract, offer to contract, or binding commitment to provide service or reserve capacity for the project.

Sincerely,

Melinda (Mimi) Morris

General Manager  
Rancho Murieta Community Services District

Attachment: Exhibit A

# Exhibit A

## COUNTY OF SACRAMENTO INTER-OFFICE CORRESPONDENCE

December 24, 2007

TO: PLANNING AND COMMUNITY DEVELOPMENT

FROM: CINDY H. TURNER, Clerk  
*Cindy Turner*  
Board of Supervisors

SUBJECT: **06-RZB-ZOB-SVB-AHS-0252** - (RANCHO MURIETA/LENZIE)  
**REZONE, AMENDMENT TO THE PLANNED DEVELOPMENT  
ORDINANCE, VESTING TENTATIVE SUBDIVISION MAP AND  
AFFORDABLE HOUSING PLAN  
BNY, WESTERN TRUST, WARMINGTON HOMES AND WOODSIDE  
GROUP** - Applicant/Developer: Murieta Holdings - Engineer: MacKay and  
Soms - located on the east side of Stonehouse Road, approximately 1,400 feet  
north of Escuela Drive, in the community of Rancho Murieta. (Nottoli)

The Board of Supervisors, meeting in regular session on October 16, 2007,  
certified the Final Environmental Impact Report as adequate and complete.

The Board of Supervisors, meeting in regular session on December 12, 2007,  
adopted the Findings of Fact and Statement of Overriding Considerations and  
took the following actions on the above referenced matter:

### **REZONE**

Approved a Rezone by Ordinance No. **SZC-2007-0060** of 86.2 acres from A-2  
(PD) (Agricultural-Planned Development) to RD-1 (PD) (Residential-Planned  
Development for 5.1 acres), RD-3 (PD) (Residential-Planned Development for  
32.3 acres) and "O" (PD) (Recreation-Planned Development for 48.8 acres),  
subject to the findings and conditions as outlined in Addendum No. 6.

### **AMENDMENT TO THE RANCHO MURIETA PLANNED DEVELOPMENT ORDINANCE**

Approved an Amendment to the Rancho Murieta Planned Development  
Ordinance by Ordinance No. **SZC-2007-0060**, subject to the findings and  
conditions as outlined in Addendum No. 6.



**VESTING TENTATIVE SUBDIVISION MAP**

Approved a Vesting Tentative Subdivision Map to create four (4) single-family lots in the RD-1 (Residential) zone and 95 single-family lots in the RD-3 (Residential) zone, in addition to four (4) open space lots, one (1) sewer lift station lot, and one (1) private road lot, subject to the findings and conditions as outlined in Addendum No. 5.

**AFFORDABLE HOUSING PLAN**

Approved an Affordable Housing Plan that consists of the payment of in-lieu and affordability fees.

The Board approved the Mitigation Monitoring and Reporting Program.

The complete file and copies of all documents are attached.

Attachments: Ordinance No. SZC-2007-0060  
Vesting Tentative Subdivision Map conditions

CHT:am

cc: In house  
Applicant/Developer  
Engineer  
Owners

**VESTING TENTATIVE SUBDIVISION MAP**

**THE RESIDENCES EAST**

**06-RZB-ZOB-SVB-AHS-0252**

**Assessor's Parcel Nos. 073-0190-047 and 105**

**CONDITIONS OF APPROVAL:**

1. The development approved by this action is for 99 single family lots in substantial compliance with Exhibit "K".
2. This action does not relieve the applicant of the obligation to comply with all ordinances, statutes, regulations and procedures. Any required subsequent procedural actions shall take place within 36 months of the date on which the permit became effective or this action shall automatically be null and void.
3. Approval shall be conditioned on, and shall not become effective unless the Applicant signs and files with the Sacramento County Planning Department, an indemnity agreement approved by the County Counsel.
4. Comply with the accompanying Affordable Housing Plan, Control No. 06-0252.
5. Grading shall be pursuant to an Approved Grading Plan. Grading activities shall not result in man-made slopes that exceed a 2:1 slope in their final condition.
6. Only wrought-iron fencing shall be allowed along the property lines abutting open space areas.
7. Prior to issuance of the first building permit, the project proponent shall provide for, and fund construction of, a trail system designed to link the existing residential developments located to the south and northeast of the project site. The trails system shall be consistent with Exhibit "K".
8. Prior to final map recordation, the property owner shall grant an Avigation and Noise Easement to Sacramento County, at no cost to the County, due to the site's location within the draft Mather Airport Planning Policy Area recommended by the Sacramento County Airport System. This easement shall preclude the property owner from seeking damages from the County in the future for loss of value due to aircraft over-flight noise or safety issues.
9. Prior to issuance of building permits, improvement plans, grading permits or recordation of the final map, comply with Transportation Systems Management (TSMP) Plan for Rancho Murieta North and South, including compliance with General Plan Air Quality policy 15 (AQ-15).
10. Provide public sewer, water, water storage and storm drainage facilities, together with any associated easements and pay all fees to the satisfaction of the Rancho Murieta Community Services District.

11. Comply with all Rancho Murieta Community Services District ordinances, and design standards dated July 1982, and construction specifications dated July 1, 1993, concerning sewer, water, drainage, and security as the only utility service provider in the community.
12. Relocate all existing facilities as necessary for project development to the satisfaction of the Rancho Murieta Community Services District, at sole cost to the developer. Grant and abandon easements as necessary.
13. Obtain right of entry and easements for all off-site facilities prior to subdivision improvement approvals.
14. Ensure access arrangements and install fire hydrants meeting the required fire flow demands pursuant to the standards of the Sacramento Metropolitan Fire District.
15. Pay Rancho Murieta Association or Rancho Murieta Community Services District community park fees and/or enter into an agreement for financing in-lieu-of privately maintained park and recreation facilities in accordance with District Ordinance 90-8, as amended, as part of the park requirements evaluation.
16. Enter into an agreement with Rancho Murieta Community Services District for potable water supply.
17. Dedicate a 12.5-foot public utility easement for underground facilities and appurtenances adjacent to all public ways.
18. Dedicate any private drive, ingress and egress easement, or Irrevocable Offer of Dedication and 12.5 feet adjacent thereto as a public utility easement for underground facilities and appurtenances.
19. Submit improvement plans to Sacramento Metropolitan Fire District for approval, prior to construction.
20. Installation of LP-Gas tanks, if any, shall comply with Fire Prevention Standard 435.203.
21. The required width of access roadways are not to be obstructed in any manner, including by the parking of vehicles. Guest parking locations and design shall be determined at time of construction and approved by the Planning Director and Sacramento Metropolitan Fire District.
22. The following methods of fire lane identification are taken from Section 22500.1 of the California Vehicle Code and of the 3 methods presented below, 1 must be present for all areas designated as a fire access lane.
  - a. Posting of a sign immediately adjacent to, and visible from, the designated fire lane clearly stating in letters not less than one inch in height, that the place is a fire lane and no parking is permitted (specific sign required).

- b. By outlining or painting the pavement “red” with approved pavement paint and, in CONTRASTING color, marking the pavement with words “NO PARKING - FIRE LANE” every 25 feet, which is clearly visible from a vehicle.
  - c. By a “red” curb or “red” paint on the edge of the roadway upon which is clearly marked in a CONTRASTING color, the words “NO PARKING - FIRE LANE”.
23. Provide drainage easements and install facilities pursuant to the County of Sacramento Floodplain Management Ordinance, Sacramento County Water Agency Code, and County of Sacramento Improvement Standards, including any fee required by the Sacramento County Water Agency Code and to the satisfaction of Rancho Murieta Community Service District.
24. Off-site drainage improvements and easements shall be provided pursuant to the Sacramento County Floodplain Management Ordinance, the Sacramento County Improvement Standards, and the Rancho Murieta Community Service District.
25. A drainage study shall be required to demonstrate mitigation of increase run-off due to the project. Drainage study shall be subject to review and approval by Department of Water Resources and Rancho Murieta Community Service District.
26. Advisory: This project is subject to the Cosumnes River Bridge Crossing fee.
27. Prior to recordation of final map, the property shall annex into the County of Sacramento Community Facilities District No. 2005-1 (Police Services). The annexation process takes approximately 6 months and the applicants must contact the County of Sacramento Infrastructure Finance Section at (916) 874-6525 at the earliest possible time to initiate the process and to obtain information concerning annexation costs.
28. Construction of the private streets shall be to the satisfaction of the Municipal Services Agency. Street sections shall be per PD 77-PD-10.
29. Provide visibility easements as necessary to meet sight distance requirements.
30. Comply with County Design Standards for lighting private streets.
31. Record a maintenance agreement or CC&R’s involving all the parcels of the subject map assuring timely maintenance of the private streets.
32. Prior to issuance of building permits for The Residences West, Residences East and/or the Retreat, the existing water supply treatment plant must be upgraded to provide adequate capacity for existing and approved projects, as well as the Retreat and both Residences projects. PU-1.
33. Prior to issuance of building permits, to avoid significant impacts related to the provision of sewer service, the applicant shall submit engineer-certified documentation from the CSD demonstrating that the wastewater treatment facility has adequate treatment, storage, and disposal capacity to accept wastewater from the lots for which building permits are

requested without resulting in detectable degradation of ground or surface water quality (or exacerbation of existing degradation), and that such determination has been made based on recent actual wastewater flows, as well as projected flows from other projects for which building permits have been issued. PU-2.

34. Contribute a fair share for public street improvements on Stonehouse Road from Jackson Highway (State Route 16) to Latrobe Road based on an 84-foot Rural Collector pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation.
35. The access control gate must be designed to the standards for an entry gate layout for new developments pursuant to the Uniform Fire Code Section 902.2.4.2.
36. Prior to the issuance of building permits, the applicant shall pay a fair share of the cost of the following improvements:
  - a. SR 16 / Sunrise Boulevard. An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
  - b. SR 16 / Sunrise Boulevard. An exclusive left-turn lane should be added to the southbound approach, creating dual left-turn lanes on Sunrise Boulevard.
  - c. SR 16/ Grant Line Road. The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane, two exclusive through lanes and an exclusive right-turn lane on Grant Line Road. The northbound and southbound phasing should be changed from split phase to protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
  - d. SR 16 / Dillard Road. The eastbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
  - e. SR 16 / Dillard Road. The northbound combined left/right-turn lane should be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Dillard Road.
  - f. SR 16 / Latrobe Road. This intersection meets the MUTCD peak hour signal warrant during the PM peak hour and should therefore be signalized. The northbound and southbound approaches should have permitted left-turn phasing and the eastbound and westbound approaches should have protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
  - g. SR 16 / Stonehouse Road. This intersection meets the MUTCD peak hour signal warrant during both the AM and PM peak hours and should therefore be signalized. The southbound combined left/right-turn lane should be split out to include an

exclusive left-turn lane and an exclusive right-turn lane on Stonehouse Road. An additional eastbound and westbound through lane should be added to SR 16.

- h. SR 16 / Stonehouse Road. An additional eastbound and westbound through lane on State Route 16 at the intersection of Stonehouse Road should be added.
  - i. SR 16 / Murieta Parkway. An additional eastbound and westbound through lane should be added to SR 16. TC-1.
37. The following mitigation measures will be applied during the grading and earthmoving phase of construction to reduce PM<sub>10</sub> emissions:
- a. All exposed soil shall be watered at a frequency that keeps soil moist at all times,
  - b. All haul roads shall be watered twice daily,
  - c. At least two feet of freeboard shall be maintained for all trucks hauling soil and,
  - d. Use emulsified diesel or diesel catalysts on applicable heavy duty diesel construction equipment. AQ-1.
38. Off-Road Vehicle Fleet - Equipment Emissions: Prior to approval of improvement plans and/or grading plans, or any earthmoving activity on the site, whichever comes first, the project representative shall submit to the Sacramento County Department of Environmental Review and Assessment (DERA) a copy of a Sacramento Metropolitan Air Quality Management District (SMAQMD) approved plan demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction\* compared to the most recent California Air Resources Board (CARB) fleet-average; and

Prior to the start of construction, the project representative shall submit to the Sacramento County DERA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly thereafter to SMAQMD throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide DERA and SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and onsite foreman.

(\*NOTE: Acceptable options for reducing emissions may include use of late model vehicles, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.) AQ-3.

39. Prior to the approval of improvement plans or the issuance of grading permits, the proponent will submit proof that the off-set air quality mitigation fee of \$1557.75 per acre graded (74.4 acres) has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and the lead agency. AQ-4.
40. Off-Road Diesel Equipment - Visible Emissions: The project shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the Sacramento County DERA and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted to SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations. AQ-5.
41. Prior to approval of Grading Plans, the applicant shall submit an Asbestos Dust Mitigation Plan to the Sacramento Metropolitan Air Quality District for approval. No Asbestos Dust Mitigation Plan shall be required for those areas where a registered geologist has performed a geologic evaluation (in accordance with the Air Resources Board's "Asbestos Airborne Toxic Control Measure For Construction, Grading, Quarrying and Surface Mining Operations") concluding that no naturally occurring asbestos, ultra-mafic rock or serpentine is likely to be found in the area to be disturbed, subject to the review and approval of the Sacramento Metropolitan Air Quality Management District. The Asbestos Dust Mitigation Plan for all other lots on which asbestos is known to be present or assumed to be present (in accordance with the above-referenced Airborne Toxic Control Measures) should include the following:

An Asbestos Dust Mitigation Plan must specify dust mitigation practices which are sufficient to ensure that no equipment or operation emits dust that is visible crossing the property line, and must include one or more provisions addressing each of the following topics:

a. Track-out prevention and control measures which shall include:

- (1) Removal of any visible track-out from a paved public road at any location where vehicles exit the work site; this shall be accomplished using wet sweeping or a HEPA filter equipped vacuum device at the end of the work day or at least one time per day; and
- (2) Installation of one or more of the following track-out prevention measures:
  - (a) A gravel pad designed using good engineering practices to clean the tires of exiting vehicles;

- (b) A tire shaker;
  - (c) A wheel-wash system;
  - (d) Pavement extending for not less than 50 consecutive feet from the intersection with the paved public road; or
  - (e) Any other measure as effective as the measures listed above.
- b. Keeping active storage piles adequately wetted or covered with tarps.
- c. Control for disturbed surface areas and storage piles that will remain inactive for more than 7 days, which shall include one or more of the following:
- (1) Keep the surfaces wetted;
  - (2) Establishment and maintenance of surface crusting sufficient to satisfy the test in Subsection (h)(6);
  - (3) Application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations;
  - (4) Covering with tarp(s) or vegetative cover;
  - (5) Installation of wind barriers of 50 percent porosity around 3 sides of a storage pile;
  - (6) Installation of wind barriers across open areas; or
  - (7) Any other measure as effective as the measures listed above.
- d. Control for traffic on on-site unpaved roads, parking lots, and staging areas which shall include:
- (1) A maximum vehicle speed limit of 15 miles per hour or less; and
  - (2) One or more of the following:
    - (a) Watering every 2 hours of active operations or sufficiently often to keep the area adequately wetted;
    - (b) Applying chemical dust suppressants consistent with manufacturer's directions;
    - (c) Maintaining a gravel cover with a silt content that is less than 5 percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of 3 inches on the surface being used for travel; or



- (d) Any other measure as effective as the measures listed above.
- e. Control for earthmoving activities which shall include one or more of the following:
  - (1) Pre-wetting the ground to the depth of anticipated cuts;
  - (2) Suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures;
  - (3) Application of water prior to any land clearing; or
  - (4) Any other measure as effective as the measures listed above.
- f. Control for Off-Site Transport: The owner/operator shall ensure that no trucks are allowed to transport excavated material off-site unless:
  - (1) Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and
  - (2) Loads are adequately wetted and either:
    - (a) Covered with tarps; or
    - (b) Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment.
- g. Post Construction Stabilization of Disturbed Areas: Upon completion of the project, disturbed surfaces shall be stabilized using one or more of the following methods:
  - (1) Establishment of a vegetative cover;
  - (2) Placement of at least 3 inches of non-asbestos-containing material;
  - (3) Paving; or
  - (4) Any other measure deemed sufficient to prevent wind speeds of ten miles-per-hour, or greater, from causing visible dust emissions.
- h. Air-Monitoring for Asbestos (if Required by the APCO):
  - (1) If required by the district APCO, the plan must include an air-monitoring component.
  - (2) The air-monitoring component shall specify the following:
    - (a) Type of air-sampling device(s);

- (b) Siting of air-sampling device(s);
  - (c) Sampling duration and frequency; and
  - (d) Analytical method.
- i. Frequency of Reporting: The plan shall state how often the items specified in Subsection (e)(5)(B), and any other items identified in the plan, will be reported to the district. AQ-10.
42. These and other measures, as deemed necessary and appropriate by the on-site geotechnical engineer, shall be applied to reduce impacts related to expansive soils to less than significant levels:
- a. Retain an onsite certified Geotechnical Engineer to observe construction in order to provide a complete professional geotechnical engineering service through the observational method. This will allow further evaluation of lots which require expansive soil mitigation following the mass grading. Should any variations or undesirable conditions be encountered the on-site observer can provide supplemental recommendations based on field conditions. Construction observation and testing will allow an opinion to be formed regarding the adequacy of the site preparation, material processing, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with project geotechnical specifications and requirements.
  - b. When soil is dry it is essential adequate water be applied during material processing and compaction. The addition of water during borrow activities, as well as during placement of soils should be assumed. Selection of construction equipment which facilitates the addition of moisture should be used to blend wet and dry soils and pulverize oversized blocky clay chunks. Selective grading of this soil can be attempted; however, due to their variable nature separation of this soil is difficult. Placement of the Ione formation soils in the deeper portion of the fill is preferable. Placement of select non-expansive soils on the upper portions of the fills may be required to reduce adverse impact of expansive soils. A certified Geotechnical Engineer will be on site to monitor dry season site grading for conformance with this measure.
  - c. When soil is wet, adequate provisions should be in place to minimize excessive moisture intrusion. Wheel rolling of graded surfaces should be performed and surfaces should be sloped to minimize ponding of rainfall and surface runoff. Wet season construction should be limited to those areas proposed to be immediately worked on to reduce surface exposure. Building pads without constructed improvements, and which go through a wet season cycle, whether cut or fill pads, may require re-processing of shallower materials prior to foundation construction. A certified Geotechnical Engineer will monitor wet season site grading and, if necessary, identify areas requiring re-processing due to wet season exposure. The on-site professional will monitor grading for conformance with this measure.

- d. Moderately expansive soils should be compacted to at least 90 to 92 percent of the maximum dry density (based on the ASTM D1557 test method) at a moisture content of about 3 to 4 percent over optimum. Should highly expansive soils be encountered, the relative compaction should be between 88 and 92 percent at a minimum of 4 percent over optimum. Prior to site grading additional testing may be required to identify specific compaction and moisture content requirements which may differ from those moisture content percentages recommended above. Deviations from moisture content recommendations must be approved by a certified on-site Geotechnical Engineer, who will also monitor soil compaction for conformance with this measure.
- e. Minimize the effects of water on cuts and fills adjacent to structures and in underground utility trenches to increase stability of lone soil materials. Water should be collected and appropriately discarded in all aspects of the site development. All building professionals (Geotechnical Engineers, Architects, Civil Engineers, Landscape Architects, general engineering contractors, or similar professional) should review and incorporate appropriate building techniques to minimize and collect surface and subsurface water. Utility trench backfills carrying water due to their permeable nature should all be controlled, directed, and drained away from the site; this will be overseen by a certified Geotechnical Engineer for conformance with this measure.
- f. Lots situated below a roadway section should have subdrainage to divert any water potentially collected and transmitted in street utilities and laterals away from the residences. Where deemed appropriate by a certified Geotechnical Engineer, instillation of cutoff subdrains surrounding a residence will be installed to maintain uniform moisture condition. The on-site professional will monitor drainage installations for conformance with this measure.
- g. Subdrainage of utility trenches should be provided to maintain dry backfill materials in all types of trenches. All utility penetrations through or beneath foundations should be backfilled with low permeability materials, such as slurry, grout, or concrete in order to minimize moisture migration through trench backfill materials when utility trenches under the structures are not intended as drains. The on-site certified Geotechnical Engineer will monitor drainage installations for conformance with this measure.
- h. Drainage of all utility trenches in the subdivision is required. The project Civil Engineer or similar professional should detail collection pipes to manholes and drop inlets of the storm drain system to allow for the collection of utility trench drainage. The collection pipes should be situated near the bottom of the permeable materials used for bedding and shading of pipes. The on-site professional will monitor drainage installations for conformance with this measure.
- i. Finish grading and landscape grading should include positive drainage away from all foundations. All final grades should provide rapid removal of surface water runoff; water should not be allowed to pond on building pads or adjacent to foundations or other structural improvements at any time during or following construction. As determined by the on-site certified Geotechnical Engineer, require slightly steeper

grades to swales and drainage areas to help convey moisture off pads, and increase the overall lot slope gradient. The on-site professional will monitor the actions for conformance with this measure.

- j. As determined by the on-site certified Geotechnical Engineer, the need for specialized foundation systems due to the presence of expansive soils will be based on the distribution of materials which occur during site grading. All foundation systems should be initially designed as if subject to potentially expansive soils. Following grading activities those lots located in non-expansive soils and/or bedrock can be delineated and a less aggressive conventional foundation system could be used. The on-site professional will monitor these actions for conformance with this measure. The on-site certified geotechnical engineer shall provide appropriate foundation systems for the specific site conditions following mass grading.
  - k. Landscape watering and saturation of pad grades due to landscaping shall be limited. Dry creek beds or other landscape type features may aid in keeping foundation areas dry where turf is desired. Dry-scape landscaping should be considered on lots affected by expansive soils. Landscape mounds adjacent to foundations in yards are not allowed. Lots that contain oak trees which require aeration trenches for root zones may need additional subdrainage measures. The on-site Geotechnical Engineer will monitor these actions for conformance with this measure.
  - l. Lots located downslope from one-another will likely experience water migration from uphill landscaping. Landscaping plans shall be review by a certified Geotechnical Engineer and Landscape Architect to assess impacts of terraced lot landscaping. Essential to reducing potential impacts from soil expansion is the collection and channeling of drained water from impermeable surfaces (i.e. roofs, concrete or asphalt paved areas); use of low flow irrigation systems; proper landscape layout and choice of turf locations; and education to the proposed homeowners of proper design and maintenance of landscaping and drainage facilities (such as perimeter subdrains and area drains that they or their landscaper installs). The on-site professional will monitor these actions for conformance with this measure.
  - m. At the start of site grading and continuing to the installation of landscaping, provide Sacramento County, Department of Environmental Review and Assessment, with monthly status reports signed by the on-site certified Geotechnical Engineer or similar professional which identifies those lots and areas where expansive soils occur, and identifies which of the above measures were implemented to mitigate expansive soil impacts. If grading or other activity associated with compromising soil integrity does not occur within the monthly period, no report need be submitted. GE-1.
43. To compensate for the permanent loss of wetlands, the applicant shall perform the following prior to grading or construction within 50 feet of onsite wetlands/swales:

The applicant shall obtain any/all applicable permits from the U.S. Army Corps of Engineers, California Department of Fish and Game and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site surface waters. A copy of

any required permits, or correspondence from the regulatory agency indicating that a permit is not required, shall be submitted to DERA. If the Mitigation required by permits do not satisfy the requirements of no net loss of wetlands specified by County General Plan Policy CO 96, the applicant shall pay to the County of Sacramento an amount based on a rate of \$35,000 per acre for the unmitigated/ uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies. The payment shall be collected by the Department of Planning and Community Development, and deposited into the Wetlands Restoration Trust Fund. BR-2.

44. Total tree removal limited by on-site tree mitigation - If the land use authority finds that the project revisions (elimination of Lots 47, 48, 49 and 50) as described on pages 18 - 21 of the "Biological Resources" chapter of the EIR are warranted; thereby reducing tree removal by 626 inches dbh and canopy loss by 0.37 acres, this measure shall apply. The proposed removal of 905 dbh inches and 1.19 acres of canopy cover of native oaks from the project site shall be mitigated through onsite replacement plantings in Open Space Lots A, B, C and D, which shall result in a minimum 1:1 compensation ratio for canopy acreage removed. No planting shall occur within 50 feet of the existing drainage channel on Lot B or Lot C on Residences West or Lot D on Residence East, or within the existing driplines of the oak groves on Lot A. Prior to the approval of grading or improvement plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist, licensed landscape architect, or restoration ecologist and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:
- a. Oak trees will be limited to deepot seedlings (40 cubic centimeters or larger) or 15-gallon size trees. Planting stock shall not be root bound and shall be field inspected by DERA staff prior to planting.
  - b. Trees shall be planted in a "natural character" with tree spacing at minimum 10 feet and maximum of 40 feet (25 feet average) apart. The maximum density of trees shall not exceed 64 trees per acre.
  - c. A soil scientist shall perform a site evaluation to determine appropriate planting locations within the open space lots. The findings of the evaluation shall be incorporated into the Replacement Oak Tree Planting Plan. If soils tests show that oaks cannot be replanted due to conditions at the site, BR-8 shall apply.
  - d. A temporary drip irrigation system shall be installed for the purpose of providing irrigation to the plantings during the establishment period. A watering schedule shall be included in the Planting Plan. The watering frequency shall be gradually reduced over the establishment period to wean the plantings off regular irrigation.
  - e. Deepot seedlings shall be planted according to industry-standard detail, including appropriate protection against herbivory from rodents and other animals. Fifteen-gallon trees shall be planted according to the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot depth boring hole to provide for adequate drainage where necessary, based on the soil evaluation.

- f. Replacement oak trees shall be monitored annually for 7 years, and shall achieve a survival rate of 100 percent at the end of the monitoring period. Monitoring reports shall be submitted to Department of Environmental Review and Assessment by July 1 of each year.
  - g. Replacement plantings shall be planted prior to issuance of any building permits and should be planted between October and April, when possible, to enhance survival.
  - h. Residents shall be provided with educational materials to minimize damage to the restoration areas. Advisory signage shall be installed along the boundaries of the open space lots where oak tree plantings occur.
  - i. Identify the maintenance entity and include their written agreement to provide care and irrigation of the trees for the 7-year establishment period, and to replace any replacement trees as necessary to achieve 100 percent survival at the end of the establishment period.
  - j. Because the County Tree Preservation Ordinance does not apply in the geographical area where mitigation plantings will occur, any on-site and/or off-site planting areas shall be protected in perpetuity through deed restrictions or conservation easements, to the satisfaction of the Sacramento County Environmental Coordinator. BR-7.
45. If the land use authority determines that all or some of the subdivision map changes on page 10-19 are not warranted and the mitigation totals are thus 1,531 inches and 2.4 acres of canopy, or that fewer on-site plantings of oak trees on open space lots are allowed, then prior to project approval one or more of the off-site options to complement onsite planting shall be chosen to mitigate for the loss of oak woodland that cannot be mitigated onsite (which shall result in a minimum 1:1 compensation ratio for canopy acreage removed):
- a. Offsite oak tree replacement plantings may occur within the boundaries of Rancho Murieta. A replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-7 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

OR

- b. Offsite oak tree replacement plantings may occur outside the boundaries of Rancho Murieta, but within five miles of Rancho Murieta and within Sacramento County. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-7 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

OR

- c. An equivalent amount of blue oak woodland canopy lost may be preserved and protected in perpetuity by a conservation easement. The property subject to the

conservation easement shall be located within five miles of Rancho Murieta, and within Sacramento County. A draft conservation easement shall be submitted to the Environmental Coordinator for review and approval. A copy of the recorded easement shall be submitted to DERA prior to the approval of grading or improvement plans or building permits.

OR

- d. Replacement for the total number of inches lost may be purchased from an oak tree mitigation bank acceptable to the County, prior to approval of grading or improvement plans or building permits.
  - e. If Lots 47 through 50 are not eliminated, the area outside the building pads of Lots 47 through 50 shall be protected through the implementation of a deed restriction that prohibits removal of any blue oaks or development within their driplines as described in BR-9.
  - f. If all of the above mitigation options are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible, then compensation shall be through payment into the County Tree Preservation Fund consistent with General Plan Policy CO-132. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made. BR-8.
46. With the exception of the trees removed and compensated for through Mitigation Measures BR-7 or BR-8, above, all native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:
- a. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.
  - b. Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".
  - c. Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the trees within 100 feet of construction - related activities, in order to avoid damage to the tree canopies and root systems. The only exception to this requirement will be that the protective fencing can be placed just outside the limits of identified improvements (as identified on the project plans

included and discussed in this Initial Study) that are within the driplines of protective trees. No encroachment may exceed 20 percent of the dripline.

- d. No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed.
- e. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.
- f. No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except where such grading is shown on the project plans and discussed in the text of this document. Grading will not be permissible within more than 20 percent of the dripline of any tree protected by this measure.
- g. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree.
- h. No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist.
- i. The construction of impervious surfaces within the dripline of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system, per County standard detail shall be installed under the supervision of a certified arborist.
- j. All portions of permanent fencing that will encroach into the dripline protection area of any protected tree shall be constructed using posts set no closer than 10 feet on-center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.
- k. Truck protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.
- l. No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above-ground drip irrigation system is recommended.
- m. Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available from the Department of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants. BR-9.



47. If construction is proposed during the raptor breeding season (February - August), a focused survey for migratory bird nests shall be conducted within 30 days prior to the beginning of construction activities by a qualified biologist in order to identify active nests on the site. If active nests are found, no construction activities shall take place within 500 feet of the nest until the young have fledged. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (September - January). If no active nests are found during the focused survey, no further mitigation will be required. BR-15.
48. To mitigate for the loss of 39.2 acres of Swainson's Hawk foraging habitat, prior to the approval of Improvement Plans or building permits, or recordation of Final Subdivision Map, whichever occurs first, the applicant shall perform one of the following:
  - a. The project proponent shall utilize either the fee payment or the land dedication option established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code).
  - b. The project proponent shall, to the satisfaction of the California Department of Fish and Game, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.
  - c. Should the County Board of Supervisors adopt a Swainson's hawk mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to implementation of one of the measures above, the project proponent may be subject to that program instead. BR-16.
49. The applicant shall avoid burrowing owls and their nest sites and habitat during construction. The following measures shall be implemented to reduce impacts to a less-than-significant level:
  - a. Prior to construction activity, a qualified biologist shall conduct focused surveys for burrowing owls where suitable habitat is present on the areas slated for construction. Suitable habitat includes all upland areas that are not developed, and all edge areas (including vegetated berms, levees, and drainage ditches). Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities. Surveys shall be conducted in accordance with current DFG protocol.
  - b. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings will be submitted to the County and DFG for review and approval, and no further mitigation is necessary.
  - c. If occupied burrows are found, occupied burrows will be avoided until the owls inhabiting the burrows have been removed and relocated using passive exclusion techniques approved by DFG.
  - d. No occupied burrows will be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that

juveniles from the occupied burrows are foraging independently and are capable of independent survival. BR-20.

50. To ensure protection of cultural resources, the following measure applies. This measure shall be included verbatim as a Construction Note on all Plans and Specifications for the project:

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains. CR-1.

51. Comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project as follows:
- a. The applicant shall comply with the MMRP for this project, including the payment of 100% of the Department of Environmental Review and Assessment staff costs, and the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is \$15,790.00. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the applicant, and if the actual monitoring costs exceed the initial estimate, the applicant shall be responsible to pay the additional amount.
  - b. Until the MMRP has been recorded and the estimated MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved; and no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved. MM-1.
52. Any retaining wall used in the initial development of the project site by the applicant shall be made of natural stone or use an architectural finish to provide a natural appearance.
53. The project shall have at a minimum three different floor plans, three different elevations and three different paint schemes.

**FINDINGS:**

1. The project is generally compatible with the intent of the Rancho Murieta Master Plan and with other development in the north that has occurred under the Master Plan in that open space corridors are created that preserve steeper slopes, drainage courses, and oak groves to a greater extent than the originally submitted map. In addition, the project will be better integrated into the existing community structure through two (2) points of access.
2. With conditions for grading the lots will conform to the natural contours of the land.
3. Only wrought-iron fencing shall be allowed where lots abut open space areas.
4. The project should provide adequate trail design and connections via a trails plan.

###

**ORDINANCE NO. SZC-2007-0060**

**AN ORDINANCE AMENDING ORDINANCE NO. 77-PD-10,  
ESTABLISHING A PLANNED UNIT DEVELOPMENT  
COMMONLY KNOWN AS RANCHO MURIETA**

The Board of Supervisors of the County of Sacramento hereby ordains as follows:

Section 1. Chapter 19 is hereby added to Ordinance No. 77-PD-10 to read as follows:

Chapter 19 - The Residences of Murieta Hills West, The Residences of Murieta Hills East, and The Retreat.

Article 1. General Provisions

SECTION 250. AMENDMENTS.

a. The Residences of Murieta Hills West is described as follows:

Portion of Parcel Eleven as described in Book 20010905 at Page 0245 in the Official Records of Sacramento County, State of California, more particularly described as follows:

Beginning at the intersection of the centerline of Stone House Road, as shown on that Record of Survey filed in Book 18 of Surveys, at Page 11, and the south line of the North Half of the Southeast Quarter of Section 28, Township 8 North, Range 8 East, Mount Diablo Meridian, thence, from the Point of Beginning, North 89°36'16" East, a distance of 1559.56 feet along said south line;

Thence, South 00°23'44" East, a distance of 196.47 feet;

Thence, South 13°26'40" West, a distance of 205.27 feet to the arc of a non-tangent curve having a radial bearing of South 13°26'40" West;

Thence, on the arc of said non-tangent curve to the right a distance of 5.57 feet, said curve has a central angle of 00°39'49" and a radius of 481.00 feet;

Thence, South 02°52'00" West, a distance of 193.69 feet;

Thence, South 00°10'10" West, a distance of 267.49 feet;

Thence, South 11°54'26" East, a distance of 162.29 feet;

Thence, South 25°20'31" East, a distance of 172.34 feet;

Thence, South 37°36'32" East, a distance of 89.77 feet;

Thence, South 37°19'46" East, a distance of 93.41 feet to the arc of a non-tangent curve having a radial bearing of South 44°51'40" East;

Thence, on the arc of said non-tangent curve to the left a distance of 92.46 feet; said curve has a central angle of 12°37'44" and a radius of 419.50 feet;

Thence, on the arc of a curve to the right a distance of 29.76 feet, said curve has a central angle of 85°15'33" and a radius of 20.00 feet;

Thence, on the arc of a curve to the right a distance of 45.38 feet, said curve has a central angle of 14°24'19" and a radius of 180.50 feet;

Thence, South 42°10'28" West, a distance of 35.00 feet;

Thence, South 50°37'32" West, a distance of 219.71 feet;

Thence, South 79°24'23" West, a distance of 77.49 feet;

Thence, South 21°54'13" East, a distance of 138.65 feet to the arc of a non-tangent curve having a radial bearing of South 08°25'36" East;

Thence, on the arc of said non-tangent curve to the left a distance of 82.83 feet, said curve has a central angle of 17°36'33" and a radius of 269.50 feet;

Thence, South 63°57'51" West, a distance of 21.34 feet;

Thence, on the arc of a curve to the right a distance of 30.53 feet, said curve has a central angle of 87°27'53" and a radius of 20.00 feet;

Thence, South 61°25'44" West, a distance of 46.00 feet to the arc of a non-tangent curve having a radial bearing of South 61°25'44" West;

Thence, on the arc of said non-tangent curve to the right a distance of 379.47 feet, said curve has a central angle 26°17'26" and a radius of 827.00 feet;

Thence, on the arc of a curve to the left a distance of 135.24 feet, said curve has a central angle of 28°23'01" and a radius of 273.00 feet;

Thence, South 59°20'09" West, a distance of 447.25 feet;

Thence, North 27°56'32" West, a distance of 112.87 feet;

Thence, North 01°32'03" West, a distance of 600.41 feet;

Thence, North 41°15'45" West, a distance of 370.98 feet;

Thence, South 88°25'25" West, a distance of 160.00 feet;

Thence, North 58°58'56" West, a distance of 278.40 feet;

Thence, North 89°40'31" West, a distance of 236.70 feet;

Thence, North 01°12'02" West, a distance of 1316.26 feet to the Point of Beginning.

Containing 59.769 Acres, more or less.

b. The Residences of Murieta Hills East is described as follows:

Parcel Ten as described in Book 20010905 at Page 0245 in the Official Records of Sacramento County also being a portion of Parcel 3 as shown and described in that certain "Parcel Map of Rancho Murieta" filed in Book 12 of Parcel Maps at Page 47 in the Official Records of Sacramento County, together with a portion of Parcel Eleven as described in said Book 20010905, at Page 0245 in the Official

Records of Sacramento County, State of California, more particularly described as follows:

Commencing at the intersection of the centerline of Stone House Road, as shown on that certain Record of Survey filed in Book 18 of Surveys, at Page 11, and the south line of the North Half of the Southeast Quarter of Section 28, Township 8 North, Range 8 East, Mount Diablo Meridian, thence, North 89°36'16" East, a distance of 1559.56 feet along said south line to the Point of Beginning of the parcel to be described;

Thence, from the Point of Beginning, North 89°36'16" East, a distance of 516.32 feet along said south line;

Thence, North 89°36'42" East, a distance of 1021.78 feet to a point on the westerly boundary line of Rancho Murieta Unit No. 4 as filed in Book 142 of Maps at Page 9 in the Official Records of Sacramento County;

Thence, South 25°46'45" West, a distance of 183.82 feet along said line;

Thence, South 54°23'16" East, a distance of 127.38 feet along said line;

Thence, South 09°13'14" West, a distance of 531.50 feet along said line;

Thence, South 87°25'09" West, a distance of 56.39 feet along said line;

Thence, South 64°22'02" West, a distance of 172.38 feet along said line;

Thence, South 08°58'59" East, a distance of 303.89 feet along said line;

Thence, South 22°24'47" West, a distance of 354.65 feet along said line;

Thence, South 05°00'46" West, a distance of 290.35 feet along said line;

Thence, South 76°44'27" East, a distance of 160.04 feet along said line to the arc of a non-tangent curve on the westerly right-of-way line of Puerto Drive having a radial bearing of North 87°15'47" West;

Thence, on the arc of said non-tangent curve to the right a distance of 436.93 feet, said curve has a central angle of 15°50'04" and a radius of 1581.00 feet;

Thence, continue along the westerly boundary line of Rancho Murieta Unit No. 4, North 63°57'25" West, a distance of 105.99 feet;

Thence, South 22°02'59" West, a distance of 143.73 feet along said line to the arc of a non-tangent curve having a radial bearing of South 22°03'02" West;

Thence, on the arc of said non-tangent curve to the left a distance of 10.01 feet, said curve has a central angle of 00°37'35" and a radius of 915.50 feet;

Thence, South 27°16'08" West, a distance of 266.03 feet along said line to a point on the Northerly boundary line of Rancho Murieta Unit No. 2, as filed in Book 121 of Maps at Page 8 in the Official Records of Sacramento County;

Thence, North 72°59'37" West, a distance of 549.33 feet along said line;

Thence, South 85°00'00" West, a distance of 266.07 feet along said line;  
Thence, South 72°35'39" West, a distance of 115.59 feet along said line;  
Thence, South 48°30'00" West, a distance of 534.98 feet along said line;  
Thence, South 19°00'00" West, a distance of 267.62 feet along said line;  
Thence, South 16°22'43" East, a distance of 199.55 feet along said line;  
Thence, South 58°00'22" West, a distance of 120.19 feet to the northerly  
right-of-way line of Escuela Drive;  
Thence, North 31°59'41" West, a distance of 170.18 feet along said right-of-way  
line;  
Thence, on the arc of a curve to the left a distance of 400.45 feet along said  
right-of-way line, said curve has a central angle of 31°49'20" and a radius of  
721.00 feet;  
Thence, North 49°45'00" East, a distance of 470.00 feet;  
Thence, North 27°56'32" West, a distance of 150.83 feet;  
Thence, North 59°20'09" East, a distance of 447.25 feet to the arc of a  
non-tangent curve having a radial bearing of North 59°20'09" East;  
Thence, on the arc of said non-tangent curve to the right a distance of 135.24 feet,  
said curve has a central angle of 28°23'01" and a radius of 273.00 feet;  
Thence, on the arc of a curve to the left a distance of 379.47 feet, said curve has a  
central angle of 26°17'26" and a radius of 827.00 feet;  
Thence, North 61°25'44" East, a distance of 46.00 feet to the arc of a non-tangent  
curve having a radial bearing of North 61°25'44" East;  
Thence, on the arc of said non-tangent curve to the left a distance of 30.53 feet,  
said curve has a central angle of 87°27'53" and a radius of 20.00 feet;  
Thence, North 63°57'51" East, a distance of 21.34 feet;  
Thence, on the arc of a curve to the right a distance of 82.83 feet, said curve has a  
central angle of 17°36'33" and a radius of 269.50 feet;  
Thence, North 21°54'13" West, a distance of 138.65 feet;  
Thence, North 79°24'23" East, a distance of 77.49 feet;  
Thence, North 50°37'32" East, a distance of 219.71 feet;  
Thence, North 42°10'28" East, a distance of 35.00 feet to the arc of a non-tangent  
curve having a radial bearing of North 42°10'28" East;  
Thence, on the arc of said non-tangent curve to the left a distance of 45.38 feet,  
said curve has a central angle of 14°24'19" and a radius of 180.50 feet;

Thence, on the arc of a curve to the left a distance of 29.76 feet, said curve has a central angle of  $85^{\circ}15'33''$  and a radius of 20.00 feet;

Thence, on the arc of a curve to the right a distance of 92.46 feet, said curve has a central angle of  $12^{\circ}37'44''$  and a radius of 419.50 feet;

Thence, North  $37^{\circ}19'46''$  West, a distance of 93.41 feet;

Thence, North  $37^{\circ}36'32''$  West, a distance of 89.77 feet;

Thence, North  $25^{\circ}20'31''$  West, a distance of 172.34 feet;

Thence, North  $11^{\circ}54'26''$  West, a distance of 162.29 feet;

Thence, North  $00^{\circ}10'10''$  East, a distance of 267.49 feet;

Thence, North  $02^{\circ}52'00''$  East, a distance of 193.69 feet to the arc of a non-tangent curve having a radial bearing of South  $14^{\circ}06'29''$  West;

Thence, on the arc of said non-tangent curve to the left a distance of 5.57 feet, said curve has a central angle of  $00^{\circ}39'49''$  and a radius of 481.00 feet;

Thence, North  $13^{\circ}26'40''$  East, a distance of 205.27 feet;

Thence, North  $00^{\circ}23'44''$  West, a distance of 196.47 feet to the Point of Beginning;

Containing 86.171 Acres, more or less.

c. The Retreat is described as follows:

1. The Retreat North and East:

A portion of Parcel 10 as shown on the map filed for record in Book 117 of Parcel Maps at Page 15 in the Official Records of Sacramento County and a portion of Parcel 6 as shown on the map filed for record in Book 12 of Parcel Maps at Page 47 in the Official Records of Sacramento County, State of California, more particularly described as follows:

Beginning at the northwesterly corner of said Parcel 10, thence, from the Point of Beginning, South  $86^{\circ}54'59''$  East, a distance of 128.01 feet along the northerly boundary line of said Parcel 10;

Thence, on the arc of a curve to the left a distance of 551.52 feet along said northerly line, said curve has a central angle of  $37^{\circ}23'46''$  and a radius of 845.00 feet;

Thence, on the arc of a curve to the right a distance of 38.01 feet along said northerly line to the easterly boundary line of said Parcel 10, said curve has a central angle of  $87^{\circ}07'06''$  and a radius of 25.00 feet;

Thence, South  $37^{\circ}11'39''$  East, a distance of 23.07 feet along said easterly line;



Thence, on the arc of a curve to the right a distance of 278.90 feet along said easterly line, said curve has a central angle of  $61^{\circ}13'29''$  and a radius of 261.00 feet;

Thence, South  $24^{\circ}01'50''$  West, a distance of 399.74 feet along said easterly line;

Thence, on the arc of a curve to the left a distance of 576.82 feet along said easterly line to the most southerly boundary line of said Parcel 10, said curve has a central angle of  $100^{\circ}27'12''$  and a radius of 329.00 feet;

Thence, South  $13^{\circ}37'04''$  West, a distance of 55.00 feet along said southerly line;

Thence, South  $29^{\circ}50'00''$  East, a distance of 136.00 feet along said southerly line;

Thence, South  $71^{\circ}18'55''$  West, a distance of 36.31 feet along said southerly line;

Thence, South  $63^{\circ}37'57''$  West, a distance of 188.54 feet along said southerly line;

Thence, South  $65^{\circ}18'31''$  West, a distance of 282.07 feet along said southerly line;

Thence, South  $81^{\circ}05'11''$  West, a distance of 154.22 feet along said southerly line;

Thence, South  $70^{\circ}01'52''$  West, a distance of 112.67 feet along said southerly line;

Thence, South  $81^{\circ}19'26''$  West, a distance of 121.46 feet along said southerly line;

Thence, North  $24^{\circ}03'09''$  West, a distance of 192.09 feet;

Thence, North  $49^{\circ}23'49''$  East, a distance of 147.25 feet to the common line between said Parcel 10 and said Parcel 6;

Thence, North  $67^{\circ}59'08''$  East, a distance of 118.26 feet along said common line;

Thence, North  $60^{\circ}31'38''$  East, a distance of 155.96 feet along said common line;

Thence, North  $52^{\circ}04'29''$  East, a distance of 176.54 feet along said common line;

Thence, North  $19^{\circ}10'45''$  East, a distance of 91.99 feet along said common line;

Thence, North  $64^{\circ}15'05''$  East, a distance of 123.18 feet along said common line to the arc of a non-tangent curve having a radial bearing of North  $64^{\circ}15'31''$  East;

Thence, on the arc of said non-tangent curve to the right a distance of 330.13 feet along said common line, said curve has a central angle of  $49^{\circ}46'33''$  and a radius of 380.00 feet;

Thence, North  $24^{\circ}02'04''$  East, a distance of 172.31 feet along said common line;

Thence, North  $85^{\circ}10'01''$  West, a distance of 65.84 feet along said common line;

Thence, South  $66^{\circ}43'30''$  West, a distance of 53.09 feet along said common line;

Thence, South  $32^{\circ}25'23''$  West, a distance of 451.52 feet along said common line;

Thence, South  $44^{\circ}46'29''$  West, a distance of 230.18 feet along said common line;

Thence, South  $50^{\circ}40'45''$  West, a distance of 154.24 feet along said common line;

Thence, South  $64^{\circ}24'50''$  West, a distance of 123.20 feet along said common line;

Thence, North  $79^{\circ}20'42''$  West, a distance of 81.36 feet;

Thence, South  $57^{\circ}25'50''$  West, a distance of 205.24 feet to the common line between said Parcel 10 and said Parcel 6;

Thence, North  $51^{\circ}02'17''$  West, a distance of 82.50 feet along said common line;

Thence, North  $05^{\circ}33'24''$  East, a distance of 339.23 feet along said common line;

Thence, North  $24^{\circ}00'08''$  East, a distance of 170.20 feet along said common line;

Thence, North  $34^{\circ}38'33''$  East, a distance of 224.50 feet along said common line;

Thence, North  $22^{\circ}03'41''$  East, a distance of 209.12 feet along said common line;

Thence, North  $32^{\circ}53'06''$  East, a distance of 235.41 feet along said common line to the Point of Beginning.

Containing 23.375 Acres, more or less.

2. The Retreat West:

Parcel 2 as shown on the map filed for record in Book 154 of Parcel Maps at Page 3 in the Official Records of the County of Sacramento, State of California, more particularly described as follows:

Beginning at the southwest corner of said Parcel 2, thence, from the Point of Beginning, North  $46^{\circ}59'43''$  East, a distance of 29.64 feet along the northwesterly boundary line of said Parcel 2;

Thence, North  $36^{\circ}58'27''$  East, a distance of 207.67 feet along said northwesterly line;

Thence, North  $37^{\circ}10'52''$  East, a distance of 151.15 feet along said northwesterly line;

Thence, North  $54^{\circ}28'55''$  East, a distance of 192.25 feet along said northwesterly line;

Thence, North  $73^{\circ}55'18''$  East, a distance of 95.66 feet along said northwesterly line;

Thence, North  $53^{\circ}55'36''$  East, a distance of 50.27 feet along said northwesterly line;

Thence, North  $42^{\circ}55'39''$  East, a distance of 116.29 feet along said northwesterly line;

Thence, North  $50^{\circ}58'02''$  East, a distance of 93.60 feet along said northwesterly line;

Thence, North  $13^{\circ}18'49''$  East, a distance of 21.38 feet along said northwesterly line;

Thence, North  $60^{\circ}19'37''$  East, a distance of 160.82 feet along said northwesterly line to the easterly line of said Parcel 2 and the arc of a non-tangent curve having a radial bearing of South  $73^{\circ}51'43''$  West;

Thence, on the arc of said non-tangent curve to the right a distance of 31.27 feet along said easterly line, said curve has a central angle of  $04^{\circ}50'31''$  and a radius of 370.00 feet;

Thence, South  $11^{\circ}17'46''$  East, a distance of 77.89 feet along said easterly line;

Thence, on the arc of a curve to the right a distance of 135.46 feet along said easterly line, said curve has a central angle of  $16^{\circ}30'46''$  and a radius of 470.00 feet;

Thence, South  $05^{\circ}13'00''$  West, a distance of 178.41 feet along said easterly line;

Thence, South  $80^{\circ}15'41''$  West, a distance of 175.78 feet along said easterly line;

Thence, South 80°11'52" West, a distance of 107.48 feet along said easterly line to the arc of a non-tangent curve having a radial bearing of South 87°56'02" East;

Thence, on the arc of said non-tangent curve to the left a distance of 314.42 feet along said easterly line to the southerly boundary line of said Parcel 2, said curve has a central angle of 22°22'43" and a radius of 805.00 feet;

Thence, North 84°39'06" West, a distance of 610.15 feet along said southerly line to the Point of Beginning.

Containing 6.601 Acres, more or less.

SECTION 251. EXHIBITS. Exhibits 19-1 through 19-17 described in this section are intended to regulate the property described in Section 250 of this ordinance. Exhibits are on file in the office of the Clerk of the Board of Supervisors and are a part of this ordinance as if fully set forth herein. Exhibits listed below are attached.

- 19-1: General Plan Amendment Exhibit – The Retreat
- 19-2: Rezone Exhibit – Residences of Murieta Hills West
- 19-3: Rezone Exhibit – Residences of Murieta Hills East
- 19-4: Rezone Exhibit – The Retreat
- 19-5: Vesting Tentative Subdivision Map – Residences of Murieta Hills West
- 19-6: Vesting Tentative Subdivision Map – Residences of Murieta Hills East
- 19-7: Vesting Tentative Subdivision Map – The Retreat (4 sheets)
- 19-8: Special Development Permit – The Retreat
- 19-9: Site Development Plan – Residences of Murieta Hills West and Residences of Murieta Hills East
- 19-10: Development Plan – The Retreat (3 sheets)
- 19-11: Trails Exhibit – Residences of Murieta Hills West and Residences of Murieta Hills East
- 19-12: Preliminary Grading Plan – Residences of Murieta Hills West
- 19-13: Preliminary Grading Plan – Residences of Murieta Hills East
- 19-14: Preliminary Grading Plan – The Retreat (3 sheets)
- 19-15: Mitigation Monitoring and Reporting Program – Residences of Murieta Hills West
- 19-16: Mitigation Monitoring and Reporting Program – Residences of Murieta Hills East
- 19-17: Mitigation Monitoring and Reporting Program – The Retreat

SECTION 252. USES. The uses permitted within the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat shall be the same as those authorized under the Zoning Code, as follows:

- a. Within the RD-3(PD) zoned portions of the Residences of Murieta Hills West (property described in Exhibit 19-2), all uses are authorized on property therein which are authorized in the RD-3 zone with which the Planned Development zone is combined.
- b. Within the O zoned portion of the Residences of Murieta Hills West (property described in Exhibit 19-2), all uses are authorized on property therein which are authorized in the O zone.
- c. Within the RD-1(PD) portion of Residences of Murieta Hills East (property described in Exhibit 19-3), all uses are authorized on property therein which are authorized in the RD-1 zone with which the Planned Development zone is combined.
- d. Within the RD-3(PD) portions of Residences of Murieta Hills East (property described in Exhibit 19-3) , all uses are authorized on property therein which are authorized in the RD-3 zone with which the Planned Development zone is combined.
- e. Within the O portion of the Residences of Murieta Hills East (property described in Exhibit 19-3) , all uses are authorized on property therein which are authorized in the O zone.
- f. Within The Retreat (property described in Exhibit 19-4), all uses are authorized on property therein which are authorized in the RD-4 zone with which the Planned Development zone is combined, as modified by the Special Development Permit (Exhibit 19-8) or the Development Plan (Exhibit 19-10) for The Retreat.

SECTION 253. YARDS AND HEIGHT. The buildings to be built within the Residences of Murieta Hills West and the Residences of Murieta Hills East shall comply with the residential development standards as set forth in the Sacramento County Zoning Code, Section 305-01, *et seq.* The buildings to be built within The Retreat shall comply with the Special Development Permit (Exhibit 19-8) or the Development Plan (Exhibit 19-10) for The Retreat.

SECTION 254. LOCATION OF LOTS AND STREETS. The location, configuration and arrangement of lots and streets within the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat shall be in substantial conformance to the Vesting Subdivision Maps for the respective project (Exhibits 19-5, 19-6, and 19-7), as amended by conditions of approval.

**SECTION 255. STREET/SIDEWALK IMPROVEMENTS.** Minimum improvement standards for the construction and design of all private streets, parking bays, sidewalks and other miscellaneous appurtenances for the Residences of Murieta Hills West and the Residences of Murieta Hills East shall be in accordance with the standards established by Section 20 of Article 3 – Development Standards of this PD Ordinance. The construction and design of all private streets, parking bays, sidewalks and other miscellaneous appurtenances for The Retreat shall comply with the Special Development Permit (Exhibit 19-8) or the Development Plan (Exhibit 19-10) for The Retreat.

**SECTION 256. STREET IMPROVEMENT EXCEPTIONS.** It is recognized that Rancho Murieta is a physically unique community for which it is not possible to anticipate all situations that may arise or to prescribe standards applicable to every situation. It may, therefore, become necessary to prescribe a different set of standards or exceptions to those standards in order to preserve the natural features (e.g., rock outcroppings and oak trees) characteristic of this area. The Public Works Director shall be the appropriate authority to approve exceptions from the improvement standards set forth in Section 175 of this ordinance.

**SECTION 257. OFF-STREET TRAILS.** Off-street trails for the Residences of Murieta Hills West and the Residences of Murieta Hills East projects shall be provided in substantial conformance with the Trails Exhibit (Exhibit 19-11) for the Residences of Murieta Hills West and the Residences of Murieta Hills East.

**SECTION 258. DRAINAGE.** Offsite drainage improvements and easements, as necessary, shall be provided pursuant to the Sacramento County Floodplain Management Ordinance, the Sacramento County Improvement Standards, and the Rancho Murieta Community Service District.

**SECTION 259. COSUMNES RIVER BRIDGE.** The Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat projects are subject to the Cosumnes River bridge crossing fee.

**SECTION 260. WATER TREATMENT PLANT CAPACITY.** Prior to the issuance of building permits for residential structures within the Residences of Murieta Hills West, the Residences of Murieta Hills East, or the Retreat, the existing water supply treatment plant must be upgraded to provide adequate capacity for existing and approved projects, as well as the Residences and Retreat projects.

**SECTION 261. WASTEWATER TREATMENT PLANT CAPACITY.** Prior to issuance of building permits for residential structures within the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, to avoid significant impacts related to the provision of sewer service, the applicant shall submit engineer-certified documentation from the CSD demonstrating that the wastewater treatment facility has adequate treatment, storage, and disposal capacity to accept wastewater from the lots for which building permits are requested without resulting in detectable degradation of ground or surface water quality (or exacerbation of existing degradation), and that such determination has been made based on recent actual wastewater flows, as well as projected flows from other projects for which building permits have been issued.

SECTION 262. TRAFFIC MITIGATION.

Prior to the issuance of building permits, the applicant shall pay a fair share of the cost of the following improvements:

- a. SR 16/Sunrise Boulevard. An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
- b. SR 16/Sunrise Boulevard. An exclusive left-turn lane should be added to the southbound approach, creating dual left-turn lanes on Sunrise Boulevard.
- c. SR 16/Grant Line Road. The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane, two exclusive through lanes and an exclusive right-turn lane on Grant Line Road. The northbound and southbound phasing should be changed from split phase to protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
- d. SR 16/Dillard Road. The eastbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
- e. SR 16/Dillard Road. The northbound combined left/right-turn lane shall be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Dillard Road.
- f. SR 16/Latrobe Road. This intersection meets the MUTCD peak hour signal warrant during the PM peak hour and should therefore be signalized. The northbound and southbound approaches should have permitted left-turn phasing and the eastbound and westbound approaches should have protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
- g. SR 16/Stonehouse Road. This intersection meets the MUTCD peak hour signal warrant during both the AM and PM peak hours and should therefore be signalized. The southbound combined left/right-turn lane should be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Stonehouse Road. An additional eastbound and westbound through lane should be added to SR 16.
- h. SR 16/Stonehouse Road. An additional eastbound and westbound through lane on State Route 16 at the intersection of Stonehouse Road should be added.
- i. SR 16/Murieta Parkway. An additional eastbound and westbound through lane should be added to SR 16.
- j. Public street improvements on Stonehouse Road from Jackson Highway (State Route 16) to Latrobe Road based on an 84 feet Rural Collector pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation.

**SECTION 263. AIR QUALITY MITIGATION.** Prior to the approval of improvement plans, grading plans, or any earthmoving activities on the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the applicant must comply with the following air quality mitigation measures:

- a. **Off-Road Vehicle Fleet - Equipment Emissions:** Prior to approval of improvement plans and/or grading plans, or any earthmoving activity on the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the project representative shall submit to the Sacramento County Department of Environmental Review and Assessment (DERA) a copy of a Sacramento Metropolitan Air Quality Management District (SMAQMD) approved plan demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of 20 percent NOx reduction and 45 percent particulate reduction\* compared to the most recent California Air Resources Board (CARB) fleet-average; and

Prior to the start of construction, the project representative shall submit to the Sacramento County DERA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly thereafter to SMAQMD throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide DERA and SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

(\*NOTE: Acceptable options for reducing emissions may include use of late model vehicles, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.)

- b. Prior to the approval of improvement plans or the issuance of grading permits for the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the proponent will submit proof that the emissions off-set air quality mitigation fee of \$303.81 per acre actively graded has been paid to SMAQMD, and that a construction air quality mitigation plan has been approved by SMAQMD and the lead agency.
- c. **Off-Road Diesel Equipment - Visible Emissions:** The developer shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the Sacramento County DERA and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation



equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted to SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

- d. Asbestos Dust Mitigation Plan. Prior to approval of Grading Plans, the applicant shall submit an Asbestos Dust Mitigation Plan to the Sacramento Metropolitan Air Quality Management District for approval. No Asbestos Dust Mitigation Plan shall be required for those areas where a registered geologist has performed a geologic evaluation (in accordance with the Air Resources Board's "Asbestos Airborne Toxic Control Measure For Construction, Grading, Quarrying and Surface Mining Operations") concluding that no naturally occurring asbestos, ultramafic rock or serpentine is likely to be found in the area to be disturbed, subject to the review and approval of the Sacramento Metropolitan Air Quality Management District. The Asbestos Dust Mitigation Plan for all other lots on which asbestos is known to be present or assumed to be present (in accordance with the above-referenced Airborne Toxic Control Measures) should include one or more provisions addressing each of the following topics to ensure that no equipment or operation emits dust that is visible crossing the property line:
1. Track-out prevention and control measures which shall include:
    - (a) Removal of any visible track-out from a paved public road at any location where vehicles exist the work site; this shall be accomplished using wet sweeping or a HEPA filter equipped vacuum device at the end of the work day or at least one time per day; and
    - (b) Installation of one or more of the following track-out prevention measures:
      - (1) A gravel pad designed using good engineering practices to clean the tires of exiting vehicles;
      - (2) A tire shaker;
      - (3) A wheel wash system;
      - (4) Pavement extending for not less than 50 consecutive feet from the intersection with the paved public road; or
      - (5) Any other measures as effective as the measures listed above.
  2. Keeping active storage piles adequately wetted or covered with tarps.

3. Control of disturbed surface areas and storage piles that will remain inactive for more than 7 days, which shall include one or more of the following:
  - (a) Keep the surfaces wetted;
  - (b) Establishment and maintenance of surface crusting sufficient to satisfy the test in subsection (h)(6);
  - (c) Application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations;
  - (d) Covering with tarp(s) or vegetative cover;
  - (e) Installation of wind barriers of 50 percent porosity around 3 sides of a storage pile;
  - (f) Installation of wind barriers across open areas; or
  - (g) Any other measure as effective as the measures listed above.
4. On-site traffic control on unpaved roads, parking lots, and staging areas shall include the following:
  - (a) A maximum vehicle speed limit of 15 miles per hour or less; and
  - (b) One of more of the following:
    - (1) Watering every 2 hours of active operations or sufficiently to keep the area adequately wetted;
    - (2) Applying chemical dust suppressants consistent with manufacturer's directions;
    - (3) Maintaining a gravel cover with a silt content that is less than 5 percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of 3 inches on the surface being used for travel; or
    - (4) Any other measure as effective as the measures listed above.
5. Control for earthmoving activities, which shall include one or more of the following:
  - (a) Pre-wetting the ground to the depth of anticipated cuts;
  - (b) Suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures;
  - (c) Application of water prior to any land clearing; or
  - (d) Any other measure as effective as the measures listed above.

6. Control for Off-Site Transport: The owner/operator shall ensure that no trucks are allowed to transport excavated material off-site unless:
  - (a) Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and
  - (b) Loads are adequately wetted and either:
    - (1) Covered with tarps; or
    - (2) Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment.
7. Post Construction Stabilization of Disturbed Areas: Upon completion of the project, disturbed surfaces shall be stabilized using one or more of the following methods:
  - (a) Establishment of a vegetative cover;
  - (b) Placement of at least three (3) inches of non-asbestos-containing material;
  - (c) Paving; or
  - (d) Any other measure deemed sufficient to prevent wind speeds of 10 miles per hour or greater from causing visible dust emissions.
8. Air-Monitoring for Asbestos (if Required by the APCO):
  - (a) If required by the district APCO, the plan must include an air-monitoring component.
  - (b) The air-monitoring component shall specify the following:
    - (1) Type of air-sampling device(s);
    - (2) Siting of air-sampling device(s);
    - (3) Sampling duration and frequency; and
    - (4) Analytical method.
9. Frequency of Reporting: The plan shall state how often the items specified in subsection (e)(5)(b), and any other items identified in the plan, will be reported to the District.

SECTION 264. GRADING. Grading activities conducted for the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat sites shall occur in accordance with the following:

- a. Grading activities associated with the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat sites shall occur in substantial conformance with the Preliminary Grading Plans for these respective sites (Exhibits 19-12, 19-13, and 19-14). Grading activities shall not result in man-made slopes that exceed a 2:1 slope in their final condition.
- b. Expansive Soils. These and other measures, as deemed necessary and appropriate by the on-site geotechnical engineer, shall be applied to reduce impacts related to expansive soils to less than significant levels:
  1. Retain an on-site certified Geotechnical Engineer to observe construction in order to provide a complete professional geotechnical engineering service through the observational method. This will allow further evaluation of lots which require expansive soil mitigation following the mass grading. Should any variations or undesirable conditions be encountered the on-site observer can provide supplemental recommendations based on field conditions. Construction observation and testing will allow an opinion to be formed regarding the adequacy of the site preparation, material processing, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with project geotechnical specifications and requirements.
  2. When soil is dry it is essential adequate water be applied during material processing and compaction. The addition of water during borrow activities, as well as during placement of soils should be assumed. Selection of construction equipment which facilitates the addition of moisture should be used to blend wet and dry soils and pulverize oversized blocky clay chunks. Selective grading of this soil can be attempted; however, due to their variable nature separation of this soil can be difficult. Placement of the Ione formation soils in the deeper portion of the fill is preferable. Placement of select non-expansive soils on the upper portions of the fills may be required to reduce adverse impact of expansive soils. A certified Geotechnical Engineer will be on site to monitor dry season site grading for conformance with this measure.
  3. When soil is wet, adequate provisions should be in place to minimize excessive moisture intrusion. Wheel rolling of graded surfaces should be performed and surfaces should be sloped to minimize ponding of rainfall and surface runoff. Wet season construction should be limited to those areas proposed to be immediately worked on to reduce surface exposure. Building pads without construction improvements, and which go through a wet season cycle, whether cut or fill pads, may require re-processing of shallower materials prior to foundation construction. A certified Geotechnical Engineer will monitor wet season site grading and, if necessary, identify areas requiring re-processing due to wet season exposure. The on-site professional will monitor grading for conformance with this measure.

4. Moderately expansive soils should be compacted to at least 90 to 92 percent of the maximum dry density (based on the ASTM D1557 test method) at a moisture content of about 3 to 4 percent over optimum. Should highly expansive soils be encountered, the relative compaction should be between 88 and 92 percent at a minimum of 4 percent over optimum. Prior to site grading additional testing may be required to identify specific compaction and moisture content requirements which may differ from those moisture content percentages recommended above. Deviations from moisture content recommendations must be approved by a certified on-site Geotechnical Engineer, who will also monitor soil compaction for conformance with this measure.
5. Minimize the effects of water on cuts and fills adjacent to structures and in underground utility trenches to increase stability of Ione soil materials. Water should be collected and appropriately discarded in all aspects of the site development. All building professionals (Geotechnical Engineers, Architects, Civil Engineers, Landscape Architects, general engineering contractors, or similar professional) should review and incorporate appropriate building techniques to minimize and collect surface and subsurface water. Utility trench backfills carrying water due to their permeable nature should all be controlled, directed, and drained away from the site; this will be overseen by a certified Geotechnical Engineer for conformance with this measure.
6. Lots situated below a roadway section should have subdrainage to divert any water potentially collected and transmitted in street utilities and laterals away from the residences. Where deemed appropriate by a certified Geotechnical Engineer, instillation of cutoff subdrains surrounding a residence will be installed to maintain uniform moisture condition. The on-site professional will monitor drainage installations for conformance with this measure.
7. Subdrainage of utility trenches should be provided to maintain dry backfill materials in all types of trenches. All utility penetrations through or beneath foundations should be backfilled with low permeability materials, such as slurry, grout, or concrete in order to minimize moisture migration through trench backfill materials when utility trenches under the structures are not intended as drains. The on-site certified Geotechnical Engineer will monitor drainage installations for conformance with this measure.
8. Drainage of all utility trenches in the subdivision is required. The project Civil Engineer or similar professional should detail collection pipes to manholes and drop inlets of the storm drain system to allow for the collection of utility trench drainage. The collection pipes should be situated near the bottom of the permeable materials used for bedding and shading of pipes. The on-site professional will monitor drainage installations for conformance with this measure.

9. Finish grading and landscape grading should include positive drainage away from all foundations. All final grades should provide rapid removal of surface water runoff; water should not be allowed to pond on building pads or adjacent to foundations or other structural improvements at any time during or following construction. As determined by the on-site certified Geotechnical Engineer, require slightly steeper grades to swales and drainage areas to help convey moisture off pads, and increase the overall lot slope gradient. The on-site professional will monitor the actions for conformance with this measure.
10. As determined by the on-site certified Geotechnical Engineer, the need for specialized foundation systems due to the presence of expansive soils will be based on the distribution of materials which occur during site grading. All foundation systems should be initially designed as if subject to potentially expansive soils. Following grading activities those lots located in non-expansive soils and/or bedrock can be delineated and a less aggressive conventional foundation system could be used. The on-site professional will monitor these actions for conformance with this measure. The on-site certified geotechnical engineer shall provide appropriate foundation systems for the specific site conditions following mass grading.
11. Landscape watering and saturation of pad grades due to landscaping shall be limited. Dry creek beds or other landscape type features may aid in keeping foundation areas dry where turf is desired. Dry-scape landscaping should be considered on lots affected by expansive soils. Landscape mounds adjacent to foundations in yards are not allowed. Lots that contain oak trees which require aeration trenches for root zones may need additional subdrainage measures. The on-site Geotechnical Engineer will monitor these actions for conformance with this measure.
12. Lots located downslope from one-another will likely experience water migration from uphill landscaping. Landscaping plans shall be review by a certified Geotechnical Engineer and Landscape Architect to assess impacts of terraced lot landscaping. Essential to reducing potential impacts from soil expansion is the collection and channeling of drained water from impermeable surfaces (i.e., roofs, concrete or asphalt paved areas); use of low flow irrigation systems; proper landscape layout and choice of turf locations; and education to the proposed homeowners of proper design and maintenance of landscaping and drainage facilities (such as perimeter subdrains and area drains that they or their landscaper installs). The on-site professional will monitor these actions for conformance with this measure.

13. At the start of site grading and continuing to the installation of landscaping, provide Sacramento County, Department of Environmental Review and Assessment, with monthly status reports signed by the on-site certified Geotechnical Engineer or similar professional which identifies those lots and areas where expansive soils occur, and identifies which of the above measures were implemented to mitigate expansive soil impacts. If grading or other activity associated with compromising soil integrity does not occur within the monthly period, no report need be submitted.

**SECTION 265. WETLAND MITIGATION.** To compensate for the permanent loss of wetlands, prior to grading or construction within 50 feet of onsite wetlands/swales, the applicant shall obtain any/all applicable permits from the U.S. Army Corps of Engineers, California Department of Fish and Game and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site surface waters. A copy of any required permits, or correspondence from the regulatory agency indicating that a permit is not required, shall be submitted to the Department of Environmental Review and Assessment. If the Mitigation required by permits do not satisfy the requirements of no net loss of wetlands specified by County General Plan Policy CO-96, the applicant shall pay to the County of Sacramento an amount based on a rate of \$35,000 per acre for the unmitigated/ uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies. The payment shall be collected by the Department of Planning and Community Development, and deposited into the Wetlands Restoration Trust Fund.

**SECTION 266. TREE REPLACEMENT AND MITIGATION CRITERIA.** The following criteria shall apply to all trees proposed to be removed on the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat:

- a. Prior to approval of grading or improvement plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist, licensed landscape architect, or restoration ecologist and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:
  1. Oak trees will be limited to deepot seedlings (40 cubic centimeters or larger) or 15-gallon size trees. Planting stock shall not be root bound and shall be field inspected by DERA staff prior to planting.
  2. Trees shall be planted in a "natural character" with tree spacing at minimum 10 feet and maximum of 40 feet (25 feet average) apart. The maximum density of trees shall not exceed 64 trees per acre.
  3. A soil scientist shall perform a site evaluation to determine appropriate planting locations within the open space lots. The findings of the evaluation shall be incorporated into the Replacement Oak Tree Planting Plan. If soils tests show that oaks cannot be replanted due to conditions at the site, BR-5 shall apply.

4. A temporary drip irrigation system shall be installed for the purpose of providing irrigation to the plantings during the establishment period. A watering schedule shall be included in the Planting Plan. The watering frequency shall be gradually reduced over the establishment period to wean the plantings off regular irrigation.
  5. Deepot seedlings shall be planted according to industry-standard detail, including appropriate protection against herbivory from rodents and other animals. Fifteen-gallon trees shall be planted according to the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot depth boring hole to provide for adequate drainage where necessary, based on the soil evaluation.
  6. Replacement oak trees shall be monitored annually for 7 years, and shall achieve a survival rate of 100 percent at the end of the monitoring period. Monitoring reports shall be submitted to the Department of Environmental Review and Assessment by July 1 of each year.
  7. Replacement plantings shall be planted prior to issuance of any building permits and should be planted between October and April, when possible, to enhance survival.
  8. Residents shall be provided with educational materials to minimize damage to the restoration areas. Advisory signage shall be installed along the boundaries of the open space lots where oak tree plantings occur.
  9. Identify the maintenance entity and include their written agreement to provide care and irrigation of the trees for the 7-year establishment period, and to replace any replacement trees as necessary to achieve 100 percent survival at the end of the establishment period.
  10. Because the County Tree Preservation Ordinance does not apply in the geographical area where mitigation plantings will occur, any onsite and/or off-site planting areas shall be protected in perpetuity through deed restrictions or conservation easements, to the satisfaction of the Sacramento County Environmental Coordinator.
- b. If fewer on-site plantings of oak trees on open space lots are allowed, then one or more of the following off-site options to complement onsite plantings shall be chosen to mitigate for the loss of oak woodland that cannot be mitigated onsite (which shall result in a minimum 1:1 compensation ratio for canopy acreage removed):
1. Off-site oak tree replacement plantings may occur within the boundaries of Rancho Murieta. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-4 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

**OR**



2. Off-site oak tree replacement plantings may occur outside the boundaries of Rancho Murieta, but within five miles of Rancho Murieta and within Sacramento County. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-4 shall be submitted to the Sacramento County Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

**OR**

3. An equivalent amount of blue oak woodland canopy lost may be preserved and protected in perpetuity by a conservation easement. The property subject to the conservation easement shall be located within five miles of Rancho Murieta, and within Sacramento County. A draft conservation easement shall be submitted to the Environmental Coordinator for review and approval. A copy of the recorded easement shall be submitted to the Department of Environmental Review and Assessment prior to the approval of grading or improvement plans or building permits.

**OR**

4. Replacement for the total number of inches lost may occur through purchase of credits from an oak tree mitigation bank acceptable to the County, prior to approval of grading or improvement plans or building permits.
  5. If all of the above mitigation options are demonstrated to the satisfaction of the Sacramento County Environmental Coordinator to be infeasible, then compensation shall be through payment into the County Tree Preservation Fund consistent with General Plan Policy CO-132. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.
- c. With the exception of the trees removed and compensated through Subdivisions A and B, above, all native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:
1. A circle with a radius measurement from the trunk of the tree to the tip of the longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.

2. Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines."
3. Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100 feet of construction related activities, in order to avoid damage to the tree canopies and root systems. The only exception to this requirement will be that the protective fencing can be placed just outside the limits of identified improvements (as identified on the project plans included and discussed in this EIR) that are within the driplines of the protected trees. No encroachment may exceed 20% of the dripline.
4. No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed.
5. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked stockpiled or located within the driplines of protected trees.
6. No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except where such grading is shown on the project plans and discussed in the text of this document. Grading will not be permissible within more than 20% of the dripline of any tree protected by this measure.
7. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree.
8. No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist.
9. The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist.
10. All portions of permanent fencing that will encroach into the dripline protection area of any protected tree shall be constructed using posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.

11. Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.
12. No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended.
13. Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available at the Department of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

**SECTION 267. RAPTOR MITIGATION.** In order to ensure that significant impacts to nesting raptors, Swainson's hawk, and burrowing owl do not occur as a result of development of the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the following measures shall be implemented by the respective project applicants:

- a. If construction is proposed during the raptor breeding season (February - August), a focused survey for migratory bird nests shall be conducted by a qualified biologist within 30 days prior to the beginning of construction activities in order to identify active nests in the project area. If active nests are found, no construction activities shall take place within 500 feet of the nest until the young have fledged. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (September - January). If no active nests are found during the focused survey, no further mitigation will be required.
- b. To mitigate for the loss of Swainson's hawk foraging habitat, prior to the approval of Improvement Plans or building permits, or recordation of Final Subdivision Map, whichever occurs first, the applicant shall perform one of the following:
  1. The project proponent shall utilize either the fee payment or land dedication option established in Sacramento County's Swainson's Hawk Impact Mitigation Program, (Chapter 16.130 of the Sacramento County Code).
  2. The project proponent shall, to the satisfaction of the California Department of Fish and Game, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.

3. Should the County Board of Supervisors adopt a Swainson's Hawk Mitigation Policy/Program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of one of the measures above, the project proponent may be subject to that program instead.
- c. The applicant shall avoid burrowing owls and their nest sites and habitat during construction. The following measures shall be implemented to reduce impacts to a less-than-significant level:
1. Prior to construction activity, a qualified biologist shall conduct focused surveys for burrowing owls where suitable habitat is present on the areas slated for construction. Suitable habitat includes all upland areas that are not developed, and all edge areas (including vegetated berms, levees, and drainage ditches). Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities. Surveys shall be conducted in accordance with current DFG protocol.
  2. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings will be submitted to the County and DFG for review and approval, and no further mitigation is necessary.
  3. If occupied burrows are found, occupied burrows will be avoided until the owls inhabiting the burrows have been removed and relocated using passive exclusion techniques approved by DFG.
  4. No occupied burrows will be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

SECTION 268. CULTURAL RESOURCES MITIGATION. To ensure protection of cultural resources, the following measure applies. This measure shall be included verbatim as a Construction Note on all Plans and Specifications for the project:

- a. Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

- b. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

SECTION 269. MITIGATION MONITORING. Pursuant to Section 21081.6 of the Public Resources Code, the developers of the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat shall comply fully with the Mitigation Monitoring Program (Exhibits 19-15, 19-16, 19-17) that has been prepared for their respective project as follows:

- a. The applicant shall comply with the MMRP for this project, including the payment of 100 percent of the Department of Environmental Review and Assessment staff costs, and the costs of any technical consultant services incurred during implementation of the MMRP, based on the initial estimate of these costs prepared by DERA. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the applicant, and if the actual monitoring costs exceed the initial estimate, the applicant shall be responsible to pay the additional amount.
- b. Until the MMRP has been recorded and the estimated MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved; and no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved.  
MM-1.

SECTION 270. TRANSPORTATION SYSTEM MANAGEMENT PLAN. Prior to the issuance of building permits, improvement plans, grading permits, or recordation of the final map for the Residences of Murieta Hills West, the Residences of Murieta Hills East, and/or The Retreat, the applicant must comply with the Transportation Systems Management Plan for Rancho Murieta North and South, including compliance with General Plan Air Quality policy 15 (AQ-15).

SECTION 271. POND 2N MAINTENANCE. In the event that a maintenance program is established for the maintenance of Pond 2N on the Rancho Murieta Country Club property and all contributing watershed properties that drain through Pond 2N are participating in the maintenance cost, the applicant shall amend the CC&Rs for the Rancho Murieta North Country Club Home Owner's Association to include a requirement to participate in a fair share contribution for such program. As the portions of the Retreat project that drain through Pond 2N only constitute 23.2% of the watershed draining through Pond 2N, the Retreat's fair share shall not exceed 23.2% of the maintenance cost.

SECTION 272. MASTER PLAN UPDATE PHASE I.

a. Master Plan Conditions (Retreat):

The Applicant shall contribute to the County for Phase 1 of a Master Plan update \$29,780, when the approved Vested Tentative Map is free from any and all legal challenges. In addition, the applicant shall contribute a fair share to the County for the total cost of a Master Plan update, should the County choose to take such action. Such contribution shall be based upon the projects acreage percentage of the over all underdeveloped acreage in the Master Plan, less the contribution made for Phase 1 of the Master Plan. Such contribution shall be made with the sale of each home and shall be due at the time that escrow closes on the first sale for each home.

b. Master Plan Condition (Residences of Murieta West):

The Applicant shall contribute to the County for Phase 1 of a Master Plan update \$35,110, when the approved Vested Tentative Map is free from any and all legal challenges. In addition, the applicant shall contribute a fair share to the County for the total cost of a Master Plan update, should the County choose to take such action. Such contribution shall be based upon the projects acreage percentage of the over all underdeveloped acreage in the Master Plan, less the contribution made for Phase 1 of the Master Plan. Such contribution shall be made with the sale of each home and shall be due at the time that escrow closes on the first sale for each home.

c. Master Plan Condition (Residences of Murieta East):

The Applicant shall contribute to the County for Phase 1 of a Master Plan update \$35,110, when the approved Vested Tentative Map is free from any and all legal challenges. In addition, the applicant shall contribute a fair share to the County for the total cost of a Master Plan update, should the County choose to take such action. Such contribution shall be based upon the projects acreage percentage of the over all underdeveloped acreage in the Master Plan, less the contribution made for Phase 1 of the Master Plan. Such contribution shall be made with the sale of each home and shall be due at the time that escrow closes on the first sale for each home.

SECTION 273. DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS. Owner shall record a Declaration of Covenants, Conditions and Restrictions ("Declaration") against the subject real property.

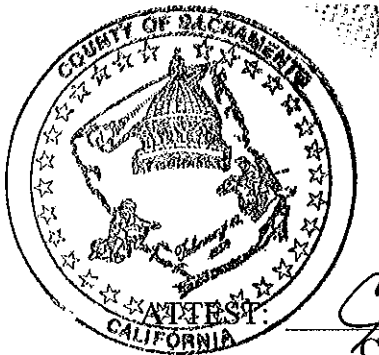
SECTION 274 BUILDING PERMIT APPROVALS

- a. Require the applicant to have a Homeowners Association (HOA) stamp and approval on all building permits at the time of submittal to the County Building Permit Department.
- b. County and applicant shall notify the Rancho Murieta Homeowners Association (HOA) at the time of the first building permit is applied for and issued.

SECTION II. This ordinance shall take effect and be in full force on and after thirty (30) days from the date of its passage hereof, and, before expiration of fifteen (15) days from the date of its passage, it shall be published once with the names of the members of the Board of Supervisors voting for and against the same, said publication to be made in a newspaper of general circulation published within the County of Sacramento.

On a motion by Supervisor Dickinson, seconded by Supervisor Peters, the foregoing ordinance was passed and adopted by the Board of Supervisors of the County of Sacramento, State of California, at a regular meeting thereof this 12th day of December, 2007, by the following vote, to wit:

AYES: Supervisors, Dickinson, MacGlashan, Peters, Yee  
NOES: Supervisors, Nottoli  
ABSENT: Supervisors, None  
ABSTAIN: Supervisors, None



*Don Nottoli*

CHAIRPERSON, Board of Supervisors  
County of Sacramento, California

*Cindy H. Turner*  
CLERK OF THE

BOARD OF SUPERVISORS

In accordance with Section 25102 of the Government Code of the State of California a copy of this document has been delivered to the Chairman of the Board of Supervisors, County of Sacramento on

DEC 12 2007

By *Alyson Mumby*  
Deputy Clerk, Board of Supervisors

FILED

DEC 12 2007

BOARD OF SUPERVISORS  
BY *Cindy H. Turner*  
CLERK OF THE BOARD

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT**

STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

On January 4, 2008, before me, Marcia Grunwaldt, personally appeared Cindy H. Turner, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacities, and that by her signature on the instrument the person, or the entities upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Marcia Grunwaldt



**OPTIONAL SECTION**

Though statute does not require the Notary to fill in the data below, doing so may prove invaluable to persons relying on the document.

- INDIVIDUAL
- CORPORATE OFFICER(S)

Title(s)

- PARTNER(S)
- LIMITED
- GENERAL
- ATTORNEY-IN-FACT
- TRUSTEE(S)
- GUARDIAN
- CONSERVATOR
- OTHER: Clerk to the Board of Supervisors

SIGNER IS REPRESENTING County of Sacramento

**OPTIONAL SECTION**

DATA REQUESTED HERE IS NOT REQUIRED BY LAW.

TITLE OR TYPE OF DOCUMENT: Ordinance No. SZC-2007-0060, Establishing A Planned Unit Development Commonly Known As Rancho Murieta  
DOCUMENT DATE: December 12, 2007.  
No. of Pages: 28 pages  
SIGNER(S) OTHER THAN NAMED ABOVE: None





## Rancho Murieta Community Services District

15160 Jackson Road • P.O. Box 1050 Rancho Murieta, CA 95683 • 916-354-3700 • Fax 916-354-2082

Visit our website [www.rmcsd.com](http://www.rmcsd.com)

August 21, 2024

Mr. Bob Keil  
River Canyon Properties, LLC  
Email: [bobkeilmrk@gmail.com](mailto:bobkeilmrk@gmail.com)

**Re: Water and Sewer Will Serve Letter for --  
Development Project: Phase 2 Residences of Murieta Hills West (93 lots)**

Dear Mr. Keil:

This letter responds to your request for a water and sewer letter for the above development project and property ("Residences"). The project property is located within the Rancho Murieta Community Services District ("District"). The District will provide water and sewer services for the parcels above based on the Conditions of Approval (attached as Exhibit A) and the following conditions:

1. New utility service and service connections are subject to the District Code and any other applicable District ordinances, resolutions, rules, regulations, policies, fees, and charges, which may be amended from time to time.
2. Service is also subject to the full execution of and the developer's compliance with a district-maintained extension agreement for the project.
3. Water and sewer service to the project property is also conditioned upon full compliance with that specific Financing and Services Agreement dated March 17, 2014, known as the 670 FSA, including payment of all amounts due as reimbursement for water treatment plant and wastewater improvements provided in the agreement. A copy of the contract is on file with the District and saved on the District's website.
4. The Residences shall implement drought-tolerant landscaping with no lawns. The Residences shall comply with all State mandates for indoor and outdoor water usage. All appliances installed in the homes shall comply with the State of California requirements to maximize water efficiency. The Residences will comply with the RMCS D Water Shortage Contingency Plan per the California Water Code and require a 50% water use reduction during a catastrophic drought as determined by the Board of Directors of RMCS D.
5. An adequate water treatment system for these units is completed and in place. Water transmission pipelines to this subdivision have been installed up to its boundary line by earlier subdivisions.
6. Ample water for everyday use and fire protection is available and will be furnished to each lot/unit upon payment of related District fees on demand.

*Serving the Community for over 30 years*

Board of Directors: Tim Maybee, President • Martin Pohll, Vice-President • Randy Jenco • Linda Butler • Martin Pohll •  
Stephen Booth  
General Manager • Mimi Morris

This letter is a statement of intent to provide water and sewer services as of the date set forth above. It is not a contract, offer to contract, or binding commitment to provide service or reserve capacity for the project.

Sincerely,

Melinda (Mimi) Morris

General Manager  
Rancho Murieta Community Services District

Attachment: Exhibit A

# Exhibit A

## COUNTY OF SACRAMENTO CALIFORNIA

### PLANNING COMMISSION REPORT

For the Agenda of:  
December 18, 2017

To: Planning Commission  
(Final Approval by the Board of Supervisors)

From: Office of Planning and Environmental Review

Subject: PLNP2017-00151. Residences Of Murieta Hills West Vesting Tentative Map Time Extension. A Request To Extend The Vesting Tentative Subdivision Map For Five Years For A Property Located At 6307 Stonehouse Road, On The East Side Of Stonehouse Road Approximately 1520 Feet North Of Escuela Drive In The Rancho Murieta Planned Development. Applicant: Walters Land Planning. APN: 073-0190-106. Environmental Document: Addendum to the Final Environmental Impact Report

Supervisorial  
District: Frost

Contact: Shelby Vockel, Associate Planner, (916) 874-6323, [vockels@saccounty.net](mailto:vockels@saccounty.net)

#### **Details of Request:**

A Time Extension pursuant to Sections 22.20.090 and 22.20.095 of the Sacramento County Code to extend the expiration date a maximum of five years from the date of final action by the hearing body for a Vesting Tentative Subdivision Map (01-RZB-ZOB-SVB-AHS-0069) to divide approximately 59.9 acres into 99 residential lots, four open space lots, one landscape lot, one television tower lot, and one private road lot in the RD-3 (PD) Zone (37 acres) and O (PD) Zone (22.9 acres).

**Applicant:**  
Walters Land Planning  
7498 Griggs Way  
Sacramento, CA 95831  
Attention: Bruce Walters

**Owner:**  
BBC Murieta Land LLC  
555 Skokie Blvd, #555  
Northbrook, IL 60062  
Attention: Rob Weil

#### **Summary of Key Points:**

- The hearing body is the Board of Supervisors with a recommendation from the Planning Commission.
- No changes to the previously approved Vesting Tentative Subdivision Map and associated entitlements are requested.
- Without further action, this map will expire on January 12, 2018.
- As no material changes to the project are proposed by this time extension request, and surrounding land uses have not changed in a manner that would necessitate updated

PLNP2017-00151. Residences Of Murieta Hills West Vesting Tentative Map Time Extension. Applicant: Walters Land Planning. APN: 073-0190-106. Environmental Document: Addendum To The Final Environmental Impact Report.

review, the certified Environmental Impact Report for Control No. 2001-0069 remains the appropriate California Environmental Quality Act (CEQA) document.

- The Cosumnes Community Planning Advisory Council (CPAC) met on July 26, 2017 and recommended approval (7-Yes, 0-No) of the proposed project.

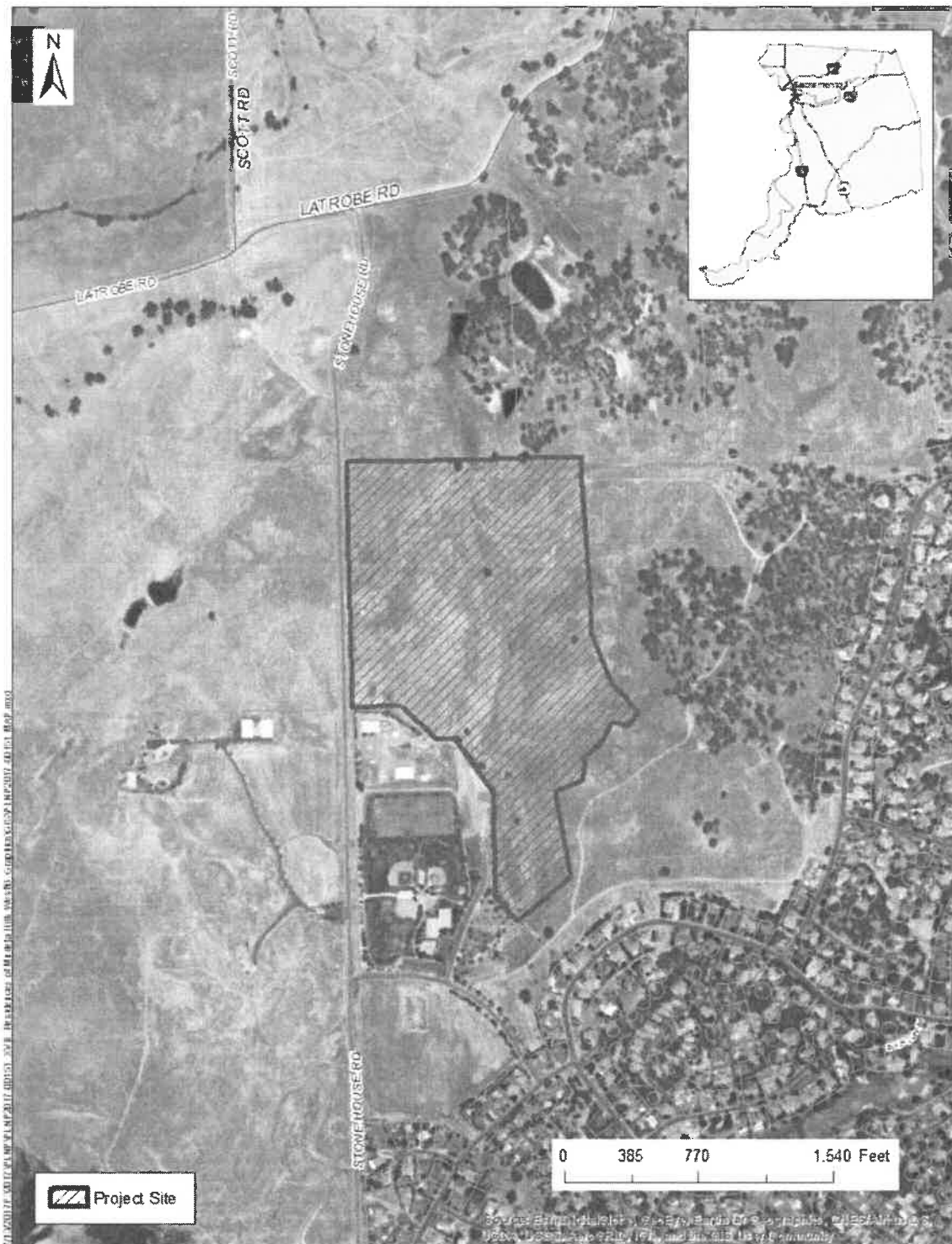
**Recommendation:**

Staff recommends the Planning Commission make the following recommendations to the Board of Supervisors:

1. Recognize the Environmental Coordinator Addendum dated November 1, 2017 and determine the Final Environmental Impact Report (Control No. 2001-0069) is still adequate and appropriate for the proposed project.
2. Recognize that the Vesting Tentative Subdivision Map Extension is subject to the previously adopted Mitigation Monitoring and Reporting Program.
3. Approve the requested entitlement for a Vesting Tentative Subdivision Map Extension to allow an extension of five years from the date of final action by the Board of Supervisors, subject to the findings and conditions listed in Attachment 2 of this report.



### Aerial Photograph of Project Site, 2014





PLNP2017-00151. Residences Of Murieta Hills West Vesting Tentative Map Time Extension. Applicant: Walters Land Planning. APN: 073-0190-106. Environmental Document: Addendum To The Final Environmental Impact Report.

### **Project History**

The proposed project is located within the Rancho Murieta Master Plan area, and is subject to the Rancho Murieta Planned Development (PD) Ordinance. The project known as “The Residences of Murieta Hills West” is included in Chapter 19 of the PD Ordinance, and was approved by the Board of Supervisors on December 12, 2007 with a total of 99 single-family lots, four open space lots, one landscape lot, one television tower lot, and one private road lot.

The Residences of Murieta Hills West project included entitlements for the following requests:

- A Rezone by Ordinance No. SZC-2007-0060 of 59.9 acres from A-2 (PD)(Agricultural-Planned Development) to RD-3 (PD) (Residential-Planned Development) for 37 acres and O (PD)(Recreational-Planned Development) for 22.9 acres;
- An Amendment to the Planned Development Ordinance to reconfigure the circulation pattern and reconfigure the open space areas as shown on the approved Master Plan;
- A Vesting Tentative Subdivision Map to create 99 single-family lots in the RD-3(Residential) zone, in addition to four (4) open space lots, one (1) landscape lot, and one (1) private road lot; and,
- An Affordable Housing Plan that consists of the payment of in-lieu and affordability fees.

The map was approved for a three year time period, originally expiring on January 11, 2011. However, due to the economic downturn, the California Legislature approved several statutory map extensions since 2008, providing additional time to record approved maps. With the legislative extensions, the Residences of Murieta Hills West Tentative Subdivision Map expiration date was extended to January 11, 2018.

### **Project Description**

The project consists of a Time Extension request for an approved Vesting Tentative Subdivision Map (2001-0069) for five years from the date of hearing body approval. The Rezone was effectuated in 2007 and is not subject to further review. The Affordable Housing Plan processed with the original map consists of payment of in-lieu and affordability fees; however, the Board of Supervisors adopted an Affordable Housing Ordinance in 2014, permitting the payment of fees based on the habitable square footage of each market rate unit. Therefore, the applicant has the option to pay the original in-lieu and affordability fees adopted with the Affordable Housing Plan or follow the Affordable Housing Ordinance.

It is important to note the purpose of a map extension is to determine whether a map should be extended for a period of zero to five years. As the request is for a Vesting Tentative Subdivision Map, the final hearing authority is the Board of Supervisors. Minor adjustments to conditions can be made for health and safety concerns, but the issue for the Planning Commission and the Board of Supervisors' consideration is whether to extend the life of the map. The related entitlements are not subject to review as part of this extension request as they are effectuated or can be accomplished through another ordinance.



PLNP2017-00151. Residences Of Murieta Hills West Vesting Tentative Map Time Extension. Applicant: Walters Land Planning. APN: 073-0190-106. Environmental Document: Addendum To The Final Environmental Impact Report.

**General Plan And Planned Development Ordinance Consistency**

***General Plan Consistency***

The General Plan is a set of policies, programs, and maps that form a blueprint for physical development in the unincorporated County. The General Plan addresses important community issues such as new growth, housing needs, and environmental protection. Its policies are instrumental in planning infrastructure to accommodate future growth.

The 2030 General Plan designation for the Residences of Murieta Hills West project is Low Density Residential and the density of the Vesting Tentative Subdivision Map conforms to this designation. An analysis of General Plan policies occurred at the time of the original subdivision map and the project was found to be consistent with these policies.

***Rancho Murieta Planned Development Ordinance Consistency***

Rancho Murieta is governed by a Planned Development (PD) Ordinance known as 77-PD-10. According to the PD Ordinance, each new unit of development in the Rancho Murieta community requires a Zoning Ordinance Amendment to add the development as a new chapter within the ordinance document. The Residences of Murieta Hills West project was placed in Chapter 19 of the Ordinance when it was originally approved, and all conditions of approval for that project are incorporated into the text of the ordinance document. The current request is an extension of the development described in Chapter 19, and no changes to the Vesting Tentative Subdivision Map are proposed with this application. Therefore, the request is consistent with the PD Ordinance.

**Design Guidelines Consistency**

Design Review was not completed as part of the original project analysis, and no changes to the Vesting Tentative Subdivision Map are requested in conjunction with the time extension. As the request is an extension of a Vesting Tentative Subdivision Map, the standards that were applicable at the time the project was originally approved are the relevant standards. Therefore, design review will not be required for the homes constructed at the Residences of Murieta Hills West.

**Land Use And Neighborhood Compatibility**

***Land Use Compatibility***

Table 1 identifies the existing land uses, zone districts, and Community Plan designations for the project site and the surrounding properties. No significant changes in land use have occurred since the Tentative Subdivision Map was approved in 2007.

**Table 1: Existing Land Uses, and Zoning Designations**

	<b>Existing Land Use</b>	<b>Zoning</b>
Subject Property	Vacant (Single-Family approved on site)	RD-3 (PD), O (PD)
North	Agriculture/ Dry Pasture	AG-20
South	Park	A-2 (PD)
East	Vacant (Single-Family approved on site)	RD-1 (PD), RD-3 (PD), O (PD)
West	Agriculture/ Dry Pasture	AG-20, AG-80

PLNP2017-00151. Residences Of Murieta Hills West Vesting Tentative Map Time Extension. Applicant: Walters Land Planning. APN: 073-0190-106. Environmental Document: Addendum To The Final Environmental Impact Report.

### **Environmental Determination**

The Office of Planning and Environmental Review evaluated the proposed project to determine whether an additional or new review under the California Environmental Quality Act (CEQA) would be required. On November 1, 2017, the Environmental Coordinator prepared a memorandum for the Planning Director, stating that the former Department of Environmental Review and Assessment, pursuant to the regulations of CEQA, prepared an Environmental Impact Report (EIR) for the Residences of Murieta Hills West (Control Number 01-RZB-ZOB-SVB-AHS-0069) and that the document is the appropriate CEQA document for the current application. The EIR was released on May 29, 2007. The document evaluated environmental impacts associated with: land use; public services; drainage and hydrology; traffic and circulation; air quality; noise; biological resources; geology, soils, and grading, cultural resources; visual and aesthetics; and affordable housing. On October 16, 2007, the Board certified the EIR for the Residences of Murieta Hills West Rezone, Zoning Ordinance Amendment, Vesting Tentative Subdivision Map, and Affordable Housing Plan and as part of the approved entitlements, adopted a Mitigation Monitoring and Reporting Program (MMRP).

### **Public Outreach, Community Response And Community Planning Advisory Council (CPAC) Review**

#### ***Community Response***

It is the County's policy to encourage applicants to conduct community outreach for projects prior to or concurrent with the filing of a planning application, and to provide a written description of the outreach. The County provided a written notice to all property owners within a 500-foot radius of the CPAC meeting. To date, staff has not received any comments regarding this application.

#### ***Community Planning Advisory Council (CPAC) Review***

The Cosumnes Community Planning Advisory (CPAC) met on July 26, 2017 and recommended approval (7 – Yes, 0 – No). The applicant informed the CPAC and the neighbors in attendance that the property was under new ownership. The topics discussed at the meeting included water rights, the existing cell tower cite, access to properties to the north from the existing dirt construction road, and coordination of phasing with Murieta Hills East (currently also requesting a time extension). The CPAC members unanimously supported the proposal.

### **Project Analysis**

The subject Vesting Tentative Subdivision Map was approved for a three year time period, originally expiring January 11, 2011. However, due to the economic downturn, the State Legislature approved several statutory map extensions since 2008, providing additional time to record approved maps. With the legislative extensions, the Residences of Murieta Hills West Vesting Tentative Subdivision Map expiration date was extended to January 11, 2018.

Once an extension is requested, approval or denial of that request can occur after the expiration of the tentative map (*Bodega Bay Concerned Citizens v. County of Sonoma*; 125 Cal. App 4<sup>th</sup> 1061). Once a tentative map is approved, the County's discretion to deny an extension of the map is limited, and involves only a determination of the length of time to be granted (*El Patio v.*

PLNP2017-00151. Residences Of Murieta Hills West Vesting Tentative Map Time Extension. Applicant: Walters Land Planning. APN: 073-0190-106. Environmental Document: Addendum To The Final Environmental Impact Report.

*Permanent Rent Control BD*; 110 Cal.App.3d 915, 928). The final hearing authority (Board of Supervisors) may grant an extension for a period ranging from zero to five years. In addition, only minor adjustments to approved conditions can be made for health and safety concerns or as mutually agreed upon by the applicant.

Approval of a zero year extension will not extend the life of this map and the applicant will be required to submit a new Tentative Subdivision Map application to continue with subdivision and development of the property, if the map is not recorded by January 11, 2018. Approval of the five year extension, as requested, provides the applicant five years commencing from the date of final action on the Map Extension to record the final map. The five-year Time Extension request was submitted by the applicant on May 23, 2017.

The project consists of a five-year Time Extension for a Vesting Tentative Subdivision Map. The original approvals were granted by the Board of Supervisors on December 12, 2007 under Control Number 01-RZB-ZOB-SVB-AHS-0069. The rezone approved with the prior application has been effectuated and does not require extension. No changes to the approved map have been proposed and there have not been significant changes in the surrounding area since the project was originally approved 2007. Other departments and agencies have also reviewed this request and have indicated concurrence with the extension request. The project is consistent with County policies and ordinances, including Title 22 of the County Code, the General Plan, and the Rancho Murieta PD Ordinance, and no policy conflicts have been identified. For these reasons, staff recommends approval of this time extension proposal.

#### **Attachments**

- ATT 1 - Vicinity Map
- ATT 2 - Findings and Conditions
- ATT 3 - Approved Vesting Tentative Subdivision Map
- ATT 4 - Original Final Transmittal (Control No. 20010069)
- ATT 5 - CPAC Referral, July 26, 2017
- ATT 6 - Advisory Letters from Reviewing Agencies
- ENV DOC - Environmental Coordinator's Memorandum and MMRP





SCOTT RD

LATROBE RD

LATROBE RD

STONEHOUSE RD

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Project Site

A-2 GENERAL AGRICULTURAL (Interim)



AG-20 AGRICULTURAL - 20 ACRES



AG-80 AGRICULTURAL - 80 ACRES



O RECREATION



RD-1 RESIDENTIAL



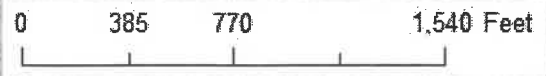
RD-3 RESIDENTIAL



RD-5 RESIDENTIAL



Parcel Boundaries



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



**ATTACHMENT 2**  
**Conditions of Approval and Findings**  
**Control Number PLNP2017-XVB-00151**  
**Residences of Murieta Hills West - Vesting Tentative Subdivision Map Time Extension**

**PROJECT FINDINGS**

The staff recommendations for the Time Extension are based upon the following considerations.

1. Staff has identified no effects from the proposed time extension request which would result in a significant detrimental impact on adjoining or neighboring properties if the previously approved conditions are carried forward.
2. The proposed map and design is consistent with the General Plan Low Density Residential designation. No policy conflicts have been identified with this request.
3. The request is consistent with the Rancho Murieta Planned Development Ordinance and Master Plan. No policy conflicts have been identified.
4. The proposed development will conform to applicable Zoning Code Sections. No policy conflicts have been identified with this request.
5. The proposed parcels are compatible with the predominant neighborhood pattern of primarily residential development and the surrounding area has not significantly changed since the Tentative Subdivision Map was approved in 2007.
6. The proposed Tentative Subdivision Map Extension is in compliance with Sacramento County Code, Title 22.
7. The proposed Tentative Subdivision Map Extension is in compliance with the Subdivision Map Act (Cal.Gov. Code Section 66410 et seq.).
8. The site is physically suitable for the type and density of development.
9. The design of the subdivision and the improvements will not cause substantial environmental damage or substantially and unavoidably injure fish and wildlife or their habitat.
10. The design of the subdivision or improvements will not cause serious public health problems.
11. Identified environmental effects, suggested mitigation measures, and alternative project analysis contained in the Environmental Impact Report have been taken into consideration in the recommended actions and conditions of approval.

**PROJECT CONDITIONS**

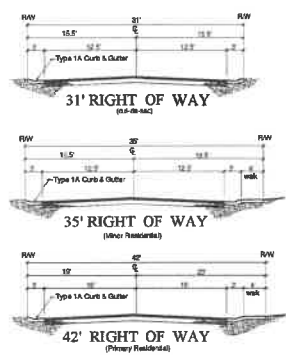
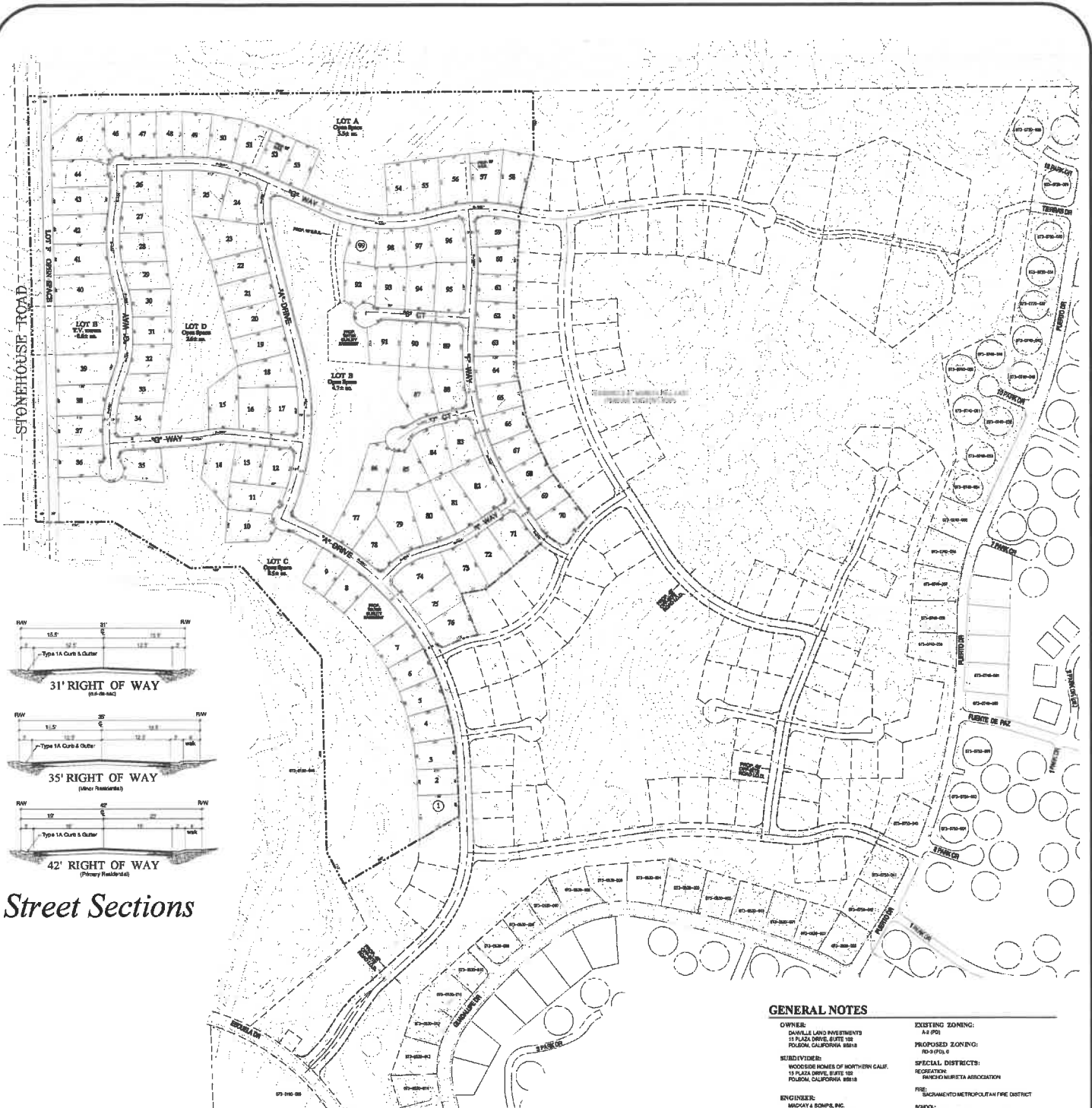
1. The tentative subdivision map extended by this action shall be in substantial compliance with Attachment 3.
2. This action does not relieve the applicant of the obligation to comply with all ordinances, statutes, regulations, and procedures. Any required subsequent procedural actions shall take place within 60 months of the date on which the time extension request was approved or this action shall automatically be null and void.
3. Comply with approved Conditions No. 3 through No. 53 of 01-RZB-ZOB-SVB-AHS-0069 (Attachment 4).

**Acronyms and Abbreviations**

<b><i>Hearing Bodies and Advisory Committees</i></b>			
<b>BS</b>	Board of Supervisors	<b>COPC</b>	Planning Commission
<b><i>Entitlements</i></b>			
<b>XVB</b>	Vesting Map Extension of Time - BS		



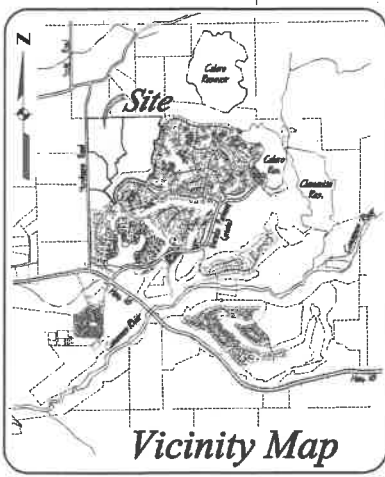





**Street Sections**

**GENERAL NOTES**

- OWNER:**  
DAVILLE LAND INVESTMENTS  
11 PLAZA DRIVE, SUITE 102  
PO BOX, CALIFORNIA 95818
- SUBDIVISION:**  
WOODSIDE HOMES OF NORTHERN CALIF.  
15 PLAZA DRIVE, SUITE 102  
PO BOX, CALIFORNIA 95818
- ENGINEER:**  
MACKAY & SOMPS, INC.  
1775 TRINITY TOWER, SUITE 100  
SACRAMENTO, CALIFORNIA 95815  
PHONE: 916.938.8888
- ASSESSOR PARCEL NUMBERS:**  
873-01-00-108
- AREA:**  
58.81 ACRES GROSS
- LOT COUNT:**  
98 SINGLE-FAMILY RESIDENTIAL (R-1)  
4 OPEN SPACE LOTS  
1 LOT TELEVISION TOWER  
1 PRIVATE ROAD LOT  
102 TOTAL LOTS
- EXISTING USE:**  
VACANT
- PROPOSED USE:**  
SINGLE FAMILY RESIDENTIAL, OPEN SPACE
- EXISTING ZONING:**  
R-2 (PD)
- PROPOSED ZONING:**  
RD-10 (PL)
- SPECIAL DISTRICTS:**  
RECREATION  
RANCHO MURIETA ASSOCIATION
- FIRE:**  
SACRAMENTO METROPOLITAN FIRE DISTRICT
- SCHOOL:**  
ELK GROVE UNIFIED SCHOOL DISTRICT
- TELEPHONE:**  
100
- WATER:**  
RANCHO MURIETA COMMUNITY SERVICES DISTRICT
- STORM DRAINAGE AND SANITARY SEWER:**  
RANCHO MURIETA COMMUNITY SERVICES DISTRICT
- OTHER:**  
1. DIMENSIONS & AREAS SHOWN ARE APPROXIMATE AND ARE SUBJECT TO CHANGE.  
2. DEVELOPER RESERVES THE RIGHT TO FILE METRIC FINAL MAPS.  
3. ALL STREETS ARE PRIVATE AND TO BE MAINTAINED BY RANCHO MURIETA ASSOCIATION.  
4. USE IS CURRENTLY VACANT WITH NO EXISTING STREET NAMES. STREET NAMES, COORDINATE SYSTEM, INFORMATION SHOWN HEREON IS TENTATIVE IN NATURE. MODIFICATION FROM THIS MAP ARE ALLOWED AS PART OF THE FINAL SUBDIVISION DESIGN PROVIDED AS DETERMINED BY THE COUNTY PUBLIC WORKS DEPARTMENT.



**Vicinity Map**

  
 0 100 200 feet  
**MACKAY & SOMPS**  
**CIVIL ENGINEERS, INC.**  
 SACRAMENTO, CALIFORNIA (916) 929-6092

Vesting Tentative Subdivision Map  
**The Residences of Murieta Hills- West**  
 Sacramento County, California

**Rancho Murieta**  
 Scale N.T.S. March 31, 2006



**COUNTY OF SACRAMENTO  
INTER-OFFICE CORRESPONDENCE**

December 26, 2007

TO: PLANNING AND COMMUNITY DEVELOPMENT

FROM: CINDY H. TURNER, Clerk  
*Cindy Turner*  
Board of Supervisors

SUBJECT: **01-RZB-ZOB-SVB-AHS-UPB-0069** - (RANCHO MURIETA/LENZIE)  
**REZONE, AMENDMENT TO THE PLANNED DEVELOPMENT  
ORDINANCE, VESTING TENTATIVE SUBDIVISION MAP, USE PERMIT  
AND AFFORDABLE HOUSING PLAN  
BNY, WESTERN TRUST, WARMINGTON HOMES AND WOODSIDE  
GROUP** - Applicant/Developer: Murieta Holdings - Engineer: MacKay and  
Somps - located on the east side of Stonehouse Road, approximately 1,400 feet  
north of Escuela Drive, in the community of Rancho Murieta. (Nottoli)

The Board of Supervisors, meeting in regular session on October 16, 2007,  
certified the Final Environmental Impact Report as adequate and complete.

The Board of Supervisors, meeting in regular session on December 12, 2007,  
adopted the Findings of Fact and Statement of Overriding Considerations and took  
the following actions on the above referenced matter:

**REZONE**

Approved a Rezone by Ordinance No. **SZC-2007-0060** of 59.9 acres from A-2  
(PD) (Agricultural-Planned Development) to RD-3 (PD) (Residential-Planned  
Development for 37 acres) and "O" (PD) (Recreational-Planned Development for  
22.9 acres), subject to the findings and conditions as outlined in Addendum No. 6.

**AMENDMENT TO THE RANCHO MURIETA PLANNED  
DEVELOPMENT ORDINANCE**

Approved an Amendment to the Rancho Murieta Planned Development Ordinance  
by Ordinance No. **SZC-2007-0060** to reconfigure the circulation pattern and  
reconfigure the open space areas as shown on the approved Master Plan, subject to  
the findings and conditions as outlined in Addendum No. 6.

**VESTING TENTATIVE SUBDIVISION MAP**

Approved a Vesting Tentative Subdivision Map to create 99 single-family lots in the RD-3 (Residential) zone, in addition to four (4) open space lots, one (1) landscape lot, one (1) television tower lot, and one (1) private road lot, subject to the findings and conditions as outlined in Addendum No. 5.

**AFFORDABLE HOUSING PLAN**

Approved an Affordable Housing Plan that consists of the payment of in-lieu and affordability fees.

The Board approved the Mitigation Monitoring and Reporting Program.

The complete file and copies of all documents are attached.

Attachments: Ordinance No. SZC-2007-0060  
Vesting Tentative Subdivision Map conditions

CHT:am

cc: In house  
Applicant/Developer  
Engineer  
Owner

**VESTING TENTATIVE SUBDIVISION MAP**  
**THE RESIDENCES OF MURIETA HILLS WEST**  
**01-RZB-ZOB-SVB-AHS-0069**  
**Assessor's Parcel No. 073-0190-106**

**CONDITIONS OF APPROVAL:**

1. The development approved by this action is for 99 single family lots in substantial compliance with Exhibit "K".
2. This action does not relieve the applicant of the obligation to comply with all ordinances, statutes, regulations and procedures. Any required subsequent procedural actions shall take place within 36 months of the date on which the permit became effective or this action shall automatically be null and void.
3. Approval shall be conditioned on, and shall not become effective unless the Applicant signs and files with the Sacramento County Planning Department, an indemnity agreement approved by the County Counsel.
4. Comply with the accompanying Affordable Housing Plan, Control No. 06-0252.
5. Grading shall be pursuant to an Approved Grading Plan. Grading activities shall not result in man-made slopes that exceed a 2:1 slope in their final condition.
6. Only wrought-iron fencing shall be allowed along the property lines abutting open space areas.
7. Prior to issuance of the first building permit, the project proponent shall provide for, and fund construction of, a trail system designed to link the existing residential developments located to the south and northeast of the project site. The trails system shall be consistent with Exhibit "K".
8. Prior to final map recordation, the property owner shall grant an Avigation and Noise Easement to Sacramento County, at no cost to the County, due to the site's location within the draft Mather Airport Planning Policy Area recommended by the Sacramento County Airport System. This easement shall preclude the property owner from seeking damages from the County in the future for loss of value due to aircraft over-flight noise or safety issues.
9. Prior to issuance of building permits, improvement plans, grading permits or recordation of the final map, comply with Transportation Systems Management (TSMP) Plan for Rancho Murieta North and South, including compliance with General Plan Air Quality policy 15 (AQ-15).
10. Provide public sewer, water, water storage and storm drainage facilities, together with any associated easements and pay all fees to the satisfaction of the Rancho Murieta Community Services District.

11. Comply with all Rancho Murieta Community Services District ordinances, and design standards dated July 1982, and construction specifications dated July 1, 1993, concerning sewer, water, drainage, and security as the only utility service provider in the community.
12. Relocate all existing facilities as necessary for project development to the satisfaction of the Rancho Murieta Community Services District, at sole cost to the developer. Grant and abandon easements as necessary.
13. Obtain right of entry and easements for all off-site facilities prior to subdivision improvement approvals.
14. Ensure access arrangements and install fire hydrants meeting the required fire flow demands pursuant to the standards of the Sacramento Metropolitan Fire District.
15. Pay Rancho Murieta Association or Rancho Murieta Community Services District community park fees and/or enter into an agreement for financing in-lieu-of privately maintained park and recreation facilities in accordance with District Ordinance 90-8, as amended, as part of the park requirements evaluation.
16. Enter into an agreement with Rancho Murieta Community Services District for potable water supply.
17. Dedicate a 12.5-foot public utility easement for underground facilities and appurtenances adjacent to all public ways.
18. Dedicate any private drive, ingress and egress easement, or Irrevocable Offer of Dedication and 12.5 feet adjacent thereto as a public utility easement for underground facilities and appurtenances.
19. Submit improvement plans to Sacramento Metropolitan Fire District for approval, prior to construction.
20. Installation of LP-Gas tanks, if any, shall comply with Fire Prevention Standard 435.203.
21. The required width of access roadways are not to be obstructed in any manner, including by the parking of vehicles. Guest parking locations and design shall be determined at time of construction and approved by the Planning Director and Sacramento Metropolitan Fire District.
22. The following methods of fire lane identification are taken from Section 22500.1 of the California Vehicle Code and of the 3 methods presented below, 1 must be present for all areas designated as a fire access lane.
  - a. Posting of a sign immediately adjacent to, and visible from, the designated fire lane clearly stating in letters not less than one inch in height, that the place is a fire lane and no parking is permitted (specific sign required).

- b. By outlining or painting the pavement “red” with approved pavement paint and, in CONTRASTING color, marking the pavement with words “NO PARKING - FIRE LANE” every 25 feet, which is clearly visible from a vehicle.
  - c. By a “red” curb or “red” paint on the edge of the roadway upon which is clearly marked in a CONTRASTING color, the words “NO PARKING - FIRE LANE”.
23. Provide drainage easements and install facilities pursuant to the County of Sacramento Floodplain Management Ordinance, Sacramento County Water Agency Code, and County of Sacramento Improvement Standards, including any fee required by the Sacramento County Water Agency Code and to the satisfaction of Rancho Murieta Community Service District.
  24. Off-site drainage improvements and easements shall be provided pursuant to the Sacramento County Floodplain Management Ordinance, the Sacramento County Improvement Standards, and the Rancho Murieta Community Service District.
  25. A drainage study shall be required to demonstrate mitigation of increase run-off due to the project. Drainage study shall be subject to review and approval by Department of Water Resources and Rancho Murieta Community Service District.
  26. Advisory: This project is subject to the Cosumnes River Bridge Crossing fee.
  27. Prior to recordation of final map, the property shall annex into the County of Sacramento Community Facilities District No. 2005-1 (Police Services). The annexation process takes approximately 6 months and the applicants must contact the County of Sacramento Infrastructure Finance Section at (916) 874-6525 at the earliest possible time to initiate the process and to obtain information concerning annexation costs.
  28. Construction of the private streets shall be to the satisfaction of the Municipal Services Agency. Street sections shall be per PD 77-PD-10.
  29. Provide visibility easements as necessary to meet sight distance requirements.
  30. Comply with County Design Standards for lighting private streets.
  31. Record a maintenance agreement or CC&R’s involving all the parcels of the subject map assuring timely maintenance of the private streets.
  32. Prior to issuance of building permits for The Residences West, Residences East and/or the Retreat, the existing water supply treatment plant must be upgraded to provide adequate capacity for existing and approved projects, as well as the Retreat and both Residences projects. PU-1.
  33. Prior to issuance of building permits, to avoid significant impacts related to the provision of sewer service, the applicant shall submit engineer-certified documentation from the CSD demonstrating that the wastewater treatment facility has adequate treatment, storage, and disposal capacity to accept wastewater from the lots for which building permits are

requested without resulting in detectable degradation of ground or surface water quality (or exacerbation of existing degradation), and that such determination has been made based on recent actual wastewater flows, as well as projected flows from other projects for which building permits have been issued. PU-2.

34. Contribute a fair share for public street improvements on Stonehouse Road from Jackson Highway (State Route 16) to Latrobe Road based on an 84-foot Rural Collector pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation.
35. The access control gate must be designed to the standards for an entry gate layout for new developments pursuant to the Uniform Fire Code Section 902.2.4.2.
36. Prior to the issuance of building permits, the applicant shall pay a fair share of the cost of the following improvements:
  - a. SR 16 / Sunrise Boulevard. An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
  - b. SR 16 / Sunrise Boulevard. An exclusive left-turn lane should be added to the southbound approach, creating dual left-turn lanes on Sunrise Boulevard.
  - c. SR 16/ Grant Line Road. The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane, two exclusive through lanes and an exclusive right-turn lane on Grant Line Road. The northbound and southbound phasing should be changed from split phase to protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
  - d. SR 16 / Dillard Road. The eastbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
  - e. SR 16 / Dillard Road. The northbound combined left/right-turn lane should be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Dillard Road.
  - f. SR 16 / Latrobe Road. This intersection meets the MUTCD peak hour signal warrant during the PM peak hour and should therefore be signalized. The northbound and southbound approaches should have permitted left-turn phasing and the eastbound and westbound approaches should have protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
  - g. SR 16 / Stonehouse Road. This intersection meets the MUTCD peak hour signal warrant during both the AM and PM peak hours and should therefore be signalized. The southbound combined left/right-turn lane should be split out to include an



- exclusive left-turn lane and an exclusive right-turn lane on Stonehouse Road. An additional eastbound and westbound through lane should be added to SR 16.
- h. SR 16 / Stonehouse Road. An additional eastbound and westbound through lane on State Route 16 at the intersection of Stonehouse Road should be added.
  - i. SR 16 / Murieta Parkway. An additional eastbound and westbound through lane should be added to SR 16. TC-1.
37. The following mitigation measures will be applied during the grading and earthmoving phase of construction to reduce PM<sub>10</sub> emissions:
- a. All exposed soil shall be watered at a frequency that keeps soil moist at all times,
  - b. All haul roads shall be watered twice daily,
  - c. At least two feet of freeboard shall be maintained for all trucks hauling soil and,
  - d. Use emulsified diesel or diesel catalysts on applicable heavy duty diesel construction equipment. AQ-1.
38. Off-Road Vehicle Fleet - Equipment Emissions: Prior to approval of improvement plans and/or grading plans, or any earthmoving activity on the site, whichever comes first, the project representative shall submit to the Sacramento County Department of Environmental Review and Assessment (DERA) a copy of a Sacramento Metropolitan Air Quality Management District (SMAQMD) approved plan demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project-wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction\* compared to the most recent California Air Resources Board (CARB) fleet-average; and

Prior to the start of construction, the project representative shall submit to the Sacramento County DERA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly thereafter to SMAQMD throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide DERA and SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and onsite foreman.

(\*NOTE: Acceptable options for reducing emissions may include use of late model vehicles, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.) AQ-3.

39. Prior to the approval of improvement plans or the issuance of grading permits, the proponent will submit proof that the off-set air quality mitigation fee of \$1557.75 per acre graded (74.4 acres) has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and the lead agency. AQ-4.
40. Off-Road Diesel Equipment - Visible Emissions: The project shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the Sacramento County DERA and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted to SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations. AQ-5.
41. Prior to approval of Grading Plans, the applicant shall submit an Asbestos Dust Mitigation Plan to the Sacramento Metropolitan Air Quality District for approval. No Asbestos Dust Mitigation Plan shall be required for those areas where a registered geologist has performed a geologic evaluation (in accordance with the Air Resources Board's "Asbestos Airborne Toxic Control Measure For Construction, Grading, Quarrying and Surface Mining Operations") concluding that no naturally occurring asbestos, ultra-mafic rock or serpentine is likely to be found in the area to be disturbed, subject to the review and approval of the Sacramento Metropolitan Air Quality Management District. The Asbestos Dust Mitigation Plan for all other lots on which asbestos is known to be present or assumed to be present (in accordance with the above-referenced Airborne Toxic Control Measures) should include the following:

An Asbestos Dust Mitigation Plan must specify dust mitigation practices which are sufficient to ensure that no equipment or operation emits dust that is visible crossing the property line, and must include one or more provisions addressing each of the following topics:

a. Track-out prevention and control measures which shall include:

- (1) Removal of any visible track-out from a paved public road at any location where vehicles exit the work site; this shall be accomplished using wet sweeping or a HEPA filter equipped vacuum device at the end of the work day or at least one time per day; and
- (2) Installation of one or more of the following track-out prevention measures:
  - (a) A gravel pad designed using good engineering practices to clean the tires of exiting vehicles;

- (b) A tire shaker;
  - (c) A wheel-wash system;
  - (d) Pavement extending for not less than 50 consecutive feet from the intersection with the paved public road; or
  - (e) Any other measure as effective as the measures listed above.
- b. Keeping active storage piles adequately wetted or covered with tarps.
- c. Control for disturbed surface areas and storage piles that will remain inactive for more than 7 days, which shall include one or more of the following:
- (1) Keep the surfaces wetted;
  - (2) Establishment and maintenance of surface crusting sufficient to satisfy the test in Subsection (h)(6);
  - (3) Application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations;
  - (4) Covering with tarp(s) or vegetative cover;
  - (5) Installation of wind barriers of 50 percent porosity around 3 sides of a storage pile;
  - (6) Installation of wind barriers across open areas; or
  - (7) Any other measure as effective as the measures listed above.
- d. Control for traffic on on-site unpaved roads, parking lots, and staging areas which shall include:
- (1) A maximum vehicle speed limit of 15 miles per hour or less; and
  - (2) One or more of the following:
    - (a) Watering every 2 hours of active operations or sufficiently often to keep the area adequately wetted;
    - (b) Applying chemical dust suppressants consistent with manufacturer's directions;
    - (c) Maintaining a gravel cover with a silt content that is less than 5 percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of 3 inches on the surface being used for travel; or

- (d) Any other measure as effective as the measures listed above.
- e. Control for earthmoving activities which shall include one or more of the following:
  - (1) Pre-wetting the ground to the depth of anticipated cuts;
  - (2) Suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures;
  - (3) Application of water prior to any land clearing; or
  - (4) Any other measure as effective as the measures listed above.
- f. Control for Off-Site Transport: The owner/operator shall ensure that no trucks are allowed to transport excavated material off-site unless:
  - (1) Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and
  - (2) Loads are adequately wetted and either:
    - (a) Covered with tarps; or
    - (b) Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment.
- g. Post Construction Stabilization of Disturbed Areas: Upon completion of the project, disturbed surfaces shall be stabilized using one or more of the following methods:
  - (1) Establishment of a vegetative cover;
  - (2) Placement of at least 3 inches of non-asbestos-containing material;
  - (3) Paving; or
  - (4) Any other measure deemed sufficient to prevent wind speeds of ten miles-per-hour, or greater, from causing visible dust emissions.
- h. Air-Monitoring for Asbestos (if Required by the APCO):
  - (1) If required by the district APCO, the plan must include an air-monitoring component.
  - (2) The air-monitoring component shall specify the following:
    - (a) Type of air-sampling device(s);

- (b) Siting of air-sampling device(s);
  - (c) Sampling duration and frequency; and
  - (d) Analytical method.
- i. Frequency of Reporting: The plan shall state how often the items specified in Subsection (e)(5)(B), and any other items identified in the plan, will be reported to the district. AQ-10.
42. These and other measures, as deemed necessary and appropriate by the on-site geotechnical engineer, shall be applied to reduce impacts related to expansive soils to less than significant levels:
- a. Retain an onsite certified Geotechnical Engineer to observe construction in order to provide a complete professional geotechnical engineering service through the observational method. This will allow further evaluation of lots which require expansive soil mitigation following the mass grading. Should any variations or undesirable conditions be encountered the on-site observer can provide supplemental recommendations based on field conditions. Construction observation and testing will allow an opinion to be formed regarding the adequacy of the site preparation, material processing, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with project geotechnical specifications and requirements.
  - b. When soil is dry it is essential adequate water be applied during material processing and compaction. The addition of water during borrow activities, as well as during placement of soils should be assumed. Selection of construction equipment which facilitates the addition of moisture should be used to blend wet and dry soils and pulverize oversized blocky clay chunks. Selective grading of this soil can be attempted; however, due to their variable nature separation of this soil is difficult. Placement of the lone formation soils in the deeper portion of the fill is preferable. Placement of select non-expansive soils on the upper portions of the fills may be required to reduce adverse impact of expansive soils. A certified Geotechnical Engineer will be on site to monitor dry season site grading for conformance with this measure.
  - c. When soil is wet, adequate provisions should be in place to minimize excessive moisture intrusion. Wheel rolling of graded surfaces should be performed and surfaces should be sloped to minimize ponding of rainfall and surface runoff. Wet season construction should be limited to those areas proposed to be immediately worked on to reduce surface exposure. Building pads without constructed improvements, and which go through a wet season cycle, whether cut or fill pads, may require re-processing of shallower materials prior to foundation construction. A certified Geotechnical Engineer will monitor wet season site grading and, if necessary, identify areas requiring re-processing due to wet season exposure. The on-site professional will monitor grading for conformance with this measure.

- d. Moderately expansive soils should be compacted to at least 90 to 92 percent of the maximum dry density (based on the ASTM D1557 test method) at a moisture content of about 3 to 4 percent over optimum. Should highly expansive soils be encountered, the relative compaction should be between 88 and 92 percent at a minimum of 4 percent over optimum. Prior to site grading additional testing may be required to identify specific compaction and moisture content requirements which may differ from those moisture content percentages recommended above. Deviations from moisture content recommendations must be approved by a certified on-site Geotechnical Engineer, who will also monitor soil compaction for conformance with this measure.
- e. Minimize the effects of water on cuts and fills adjacent to structures and in underground utility trenches to increase stability of lone soil materials. Water should be collected and appropriately discarded in all aspects of the site development. All building professionals (Geotechnical Engineers, Architects, Civil Engineers, Landscape Architects, general engineering contractors, or similar professional) should review and incorporate appropriate building techniques to minimize and collect surface and subsurface water. Utility trench backfills carrying water due to their permeable nature should all be controlled, directed, and drained away from the site; this will be overseen by a certified Geotechnical Engineer for conformance with this measure.
- f. Lots situated below a roadway section should have subdrainage to divert any water potentially collected and transmitted in street utilities and laterals away from the residences. Where deemed appropriate by a certified Geotechnical Engineer, installation of cutoff subdrains surrounding a residence will be installed to maintain uniform moisture condition. The on-site professional will monitor drainage installations for conformance with this measure.
- g. Subdrainage of utility trenches should be provided to maintain dry backfill materials in all types of trenches. All utility penetrations through or beneath foundations should be backfilled with low permeability materials, such as slurry, grout, or concrete in order to minimize moisture migration through trench backfill materials when utility trenches under the structures are not intended as drains. The on-site certified Geotechnical Engineer will monitor drainage installations for conformance with this measure.
- h. Drainage of all utility trenches in the subdivision is required. The project Civil Engineer or similar professional should detail collection pipes to manholes and drop inlets of the storm drain system to allow for the collection of utility trench drainage. The collection pipes should be situated near the bottom of the permeable materials used for bedding and shading of pipes. The on-site professional will monitor drainage installations for conformance with this measure.
- i. Finish grading and landscape grading should include positive drainage away from all foundations. All final grades should provide rapid removal of surface water runoff; water should not be allowed to pond on building pads or adjacent to foundations or other structural improvements at any time during or following construction. As determined by the on-site certified Geotechnical Engineer, require slightly steeper

**THE RESIDENCES OF MURIETA HILLS WEST**

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grades to swales and drainage areas to help convey moisture off pads, and increase the overall lot slope gradient. The on-site professional will monitor the actions for conformance with this measure.

- j. As determined by the on-site certified Geotechnical Engineer, the need for specialized foundation systems due to the presence of expansive soils will be based on the distribution of materials which occur during site grading. All foundation systems should be initially designed as if subject to potentially expansive soils. Following grading activities those lots located in non-expansive soils and/or bedrock can be delineated and a less aggressive conventional foundation system could be used. The on-site professional will monitor these actions for conformance with this measure. The on-site certified geotechnical engineer shall provide appropriate foundation systems for the specific site conditions following mass grading.
  - k. Landscape watering and saturation of pad grades due to landscaping shall be limited. Dry creek beds or other landscape type features may aid in keeping foundation areas dry where turf is desired. Dry-scape landscaping should be considered on lots affected by expansive soils. Landscape mounds adjacent to foundations in yards are not allowed. Lots that contain oak trees which require aeration trenches for root zones may need additional subdrainage measures. The on-site Geotechnical Engineer will monitor these actions for conformance with this measure.
  - l. Lots located downslope from one-another will likely experience water migration from uphill landscaping. Landscaping plans shall be review by a certified Geotechnical Engineer and Landscape Architect to assess impacts of terraced lot landscaping. Essential to reducing potential impacts from soil expansion is the collection and channeling of drained water from impermeable surfaces (i.e. roofs, concrete or asphalt paved areas); use of low flow irrigation systems; proper landscape layout and choice of turf locations; and education to the proposed homeowners of proper design and maintenance of landscaping and drainage facilities (such as perimeter subdrains and area drains that they or their landscaper installs). The on-site professional will monitor these actions for conformance with this measure.
  - m. At the start of site grading and continuing to the installation of landscaping, provide Sacramento County, Department of Environmental Review and Assessment, with monthly status reports signed by the on-site certified Geotechnical Engineer or similar professional which identifies those lots and areas where expansive soils occur, and identifies which of the above measures were implemented to mitigate expansive soil impacts. If grading or other activity associated with compromising soil integrity does not occur within the monthly period, no report need be submitted. GE-1.
43. To compensate for the permanent loss of wetlands, the applicant shall perform the following prior to grading or construction within 50 feet of onsite wetlands/swales:

The applicant shall obtain any/all applicable permits from the U.S. Army Corps of Engineers, California Department of Fish and Game and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site surface waters. A copy of

any required permits, or correspondence from the regulatory agency indicating that a permit is not required, shall be submitted to DERA. If the Mitigation required by permits do not satisfy the requirements of no net loss of wetlands specified by County General Plan Policy CO 96, the applicant shall pay to the County of Sacramento an amount based on a rate of \$35,000 per acre for the unmitigated/ uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies. The payment shall be collected by the Department of Planning and Community Development, and deposited into the Wetlands Restoration Trust Fund. BR-2.

44. Total tree removal limited by on-site tree mitigation - If the land use authority finds that the project revisions (elimination of Lots 47, 48, 49 and 50) as described on pages 18 - 21 of the "Biological Resources" chapter of the EIR are warranted; thereby reducing tree removal by 626 inches dbh and canopy loss by 0.37 acres, this measure shall apply. The proposed removal of 905 dbh inches and 1.19 acres of canopy cover of native oaks from the project site shall be mitigated through onsite replacement plantings in Open Space Lots A, B, C and D, which shall result in a minimum 1:1 compensation ratio for canopy acreage removed. No planting shall occur within 50 feet of the existing drainage channel on Lot B or Lot C on Residences West or Lot D on Residence East, or within the existing driplines of the oak groves on Lot A. Prior to the approval of grading or improvement plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist, licensed landscape architect, or restoration ecologist and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:
- a. Oak trees will be limited to deepot seedlings (40 cubic centimeters or larger) or 15-gallon size trees. Planting stock shall not be root bound and shall be field inspected by DERA staff prior to planting.
  - b. Trees shall be planted in a "natural character" with tree spacing at minimum 10 feet and maximum of 40 feet (25 feet average) apart. The maximum density of trees shall not exceed 64 trees per acre.
  - c. A soil scientist shall perform a site evaluation to determine appropriate planting locations within the open space lots. The findings of the evaluation shall be incorporated into the Replacement Oak Tree Planting Plan. If soils tests show that oaks cannot be replanted due to conditions at the site, BR-8 shall apply.
  - d. A temporary drip irrigation system shall be installed for the purpose of providing irrigation to the plantings during the establishment period. A watering schedule shall be included in the Planting Plan. The watering frequency shall be gradually reduced over the establishment period to wean the plantings off regular irrigation.
  - e. Deepot seedlings shall be planted according to industry-standard detail, including appropriate protection against herbivory from rodents and other animals. Fifteen-gallon trees shall be planted according to the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot depth boring hole to provide for adequate drainage where necessary, based on the soil evaluation.



- f. Replacement oak trees shall be monitored annually for 7 years, and shall achieve a survival rate of 100 percent at the end of the monitoring period. Monitoring reports shall be submitted to Department of Environmental Review and Assessment by July 1 of each year.
  - g. Replacement plantings shall be planted prior to issuance of any building permits and should be planted between October and April, when possible, to enhance survival.
  - h. Residents shall be provided with educational materials to minimize damage to the restoration areas. Advisory signage shall be installed along the boundaries of the open space lots where oak tree plantings occur.
  - i. Identify the maintenance entity and include their written agreement to provide care and irrigation of the trees for the 7-year establishment period, and to replace any replacement trees as necessary to achieve 100 percent survival at the end of the establishment period.
  - j. Because the County Tree Preservation Ordinance does not apply in the geographical area where mitigation plantings will occur, any on-site and/or off-site planting areas shall be protected in perpetuity through deed restrictions or conservation easements, to the satisfaction of the Sacramento County Environmental Coordinator. BR-7.
45. If the land use authority determines that all or some of the subdivision map changes on page 10-19 are not warranted and the mitigation totals are thus 1,531 inches and 2.4 acres of canopy, or that fewer on-site plantings of oak trees on open space lots are allowed, then prior to project approval one or more of the off-site options to complement onsite planting shall be chosen to mitigate for the loss of oak woodland that cannot be mitigated onsite (which shall result in a minimum 1:1 compensation ratio for canopy acreage removed):
- a. Offsite oak tree replacement plantings may occur within the boundaries of Rancho Murieta. A replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-7 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

OR

- b. Offsite oak tree replacement plantings may occur outside the boundaries of Rancho Murieta, but within five miles of Rancho Murieta and within Sacramento County. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-7 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

OR

- c. An equivalent amount of blue oak woodland canopy lost may be preserved and protected in perpetuity by a conservation easement. The property subject to the

conservation easement shall be located within five miles of Rancho Murieta, and within Sacramento County. A draft conservation easement shall be submitted to the Environmental Coordinator for review and approval. A copy of the recorded easement shall be submitted to DERA prior to the approval of grading or improvement plans or building permits.

OR

- d. Replacement for the total number of inches lost may be purchased from an oak tree mitigation bank acceptable to the County, prior to approval of grading or improvement plans or building permits.
  - e. If Lots 47 through 50 are not eliminated, the area outside the building pads of Lots 47 through 50 shall be protected through the implementation of a deed restriction that prohibits removal of any blue oaks or development within their driplines as described in BR-9.
  - f. If all of the above mitigation options are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible, then compensation shall be through payment into the County Tree Preservation Fund consistent with General Plan Policy CO-132. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made. BR-8.
46. With the exception of the trees removed and compensated for through Mitigation Measures BR-7 or BR-8, above, all native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:
- a. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.
  - b. Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".
  - c. Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the trees within 100 feet of construction - related activities, in order to avoid damage to the tree canopies and root systems. The only exception to this requirement will be that the protective fencing can be placed just outside the limits of identified improvements (as identified on the project plans

included and discussed in this Initial Study) that are within the driplines of protective trees. No encroachment may exceed 20 percent of the dripline.

- d. No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed.
- e. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.
- f. No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except where such grading is shown on the project plans and discussed in the text of this document. Grading will not be permissible within more than 20 percent of the dripline of any tree protected by this measure.
- g. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree.
- h. No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist.
- i. The construction of impervious surfaces within the dripline of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system, per County standard detail shall be installed under the supervision of a certified arborist.
- j. All portions of permanent fencing that will encroach into the dripline protection area of any protected tree shall be constructed using posts set no closer than 10 feet on-center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.
- k. Truck protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.
- l. No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above-ground drip irrigation system is recommended.
- m. Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available from the Department of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants. BR-9.

47. If construction is proposed during the raptor breeding season (February - August), a focused survey for migratory bird nests shall be conducted within 30 days prior to the beginning of construction activities by a qualified biologist in order to identify active nests on the site. If active nests are found, no construction activities shall take place within 500 feet of the nest until the young have fledged. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (September - January). If no active nests are found during the focused survey, no further mitigation will be required. BR-15.
48. To mitigate for the loss of 39.2 acres of Swainson's Hawk foraging habitat, prior to the approval of Improvement Plans or building permits, or recordation of Final Subdivision Map, whichever occurs first, the applicant shall perform one of the following:
  - a. The project proponent shall utilize either the fee payment or the land dedication option established in Sacramento County's Swainson's Hawk Impact Mitigation Program (Chapter 16.130 of the Sacramento County Code).
  - b. The project proponent shall, to the satisfaction of the California Department of Fish and Game, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.
  - c. Should the County Board of Supervisors adopt a Swainson's hawk mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to implementation of one of the measures above, the project proponent may be subject to that program instead. BR-16.
49. The applicant shall avoid burrowing owls and their nest sites and habitat during construction. The following measures shall be implemented to reduce impacts to a less-than-significant level:
  - a. Prior to construction activity, a qualified biologist shall conduct focused surveys for burrowing owls where suitable habitat is present on the areas slated for construction. Suitable habitat includes all upland areas that are not developed, and all edge areas (including vegetated berms, levees, and drainage ditches). Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities. Surveys shall be conducted in accordance with current DFG protocol.
  - b. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings will be submitted to the County and DFG for review and approval, and no further mitigation is necessary.
  - c. If occupied burrows are found, occupied burrows will be avoided until the owls inhabiting the burrows have been removed and relocated using passive exclusion techniques approved by DFG.
  - d. No occupied burrows will be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that

juveniles from the occupied burrows are foraging independently and are capable of independent survival. BR-20.

50. To ensure protection of cultural resources, the following measure applies. This measure shall be included verbatim as a Construction Note on all Plans and Specifications for the project:

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains. CR-1.

51. Comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project as follows:
- a. The applicant shall comply with the MMRP for this project, including the payment of 100% of the Department of Environmental Review and Assessment staff costs, and the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is \$15,790.00. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the applicant, and if the actual monitoring costs exceed the initial estimate, the applicant shall be responsible to pay the additional amount.
  - b. Until the MMRP has been recorded and the estimated MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved; and no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved. MM-1.
52. Any retaining wall used in the initial development of the project site by the applicant shall be made of natural stone or use an architectural finish to provide a natural appearance.
53. The project shall have at a minimum three different floor plans, three different elevations and three different paint schemes.

**FINDINGS:**

1. The project is generally compatible with the intent of the Rancho Murieta Master Plan and with other development in the north that has occurred under the Master Plan in that open space corridors are created that preserve steeper slopes, drainage courses, and oak groves to a greater extent than the originally submitted map. In addition, the project will be better integrated into the existing community structure through two (2) points of access.
2. With conditions for grading the lots will conform to the natural contours of the land.
3. Only wrought-iron fencing shall be allowed where lots abut open space areas.
4. The project should provide adequate trail design and connections via a trails plan.

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**ORDINANCE NO. SZC-2007-0060**

**AN ORDINANCE AMENDING ORDINANCE NO. 77-PD-10,  
ESTABLISHING A PLANNED UNIT DEVELOPMENT  
COMMONLY KNOWN AS RANCHO MURIETA**

The Board of Supervisors of the County of Sacramento hereby ordains as follows:

Section 1. Chapter 19 is hereby added to Ordinance No. 77-PD-10 to read as follows:

Chapter 19 - The Residences of Murieta Hills West, The Residences of Murieta Hills East, and The Retreat.

Article 1. General Provisions

SECTION 250. AMENDMENTS.

a. The Residences of Murieta Hills West is described as follows:

Portion of Parcel Eleven as described in Book 20010905 at Page 0245 in the Official Records of Sacramento County, State of California, more particularly described as follows:

Beginning at the intersection of the centerline of Stone House Road, as shown on that Record of Survey filed in Book 18 of Surveys, at Page 11, and the south line of the North Half of the Southeast Quarter of Section 28, Township 8 North, Range 8 East, Mount Diablo Meridian, thence, from the Point of Beginning, North 89°36'16" East, a distance of 1559.56 feet along said south line;

Thence, South 00°23'44" East, a distance of 196.47 feet;

Thence, South 13°26'40" West, a distance of 205.27 feet to the arc of a non-tangent curve having a radial bearing of South 13°26'40" West;

Thence, on the arc of said non-tangent curve to the right a distance of 5.57 feet, said curve has a central angle of 00°39'49" and a radius of 481.00 feet;

Thence, South 02°52'00" West, a distance of 193.69 feet;

Thence, South 00°10'10" West, a distance of 267.49 feet;

Thence, South 11°54'26" East, a distance of 162.29 feet;

Thence, South 25°20'31" East, a distance of 172.34 feet;

Thence, South 37°36'32" East, a distance of 89.77 feet;

Thence, South 37°19'46" East, a distance of 93.41 feet to the arc of a non-tangent curve having a radial bearing of South 44°51'40" East;

Thence, on the arc of said non-tangent curve to the left a distance of 92.46 feet; said curve has a central angle of 12°37'44" and a radius of 419.50 feet;

Thence, on the arc of a curve to the right a distance of 29.76 feet, said curve has a central angle of 85°15'33" and a radius of 20.00 feet;

Thence, on the arc of a curve to the right a distance of 45.38 feet, said curve has a central angle of 14°24'19" and a radius of 180.50 feet;

Thence, South 42°10'28" West, a distance of 35.00 feet;

Thence, South 50°37'32" West, a distance of 219.71 feet;

Thence, South 79°24'23" West, a distance of 77.49 feet;

Thence, South 21°54'13" East, a distance of 138.65 feet to the arc of a non-tangent curve having a radial bearing of South 08°25'36" East;

Thence, on the arc of said non-tangent curve to the left a distance of 82.83 feet, said curve has a central angle of 17°36'33" and a radius of 269.50 feet;

Thence, South 63°57'51" West, a distance of 21.34 feet;

Thence, on the arc of a curve to the right a distance of 30.53 feet, said curve has a central angle of 87°27'53" and a radius of 20.00 feet;

Thence, South 61°25'44" West, a distance of 46.00 feet to the arc of a non-tangent curve having a radial bearing of South 61°25'44" West;

Thence, on the arc of said non-tangent curve to the right a distance of 379.47 feet, said curve has a central angle 26°17'26" and a radius of 827.00 feet;

Thence, on the arc of a curve to the left a distance of 135.24 feet, said curve has a central angle of 28°23'01" and a radius of 273.00 feet;

Thence, South 59°20'09" West, a distance of 447.25 feet;

Thence, North 27°56'32" West, a distance of 112.87 feet;

Thence, North 01°32'03" West, a distance of 600.41 feet;

Thence, North 41°15'45" West, a distance of 370.98 feet;

Thence, South 88°25'25" West, a distance of 160.00 feet;

Thence, North 58°58'56" West, a distance of 278.40 feet;

Thence, North 89°40'31" West, a distance of 236.70 feet;

Thence, North 01°12'02" West, a distance of 1316.26 feet to the Point of Beginning.

Containing 59.769 Acres, more or less.

b. The Residences of Murieta Hills East is described as follows:

Parcel Ten as described in Book 20010905 at Page 0245 in the Official Records of Sacramento County also being a portion of Parcel 3 as shown and described in that certain "Parcel Map of Rancho Murieta" filed in Book 12 of Parcel Maps at Page 47 in the Official Records of Sacramento County, together with a portion of Parcel Eleven as described in said Book 20010905, at Page 0245 in the Official



Records of Sacramento County, State of California, more particularly described as follows:

Commencing at the intersection of the centerline of Stone House Road, as shown on that certain Record of Survey filed in Book 18 of Surveys, at Page 11, and the south line of the North Half of the Southeast Quarter of Section 28, Township 8 North, Range 8 East, Mount Diablo Meridian, thence, North 89°36'16" East, a distance of 1559.56 feet along said south line to the Point of Beginning of the parcel to be described;

Thence, from the Point of Beginning, North 89°36'16" East, a distance of 516.32 feet along said south line;

Thence, North 89°36'42" East, a distance of 1021.78 feet to a point on the westerly boundary line of Rancho Murieta Unit No. 4 as filed in Book 142 of Maps at Page 9 in the Official Records of Sacramento County;

Thence, South 25°46'45" West, a distance of 183.82 feet along said line;

Thence, South 54°23'16" East, a distance of 127.38 feet along said line;

Thence, South 09°13'14" West, a distance of 531.50 feet along said line;

Thence, South 87°25'09" West, a distance of 56.39 feet along said line;

Thence, South 64°22'02" West, a distance of 172.38 feet along said line;

Thence, South 08°58'59" East, a distance of 303.89 feet along said line;

Thence, South 22°24'47" West, a distance of 354.65 feet along said line;

Thence, South 05°00'46" West, a distance of 290.35 feet along said line;

Thence, South 76°44'27" East, a distance of 160.04 feet along said line to the arc of a non-tangent curve on the westerly right-of-way line of Puerto Drive having a radial bearing of North 87°15'47" West;

Thence, on the arc of said non-tangent curve to the right a distance of 436.93 feet, said curve has a central angle of 15°50'04" and a radius of 1581.00 feet;

Thence, continue along the westerly boundary line of Rancho Murieta Unit No. 4, North 63°57'25" West, a distance of 105.99 feet;

Thence, South 22°02'59" West, a distance of 143.73 feet along said line to the arc of a non-tangent curve having a radial bearing of South 22°03'02" West;

Thence, on the arc of said non-tangent curve to the left a distance of 10.01 feet, said curve has a central angle of 00°37'35" and a radius of 915.50 feet;

Thence, South 27°16'08" West, a distance of 266.03 feet along said line to a point on the Northerly boundary line of Rancho Murieta Unit No. 2, as filed in Book 121 of Maps at Page 8 in the Official Records of Sacramento County;

Thence, North 72°59'37" West, a distance of 549.33 feet along said line;

Thence, South 85°00'00" West, a distance of 266.07 feet along said line;  
Thence, South 72°35'39" West, a distance of 115.59 feet along said line;  
Thence, South 48°30'00" West, a distance of 534.98 feet along said line;  
Thence, South 19°00'00" West, a distance of 267.62 feet along said line;  
Thence, South 16°22'43" East, a distance of 199.55 feet along said line;  
Thence, South 58°00'22" West, a distance of 120.19 feet to the northerly  
right-of-way line of Escuela Drive;  
Thence, North 31°59'41" West, a distance of 170.18 feet along said right-of-way  
line;  
Thence, on the arc of a curve to the left a distance of 400.45 feet along said  
right-of-way line, said curve has a central angle of 31°49'20" and a radius of  
721.00 feet;  
Thence, North 49°45'00" East, a distance of 470.00 feet;  
Thence, North 27°56'32" West, a distance of 150.83 feet;  
Thence, North 59°20'09" East, a distance of 447.25 feet to the arc of a  
non-tangent curve having a radial bearing of North 59°20'09" East;  
Thence, on the arc of said non-tangent curve to the right a distance of 135.24 feet,  
said curve has a central angle of 28°23'01" and a radius of 273.00 feet;  
Thence, on the arc of a curve to the left a distance of 379.47 feet, said curve has a  
central angle of 26°17'26" and a radius of 827.00 feet;  
Thence, North 61°25'44" East, a distance of 46.00 feet to the arc of a non-tangent  
curve having a radial bearing of North 61°25'44" East;  
Thence, on the arc of said non-tangent curve to the left a distance of 30.53 feet,  
said curve has a central angle of 87°27'53" and a radius of 20.00 feet;  
Thence, North 63°57'51" East, a distance of 21.34 feet;  
Thence, on the arc of a curve to the right a distance of 82.83 feet, said curve has a  
central angle of 17°36'33" and a radius of 269.50 feet;  
Thence, North 21°54'13" West, a distance of 138.65 feet;  
Thence, North 79°24'23" East, a distance of 77.49 feet;  
Thence, North 50°37'32" East, a distance of 219.71 feet;  
Thence, North 42°10'28" East, a distance of 35.00 feet to the arc of a non-tangent  
curve having a radial bearing of North 42°10'28" East;  
Thence, on the arc of said non-tangent curve to the left a distance of 45.38 feet,  
said curve has a central angle of 14°24'19" and a radius of 180.50 feet;

Thence, on the arc of a curve to the left a distance of 29.76 feet, said curve has a central angle of  $85^{\circ}15'33''$  and a radius of 20.00 feet;

Thence, on the arc of a curve to the right a distance of 92.46 feet, said curve has a central angle of  $12^{\circ}37'44''$  and a radius of 419.50 feet;

Thence, North  $37^{\circ}19'46''$  West, a distance of 93.41 feet;

Thence, North  $37^{\circ}36'32''$  West, a distance of 89.77 feet;

Thence, North  $25^{\circ}20'31''$  West, a distance of 172.34 feet;

Thence, North  $11^{\circ}54'26''$  West, a distance of 162.29 feet;

Thence, North  $00^{\circ}10'10''$  East, a distance of 267.49 feet;

Thence, North  $02^{\circ}52'00''$  East, a distance of 193.69 feet to the arc of a non-tangent curve having a radial bearing of South  $14^{\circ}06'29''$  West;

Thence, on the arc of said non-tangent curve to the left a distance of 5.57 feet, said curve has a central angle of  $00^{\circ}39'49''$  and a radius of 481.00 feet;

Thence, North  $13^{\circ}26'40''$  East, a distance of 205.27 feet;

Thence, North  $00^{\circ}23'44''$  West, a distance of 196.47 feet to the Point of Beginning;

Containing 86.171 Acres, more or less.

c. The Retreat is described as follows:

1. The Retreat North and East:

A portion of Parcel 10 as shown on the map filed for record in Book 117 of Parcel Maps at Page 15 in the Official Records of Sacramento County and a portion of Parcel 6 as shown on the map filed for record in Book 12 of Parcel Maps at Page 47 in the Official Records of Sacramento County, State of California, more particularly described as follows:

Beginning at the northwesterly corner of said Parcel 10, thence, from the Point of Beginning, South  $86^{\circ}54'59''$  East, a distance of 128.01 feet along the northerly boundary line of said Parcel 10;

Thence, on the arc of a curve to the left a distance of 551.52 feet along said northerly line, said curve has a central angle of  $37^{\circ}23'46''$  and a radius of 845.00 feet;

Thence, on the arc of a curve to the right a distance of 38.01 feet along said northerly line to the easterly boundary line of said Parcel 10, said curve has a central angle of  $87^{\circ}07'06''$  and a radius of 25.00 feet;

Thence, South  $37^{\circ}11'39''$  East, a distance of 23.07 feet along said easterly line;

Thence, on the arc of a curve to the right a distance of 278.90 feet along said easterly line, said curve has a central angle of  $61^{\circ}13'29''$  and a radius of 261.00 feet;

Thence, South  $24^{\circ}01'50''$  West, a distance of 399.74 feet along said easterly line;

Thence, on the arc of a curve to the left a distance of 576.82 feet along said easterly line to the most southerly boundary line of said Parcel 10, said curve has a central angle of  $100^{\circ}27'12''$  and a radius of 329.00 feet;

Thence, South  $13^{\circ}37'04''$  West, a distance of 55.00 feet along said southerly line;

Thence, South  $29^{\circ}50'00''$  East, a distance of 136.00 feet along said southerly line;

Thence, South  $71^{\circ}18'55''$  West, a distance of 36.31 feet along said southerly line;

Thence, South  $63^{\circ}37'57''$  West, a distance of 188.54 feet along said southerly line;

Thence, South  $65^{\circ}18'31''$  West, a distance of 282.07 feet along said southerly line;

Thence, South  $81^{\circ}05'11''$  West, a distance of 154.22 feet along said southerly line;

Thence, South  $70^{\circ}01'52''$  West, a distance of 112.67 feet along said southerly line;

Thence, South  $81^{\circ}19'26''$  West, a distance of 121.46 feet along said southerly line;

Thence, North  $24^{\circ}03'09''$  West, a distance of 192.09 feet;

Thence, North  $49^{\circ}23'49''$  East, a distance of 147.25 feet to the common line between said Parcel 10 and said Parcel 6;

Thence, North  $67^{\circ}59'08''$  East, a distance of 118.26 feet along said common line;

Thence, North  $60^{\circ}31'38''$  East, a distance of 155.96 feet along said common line;

Thence, North  $52^{\circ}04'29''$  East, a distance of 176.54 feet along said common line;

Thence, North  $19^{\circ}10'45''$  East, a distance of 91.99 feet along said common line;

Thence, North  $64^{\circ}15'05''$  East, a distance of 123.18 feet along said common line to the arc of a non-tangent curve having a radial bearing of North  $64^{\circ}15'31''$  East;

Thence, on the arc of said non-tangent curve to the right a distance of 330.13 feet along said common line, said curve has a central angle of  $49^{\circ}46'33''$  and a radius of 380.00 feet;

Thence, North  $24^{\circ}02'04''$  East, a distance of 172.31 feet along said common line;

Thence, North  $85^{\circ}10'01''$  West, a distance of 65.84 feet along said common line;

Thence, South  $66^{\circ}43'30''$  West, a distance of 53.09 feet along said common line;

Thence, South  $32^{\circ}25'23''$  West, a distance of 451.52 feet along said common line;

Thence, South  $44^{\circ}46'29''$  West, a distance of 230.18 feet along said common line;

Thence, South  $50^{\circ}40'45''$  West, a distance of 154.24 feet along said common line;

Thence, South  $64^{\circ}24'50''$  West, a distance of 123.20 feet along said common line;

Thence, North  $79^{\circ}20'42''$  West, a distance of 81.36 feet;

Thence, South  $57^{\circ}25'50''$  West, a distance of 205.24 feet to the common line between said Parcel 10 and said Parcel 6;

Thence, North  $51^{\circ}02'17''$  West, a distance of 82.50 feet along said common line;

Thence, North  $05^{\circ}33'24''$  East, a distance of 339.23 feet along said common line;

Thence, North  $24^{\circ}00'08''$  East, a distance of 170.20 feet along said common line;

Thence, North  $34^{\circ}38'33''$  East, a distance of 224.50 feet along said common line;

Thence, North  $22^{\circ}03'41''$  East, a distance of 209.12 feet along said common line;

Thence, North  $32^{\circ}53'06''$  East, a distance of 235.41 feet along said common line to the Point of Beginning.

Containing 23.375 Acres, more or less.

2. The Retreat West:

Parcel 2 as shown on the map filed for record in Book 154 of Parcel Maps at Page 3 in the Official Records of the County of Sacramento, State of California, more particularly described as follows:

Beginning at the southwest corner of said Parcel 2, thence, from the Point of Beginning, North 46°59'43" East, a distance of 29.64 feet along the northwesterly boundary line of said Parcel 2;

Thence, North 36°58'27" East, a distance of 207.67 feet along said northwesterly line;

Thence, North 37°10'52" East, a distance of 151.15 feet along said northwesterly line;

Thence, North 54°28'55" East, a distance of 192.25 feet along said northwesterly line;

Thence, North 73°55'18" East, a distance of 95.66 feet along said northwesterly line;

Thence, North 53°55'36" East, a distance of 50.27 feet along said northwesterly line;

Thence, North 42°55'39" East, a distance of 116.29 feet along said northwesterly line;

Thence, North 50°58'02" East, a distance of 93.60 feet along said northwesterly line;

Thence, North 13°18'49" East, a distance of 21.38 feet along said northwesterly line;

Thence, North 60°19'37" East, a distance of 160.82 feet along said northwesterly line to the easterly line of said Parcel 2 and the arc of a non-tangent curve having a radial bearing of South 73°51'43" West;

Thence, on the arc of said non-tangent curve to the right a distance of 31.27 feet along said easterly line, said curve has a central angle of 04°50'31" and a radius of 370.00 feet;

Thence, South 11°17'46" East, a distance of 77.89 feet along said easterly line;

Thence, on the arc of a curve to the right a distance of 135.46 feet along said easterly line, said curve has a central angle of 16°30'46" and a radius of 470.00 feet;

Thence, South 05°13'00" West, a distance of 178.41 feet along said easterly line;

Thence, South 80°15'41" West, a distance of 175.78 feet along said easterly line;

Thence, South 80°11'52" West, a distance of 107.48 feet along said easterly line to the arc of a non-tangent curve having a radial bearing of South 87°56'02" East;

Thence, on the arc of said non-tangent curve to the left a distance of 314.42 feet along said easterly line to the southerly boundary line of said Parcel 2, said curve has a central angle of 22°22'43" and a radius of 805.00 feet;

Thence, North 84°39'06" West, a distance of 610.15 feet along said southerly line to the Point of Beginning.

Containing 6.601 Acres, more or less.

**SECTION 251. EXHIBITS.** Exhibits 19-1 through 19-17 described in this section are intended to regulate the property described in Section 250 of this ordinance. Exhibits are on file in the office of the Clerk of the Board of Supervisors and are a part of this ordinance as if fully set forth herein. Exhibits listed below are attached.

- 19-1: General Plan Amendment Exhibit – The Retreat
- 19-2: Rezone Exhibit – Residences of Murieta Hills West
- 19-3: Rezone Exhibit – Residences of Murieta Hills East
- 19-4: Rezone Exhibit – The Retreat
- 19-5: Vesting Tentative Subdivision Map – Residences of Murieta Hills West
- 19-6: Vesting Tentative Subdivision Map – Residences of Murieta Hills East
- 19-7: Vesting Tentative Subdivision Map – The Retreat (4 sheets)
- 19-8: Special Development Permit – The Retreat
- 19-9: Site Development Plan – Residences of Murieta Hills West and Residences of Murieta Hills East
- 19-10: Development Plan – The Retreat (3 sheets)
- 19-11: Trails Exhibit – Residences of Murieta Hills West and Residences of Murieta Hills East
- 19-12: Preliminary Grading Plan – Residences of Murieta Hills West
- 19-13: Preliminary Grading Plan – Residences of Murieta Hills East
- 19-14: Preliminary Grading Plan – The Retreat (3 sheets)
- 19-15: Mitigation Monitoring and Reporting Program – Residences of Murieta Hills West
- 19-16: Mitigation Monitoring and Reporting Program – Residences of Murieta Hills East
- 19-17: Mitigation Monitoring and Reporting Program – The Retreat

**SECTION 252. USES.** The uses permitted within the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat shall be the same as those authorized under the Zoning Code, as follows:

- a. Within the RD-3(PD) zoned portions of the Residences of Murieta Hills West (property described in Exhibit 19-2), all uses are authorized on property therein which are authorized in the RD-3 zone with which the Planned Development zone is combined.
- b. Within the O zoned portion of the Residences of Murieta Hills West (property described in Exhibit 19-2), all uses are authorized on property therein which are authorized in the O zone.
- c. Within the RD-1(PD) portion of Residences of Murieta Hills East (property described in Exhibit 19-3), all uses are authorized on property therein which are authorized in the RD-1 zone with which the Planned Development zone is combined.
- d. Within the RD-3(PD) portions of Residences of Murieta Hills East (property described in Exhibit 19-3) , all uses are authorized on property therein which are authorized in the RD-3 zone with which the Planned Development zone is combined.
- e. Within the O portion of the Residences of Murieta Hills East (property described in Exhibit 19-3) , all uses are authorized on property therein which are authorized in the O zone.
- f. Within The Retreat (property described in Exhibit 19-4), all uses are authorized on property therein which are authorized in the RD-4 zone with which the Planned Development zone is combined, as modified by the Special Development Permit (Exhibit 19-8) or the Development Plan (Exhibit 19-10) for The Retreat.

**SECTION 253. YARDS AND HEIGHT.** The buildings to be built within the Residences of Murieta Hills West and the Residences of Murieta Hills East shall comply with the residential development standards as set forth in the Sacramento County Zoning Code, Section 305-01, *et seq.* The buildings to be built within The Retreat shall comply with the Special Development Permit (Exhibit 19-8) or the Development Plan (Exhibit 19-10) for The Retreat.

**SECTION 254. LOCATION OF LOTS AND STREETS.** The location, configuration and arrangement of lots and streets within the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat shall be in substantial conformance to the Vesting Subdivision Maps for the respective project (Exhibits 19-5, 19-6, and 19-7), as amended by conditions of approval.



**SECTION 255. STREET/SIDEWALK IMPROVEMENTS.** Minimum improvement standards for the construction and design of all private streets, parking bays, sidewalks and other miscellaneous appurtenances for the Residences of Murieta Hills West and the Residences of Murieta Hills East shall be in accordance with the standards established by Section 20 of Article 3 – Development Standards of this PD Ordinance. The construction and design of all private streets, parking bays, sidewalks and other miscellaneous appurtenances for The Retreat shall comply with the Special Development Permit (Exhibit 19-8) or the Development Plan (Exhibit 19-10) for The Retreat.

**SECTION 256. STREET IMPROVEMENT EXCEPTIONS.** It is recognized that Rancho Murieta is a physically unique community for which it is not possible to anticipate all situations that may arise or to prescribe standards applicable to every situation. It may, therefore, become necessary to prescribe a different set of standards or exceptions to those standards in order to preserve the natural features (e.g., rock outcroppings and oak trees) characteristic of this area. The Public Works Director shall be the appropriate authority to approve exceptions from the improvement standards set forth in Section 175 of this ordinance.

**SECTION 257. OFF-STREET TRAILS.** Off-street trails for the Residences of Murieta Hills West and the Residences of Murieta Hills East projects shall be provided in substantial conformance with the Trails Exhibit (Exhibit 19-11) for the Residences of Murieta Hills West and the Residences of Murieta Hills East.

**SECTION 258. DRAINAGE.** Offsite drainage improvements and easements, as necessary, shall be provided pursuant to the Sacramento County Floodplain Management Ordinance, the Sacramento County Improvement Standards, and the Rancho Murieta Community Service District.

**SECTION 259. COSUMNES RIVER BRIDGE.** The Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat projects are subject to the Cosumnes River bridge crossing fee.

**SECTION 260. WATER TREATMENT PLANT CAPACITY.** Prior to the issuance of building permits for residential structures within the Residences of Murieta Hills West, the Residences of Murieta Hills East, or the Retreat, the existing water supply treatment plant must be upgraded to provide adequate capacity for existing and approved projects, as well as the Residences and Retreat projects.

**SECTION 261. WASTEWATER TREATMENT PLANT CAPACITY.** Prior to issuance of building permits for residential structures within the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, to avoid significant impacts related to the provision of sewer service, the applicant shall submit engineer-certified documentation from the CSD demonstrating that the wastewater treatment facility has adequate treatment, storage, and disposal capacity to accept wastewater from the lots for which building permits are requested without resulting in detectable degradation of ground or surface water quality (or exacerbation of existing degradation), and that such determination has been made based on recent actual wastewater flows, as well as projected flows from other projects for which building permits have been issued.

SECTION 262. TRAFFIC MITIGATION.

Prior to the issuance of building permits, the applicant shall pay a fair share of the cost of the following improvements:

- a. SR 16/Sunrise Boulevard. An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
- b. SR 16/Sunrise Boulevard. An exclusive left-turn lane should be added to the southbound approach, creating dual left-turn lanes on Sunrise Boulevard.
- c. SR 16/Grant Line Road. The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane, two exclusive through lanes and an exclusive right-turn lane on Grant Line Road. The northbound and southbound phasing should be changed from split phase to protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
- d. SR 16/Dillard Road. The eastbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
- e. SR 16/Dillard Road. The northbound combined left/right-turn lane shall be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Dillard Road.
- f. SR 16/Latrobe Road. This intersection meets the MUTCD peak hour signal warrant during the PM peak hour and should therefore be signalized. The northbound and southbound approaches should have permitted left-turn phasing and the eastbound and westbound approaches should have protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
- g. SR 16/Stonehouse Road. This intersection meets the MUTCD peak hour signal warrant during both the AM and PM peak hours and should therefore be signalized. The southbound combined left/right-turn lane should be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Stonehouse Road. An additional eastbound and westbound through lane should be added to SR 16.
- h. SR 16/Stonehouse Road. An additional eastbound and westbound through lane on State Route 16 at the intersection of Stonehouse Road should be added.
- i. SR 16/Murieta Parkway. An additional eastbound and westbound through lane should be added to SR 16.
- j. Public street improvements on Stonehouse Road from Jackson Highway (State Route 16) to Latrobe Road based on an 84 feet Rural Collector pursuant to the Sacramento County Improvement Standards and to the satisfaction of the Department of Transportation.

**SECTION 263. AIR QUALITY MITIGATION.** Prior to the approval of improvement plans, grading plans, or any earthmoving activities on the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the applicant must comply with the following air quality mitigation measures:

- a. **Off-Road Vehicle Fleet - Equipment Emissions:** Prior to approval of improvement plans and/or grading plans, or any earthmoving activity on the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the project representative shall submit to the Sacramento County Department of Environmental Review and Assessment (DERA) a copy of a Sacramento Metropolitan Air Quality Management District (SMAQMD) approved plan demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of 20 percent NOx reduction and 45 percent particulate reduction\* compared to the most recent California Air Resources Board (CARB) fleet-average; and

Prior to the start of construction, the project representative shall submit to the Sacramento County DERA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly thereafter to SMAQMD throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide DERA and SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

(\*NOTE: Acceptable options for reducing emissions may include use of late model vehicles, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.)

- b. Prior to the approval of improvement plans or the issuance of grading permits for the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the proponent will submit proof that the emissions off-set air quality mitigation fee of \$303.81 per acre actively graded has been paid to SMAQMD, and that a construction air quality mitigation plan has been approved by SMAQMD and the lead agency.
- c. **Off-Road Diesel Equipment - Visible Emissions:** The developer shall ensure that emissions from all off-road diesel-powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the Sacramento County DERA and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation

equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted to SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supersede other SMAQMD or state rules or regulations.

- d. **Asbestos Dust Mitigation Plan.** Prior to approval of Grading Plans, the applicant shall submit an Asbestos Dust Mitigation Plan to the Sacramento Metropolitan Air Quality Management District for approval. No Asbestos Dust Mitigation Plan shall be required for those areas where a registered geologist has performed a geologic evaluation (in accordance with the Air Resources Board's "Asbestos Airborne Toxic Control Measure For Construction, Grading, Quarrying and Surface Mining Operations") concluding that no naturally occurring asbestos, ultramafic rock or serpentine is likely to be found in the area to be disturbed, subject to the review and approval of the Sacramento Metropolitan Air Quality Management District. The Asbestos Dust Mitigation Plan for all other lots on which asbestos is known to be present or assumed to be present (in accordance with the above-referenced Airborne Toxic Control Measures) should include one or more provisions addressing each of the following topics to ensure that no equipment or operation emits dust that is visible crossing the property line:

1. **Track-out prevention and control measures which shall include:**
  - (a) **Removal of any visible track-out from a paved public road at any location where vehicles exist the work site; this shall be accomplished using wet sweeping or a HEPA filter equipped vacuum device at the end of the work day or at least one time per day; and**
  - (b) **Installation of one or more of the following track-out prevention measures:**
    - (1) **A gravel pad designed using good engineering practices to clean the tires of exiting vehicles;**
    - (2) **A tire shaker;**
    - (3) **A wheel wash system;**
    - (4) **Pavement extending for not less than 50 consecutive feet from the intersection with the paved public road; or**
    - (5) **Any other measures as effective as the measures listed above.**
2. **Keeping active storage piles adequately wetted or covered with tarps.**

3. Control of disturbed surface areas and storage piles that will remain inactive for more than 7 days, which shall include one or more of the following:
  - (a) Keep the surfaces wetted;
  - (b) Establishment and maintenance of surface crusting sufficient to satisfy the test in subsection (h)(6);
  - (c) Application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations;
  - (d) Covering with tarp(s) or vegetative cover;
  - (e) Installation of wind barriers of 50 percent porosity around 3 sides of a storage pile;
  - (f) Installation of wind barriers across open areas; or
  - (g) Any other measure as effective as the measures listed above.
4. On-site traffic control on unpaved roads, parking lots, and staging areas shall include the following:
  - (a) A maximum vehicle speed limit of 15 miles per hour or less; and
  - (b) One of more of the following:
    - (1) Watering every 2 hours of active operations or sufficiently to keep the area adequately wetted;
    - (2) Applying chemical dust suppressants consistent with manufacturer's directions;
    - (3) Maintaining a gravel cover with a silt content that is less than 5 percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of 3 inches on the surface being used for travel; or
    - (4) Any other measure as effective as the measures listed above.
5. Control for earthmoving activities, which shall include one or more of the following:
  - (a) Pre-wetting the ground to the depth of anticipated cuts;
  - (b) Suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures;
  - (c) Application of water prior to any land clearing; or
  - (d) Any other measure as effective as the measures listed above.

6. Control for Off-Site Transport: The owner/operator shall ensure that no trucks are allowed to transport excavated material off-site unless:
  - (a) Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and
  - (b) Loads are adequately wetted and either:
    - (1) Covered with tarps; or
    - (2) Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than 6 inches from the top and that no point of the load extends above the top of the cargo compartment.
7. Post Construction Stabilization of Disturbed Areas: Upon completion of the project, disturbed surfaces shall be stabilized using one or more of the following methods:
  - (a) Establishment of a vegetative cover;
  - (b) Placement of at least three (3) inches of non-asbestos-containing material;
  - (c) Paving; or
  - (d) Any other measure deemed sufficient to prevent wind speeds of 10 miles per hour or greater from causing visible dust emissions.
8. Air-Monitoring for Asbestos (if Required by the APCO):
  - (a) If required by the district APCO, the plan must include an air-monitoring component.
  - (b) The air-monitoring component shall specify the following:
    - (1) Type of air-sampling device(s);
    - (2) Siting of air-sampling device(s);
    - (3) Sampling duration and frequency; and
    - (4) Analytical method.
9. Frequency of Reporting: The plan shall state how often the items specified in subsection (e)(5)(b), and any other items identified in the plan, will be reported to the District.

SECTION 264. GRADING. Grading activities conducted for the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat sites shall occur in accordance with the following:

- a. Grading activities associated with the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat sites shall occur in substantial conformance with the Preliminary Grading Plans for these respective sites (Exhibits 19-12, 19-13, and 19-14). Grading activities shall not result in man-made slopes that exceed a 2:1 slope in their final condition.
- b. Expansive Soils. These and other measures, as deemed necessary and appropriate by the on-site geotechnical engineer, shall be applied to reduce impacts related to expansive soils to less than significant levels:
  1. Retain an on-site certified Geotechnical Engineer to observe construction in order to provide a complete professional geotechnical engineering service through the observational method. This will allow further evaluation of lots which require expansive soil mitigation following the mass grading. Should any variations or undesirable conditions be encountered the on-site observer can provide supplemental recommendations based on field conditions. Construction observation and testing will allow an opinion to be formed regarding the adequacy of the site preparation, material processing, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with project geotechnical specifications and requirements.
  2. When soil is dry it is essential adequate water be applied during material processing and compaction. The addition of water during borrow activities, as well as during placement of soils should be assumed. Selection of construction equipment which facilitates the addition of moisture should be used to blend wet and dry soils and pulverize oversized blocky clay chunks. Selective grading of this soil can be attempted; however, due to their variable nature separation of this soil can be difficult. Placement of the lone formation soils in the deeper portion of the fill is preferable. Placement of select non-expansive soils on the upper portions of the fills may be required to reduce adverse impact of expansive soils. A certified Geotechnical Engineer will be on site to monitor dry season site grading for conformance with this measure.
  3. When soil is wet, adequate provisions should be in place to minimize excessive moisture intrusion. Wheel rolling of graded surfaces should be performed and surfaces should be sloped to minimize ponding of rainfall and surface runoff. Wet season construction should be limited to those areas proposed to be immediately worked on to reduce surface exposure. Building pads without construction improvements, and which go through a wet season cycle, whether cut or fill pads, may require re-processing of shallower materials prior to foundation construction. A certified Geotechnical Engineer will monitor wet season site grading and, if necessary, identify areas requiring re-processing due to wet season exposure. The on-site professional will monitor grading for conformance with this measure.

4. Moderately expansive soils should be compacted to at least 90 to 92 percent of the maximum dry density (based on the ASTM D1557 test method) at a moisture content of about 3 to 4 percent over optimum. Should highly expansive soils be encountered, the relative compaction should be between 88 and 92 percent at a minimum of 4 percent over optimum. Prior to site grading additional testing may be required to identify specific compaction and moisture content requirements which may differ from those moisture content percentages recommended above. Deviations from moisture content recommendations must be approved by a certified on-site Geotechnical Engineer, who will also monitor soil compaction for conformance with this measure.
5. Minimize the effects of water on cuts and fills adjacent to structures and in underground utility trenches to increase stability of Ione soil materials. Water should be collected and appropriately discarded in all aspects of the site development. All building professionals (Geotechnical Engineers, Architects, Civil Engineers, Landscape Architects, general engineering contractors, or similar professional) should review and incorporate appropriate building techniques to minimize and collect surface and subsurface water. Utility trench backfills carrying water due to their permeable nature should all be controlled, directed, and drained away from the site; this will be overseen by a certified Geotechnical Engineer for conformance with this measure.
6. Lots situated below a roadway section should have subdrainage to divert any water potentially collected and transmitted in street utilities and laterals away from the residences. Where deemed appropriate by a certified Geotechnical Engineer, instillation of cutoff subdrains surrounding a residence will be installed to maintain uniform moisture condition. The on-site professional will monitor drainage installations for conformance with this measure.
7. Subdrainage of utility trenches should be provided to maintain dry backfill materials in all types of trenches. All utility penetrations through or beneath foundations should be backfilled with low permeability materials, such as slurry, grout, or concrete in order to minimize moisture migration through trench backfill materials when utility trenches under the structures are not intended as drains. The on-site certified Geotechnical Engineer will monitor drainage installations for conformance with this measure.
8. Drainage of all utility trenches in the subdivision is required. The project Civil Engineer or similar professional should detail collection pipes to manholes and drop inlets of the storm drain system to allow for the collection of utility trench drainage. The collection pipes should be situated near the bottom of the permeable materials used for bedding and shading of pipes. The on-site professional will monitor drainage installations for conformance with this measure.



9. Finish grading and landscape grading should include positive drainage away from all foundations. All final grades should provide rapid removal of surface water runoff; water should not be allowed to pond on building pads or adjacent to foundations or other structural improvements at any time during or following construction. As determined by the on-site certified Geotechnical Engineer, require slightly steeper grades to swales and drainage areas to help convey moisture off pads, and increase the overall lot slope gradient. The on-site professional will monitor the actions for conformance with this measure.
10. As determined by the on-site certified Geotechnical Engineer, the need for specialized foundation systems due to the presence of expansive soils will be based on the distribution of materials which occur during site grading. All foundation systems should be initially designed as if subject to potentially expansive soils. Following grading activities those lots located in non-expansive soils and/or bedrock can be delineated and a less aggressive conventional foundation system could be used. The on-site professional will monitor these actions for conformance with this measure. The on-site certified geotechnical engineer shall provide appropriate foundation systems for the specific site conditions following mass grading.
11. Landscape watering and saturation of pad grades due to landscaping shall be limited. Dry creek beds or other landscape type features may aid in keeping foundation areas dry where turf is desired. Dry-scape landscaping should be considered on lots affected by expansive soils. Landscape mounds adjacent to foundations in yards are not allowed. Lots that contain oak trees which require aeration trenches for root zones may need additional subdrainage measures. The on-site Geotechnical Engineer will monitor these actions for conformance with this measure.
12. Lots located downslope from one-another will likely experience water migration from uphill landscaping. Landscaping plans shall be review by a certified Geotechnical Engineer and Landscape Architect to assess impacts of terraced lot landscaping. Essential to reducing potential impacts from soil expansion is the collection and channeling of drained water from impermeable surfaces (i.e., roofs, concrete or asphalt paved areas); use of low flow irrigation systems; proper landscape layout and choice of turf locations; and education to the proposed homeowners of proper design and maintenance of landscaping and drainage facilities (such as perimeter subdrains and area drains that they or their landscaper installs). The on-site professional will monitor these actions for conformance with this measure.

13. At the start of site grading and continuing to the installation of landscaping, provide Sacramento County, Department of Environmental Review and Assessment, with monthly status reports signed by the on-site certified Geotechnical Engineer or similar professional which identifies those lots and areas where expansive soils occur, and identifies which of the above measures were implemented to mitigate expansive soil impacts. If grading or other activity associated with compromising soil integrity does not occur within the monthly period, no report need be submitted.

**SECTION 265. WETLAND MITIGATION.** To compensate for the permanent loss of wetlands, prior to grading or construction within 50 feet of onsite wetlands/swales, the applicant shall obtain any/all applicable permits from the U.S. Army Corps of Engineers, California Department of Fish and Game and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site surface waters. A copy of any required permits, or correspondence from the regulatory agency indicating that a permit is not required, shall be submitted to the Department of Environmental Review and Assessment. If the Mitigation required by permits do not satisfy the requirements of no net loss of wetlands specified by County General Plan Policy CO-96, the applicant shall pay to the County of Sacramento an amount based on a rate of \$35,000 per acre for the unmitigated/ uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies. The payment shall be collected by the Department of Planning and Community Development, and deposited into the Wetlands Restoration Trust Fund.

**SECTION 266. TREE REPLACEMENT AND MITIGATION CRITERIA.** The following criteria shall apply to all trees proposed to be removed on the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat:

- a. Prior to approval of grading or improvement plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist, licensed landscape architect, or restoration ecologist and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:
  1. Oak trees will be limited to deepot seedlings (40 cubic centimeters or larger) or 15-gallon size trees. Planting stock shall not be root bound and shall be field inspected by DERA staff prior to planting.
  2. Trees shall be planted in a "natural character" with tree spacing at minimum 10 feet and maximum of 40 feet (25 feet average) apart. The maximum density of trees shall not exceed 64 trees per acre.
  3. A soil scientist shall perform a site evaluation to determine appropriate planting locations within the open space lots. The findings of the evaluation shall be incorporated into the Replacement Oak Tree Planting Plan. If soils tests show that oaks cannot be replanted due to conditions at the site, BR-5 shall apply.

4. A temporary drip irrigation system shall be installed for the purpose of providing irrigation to the plantings during the establishment period. A watering schedule shall be included in the Planting Plan. The watering frequency shall be gradually reduced over the establishment period to wean the plantings off regular irrigation.
  5. Deepot seedlings shall be planted according to industry-standard detail, including appropriate protection against herbivory from rodents and other animals. Fifteen-gallon trees shall be planted according to the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot depth boring hole to provide for adequate drainage where necessary, based on the soil evaluation.
  6. Replacement oak trees shall be monitored annually for 7 years, and shall achieve a survival rate of 100 percent at the end of the monitoring period. Monitoring reports shall be submitted to the Department of Environmental Review and Assessment by July 1 of each year.
  7. Replacement plantings shall be planted prior to issuance of any building permits and should be planted between October and April, when possible, to enhance survival.
  8. Residents shall be provided with educational materials to minimize damage to the restoration areas. Advisory signage shall be installed along the boundaries of the open space lots where oak tree plantings occur.
  9. Identify the maintenance entity and include their written agreement to provide care and irrigation of the trees for the 7-year establishment period, and to replace any replacement trees as necessary to achieve 100 percent survival at the end of the establishment period.
  10. Because the County Tree Preservation Ordinance does not apply in the geographical area where mitigation plantings will occur, any onsite and/or off-site planting areas shall be protected in perpetuity through deed restrictions or conservation easements, to the satisfaction of the Sacramento County Environmental Coordinator.
- b. If fewer on-site plantings of oak trees on open space lots are allowed, then one or more of the following off-site options to complement onsite plantings shall be chosen to mitigate for the loss of oak woodland that cannot be mitigated onsite (which shall result in a minimum 1:1 compensation ratio for canopy acreage removed):
1. Off-site oak tree replacement plantings may occur within the boundaries of Rancho Murieta. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-4 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

**OR**

2. Off-site oak tree replacement plantings may occur outside the boundaries of Rancho Murieta, but within five miles of Rancho Murieta and within Sacramento County. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-4 shall be submitted to the Sacramento County Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

**OR**

3. An equivalent amount of blue oak woodland canopy lost may be preserved and protected in perpetuity by a conservation easement. The property subject to the conservation easement shall be located within five miles of Rancho Murieta, and within Sacramento County. A draft conservation easement shall be submitted to the Environmental Coordinator for review and approval. A copy of the recorded easement shall be submitted to the Department of Environmental Review and Assessment prior to the approval of grading or improvement plans or building permits.

**OR**

4. Replacement for the total number of inches lost may occur through purchase of credits from an oak tree mitigation bank acceptable to the County, prior to approval of grading or improvement plans or building permits.
5. If all of the above mitigation options are demonstrated to the satisfaction of the Sacramento County Environmental Coordinator to be infeasible, then compensation shall be through payment into the County Tree Preservation Fund consistent with General Plan Policy CO-132. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

- c. With the exception of the trees removed and compensated through Subdivisions A and B, above, all native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of the longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.

2. Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines."
3. Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100 feet of construction related activities, in order to avoid damage to the tree canopies and root systems. The only exception to this requirement will be that the protective fencing can be placed just outside the limits of identified improvements (as identified on the project plans included and discussed in this EIR) that are within the driplines of the protected trees. No encroachment may exceed 20% of the dripline.
4. No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed.
5. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked stockpiled or located within the driplines of protected trees.
6. No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except where such grading is shown on the project plans and discussed in the text of this document. Grading will not be permissible within more than 20% of the dripline of any tree protected by this measure.
7. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree.
8. No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist.
9. The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist.
10. All portions of permanent fencing that will encroach into the dripline protection area of any protected tree shall be constructed using posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.

11. Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.
12. No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended.
13. Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the driplines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available at the Department of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

**SECTION 267. RAPTOR MITIGATION.** In order to ensure that significant impacts to nesting raptors, Swainson's hawk, and burrowing owl do not occur as a result of development of the Residences of Murieta Hills West, the Residences of Murieta Hills East, or The Retreat, the following measures shall be implemented by the respective project applicants:

- a. If construction is proposed during the raptor breeding season (February - August), a focused survey for migratory bird nests shall be conducted by a qualified biologist within 30 days prior to the beginning of construction activities in order to identify active nests in the project area. If active nests are found, no construction activities shall take place within 500 feet of the nest until the young have fledged. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (September - January). If no active nests are found during the focused survey, no further mitigation will be required.
- b. To mitigate for the loss of Swainson's hawk foraging habitat, prior to the approval of Improvement Plans or building permits, or recordation of Final Subdivision Map, whichever occurs first, the applicant shall perform one of the following:
  1. The project proponent shall utilize either the fee payment or land dedication option established in Sacramento County's Swainson's Hawk Impact Mitigation Program, (Chapter 16.130 of the Sacramento County Code).
  2. The project proponent shall, to the satisfaction of the California Department of Fish and Game, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.

3. Should the County Board of Supervisors adopt a Swainson's Hawk Mitigation Policy/Program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of one of the measures above, the project proponent may be subject to that program instead.
- c. The applicant shall avoid burrowing owls and their nest sites and habitat during construction. The following measures shall be implemented to reduce impacts to a less-than-significant level:
1. Prior to construction activity, a qualified biologist shall conduct focused surveys for burrowing owls where suitable habitat is present on the areas slated for construction. Suitable habitat includes all upland areas that are not developed, and all edge areas (including vegetated berms, levees, and drainage ditches). Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities. Surveys shall be conducted in accordance with current DFG protocol.
  2. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings will be submitted to the County and DFG for review and approval, and no further mitigation is necessary.
  3. If occupied burrows are found, occupied burrows will be avoided until the owls inhabiting the burrows have been removed and relocated using passive exclusion techniques approved by DFG.
  4. No occupied burrows will be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

**SECTION 268. CULTURAL RESOURCES MITIGATION.** To ensure protection of cultural resources, the following measure applies. This measure shall be included verbatim as a Construction Note on all Plans and Specifications for the project:

- a. Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

- b. At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

**SECTION 269. MITIGATION MONITORING.** Pursuant to Section 21081.6 of the Public Resources Code, the developers of the Residences of Murieta Hills West, the Residences of Murieta Hills East, and The Retreat shall comply fully with the Mitigation Monitoring Program (Exhibits 19-15, 19-16, 19-17) that has been prepared for their respective project as follows:

- a. The applicant shall comply with the MMRP for this project, including the payment of 100 percent of the Department of Environmental Review and Assessment staff costs, and the costs of any technical consultant services incurred during implementation of the MMRP, based on the initial estimate of these costs prepared by DERA. If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the applicant, and if the actual monitoring costs exceed the initial estimate, the applicant shall be responsible to pay the additional amount.
- b. Until the MMRP has been recorded and the estimated MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved; and no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved.  
MM-1.

**SECTION 270. TRANSPORTATION SYSTEM MANAGEMENT PLAN.** Prior to the issuance of building permits, improvement plans, grading permits, or recordation of the final map for the Residences of Murieta Hills West, the Residences of Murieta Hills East, and/or The Retreat, the applicant must comply with the Transportation Systems Management Plan for Rancho Murieta North and South, including compliance with General Plan Air Quality policy 15 (AQ-15).

**SECTION 271. POND 2N MAINTENANCE.** In the event that a maintenance program is established for the maintenance of Pond 2N on the Rancho Murieta Country Club property and all contributing watershed properties that drain through Pond 2N are participating in the maintenance cost, the applicant shall amend the CC&Rs for the Rancho Murieta North Country Club Home Owner's Association to include a requirement to participate in a fair share contribution for such program. As the portions of the Retreat project that drain through Pond 2N only constitute 23.2% of the watershed draining through Pond 2N, the Retreat's fair share shall not exceed 23.2% of the maintenance cost.



**SECTION 272. MASTER PLAN UPDATE PHASE I.**

**a. Master Plan Conditions (Retreat):**

The Applicant shall contribute to the County for Phase 1 of a Master Plan update \$29,780, when the approved Vested Tentative Map is free from any and all legal challenges. In addition, the applicant shall contribute a fair share to the County for the total cost of a Master Plan update, should the County choose to take such action. Such contribution shall be based upon the projects acreage percentage of the over all underdeveloped acreage in the Master Plan, less the contribution made for Phase 1 of the Master Plan. Such contribution shall be made with the sale of each home and shall be due at the time that escrow closes on the first sale for each home.

**b. Master Plan Condition (Residences of Murieta West):**

The Applicant shall contribute to the County for Phase 1 of a Master Plan update \$35,110, when the approved Vested Tentative Map is free from any and all legal challenges. In addition, the applicant shall contribute a fair share to the County for the total cost of a Master Plan update, should the County choose to take such action. Such contribution shall be based upon the projects acreage percentage of the over all underdeveloped acreage in the Master Plan, less the contribution made for Phase 1 of the Master Plan. Such contribution shall be made with the sale of each home and shall be due at the time that escrow closes on the first sale for each home.

**c. Master Plan Condition (Residences of Murieta East):**

The Applicant shall contribute to the County for Phase 1 of a Master Plan update \$35,110, when the approved Vested Tentative Map is free from any and all legal challenges. In addition, the applicant shall contribute a fair share to the County for the total cost of a Master Plan update, should the County choose to take such action. Such contribution shall be based upon the projects acreage percentage of the over all underdeveloped acreage in the Master Plan, less the contribution made for Phase 1 of the Master Plan. Such contribution shall be made with the sale of each home and shall be due at the time that escrow closes on the first sale for each home.

**SECTION 273. DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS.** Owner shall record a Declaration of Covenants, Conditions and Restrictions ("Declaration") against the subject real property.

**SECTION 274 BUILDING PERMIT APPROVALS**

- a. Require the applicant to have a Homeowners Association (HOA) stamp and approval on all building permits at the time of submittal to the County Building Permit Department.
- b. County and applicant shall notify the Rancho Murieta Homeowners Association (HOA) at the time of the first building permit is applied for and issued.

SECTION II. This ordinance shall take effect and be in full force on and after thirty (30) days from the date of its passage hereof, and, before expiration of fifteen (15) days from the date of its passage, it shall be published once with the names of the members of the Board of Supervisors voting for and against the same, said publication to be made in a newspaper of general circulation published within the County of Sacramento.

On a motion by Supervisor Dickinson, seconded by Supervisor Peters, the foregoing ordinance was passed and adopted by the Board of Supervisors of the County of Sacramento, State of California, at a regular meeting thereof this 12th day of December, 2007, by the following vote, to wit:

AYES: Supervisors, Dickinson, MacGlashan, Peters, Yee  
NOES: Supervisors, Nottoli  
ABSENT: Supervisors, None  
ABSTAIN: Supervisors, None

*Don Nottoli*

CHAIRPERSON, Board of Supervisors  
County of Sacramento, California



*Cindy H. Turner*  
CLERK OF THE

BOARD OF SUPERVISORS

In accordance with Section 25109 of the Government Code of the State of California a copy of this document has been delivered to the Chairman of the Board of Supervisors, County of Sacramento on

DEC 12 2007

By *Alyson Nunnally*  
Deputy Clerk, Board of Supervisors

FILED

DEC 12 2007

BOARD OF SUPERVISORS  
BY *Cindy H. Turner*  
CLERK OF THE BOARD

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGEMENT**

STATE OF CALIFORNIA

COUNTY OF SACRAMENTO

On January 4, 2008, before me, Marcia Grunwaldt, personally appeared Cindy H. Turner, personally known to me to be the person whose name is subscribed to the within instrument and acknowledged to me that she executed the same in her authorized capacities, and that by her signature on the instrument the person, or the entities upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Marcia Grunwaldt



**OPTIONAL SECTION**

Though statute does not require the Notary to fill in the data below, doing so may prove invaluable to persons relying on the document.

- INDIVIDUAL
- CORPORATE OFFICER(S)

Title(s)

- PARTNER(S)
- LIMITED
- GENERAL
- ATTORNEY-IN-FACT
- TRUSTEE(S)
- GUARDIAN
- CONSERVATOR
- OTHER: Clerk to the Board of Supervisors

SIGNER IS REPRESENTING County of Sacramento

**OPTIONAL SECTION**

DATA REQUESTED HERE IS NOT REQUIRED BY LAW.

TITLE OR TYPE OF DOCUMENT: Ordinance No. SZC-2007-0060, Establishing A Planned Unit Development Commonly Known As Rancho Murieta

DOCUMENT DATE: December 12, 2007.

No. of Pages: 28 pages

SIGNER(S) OTHER THAN NAMED ABOVE: None



HEARING DATE:	
PLANNER	
NOTICES	

## CPAC REFERRAL

<b>UPA</b>		
<b>Delta Community</b>		
ER RELEASE	Y <input type="checkbox"/>	N <input type="checkbox"/>

Residences of Murieta Hills West -

**PLNP2017-00151**

DATE	PROJECT NAME	CONTROL NO.
APPLICANT: Walters Land Planning	A.P.N.: 073-0190-106	ZONING: RD-3 (PD), O (PD)
ADDRESS: 7498 Griggs Way	CONTACT: Bruce Walters	COM. PLAN: None
CITY/STATE: Sacramento, CA 95831	TELEPHONE: 916-502-1723	GEN. PLAN: LDR

**REQUEST:** A Time Extension pursuant to Sections 22.20.090 and 22.20.095 of the Sacramento County Code to extend the expiration date a maximum of five years from the date of final action by the hearing body for:

- A Vesting Tentative Subdivision Map (01-RZB-ZOB-SVB-AHS-0069) to divide approximately 59.9 acres into 99 residential lots, four open space lots, one landscape lot, one television tower lot, and one private road lot in the RD-3 (PD) zone (37 acres) and O (PD) zone (22.9 acres) in the Rancho Murieta Planned Development.
- Entitlements approved with and pertaining to the above, specifically; an Affordable Housing Plan.

**PRIMARY CPAC**  
Cosumnes

**ADJACENT CPAC** (If Applicable)

HEARING BODY: Planning Commission

REVISED APPLICATION:  DATE: \_\_\_\_\_

Planning Division Project Manager:	RETURN BY: _____ DATE: _____
------------------------------------	---------------------------------

**ADVISORY COUNCIL COMPLETE THIS SECTION - PLEASE PRINT OR TYPE**

1. Meeting date(s) at which proposal discussed: 7-26-17

2. Number of council members present: 7 Quorum: YES  NO

3. Is the proposal compatible with the area or neighborhood in which proposed: YES  NO

4. Summarize neighborhood response or reaction: POSITIVE

---

5. Motion by: PERHAM Seconded by: HUNTER

6. Council recommendation: APPROVAL  DENIAL  CONTINUE  Date: 7-26-17

7. Council vote on motion to reflect recommendation  
YES: 7 NO: \_\_\_\_\_ ABSTAIN: \_\_\_\_\_ ABSENT: \_\_\_\_\_

8. Comments/conditions on recommendation: \_\_\_\_\_

---

Investigating Member
Frederick N. Heise  
Chairperson or Secretary
7-26-17  
Date





November 13, 2017

**Control No.:** PLNP2017-00151

**Project Name:** Residences of Murieta Hills – West Vesting Tentative Map Time Extension.

**APN:** 073-0190-106

### **Attachment 6 – Advisory Letters from Reviewing Agencies**

This attachment includes letters containing advisory notices from the following agencies:

1. Rancho Murieta Community Services District
2. Elk Grove Unified School District
3. Sacramento County Environmental Management Department
4. Regional Sanitation
5. Sacramento Area Sewer District
6. Sacramento Municipal Utility District

The enclosed letters have been sent to the project proponent and are included in this report as Attachment 6 for informational purposes. All comments included in these letters are advisory, and inform the project proponent of required actions.



## Rancho Murieta Community Services District

15160 Jackson Road • P.O. Box 1050 Rancho Murieta, CA 95683 • 916-354-3700 • Fax 916-354-2082

Visit our website [www.rmcsd.com](http://www.rmcsd.com)

August 14, 2017

Shelby Vockel, Associate Planner  
Office of Planning and Environmental Review  
827 7th Street, Room 225, Sacramento, CA 95814

Via email: [mapless@saccounty.net](mailto:mapless@saccounty.net)

Subject: Residences of Murieta Hills – West and Residences of Murieta Hills – East  
Project Numbers: PLNP2017-00151 and PLNP2017-00183  
Comment Letter: Vesting Tentative Map Extension Application

Dear Shelby,

Rancho Murieta Community Services District (District) appreciates the opportunity to review and provide comments on the Vesting Tentative Map Extension Application (Application) for Residences of Murieta Hills – West and Residences of Murieta Hills – East (Projects). The District is the provider of water, wastewater, recycled water, storm drainage and flood control, security, and solid waste collection and disposal services (via a contract service provider) for the Rancho Murieta community.

The District recognizes that the entitlement processes for the Projects were previously completed. The comment below seeks to clarify existing conditions and not add new conditions.

Condition 11 states the following:

Comply with all Rancho Murieta Community Services District ordinances, and design standards dated July 1982, and construction specifications dated July 1, 1993, concerning sewer, water, drainage, and security as the only utility service provider in the community.

The District requests this condition be revised as follows:

Comply with all Rancho Murieta Community Services District ordinances, design standards, and construction specifications in place at time of approval of improvement plans, concerning sewer, water, drainage, and security as the only utility service provider in the community.

Thank you for the opportunity to provide comments on the Application. We look forward to actively working with the County on this Project as it moves through the entitlement processes. If you have any questions regarding the contents of this letter, please feel free to call me at (916) 354-3700 or John Griffin at (530) 401-4293.

Sincerely,

  
Edward R. Crouse  
Interim General Manager

*Serving the Community for over 30 years*

Board of Directors: Mark Pecotich, President • Morrison Graf, Vice-President • Les Clark • John Merchant • Gerald Pasek  
General Manager • Edward R. Crouse

PC ATTACHMENT 6





**Members of the Board:**

Beth Albiani  
Nancy Chaires Espinoza  
Carmine S. Forcina  
Chet Madison, Sr.  
Dr. Crystal Martinez-Alire  
Anthony "Tony" Perez  
Bobbie Singh-Allen

**Susan Bell**  
Chief Facilities Officer  
Facilities and Planning

Robert L. Trigg Education Center  
9510 Elk Grove-Florin Road, Elk Grove, CA 95624

(916) 686-7711  
FAX: (916) 686-7754

July 25, 2017

*SENT VIA E-MAIL- mapless@saccounty.net*

Ms. Shelby Maples  
County of Sacramento  
Planning and Community Development Department  
827 Seventh Street, Room 230  
Sacramento, CA 95814

Subject: Residences of Murieta Hills West - Subdivision Map Extension of Time  
PLNP2017-00151

Dear Ms. Maples:

The Elk Grove Unified School District appreciates the opportunity to review the subject application. We request the following response be made a part of the public record of the Planning Commission and/or the City Council hearings.

**The District is currently impacted and overcrowded. This and other development projects will have a negative impact upon the District's existing school facilities. The District does not have the financial capability to purchase school sites nor construct and furnish needed school facilities with local funds alone. Developer fees and Mello-Roos taxes collected by the District are not sufficient or timely to satisfy the need. The District relies on statewide school bonds to provide funding necessary to construct new school facilities.**

**Without continued state funding, the District is in a school housing crisis. The District will continue to seek additional state funds to construct needed school facilities. Until such time as adequate facilities are available for current and projected students, students may be housed on campuses that have exceeded their intended capacity.**

**On May 16, 2017 the Board of Education adopted a new residential development fee in accordance with Senate Bill 50. The new fee is \$5.43 per square foot and became effective on May 17, 2017. The district must update the School Facilities Needs Analysis annually; therefore the residential development fee is subject to change annually. At the time a building permit is applied for, the development will be subject to the residential fee in place.**

On March 2, 2004, voters in California passed Proposition 55, a statewide bond authorizing 12.3 billion dollars to help fund public school facility needs. Specifically, the bond funds will provide a total of 7.75 billion dollars for new K-12 school construction and 2.25 billion dollars for K-12 reconstruction/modernization needs. The remaining 2.3 billion are reserved for community college, California State University, and University of California facilities.

Enclosed sheets provide estimates of student generation and financial impacts resulting from the construction of the proposed project. Please include the District on your mailing list for subsequent stages of planning and environmental review. As in the past, we are available to review the impact of this project with you. If you have any questions or comments, please contact me at (916) 686-7711.

Thank you again for the opportunity to comment and your continuing assistance and cooperation.

Sincerely,

*Teresa Tholen*

Teresa Tholen  
Planner, Facilities and Planning

<http://commentltr/Residences of Murieta Hills West 7-25-17>

Enclosure

**From:** [Hunley, Christopher](#)  
**To:** [Vockel, Shelby](#)  
**Subject:** PLNP2017-00151 RESIDENCES OF MURIETA HILLS WEST TIME EXTENSION  
**Date:** Friday, August 18, 2017 4:11:23 PM

---

Hi Shelby,

EMD requests the following advisory be added to the subject project:

- 1. ADVISORY:** If an abandoned well is found on the property, it must be issued an inactivation permit (subject to review and approval from EMD); repaired and brought back into service; or, it must be destroyed at the parcel owner's cost. All well related activities must be performed in compliance with EMD's well permitting and inspection program requirements. Contact EMD's abandoned well program at [EMD-abndwells@saccounty.net](mailto:EMD-abndwells@saccounty.net) with any questions.

Thanks so much,

--Chris

Christopher Hunley, REHS  
County of Sacramento  
Environmental Management Department  
Environmental Compliance Division  
Office (916) 876-7277  
Fax (916) 854-9274  
<http://www.emd.saccounty.net/>



July 20, 2017

Ms. Shelby Maples  
County of Sacramento – Department Community Development  
827 Seventh Street, Room 230  
Sacramento CA 95814

**Subject: Residences of Murieta Hills West – Tentative Subdivision Map  
APN: 073-0190-106  
Control No. PLNP2017-00151**

Dear Ms. Maples,

Sacramento Regional County Sanitation District (Regional San) has reviewed the subject application and has the following comments.

A request for a time extension to a previously approved Tentative Subdivision Map to divide approximately 59.9 acres into 99 residential lots. The proposed project is located at 6307 Stonehouse Road, approximately 1,520 feet north of Escuela Drive in the Rancho Murieta Community.

The subject property is located outside of the Sacramento Area Sewer District (SASD) and Regional San service boundaries. Rancho Murieta Community Services District approval will be required for all sanitary sewer facilities. No further comments are needed at this time.

If you have any questions regarding this letter, please feel free to contact me at (916) 876-6104 or by email: [armstrongro@sacsewer.com](mailto:armstrongro@sacsewer.com).

Sincerely,

*Robb Armstrong*

Robb Armstrong  
Regional San Development Services & Plan Check

cc: SASD Development Services

**Main Office**

10060 Goethe Road  
Sacramento, CA 95827-3553  
Tel: 916.876.6000  
Fax: 916.876.6160

**Treatment Plant**

8521 Laguna Station Road  
Elk Grove, CA 95758-9550  
Tel: 916.875.9000  
Fax: 916.875.9068

**Board of Directors**

Representing:

County of Sacramento

County of Yolo

City of Citrus Heights

City of Elk Grove

City of Folsom

City of Rancho Cordova

City of Sacramento

City of West Sacramento

Prabhakar Somavarapu

*District Engineer*

Ruben Robles

*Director of Operations*

Christoph Dobson

*Director of Policy & Planning*

David O'Toole

*Director of Investor Services*

Joseph Maestretti

*Chief Financial Officer*

Claudia Goss

*Public Affairs Manager*

[www.regionalsan.com](http://www.regionalsan.com)

August 2, 2017

Shelby Maples  
County of Sacramento  
Community Development Department  
Planning and Environmental Review Division (PER)  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814

**Subject: Residences of Murieta Hills West – Vesting TSM Time Extension**  
**APN: 073-0190-106-0000**  
**Control No.: PLNP2017-00151**

Dear Ms. Maples,

Both the Sacramento Area Sewer District (SASD) and the Sacramento Regional County Sanitation District (Regional San) have reviewed the subject documents.

The applicant is requesting a Vesting Tentative Subdivision Map Time Extension. The property is located at 6307 Stonehouse Road on the east side of Stonehouse Road approximately 1,520 feet north of Escuela Drive in the Rancho Murieta community.

The subject property is within the Urban Service Boundary but outside the service boundaries of SASD and Regional San. Environmental Management Department approval will be required for the onsite waste disposal facilities, if necessary.

If you have any questions regarding these comments, please call me at 916-876-6336 or call Dillon Miele at 916-876-6278.

Sincerely,

*Yadira Lewis*  
Yadira Lewis  
SASD Development Services



***Sent Via E-Mail***

August 14, 2017

Shelby Maples  
Sacramento County  
Department of Community Development  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814  
[maples@saccounty.net](mailto:maples@saccounty.net)

**Subject: Residences of Murieta Hills West – Vesting Tentative Map Time Extension  
(Project No. PLNP2017-00151)**

Dear Ms. Maples:

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Residences of Murieta Hills West – Vesting Tentative Map Time Extension (Project, PLNP2017-00151), located at 6307 Stonehouse Road in the Rancho Murieta Planned Development. SMUD is the electric utility provider for Sacramento County, including the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region, all while maintaining best-in-class safety and reliability. As a reviewing agency, SMUD is committed to providing reliable service to meet our customers' growing needs.

The Applicant has requested a Time Extension pursuant to Sections 22.20.090 and 22.20.095 of the Sacramento County Code to extend the expiration date a maximum of five-years from the date of final action by the hearing body for: (a) a Vesting Tentative Subdivision Map (01-RZB-ZOB-SVB-AHS-0069) to divide approximately 59.9-acres into 99 residential lots, four open space lots, one landscape lot, one television tower lot, and one private road lot in the RD-3 (PD) zone (37 acres) and O (PD) zone (22.9 acres) in the Rancho Murieta Planned Development; and (b) entitlements approved with and pertaining to the above.

SMUD has existing and/or proposed facilities on or adjacent to the proposed Project Site, existing overhead/underground 12kV facilities along Stonehouse Drive. To that end, we note the following Conditions of Approval that were originally imposed on the Applicant's Project to minimize impacts to SMUD facilities on or adjacent to the Project site:

17. The Applicant shall dedicate a 12.5-foot public utility easement for underground facilities and appurtenances adjacent to all public ways.
18. The Applicant shall dedicate any private drive, ingress and egress easement, or Irrevocable Offer of Dedication and 12.5-foot

adjacent thereto as a public utility easement for underground facilities and appurtenances.

We also note the following advisory comments for Sacramento County's and the Applicant's consideration:

1. All structural setbacks should be a minimum of 14-feet from the edge of the roadway right-of-way. Structural setbacks less than 14-feet shall require the Applicant to conduct a pre-engineering meeting with all utilities to ensure proper clearances are maintained.
2. In the event the Applicant requires the relocation or removal of existing SMUD facilities on or adjacent to the subject property, the Applicant shall coordinate with SMUD. The Applicant shall be responsible for the cost of relocation or removal.
3. SMUD reserves the right to use any portion of its easements on or adjacent to the subject property that it reasonably needs and shall not be responsible for any damages to the developed property within said easement that unreasonably interferes with those needs.
4. The Applicant should not place any building foundations within 5-feet of any SMUD trench to maintain adequate trench integrity. The Applicant shall verify specific clearance requirements for other utilities (e.g., Gas, Telephone, etc.).
5. The Applicant should provide all-weather vehicular access for service vehicles that are up to 26,000 pounds. At a minimum: (a) the drivable surface shall be 20-feet wide; and (b) all SMUD underground equipment and appurtenances shall be within 15-feet from the drivable surface.
6. Any necessary future SMUD facilities located on the Applicant's property shall require a dedicated SMUD easement. This will be determined prior to SMUD performing work on the Applicant's property.

SMUD appreciates the opportunity to provide input on the Residences of Murieta Hills West – Vesting Tentative Map Time Extension. Please ensure that the conditions and considerations in this response are conveyed to the Project planners and the appropriate Project Applicants. Any revisions or deletions relative to the above conditions must be submitted in writing to the Real Estate section of SMUD. No verbal or other written agreements should be accepted by Sacramento County. For additional information regarding approvals, acceptable uses and clearances for SMUD facilities, please contact

SMUD's Land Specialist, Yujean Kim at [yujean.kim@smud.org](mailto:yujean.kim@smud.org) at [yujean.kim@smud.org](mailto:yujean.kim@smud.org) or (916)732-5442.

Sincerely,



Angela C. McIntire  
Regional & Local Government Affairs  
Sacramento Municipal Utility District  
6301 S Street, Mail Stop A313  
Sacramento, CA 95817  
[angela.mcintire@smud.org](mailto:angela.mcintire@smud.org)

Cc: Yujean Kim, SMUD






## MEMORANDUM

**DATE:** November 1, 2017

**TO:** Leighann Moffitt  
Planning Director

**FROM:** Tim Hawkins   
Environmental Coordinator

**SUBJECT: PLNP2017-00151, Residences of Murieta Hills West Time Extension.** Request for a Time Extension of five years for a vesting tentative subdivision map located at 6307 Stonehouse Road, on the east side of Stonehouse Road approximately 1,520 feet north of Escuela Drive in the Rancho Murieta Planned Development.

The former Department of Environmental Review and Assessment, pursuant to the regulations of the California Environmental Quality Act (CEQA), prepared an Environmental Impact Report (EIR) for the Residences West of Murieta Hills, The Residences East of Murieta Hills, and the Retreat at Rancho Murieta (Control Number: 06-RZB-ZOB-SVB-AHS-0252, 01-RZB-ZOB-SVB-AHS-0069, 01-GPB-RZB-SVB-SPP-AHS-0070). The recirculated draft EIR was released on May 29, 2007. The document evaluated environmental impacts associated with land use; public services; drainage and hydrology; traffic and circulation; air quality; noise; biological resources; geology, soils, and grading, cultural resources; visual and aesthetics; and affordable housing. On October 16, 2007, the Board of Supervisors certified the EIR for the project as adequate and complete.

On December 12, 2007 the Board of Supervisors took final action to approve the requested Rezone, Amendment to the Planned Development Ordinance, Vesting Tentative Subdivision Map, Use Permit, and Affordable Housing Plan for the Residences of Murieta Hills West project (Control Number: 01-RZB-ZOB-SVB-AHS-0069).

The Residences of Murieta Hills West original project allowed for an Amendment of the Rancho Murieta Planned Development Ordinance (SZC-2007-0060) to reconfigure the circulation pattern and reconfigure the open space areas as shown on the approved master plan, as well as allowed for the rezoning (Ordinance No. SZC-2007-0060) of 59.9 acres from A-2(PD)(Agricultural- Planned Development) to RD-3 (PD)(Residential-Planned Development for 37 acres) and "O" (PD)(Recreational-Planned Development for 22.9 acres) The Vesting Tentative Subdivision Map allowed for the division of the approximately 59.9 acre site into 99 single family lots in the RD-3(PD) zone, in addition to four open space lots, one landscape plot, one television tower lot, and one private road lot. The Affordable Housing Plan allowed for the development to pay in-lieu and affordability fees to meet the projects affordability requirements.

The applicant is currently requesting a Time Extension for the approved Vesting Tentative Subdivision Map (PLNP2017-00151). No other changes are being requested. The five-year time extension request is not expected to result in any substantial changes or create any new impacts that were not addressed in the previous Environmental Impact Report. In addition, land uses in the project area have not changed in a manner that would necessitate updated review.

It is the Environmental Coordinator's determination, pursuant to Section 15162 of the CEQA Guidelines, that there are no substantial changes in the project or in the circumstances under which the project is to be undertaken and that the project involves no new significant impacts that were not considered in the previous Environmental Impact Report for the Rezone, Amendment to the Planned Development Ordinance, Vesting Tentative Subdivision Map, Use Permit, and Affordable Housing Plan for the Residences of Murieta Hills West (Control Number: 2001-0069). Therefore, no further Environmental Document is required. The prior Environmental Impact Report remains the appropriate document for the Time Extension project and the Mitigation Monitoring and Reporting Program (MMRP) for the Residences of Murieta Hills West remains applicable to the current project. A copy of the MMRP is attached to this correspondence.

Attachment: Residences of Murieta Hills West MMRP

The Residences of Murieta Hills West (01-RZB-ZOB-SVB-AHS-0069) Environmental Impact Report is available for review at:

Sacramento County  
Office of Planning and Environmental Review  
827 7<sup>th</sup> Street, Room 225  
Sacramento, CA 95814

Monday – Friday during normal business hours  
(916) 874-6221

**RECORDING REQUESTED BY  
AND WHEN RECORDED  
MAIL TO:**

**NAME: DERA**

**COUNTY MAIL CODE: 01-220**

**No Fee--For the Benefit of  
Sacramento County (Code  
6103)**

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

**COUNTY OF SACRAMENTO  
DEPARTMENT OF ENVIRONMENTAL REVIEW AND ASSESSMENT  
MITIGATION MONITORING AND REPORTING PROGRAM**

**CONTROL NUMBER: 01-RZB-ZOB-SVB-AHS-0069**

**NAME: THE RESIDENCES WEST OF MURIETA HILLS**

**LOCATION:** The proposed project consists of a subdivision located within the community known as Rancho Murieta, in eastern Sacramento County. The subdivision site is located north of State Highway 16 and the Cosumnes River.

**ASSESSOR'S PARCEL NUMBER: 073-0190-106**

<b>Owner/Applicant:</b>
Woodside Homes of Northern California
111 Woodmere Drive
Folsom, CA 95630
Attn: James Galovan

**PROJECT DESCRIPTION:**

**TYPE OF ENVIRONMENTAL DOCUMENT:**

- Negative Declaration
- Environmental Impact Report
- Supplemental Environmental Impact Report
- Prior Negative Declaration
- Prior Environmental Impact Report

**PREPARED BY:** Sacramento County Department of  
 Environmental Review and Assessment  
 827 7<sup>th</sup> Street, Room 220  
 Sacramento, CA 95814

**PHONE:** (916) 874-7914

**MITIGATION MONITORING AND REPORTING PROGRAM  
 ADOPTED BY:**

**DATE:**

**ATTEST:** \_\_\_\_\_  
**SECRETARY/CLERK**

**State of California  
 County of Sacramento**

On \_\_\_\_\_ before me, \_\_\_\_\_ (name, title of officer),  
 personally appeared:

\_\_\_\_\_

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

WITNESS my hand and official seal.

\_\_\_\_\_

*Signature*

### DECLARATION OF AGREEMENT

This Mitigation Monitoring and Reporting Program applies to certain real property, a Legal Description of which is attached as Exhibit A. I (We) the undersigned agree that this Mitigation Monitoring and Reporting Program applies to the real property described in Exhibit A. I (We) the undersigned am (are) the legal owner(s) of that property, and agree to comply with the requirements of this Mitigation Monitoring and Reporting Program (Summary and Mitigation Measures attached).

IN WITNESS WHEREOF, this declaration is hereby executed by the undersigned named legal owner(s) of the subject property on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

OWNER(S):

\_\_\_\_\_  
(Type name and/or title above)

\_\_\_\_\_  
(Signature above)

### ALL PURPOSE ACKNOWLEDGEMENT

State of California

County of Sacramento

On \_\_\_\_\_ before me, \_\_\_\_\_ (name, title of officer), personally appeared \_\_\_\_\_,

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

WITNESS my hand and official seal.

\_\_\_\_\_  
Signature

### CAPACITY CLAIMED BY SIGNER

- INDIVIDUAL(S) SIGNING FOR ONESELF/THEMSELVES
- CORPORATE OFFICER(S) \_\_\_\_\_ TITLE(S) \_\_\_\_\_ COMPANY \_\_\_\_\_
- PARTNER(S) \_\_\_\_\_ PARTNERSHIP \_\_\_\_\_
- ATTORNEY-IN-FACT \_\_\_\_\_ PRINCIPAL(S) \_\_\_\_\_
- TRUSTEE(S) \_\_\_\_\_ TRUST \_\_\_\_\_
- OTHER \_\_\_\_\_ TITLE(S) \_\_\_\_\_ TITLE(S) \_\_\_\_\_ ENTITY(IES) REPRESENTED \_\_\_\_\_ ENTITY(IES) REPRESENTED \_\_\_\_\_

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<input type="checkbox"/>	<b>MITIGATION MEASURE TC-1: TRAFFIC.....</b>	<b>14</b>
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## **PURPOSE AND PROCEDURES**

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Pursuant to Section 21081.6 of the Public Resources Code and Chapter 20.02 of the Sacramento County Code, a Mitigation Monitoring and Reporting Program has been established for the project entitled THE RESIDENCES WEST OF MURIETA HILLS (Control Number: 01-RZB-ZOB-SVB-AHS-0069 ).

### **PURPOSE**

The purpose of this program is to assure diligent and good faith compliance with the Mitigation Measures which have been recommended in the environmental document, and adopted as part of the project or made conditions of project approval, in order to avoid or mitigate potentially significant effects on the environment.

### **NOTIFICATION AND COMPLIANCE**

It shall be the responsibility of the project applicant to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The Department of Environmental Review and Assessment (DERA) will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). Any non-compliance will be reported to the project applicant, and it shall be the project applicant's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator. Any indication that the project is proceeding without good-faith compliance could result in the imposition of administrative, civil and/or criminal penalties upon the project applicant in accordance with Chapter 20.02 of the Sacramento County Code.

### **PAYMENT**

It shall be the responsibility of the project applicant to reimburse the County for all expenses incurred in the implementation of the Mitigation Monitoring and Reporting Program (MMRP), including any necessary enforcement actions. The initial estimate of County monitoring costs for this project is **\$ .00**, which must be paid to the Department of Environmental Review and Assessment **prior to recordation of the MMRP or review of any plans by the DERA**. If actual County monitoring costs are less than the initial estimate, the difference will be refunded to the applicant; and if the actual County monitoring costs exceed the initial estimate, a supplemental bill will be submitted to the applicant.

### **RECORDATION**

In order to record the adopted Mitigation Monitoring and Reporting Program with the County Recorder as required by Section 20.02.050(b)(2) of the Sacramento County Code, the project applicant shall provide to the Department of Environmental Review

and Assessment a Legal Description for the real property that is the subject of the project.

### **COMPLETION**

Pursuant to Section 20.02.060 of the Sacramento County Code, upon the determination of the Environmental Coordinator that compliance with the terms of the approved Mitigation Monitoring and Reporting Program has been achieved, and that there has been full payment of all fees for the project, the Environmental Coordinator shall record and issue a Program Completion Certificate for the project.

### **PROPERTY TRANSFER**

The requirements of this adopted Program run with the real property that is the subject of the project, as described in Exhibit Successive owners, heirs and assigns of this real property are bound to comply with all of the requirements of the adopted Program.

Prior to any lease, sale, transfer or conveyance of any portion of the real property that is the subject of the project, the record owner(s) at the time of the application for the project, or his or her successor's in interest, shall provide a copy of the adopted Program to the prospective lessee, buyer, transferee, or one to whom the conveyance is made.

### **PENALTIES**

Chapter 20.02 of the Sacramento County Code permits civil remedies and criminal penalties to be imposed in the event of non-compliance with an adopted Mitigation Monitoring and Reporting Program. The civil remedies, which are found in Section 20.02.090 of the Sacramento County Code, include injunctive relief, stop work orders, revocation of any special permit granted concurrently with the approval of a Program, and the abatement of any resulting nuisance. The criminal penalties, which are found in Section 20.02.080 of the Sacramento County Code, include a fine not to exceed five hundred dollars or imprisonment in the County jail not to exceed six months, or both.

Plans that are inconsistent with the adopted Mitigation Measures will not be approved.

In the event of an ongoing, serious non-compliance issue, the Department of Environmental Review and Assessment may call for a "stop work order" on the project.



## **STANDARD PROVISIONS**

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**Page one of all Project Plans must include the following statement in a conspicuous location:**

**“All Plans associated with this project are subject to the conditions of Mitigation Monitoring and Reporting Program ( 01-RZB-ZOB-SVB-AHS-0069 ). For any questions regarding compliance with the MMRP document, contact MMRP staff at (916) 874-7914.”**

All Project Plans and any revisions to those Plans shall be in full compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). The project applicant shall submit one copy of all such Plans and any revisions to the Department of Environmental Review and Assessment prior to final approval by the Sacramento County Building Inspection Division (BID). If the Department of Environmental Review and Assessment determines that the Plans are not in full compliance with the adopted MMRP, the Plans shall be returned to the project applicant with a letter specifying the items of non-compliance, and instructing the applicant to revise the Plans, and then resubmit one copy of the revised Plans to the Department of Environmental Review and Assessment, for determination of compliance, prior to final approval by BID.

Additionally, the project applicant shall notify the Department of Environmental Review and Assessment **no later than 48 hours** prior to the start of construction and no later than 24 hours after its completion. The applicant shall notify the Department of Environmental Review and Assessment no later than 48 hours prior to any/all Final Inspection(s) by the County of Sacramento.

**MITIGATION MEASURE PU-1: WATER TREATMENT**

Prior to issuance of building permits for The Residences West, Residences East and/or the Retreat, the existing water supply treatment plant must be upgraded to provide adequate capacity for existing and approved projects, as well as the Residences and Retreat projects.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
3. Provide documentation verifying that the required upgrade has been satisfactorily completed.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review and verify submitted documentation of upgrade completion.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE PU-2: WATER SUPPLY**

Prior to issuance of building permits one of the following must be met:

- A. The Petition for a Time Extension of water rights Permit 16762 must have been granted.
- B. The applicant must provide a water supply assessment verifying that sufficient water supply exists to support the lots for which building permits are requested. This water supply must be existing, not planned.

**Implementation and Notification (Action by Project Applicant):**

- 1. Comply fully with the above measure.
- 2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
- 3. Provide a copy of the approved Petition and associated water rights permit or provide a water supply assessment documenting sufficient existing water supply to serve all lots for which building permits are requested.

**Verification (Action by the Department of Environmental Review and Assessment):**

- 1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
- 2. Review and verify submitted documents.
- 3. Monitor compliance during periodic site inspections of the construction work.
- 4. Participate in any Final Inspection(s) as necessary.

**Comments:**

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**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE PU-3: WASTEWATER CAPACITY**

Prior to issuance of building permits, to avoid significant impacts related to the provision of sewer service, the following mitigation shall apply:

- A. A revised CSD Conditional Use Permit must be approved by the County to provide for enough connections to accommodate each project plus existing and approved dwelling units in Rancho Murieta and;
- B. The applicant shall submit engineer-certified documentation from the CSD demonstrating that the wastewater treatment facility has adequate treatment, storage, and disposal capacity to accept wastewater from the lots for which building permits are requested without resulting in detectable degradation of ground or surface water quality (or exacerbation of existing degradation), and that such determination has been made based on recent actual wastewater flows, as well as projected flows from other projects for which building permits have been issued.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review submitted documentation of compliance, and confer with the Central Valley Regional Water Quality Control Board and appropriate County staff to verify accuracy.
3. Verify that the CSD Conditional Use Permit has been approved as above in PU-3.A.
4. Monitor compliance during periodic site inspections of the construction work.
5. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE TC-1: TRAFFIC**

Prior to the issuance of building permits, the applicant shall pay a fair share of the cost of the following improvements:

- A. SR 16 / Sunrise Boulevard. An exclusive left-turn lane should be added to the eastbound approach creating dual left-turn lanes on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
- B. SR 16 / Sunrise Boulevard. An exclusive left-turn lane should be added to the southbound approach, creating dual left-turn lanes on Sunrise Boulevard.
- C. SR 16 / Grant Line Road. The northbound and southbound combined left/through/right-turn lane should be split out to include an exclusive left-turn lane, two exclusive through lanes and an exclusive right-turn lane on Grant Line Road. The northbound and southbound phasing should be changed from split phase to protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
- D. SR 16 / Dillard Road. The eastbound combined through/right-turn lane should be split out to include an exclusive through lane and an exclusive right-turn lane on SR 16. An additional eastbound and westbound through lane should be added to SR 16.
- E. SR 16 / Dillard Road. The northbound combined left/right-turn lane should be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Dillard Road.
- F. SR 16 / Latrobe Road. This intersection meets the MUTCD peak hour signal warrant during the PM peak hour and should therefore be considered for signalization. The northbound and southbound approaches should have permitted left-turn phasing and the eastbound and westbound approaches should have protected left-turn phasing. An additional eastbound and westbound through lane should be added to SR 16.
- G. SR 16 / Stonehouse Road. This intersection meets the MUTCD peak hour signal warrant during both the AM and PM peak hours and should therefore be considered for signalization. The southbound combined left/right-turn lane should be split out to include an exclusive left-turn lane and an exclusive right-turn lane on Stonehouse Road. An additional eastbound and westbound through lane should be added to SR 16.
- H. SR 16 / Stonehouse Road. An additional eastbound and westbound through lane on State Route 16 at the intersection of Stonehouse Road should be added.
- I. SR 16 / Murieta Parkway. An additional eastbound and westbound through lane should be added to SR 16.



**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Verify with Sacramento County Department of Transportation that all of the above fees have been paid.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE AQ-1: PARTICULATE MATTER**

The following mitigation measures will be applied during the grading and earthmoving phase of construction to reduce PM<sub>10</sub> emissions:

- A. all exposed soil shall be watered at a frequency that keeps soil moist at all times,
- B. all haul roads shall be watered twice daily,
- C. at least two feet of freeboard shall be maintained for all trucks hauling soil and,
- D. Use emulsified diesel or diesel catalyts on applicable heavy duty diesel construction equipment.

**Implementation and Notification (Action by Project Applicant):**

- 1. Comply fully with the above measure.
- 2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

- 1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
- 2. Monitor compliance during periodic site inspections of the construction work.
- 3. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE AQ-3: CONSTRUCTION VEHICLE EMISSIONS**

**Off-Road Vehicle Fleet – Equipment Emissions.** Prior to approval of improvement plans and/or grading plans, or any earthmoving activity on the site, whichever comes first, the project representative shall submit to the Sacramento County Department of Environmental Review and Assessment (DERA) a copy of a Sacramento Metropolitan Air Quality Management District (SMAQMD) approved plan demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction\* compared to the most recent California Air Resources Board (CARB) fleet average; and

Prior to the start of construction, the project representative shall submit to the Sacramento County DERA and SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. The inventory shall include the horsepower rating, engine production year, and hours of use or fuel throughput for each piece of equipment. The inventory shall be updated and submitted monthly thereafter to SMAQMD throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. At least 48 hours prior to the use of subject heavy-duty off-road equipment, the project representative shall provide DERA and SMAQMD with the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman.

(\*NOTE: Acceptable options for reducing emissions may include use of late model vehicles, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.)

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE AQ-4: AIR QUALITY MITIGATION FEE**

Prior to the approval of improvement plans or the issuance of grading permits, the proponent will submit proof that the emissions off-set air quality mitigation fee of \$1557.75 per acre to be graded (74.4 acres) has been paid to SMAQMD, and that the construction air quality mitigation plan has been approved by SMAQMD and the lead agency.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Verify with the Sacramento Metropolitan Air Quality Management District that all fees have been paid.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature: \_\_\_\_\_ Date: \_\_\_\_\_**



**MITIGATION MEASURE AQ-5: CONSTRUCTION VEHICLE EMISSIONS**

Off-Road Diesel Equipment—Visible Emissions. The project shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity shall be repaired immediately, and the Sacramento County DERA and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted to SMAQMD throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this section shall supercede other SMAQMD or state rules or regulations.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**☐ MITIGATION MEASURES AQ-10: NATURALLY OCCURRING ASBESTOS**

Prior to approval of Grading Plans, the applicant shall submit an Asbestos Dust Mitigation Plan to the Sacramento Metropolitan Air Quality District for approval. No Asbestos Dust Mitigation Plan shall be required for those areas where a registered geologist has performed a geologic evaluation (in accordance with the Air Resources Board's "Asbestos Airborne Toxic Control Measure For Construction, Grading, Quarrying and Surface Mining Operations") concluding that no naturally occurring asbestos, ultramafic rock or serpentine is likely to be found in the area to be disturbed, subject to the review and approval of the Sacramento Metropolitan Air Quality Management District. The Asbestos Dust Mitigation Plan for all other lots on which asbestos is known to be present or assumed to be present (in accordance with the in accordance with the above-referenced Airborne Toxic Control Measures) should include the following:

An Asbestos Dust Mitigation Plan must specify dust mitigation practices which are sufficient to ensure that no equipment or operation emits dust that is visible crossing the property line, and must include one or more provisions addressing each of the following topics.

- A. Track-out prevention and control measures which shall include:
  1. Removal of any visible track-out from a paved public road at any location where vehicles exit the work site; this shall be accomplished using wet sweeping or a HEPA filter equipped vacuum device at the end of the work day or at least one time per day; and
  2. Installation of one or more of the following track-out prevention measures:
    - i. A gravel pad designed using good engineering practices to clean the tires of exiting vehicles;
    - ii. A tire shaker;
    - iii. A wheel wash system;
    - iv. Pavement extending for not less than fifty (50) consecutive feet from the intersection with the paved public road; or
    - v. Any other measure as effective as the measures listed above.
- B. Keeping active storage piles adequately wetted or covered with tarps.
- C. Control for disturbed surface areas and storage piles that will remain inactive for more than seven (7) days, which shall include one or more of the following:
  1. Keep the surfaces wetted;
  2. Establishment and maintenance of surface crusting sufficient to satisfy the test in subsection (h)(6);
  3. Application of chemical dust suppressants or chemical stabilizers according to the manufacturers' recommendations;
  4. Covering with tarp(s) or vegetative cover;

5. Installation of wind barriers of fifty (50) percent porosity around three (3) sides of a storage pile;
  6. Installation of wind barriers across open areas; or
  7. Any other measure as effective as the measures listed above.
- D. Control for traffic on on-site unpaved roads, parking lots, and staging areas which shall include:
1. A maximum vehicle speed limit of fifteen (15) miles per hour or less; and
  2. One or more of the following:
    - i. Watering every two hours of active operations or sufficiently often to keep the area adequately wetted;
    - ii. Applying chemical dust suppressants consistent with manufacturer's directions;
    - iii. Maintaining a gravel cover with a silt content that is less than five (5) percent and asbestos content that is less than 0.25 percent, as determined using an approved asbestos bulk test method, to a depth of three (3) inches on the surface being used for travel; or
    - iv. Any other measure as effective as the measures listed above.
- E. Control for earthmoving activities which shall include one or more of the following:
1. Pre-wetting the ground to the depth of anticipated cuts;
  2. suspending grading operations when wind speeds are high enough to result in dust emissions crossing the property line, despite the application of dust mitigation measures;
  3. application of water prior to any land clearing; or
  4. Any other measure as effective as the measures listed above.
- F. Control for Off-Site Transport. The owner/operator shall ensure that no trucks are allowed to transport excavated material off-site unless;
1. Trucks are maintained such that no spillage can occur from holes or other openings in cargo compartments; and
  2. Loads are adequately wetted and either:
    - i. Covered with tarps; or
    - ii. Loaded such that the material does not touch the front, back, or sides of the cargo compartment at any point less than six inches from the top and that no point of the load extends above the top of the cargo compartment.
- G. Post Construction Stabilization of Disturbed Areas. Upon completion of the project, disturbed surfaces shall be stabilized using one or more of the following methods;

1. Establishment of a vegetative cover;
  2. Placement of at least three (3.0) inches of non-asbestos-containing material;
  3. Paving;
  4. Any other measure deemed sufficient to prevent wind speeds of ten (10) miles per hour or greater from causing visible dust emissions.
- H. Air Monitoring for Asbestos (If Required by the APCO).
1. If required by the district APCO, the plan must include an air-monitoring component.
  2. The air monitoring component shall specify the following:
    - i. Type of air sampling device(s);
    - ii. Siting of air sampling device(s);
    - iii. Sampling duration and frequency; and
    - iv. Analytical method.
  - I. Frequency of Reporting: The plan shall state how often the items specified in subsection (e)(5)(B), and any other items identified in the plan, will be reported to the district.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
3. Asbestos the Dust Mitigation Plan to the Sacramento Metropolitan Air Quality District for approval, and provide the approval letter to the Department of Environmental Review and Assessment or submit written verification from the Sacramento Metropolitan Air Quality District that no Plan is required.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review and verify submitted documentation.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**☐ MITIGATION MEASURE GE-1: EXPANSIVE SOILS**

These and other measures, as deemed necessary and appropriate by the on-site geotechnical engineer, shall be applied to reduce impacts related to expansive soils to less than significant levels:

- A. Retain an onsite certified Geotechnical Engineer to observe construction in order to provide a complete professional geotechnical engineering service through the observational method. This will allow further evaluation of lots which require expansive soil mitigation following the mass grading. Should any variations or undesirable conditions be encountered the on-site observer can provide supplemental recommendations based on field conditions. Construction observation and testing will allow an opinion to be formed regarding the adequacy of the site preparation, material processing, the acceptability of fill materials, and the extent to which the earthwork construction and the degree of compaction comply with project geotechnical specifications and requirements.
- B. When soil is dry it is essential adequate water be applied during material processing and compaction. The addition of water during borrow activities, as well as during placement of soils should be assumed. Selection of construction equipment which facilitates the addition of moisture should be used to blend wet and dry soils and pulverize oversized blocky clay chunks. Selective grading of this soil can be attempted; however, due to their variable nature separation of this soil is difficult. Placement of the lone formation soils in the deeper portion of the fill is preferable. Placement of select non-expansive soils on the upper portions of the fills may be required to reduce adverse impact of expansive soils. A certified Geotechnical Engineer will be on site to monitor dry season site grading for conformance with this measure.
- C. When soil is wet, adequate provisions should be in place to minimize excessive moisture intrusion. Wheel rolling of graded surfaces should be performed and surfaces should be sloped to minimize ponding of rainfall and surface runoff. Wet season construction should be limited to those areas proposed to be immediately worked on to reduce surface exposure. Building pads without constructed improvements, and which go through a wet season cycle, whether cut or fill pads, may require re-processing of shallower materials prior to foundation construction. A certified Geotechnical Engineer will monitor wet season site grading and, if necessary, identify areas requiring re-processing due to wet season exposure. The on-site professional will monitor grading for conformance with this measure.
- D. Moderately expansive soils should be compacted to at least 90 to 92 percent of the maximum dry density (based on the ASTM D1557 test method) at a moisture content of about 3 to 4 percent over optimum. Should highly expansive soils be encountered, the relative compaction should be between 88 and 92 percent at a minimum of 4 percent over optimum. Prior to site grading additional testing may be required to identify specific compaction and moisture content requirements

which may differ from those moisture content percentages recommended above. Deviations from moisture content recommendations must be approved by a certified on-site Geotechnical Engineer, who will also monitor soil compaction for conformance with this measure.

- E. Minimize the effects of water on cuts and fills adjacent to structures and in underground utility trenches to increase stability of lone soil materials. Water should be collected and appropriately discarded in all aspects of the site development. All building professionals (Geotechnical Engineers, Architects, Civil Engineers, Landscape Architects, general engineering contractors, or similar professional) should review and incorporate appropriate building techniques to minimize and collect surface and subsurface water. Utility trench backfills carrying water due to their permeable nature should all be controlled, directed, and drained away from the site; this will be overseen by a certified Geotechnical Engineer for conformance with this measure.
- F. Lots situated below a roadway section should have subdrainage to divert any water potentially collected and transmitted in street utilities and laterals away from the residences. Where deemed appropriate by a certified Geotechnical Engineer, instillation of cutoff subdrains surrounding a residence will be installed to maintain uniform moisture condition. The on-site professional will monitor drainage installations for conformance with this measure.
- G. Subdrainage of utility trenches should be provided to maintain dry backfill materials in all types of trenches. All utility penetrations through or beneath foundations should be backfilled with low permeability materials, such as slurry, grout, or concrete in order to minimize moisture migration through trench backfill materials when utility trenches under the structures are not intended as drains. The on-site certified Geotechnical Engineer will monitor drainage installations for conformance with this measure.
- H. Drainage of all utility trenches in the subdivision is required. The project Civil Engineer or similar professional should detail collection pipes to manholes and drop inlets of the storm drain system to allow for the collection of utility trench drainage. The collection pipes should be situated near the bottom of the permeable materials used for bedding and shading of pipes. The on-site professional will monitor drainage installations for conformance with this measure.
- I. Finish grading and landscape grading should include positive drainage away from all foundations. All final grades should provide rapid removal of surface water runoff; water should not be allowed to pond on building pads or adjacent to foundations or other structural improvements at any time during or following construction. As determined by the on-site certified Geotechnical Engineer, require slightly steeper grades to swales and drainage areas to help convey moisture off pads, and increase the overall lot slope gradient. The on-site professional will monitor the actions for conformance with this measure.



- J. As determined by the on-site certified Geotechnical Engineer, the need for specialized foundation systems due to the presence of expansive soils will be based on the distribution of materials which occur during site grading. All foundation systems should be initially designed as if subject to potentially expansive soils. Following grading activities those lots located in non-expansive soils and/or bedrock can be delineated and a less aggressive conventional foundation system could be used. The on-site professional will monitor these actions for conformance with this measure. The on-site certified geotechnical engineer shall provide appropriate foundation systems for the specific site conditions following mass grading.
- K. Landscape watering and saturation of pad grades due to landscaping shall be limited. Dry creek beds or other landscape type features may aid in keeping foundation areas dry where turf is desired. Dry-scape landscaping should be considered on lots affected by expansive soils. Landscape mounds adjacent to foundations in yards are not allowed. Lots that contain oak trees which require aeration trenches for root zones may need additional subdrainage measures. The on-site Geotechnical Engineer will monitor these actions for conformance with this measure.
- L. Lots located downslope from one-another will likely experience water migration from uphill landscaping. Landscaping plans shall be review by a certified Geotechnical Engineer and Landscape Architect to assess impacts of terraced lot landscaping. Essential to reducing potential impacts from soil expansion is the collection and channeling of drained water from impermeable surfaces (i.e. roofs, concrete or asphalt paved areas); use of low flow irrigation systems; proper landscape layout and choice of turf locations; and education to the proposed homeowners of proper design and maintenance of landscaping and drainage facilities (such as perimeter subdrains and area drains that they or their landscaper installs). The on-site professional will monitor these actions for conformance with this measure.
- M. At the start of site grading and continuing to the installation of landscaping, provide Sacramento County, Department of Environmental Review and Assessment, with monthly status reports signed by the on-site certified Geotechnical Engineer or similar professional which identifies those lots and areas where expansive soils occur, and identifies which of the above measures were implemented to mitigate expansive soil impacts. If grading or other activity associated with compromising soil integrity does not occur within the monthly period, no report need be submitted.

**Implementation and Notification (Action by Project Applicant):**

- 1. Comply fully with the above measure.
- 2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the

Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

3. Provide the Department of Environmental Review and Assessment with monthly status reports, per GE-1.M, by the 10<sup>th</sup> day of each calendar month.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review monthly status reports, and confer with the geotechnical engineer and with the Sacramento County building department, as necessary.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE BR-1: WETLANDS**

To compensate for the permanent loss of wetlands, the applicant shall perform the following prior to grading or construction within 50 feet of onsite wetlands/swales:

The applicant shall obtain any/all applicable permits from the U.S. Army Corps of Engineers, California Department of Fish and Game and the Central Valley Regional Water Quality Control Board for the proposed modifications to on-site surface waters. A copy of any required permits, or correspondence from the regulatory agency indicating that no permit is required, shall be submitted to the Department of Environmental Review and Assessment. If the Mitigation required by permits do not satisfy the requirements of no net loss of wetlands specified by County General Plan policy CO 96, the applicant shall pay to the County of Sacramento an amount based on a rate of \$35,000 per acre for the unmitigated/uncompensated wetlands, which shall constitute mitigation for purposes of implementing adopted no net loss policies. The payment shall be collected by the Department of Planning and Community Development, and deposited into the Wetlands Restoration Trust Fund.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review the submitted permits, letters, and/or verification of compliance with General Plan Conservation Element Policy No. CO-96 prior to the start of construction within wetland buffer areas.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**☐ MITIGATION MEASURE BR-4: REPLACEMENT OAK PLANTING**

The proposed removal of 88 dbh inches from the project site shall be mitigated through onsite replacement plantings in Open Space Lots A, B, C and D. No planting shall occur within 50 feet of the existing drainage channels on Lot B or Lot C on Residences West or Lot D on Residences East, or within the existing oak groves on Lot A. Prior to the approval of grading or improvement plans or building permits, a Replacement Oak Tree Planting Plan shall be prepared by a certified arborist, licensed landscape architect, or restoration ecologist and shall be submitted to the Environmental Coordinator for approval. The Replacement Oak Tree Planting Plan(s) shall include the following minimum elements:

- A. Oak trees will be limited to deepot seedlings (40 cubic centimeters or larger) or 15-gallon size trees. Planting stock shall not be root bound and shall be field inspected by DERA staff prior to planting.
- B. Trees shall be planted in a "natural character" with tree spacing at minimum 10 feet and maximum of 40 feet (25 feet average) apart. The maximum density of trees shall not exceed 64 trees per acre.
- C. A soil scientist shall perform a site evaluation to determine appropriate planting locations within the open space lots. The findings of the evaluation shall be incorporated into the Replacement Oak Tree Planting Plan. If soils tests show that oaks cannot be replanted due to conditions at the site, BR-5 shall apply.
- D. A temporary drip irrigation system shall be installed for the purpose of providing irrigation to the plantings during the establishment period. A watering schedule shall be included in the Planting Plan. The watering frequency shall be gradually reduced over the establishment period to wean the plantings off regular irrigation.
- E. Deepot seedlings shall be planted according to industry-standard detail, including appropriate protection against herbivory from rodents and other animals. Fifteen-gallon trees shall be planted according to the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot depth boring hole to provide for adequate drainage where necessary, based on the soil evaluation.
- F. Replacement oak trees shall be monitored annually for seven (7) years, and shall achieve a survival rate of 100 percent at the end of the monitoring period. Monitoring reports shall be submitted to the Department of Environmental Review and Assessment by July 1 of each year.
- G. Replacement plantings shall be planted prior to issuance of any building permits and should be planted between October and April, when possible, to enhance survival.
- H. Residents shall be provided with educational materials to minimize damage to the restoration areas. Advisory signage shall be installed along the boundaries of the open space lots where oak tree plantings occur.
- I. Identify the maintenance entity and include their written agreement to provide care and irrigation of the trees for the 7-year establishment period, and to replace

any replacement trees as necessary to achieve 100 percent survival at the end of the establishment period.

- J. Because the County Tree Preservation Ordinance does not apply in the geographical area where mitigation plantings will occur, any onsite and/or offsite planting areas shall be protected in perpetuity through deed restrictions or conservation easements, to the satisfaction of the Environmental Coordinator.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
3. Submit the soils evaluation as a separate document attached to the Replacement Oak Tree Planting Plan, and incorporate the results into the Plan.
4. Submit the informational materials required by Measure BR-4.H to the Department of Environmental Review and Assessment for approval, prior to distribution to residents. Provide a summary of the number of such materials distributed to residents, and the means of distribution, to the Department of Environmental Review and Assessment within 30 days of distribution.
5. Submit documentation on the preferred maintenance entity required by Measure BR-4.I to the Department of Environmental Review and Assessment for approval; no maintenance contract shall be entered into without such approval.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review all submitted documentation for compliance.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature: \_\_\_\_\_ Date: \_\_\_\_\_**



**MITIGATION MEASURE BR-5: TREE COMPENSATION**

If fewer on-site plantings of oak trees on open space lots are allowed, then one or more of the following off-site options to complement onsite planting shall be chosen to mitigate for the loss of oak woodland that cannot be mitigated onsite:

- A. Offsite oak tree replacement plantings may occur within the boundaries of Rancho Murieta. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-4 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

OR

- B. Offsite oak tree replacement plantings may occur outside the boundaries of Rancho Murieta, but within five miles of Rancho Murieta and within Sacramento County. A Replacement Oak Tree Planting Plan consistent with the minimum elements specified in Mitigation Measure BR-4 shall be submitted to the Environmental Coordinator for review and approval prior to the approval of grading or improvement plans or building permits.

OR

- C. An equivalent amount of blue oak woodland canopy lost may be preserved and protected in perpetuity by a conservation easement. The property subject to the conservation easement shall be located within five miles of Rancho Murieta, and within Sacramento County. A draft conservation easement shall be submitted to the Environmental Coordinator for review and approval. A copy of the recorded easement shall be submitted to the Department of Environmental Review and Assessment prior to the approval of grading or improvement plans or building permits.

OR

- D. Replacement for the total number of inches lost may occur through purchase of credits from an oak tree mitigation bank acceptable to the County, prior to approval of grading or improvement plans or building permits.
- E. If all of the above mitigation options are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible, then compensation shall be through payment into the County Tree Preservation Fund consistent with General Plan Policy CO-132. Payment shall be made at a rate of \$325.00 per dbh inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## □ MITIGATION MEASURE BR-6: TREE PROTECTION

With the exception of the trees removed and compensated for through Mitigation Measures BR-4 or BR-5, above, all native oak trees that are 6 inches dbh or larger on the project site, all portions of adjacent off-site native oak trees that are 6 inches dbh or larger which have driplines that extend onto the project site, and all off-site native oak trees that are 6 inches dbh or larger which may be impacted by utility installation and/or improvements associated with this project, shall be preserved and protected as follows:

- A. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of each tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of each tree. Removing limbs that make up the dripline does not change the protected area.
- B. Any protected trees on the site that require pruning shall be pruned by a certified arborist prior to the start of construction work. All pruning shall be in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines."
- C. Prior to initiating construction, temporary protective fencing shall be installed at least one foot outside the driplines of the protected trees within 100-feet of construction related activities, in order to avoid damage to the tree canopies and root systems. The only exception to this requirement will be that the protective fencing can be placed just outside the limits of identified improvements (as identified on the project plans included and discussed in this Initial Study) that are within the driplines of protected trees. No encroachment may exceed 20% of the dripline.
- D. No signs, ropes, cables (except those which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the protected trees. Small metallic numbering tags for the purpose of preparing tree reports and inventories shall be allowed.
- E. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of protected trees.
- F. No grading (grade cuts or fills) shall be allowed within the driplines of protected trees, except where such grading is shown on the project plans and discussed in the text of this document. Grading will not be permissible within more than 20% of the dripline of any tree protected by this measure.
- G. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of any protected tree.
- H. No trenching shall be allowed within the driplines of protected trees. If it is absolutely necessary to install underground utilities within the dripline of a protected tree, the utility line shall be bored and jacked under the supervision of a certified arborist.

- I. The construction of impervious surfaces within the driplines of protected trees shall be stringently minimized. When it is absolutely necessary, a piped aeration system per County standard detail shall be installed under the supervision of a certified arborist.
- J. All portions of permanent fencing that will encroach into the dripline protection area of any protected tree shall be constructed using posts set no closer than 10 feet on center. Posts shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts in order to reduce impacts to the trees.
- K. Trunk protection measures, per Sacramento County standards, shall be used for all protected trees where development/construction activity, including installation of fencing, occurs within 10 feet of the trunk of a tree.
- L. No sprinkler or irrigation system shall be installed in such a manner that sprays water or requires trenching within the driplines of protected trees. An above ground drip irrigation system is recommended.
- M. Landscaping beneath oak trees may include non-plant materials such as bark mulch, wood chips, boulders, etc. The only plant species which shall be planted within the drip-lines of oak trees are those which are tolerant of the natural semi-arid environs of the trees. A list of such drought-tolerant plant species is available at the Department of Environmental Review and Assessment. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
3. Regarding above measures BR-6.B, .H and .I, submit written evidence to the Department of Environmental Review and Assessment from a certified arborist that indicates that the work has been properly completed as required. Provide the name, address and phone number of the certified arborist.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review submitted information from certified arborist.

3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**☐ MITIGATION MEASURE BR-13: PRE-CONSTRUCTION NESTING SURVEYS**

If construction is proposed during the raptor breeding season (February – August), a focused survey for migratory bird nests shall be conducted by a qualified biologist within 30 days prior to the beginning of construction activities in order to identify active nests in the project area. If active nests are found, no construction activities shall take place within 500 feet of the nest until the young have fledged. Trees containing nests that must be removed as a result of project implementation shall be removed during the non-breeding season (September – January). If no active nests are found during the focused survey, no further mitigation will be required.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
3. Prior to the start of construction, submit a written report prepared by the qualified biologist to the Department of Environmental Review and Assessment, which indicates the findings of the required surveys. Include the name, address and phone number of the qualified biologist.
4. Notify the Department of Environmental Review and Assessment no later than 48 hours prior to the start of construction work, and no later than 24 hours after its completion.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review the required written report from the qualified biologist, and consult with him/her as necessary to determine compliance.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.



**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**☐ MITIGATION MEASURE BR-14: SWAINSON'S HAWK FORAGING**

To mitigate for the loss of 36.3 acres of Swainson's hawk foraging habitat, prior to the approval of Improvement Plans or building permits, or recordation of Final Subdivision Map, whichever occurs first, the applicant shall perform one of the following:

- A. The project proponent shall utilize either the fee payment or the land dedication option established in Sacramento County's *Swainson's Hawk Impact Mitigation Program* (Chapter 16.130 of the Sacramento County Code).
- B. The project proponent shall, to the satisfaction of the California Department of Fish and Game, prepare and implement a Swainson's hawk mitigation plan that will include preservation of Swainson's hawk foraging habitat.
- C. Should the County Board of Supervisors adopt a Swainson's hawk mitigation policy/program (which may include a mitigation fee payable prior to issuance of building permits) prior to the implementation of one of the measures above, the project proponent may be subject to that program instead.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
3. Submit written evidence of compliance with one of the above mitigation options to the Department of Environmental Review and Assessment.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review the submitted written evidence of compliance with one of the above mitigation options.
3. Consult with the California Department of Fish and Game and/or the Planning Department as necessary to determine compliance.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE BR-19: BURROWING OWL NESTING**

The applicant shall avoid burrowing owls and their nest sites and habitat during construction. The following measures shall be implemented to reduce impacts to a less-than-significant level:

- A. Prior to construction activity, a qualified biologist shall conduct focused surveys for burrowing owls where suitable habitat is present on the areas slated for construction. Suitable habitat includes all upland areas that are not developed, and all edge areas (including vegetated berms, levees, and drainage ditches). Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities. Surveys shall be conducted in accordance with current DFG protocol.
- B. If no occupied burrows are found in the survey area, a letter report documenting survey methods and findings will be submitted to the County and DFG for review and approval, and no further mitigation is necessary.
- C. If occupied burrows are found, occupied burrows will be avoided until the owls inhabiting the burrows have been removed and relocated using passive exclusion techniques approved by DFG.
- D. No occupied burrows will be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist verifies through non-invasive methods that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

**Implementation and Notification (Action by Project Applicant):**

- 1. Comply fully with the above measure.
- 2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
- 3. Prior to the approval of Improvement Plans or building permits, submit a written report prepared by the qualified biologist to the Department of Environmental Review and Assessment, which indicates the findings of the required survey. Include the name, address and phone number of the qualified biologist.
- 4. Submit documentation that verifies compliance with DFG requirements, if any.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Review biologist's report and documentation from DFG, as applicable.
3. Monitor compliance during periodic site inspections of the construction work.
4. Participate in any Final Inspection(s) as necessary.

**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE CR-1: CULTURAL RESOURCES**

To ensure protection of cultural resources, the following measure applies. This measure shall be included verbatim as a Construction Note on all Plans and Specifications for the project:

Should any cultural resources, such as structural features, unusual amounts of bone or shell, artifacts, human remains, or architectural remains be encountered during any development activities, work shall be suspended and the Department of Environmental Review and Assessment shall be immediately notified at (916) 874-7914.

At that time, the Department of Environmental Review and Assessment will coordinate any necessary investigation of the find with appropriate specialists as needed. The project proponent shall be required to implement any mitigation deemed necessary for the protection of the cultural resources. In addition, pursuant to Section 5097.97 of the State Public Resources Code and Section 7050.5 of the State Health and Safety Code, in the event of the discovery of human remains, all work is to stop and the County Coroner shall be immediately notified. If the remains are determined to be Native American, guidelines of the Native American Heritage Commission shall be adhered to in the treatment and disposition of the remains.

**Implementation and Notification (Action by Project Applicant):**

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Department of Environmental Review and Assessment for review and approval prior to the start of any construction work (including clearing and grubbing).
3. If cultural resources are encountered, notify the Department of Environmental Review and Assessment immediately.
4. If no cultural resources are encountered, the applicant shall provide the Department of Environmental Review and Assessment with a signed statement to that effect.

**Verification (Action by the Department of Environmental Review and Assessment):**

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. If cultural resources are encountered, the Department of Environmental Review and Assessment will coordinate an investigation of the site with appropriate

specialists as needed. After investigation, the applicant may be required to implement additional mitigation for the cultural resources.

3. Review the signed statement if no resources are encountered.
4. Monitor compliance during periodic site inspections of the construction work.
5. Participate in any Final Inspection(s) as necessary.



**Comments:**

**Completion of Mitigation Verified:**

**Department of Environmental Review and Assessment**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**MITIGATION MEASURE MM-1**

Comply with the Mitigation Monitoring and Reporting Program (MMRP) for this project as follows:

- A. The applicant shall comply with the MMRP for this project, including the payment of 100% of the Department of Environmental Review and Assessment staff costs, and the costs of any technical consultant services incurred during implementation of the MMRP. The initial estimate of these costs is \$ . If the initial estimate exceeds the actual monitoring costs, the balance shall be refunded to the applicant, and if the actual monitoring costs exceed the initial estimate, the applicant shall be responsible to pay the additional amount.
- B. Until the MMRP has been recorded and the estimated MMRP fee has been paid, no final parcel map or final subdivision map for the subject property shall be approved; and no encroachment, grading, building, sewer connection, water connection or occupancy permit from Sacramento County shall be approved.



## Rancho Murieta Community Services District

15160 Jackson Road • P.O. Box 1050 Rancho Murieta, CA 95683 • 916-354-3700 • Fax 916-354-2082

Visit our website-[www.rmcsd.com](http://www.rmcsd.com)

August 21, 2024

Katherine Bardis  
Reynen & Bardis Homes  
350 University Ave, Suite 180  
Sacramento, CA 95825

**Re: Water and Sewer Will Serve Letter for --  
Development Project: Riverview Development (110 lots)**

Dear Ms. Bardis:

This letter responds to your request for a water and sewer letter for the above development project and property ("Riverview"). The project property is located within the Rancho Murieta Community Services District ("District"). The District will provide water and sewer services for the parcels above based on the Conditions of Approval (attached as Exhibit A) and the following conditions:

1. New utility service and service connections are subject to the District Code and any other applicable District ordinances, resolutions, rules, regulations, policies, fees, and charges, which may be amended from time to time.
2. Water and sewer service to the project property is also conditioned upon full compliance with that specific Financing and Services Agreement dated March 17, 2014, known as the 670 FSA, including payment of all amounts due as reimbursement for water treatment plant and wastewater improvements provided in the agreement. A copy of the contract is on file with the District and saved on the District's website.
3. Services are subject to the District having sufficient treated water distribution system storage capacity to adequately serve the connections without impacting the water service to existing customers.
4. Riverview residences shall comply with all State mandates for indoor and outdoor water usage. All appliances installed in the homes shall comply with the State of California requirements to maximize water efficiency. Riverview will comply with the RMCS D Water Shortage Contingency Plan per the California Water Code and require a 50% water use reduction during a catastrophic drought as determined by the Board of Directors of RMCS D.
5. An adequate water treatment system for these units is completed and in place. Water transmission pipelines to this subdivision have been installed up to its boundary line by earlier subdivisions.

*Serving the Community for over 30 years*

Board of Directors: Tim Maybee, President • Martin Pohll, Vice-President • Randy Jenco • Linda Butler • Martin Pohll •  
Stephen Booth  
General Manager • Mimi Morris

6. Ample water for everyday use and fire protection is available and will be furnished to each lot/unit upon payment of related District fees on demand.

This letter is a statement of intent to provide water and sewer services as of the date set forth above. It is not a contract, offer to contract, or binding commitment to provide service or reserve capacity for the project.

Sincerely,

Melinda (Mimi) Morris

General Manager  
Rancho Murieta Community Services District

Attachment: Exhibit A

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## DIRECTOR OF OPERATIONS

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DEPARTMENT: WATER/WASTEWATER/DRAINAGE

FLSA OVERTIME STATUS:  
EXEMPT BARGAINING UNIT: N/A

PENDING APPROVAL BY BOARD OF DIRECTORS

---

REVISED ~~June~~ August 2024

**SUMMARY:** With direction from the General Manager, plans, organizes and directs the District's Operations and Maintenance Department; establishes goals, objectives and measurement indicators for the department; establishes internal policies and procedures related to departmental activities; through subordinate managers and supervisors, directs the work of staff engaged in distribution maintenance and construction, water treatment and production, water quality, facility maintenance, environmental compliance, laboratory services, and ensures the effectiveness of departmental programs; provides responsible advice and counsel to the Board, General Manager, Chief Plant Operator and Utility Supervisor on a variety of issues; participates in the Executive Management team to develop District-wide policies and procedures and to advance the goals and mission of the District; provides highly responsible administrative staff assistance to the General Manager; represents the District to outside groups and organizations; serves as District liaison on various interagency coordination projects; and performs other related work as required.

**SUPERVISION:** Receives general supervision from the General Manager. Provides direct supervision over Chief Plant Operator and Utility Supervisor, and staff thereunder.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

- Plans, organizes, coordinates and directs a wide variety of water distribution and treatment, wastewater collection, treatment, and tertiary reclamation plant operations, reclaimed water distribution and management, storm water management (small MS4), flood control, levees and drainage, raw water deliveries and storage, including operation and maintenance of earth-filled dams, drainage systems, lakes and reservoirs, capital and operational construction and maintenance projects, functions of the District;
- Directs and participates in the development of goals, objectives, rules, policies and operating procedures for field operations, develops long range strategic and financial goals for the department.

- Coordinates preparation of the annual budget request for the Operations and Maintenance Department;
- Reviews staffing, equipment, and supply needs based upon recent trends and planned activities; monitors expenditures after budget adoption to ensure efficient operations; approves the requisition of materials, supplies, and equipment
- Maintains water rights permits and oversees preparation of periodic reports to Federal, State, County and local agencies.
- Monitors potential impacting legislative and regulatory activities and coordinates with District's external representative(s) and other internal and external stakeholders as appropriate to protect the interests of the district.
- Studies and recommends technology, procedures, and practices to improve operational efficiency; evaluates alternatives for performing needed work; attends project review meetings to evaluate progress of ongoing construction or maintenance activities, coordinates and routinely inspects construction and maintenance work performed by contractors, prepares cost estimates and specifications for outside contract work including Capital Improvement Projects.
- Recommends selection of operations and maintenance consultants; oversees the coordination and management of consultants providing engineering and information technology services to the department.
- Establishes and oversees comprehensive programs for preventive maintenance, work safety, training and energy conservation.
- Attends Board of Directors and Board Committee meetings; prepares and presents staff reports and agenda items for consideration by the Board; serves as advisor to the General Manager and Board regarding operations and maintenance issues.
- Provides technical information, advice, and consultation to the District Board and General Manager on water, wastewater, recycled water, and drainage activities.
- Directs the preparation and prepares a variety of reports related to operations, functions, and activities.
- Visits District facilities and job sites to oversee work in progress and provide needed direction; responds to major emergencies during and after hours as needed; directs the investigation and correction of customer and operational complaints within areas of operations, responds respectfully to sensitive citizen inquiries and complaints concerning operations and activities.
- Ensures that long-term training objectives are established and implemented so that staff possess the depth of technical skills and knowledge necessary to maintain effective and efficient operations as well as for succession planning management.
- Serves on District or community committees as assigned.

**QUALIFICATION REQUIREMENTS:**

To perform this job successfully, an individual must be able to administer and manage the operations of the water, wastewater, and drainage functions and to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

Knowledge of the principles and methods of water distribution, water treatment, and wastewater treatment, collections, operations and maintenance. Knowledge of the principles of organization and management; principles of supervision, training, and effective personnel management; budgetary and job costing practices. Familiarity with safety programs and practices related to the control and use of hazardous materials and substances, confined space entry and related safety issues. Knowledge of energy conservation programs and practices. Familiarity and ability to comprehend and apply applicable Federal, State, county and local environmental regulations. Knowledge of grant requirements and applications from federal, state and private entities.

**SUPERVISORY RESPONSIBILITIES:**

Ability to:

- Assign, review, plan, coordinate and guide the work of other employees.
- Recommend the transfer, promotion, salary increase, discipline or discharge of staff;
- Evaluate the work of employees and prepare performance appraisals;
- Promote staff development and motivation and to train staff;
- Analyze problems that arise in the areas under supervision and recommend solutions;
- Prepare procedures and processes for tracking and evaluating the budget throughout the year; and
- Use independent judgment in fairly non-routine situations, such as, but not limited to: water leaks, calculating anticipated revenue and/or expenditures and ensuring adequate supervision of programs.

**Desirable Qualifications**

In addition to evaluating each candidate's relative ability, as demonstrated by quality and breadth of experience, the following factors will provide the basis for competitively evaluating each candidate:

- Strong leadership, interpersonal, and problem-solving skills.
- Knowledge and experience in water and wastewater treatment and management.
- Knowledge of the principles, practices, and trends of public administration, organization, and management.
- Knowledge of water and wastewater treatment policy, programs, trends, and issues.
- Knowledge of the interrelationship of federal, state, local, professional, and voluntary water agencies and the programs and services of such agencies.
- Demonstrated ability to review regulatory guidance and complex, interrelated policies, procedures, and practices.

- Demonstrated ability to manage and coordinate with large teams in multiple locations.
- Demonstrated ability to analyze complex problems and develop effective courses of action to solve them.
- Demonstrated ability to collaborate across high levels of government, external organizations, providers, industry associations, and member representatives.
- Demonstrated ability to lead change and transformation efforts within and outside the organization, utilizing excellent communication and change management strategies.

## Minimum Qualifications

### EDUCATION:

~~Graduation from high school or GED equivalent is required.~~

~~Bachelor of Science degree in civil/environmental engineering, public/business administration, chemistry, natural sciences or related field preferred.~~

Education: Equivalent to graduation from college with a degree in civil/environmental engineering, public/business administration, chemistry, natural sciences or related field required. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.)

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Master's degree in science, engineering, or business is highly desirable.

Registration with the State of California as a Professional Engineer is highly desirable.

### EXPERIENCE:

Five (5) years effective Water and Wastewater utility administration experience including supervision, budget preparation, personnel management, operations and maintenance analysis, and analytical report preparation including four (4) years in a supervisory or management capacity.

### LICENSES AND/OR CERTIFICATES:

Possession of the category of a current California Driver's license required by the State Department of Motor Vehicles to perform the essential duties of the position. Continued maintenance of a valid driver's license, insurability, and compliance with established District vehicle operation standards are conditions of continuing employment.

Possession and maintenance of a Grade 4 Wastewater Plant Operator's Certificate of Competence issued by the California State Water Resources Control Board within 18 months of entering this position is required, and Possession and maintenance of a Grade 3 Water Treatment Operator's Certificate required by the California Department of Health Services within 18 months of entering this position is required.

Possession and maintenance of a Grade 1 Collection System Maintenance Certificate issued by either the CWEA or AWWA.



**OTHER SKILLS AND ABILITIES:**

Knowledge of supervisory principles and practices; Operation, administration, policies and procedures relating to governmental administration and finance; operate a computer at a skill level and with the degree of accuracy to meet job requirements; data management including word processing, spreadsheet and data base principles; Methods of preparing and monitoring annual budgets.

Ability to work with and communicate clearly with various Federal, State, County and local regulatory agencies, build and maintain a good working relationship with the applicable agencies.

Strong written and verbal communication skills.

**PHYSICAL DEMANDS:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to sit, talk, and hear. The employee frequently is required to walk. The employee is occasionally required to stand; use hands to manipulate, handle and feel objects, tools, and controls; reach with hands and arms; climb and balance; and taste and smell. The employee may be exposed to extreme dampness, heights and vibrations.

The employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, and depth perception.

**WORK ENVIRONMENT:**

The work environment characteristics described here are representative of those encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee may occasionally work near moving mechanical parts and in outside weather conditions and may occasionally be exposed to wet and/or humid conditions, toxic or caustic chemicals, biological hazards, vibration, and risk of electrical shock.

The noise level in the work environment is usually moderate.

# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## DIRECTOR OF OPERATIONS

---

DEPARTMENT: WATER/WASTEWATER/DRAINAGE

FLSA OVERTIME STATUS:

EXEMPT BARGAINING UNIT: N/A

PENDING APPROVAL BY BOARD OF DIRECTORS

---

REVISED August 2024

**SUMMARY:** With direction from the General Manager, plans, organizes and directs the District's Operations and Maintenance Department; establishes goals, objectives and measurement indicators for the department; establishes internal policies and procedures related to departmental activities; through subordinate managers and supervisors, directs the work of staff engaged in distribution maintenance and construction, water treatment and production, water quality, facility maintenance, environmental compliance, laboratory services, and ensures the effectiveness of departmental programs; provides responsible advice and counsel to the Board, General Manager, Chief Plant Operator and Utility Supervisor on a variety of issues; participates in the Executive Management team to develop District-wide policies and procedures and to advance the goals and mission of the District; provides highly responsible administrative staff assistance to the General Manager; represents the District to outside groups and organizations; serves as District liaison on various interagency coordination projects; and performs other related work as required.

**SUPERVISION:** Receives general supervision from the General Manager. Provides direct supervision over Chief Plant Operator and Utility Supervisor, and staff thereunder.

**ESSENTIAL DUTIES AND RESPONSIBILITIES** include the following. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

- Plans, organizes, coordinates and directs a wide variety of water distribution and treatment, wastewater collection, treatment, and tertiary reclamation plant operations, reclaimed water distribution and management, storm water management (small MS4), flood control, levees and drainage, raw water deliveries and storage, including operation and maintenance of earth-filled dams, drainage systems, lakes and reservoirs, capital and operational construction and maintenance projects, functions of the District;
- Directs and participates in the development of goals, objectives, rules, policies and operating procedures for field operations, develops long range strategic and financial goals for the department.

- Coordinates preparation of the annual budget request for the Operations and Maintenance Department;
- Reviews staffing, equipment, and supply needs based upon recent trends and planned activities; monitors expenditures after budget adoption to ensure efficient operations; approves the requisition of materials, supplies, and equipment
- Maintains water rights permits and oversees preparation of periodic reports to Federal, State, County and local agencies.
- Monitors potential impacting legislative and regulatory activities and coordinates with District's external representative(s) and other internal and external stakeholders as appropriate to protect the interests of the district.
- Studies and recommends technology, procedures, and practices to improve operational efficiency; evaluates alternatives for performing needed work; attends project review meetings to evaluate progress of ongoing construction or maintenance activities, coordinates and routinely inspects construction and maintenance work performed by contractors, prepares cost estimates and specifications for outside contract work including Capital Improvement Projects.
- Recommends selection of operations and maintenance consultants; oversees the coordination and management of consultants providing engineering and information technology services to the department.
- Establishes and oversees comprehensive programs for preventive maintenance, work safety, training and energy conservation.
- Attends Board of Directors and Board Committee meetings; prepares and presents staff reports and agenda items for consideration by the Board; serves as advisor to the General Manager and Board regarding operations and maintenance issues.
- Provides technical information, advice, and consultation to the District Board and General Manager on water, wastewater, recycled water, and drainage activities.
- Directs the preparation and prepares a variety of reports related to operations, functions, and activities.
- Visits District facilities and job sites to oversee work in progress and provide needed direction; responds to major emergencies during and after hours as needed; directs the investigation and correction of customer and operational complaints within areas of operations, responds respectfully to sensitive citizen inquiries and complaints concerning operations and activities.
- Ensures that long-term training objectives are established and implemented so that staff possess the depth of technical skills and knowledge necessary to maintain effective and efficient operations as well as for succession planning management.
- Serves on District or community committees as assigned.

## **QUALIFICATION REQUIREMENTS:**

To perform this job successfully, an individual must be able to administer and manage the operations of the water, wastewater, and drainage functions and to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required.

Knowledge of the principles and methods of water distribution, water treatment, and wastewater treatment, collections, operations and maintenance. Knowledge of the principles of organization and management; principles of supervision, training, and effective personnel management; budgetary and job costing practices. Familiarity with safety programs and practices related to the control and use of hazardous materials and substances, confined space entry and related safety issues. Knowledge of energy conservation programs and practices. Familiarity and ability to comprehend and apply applicable Federal, State, county and local environmental regulations. Knowledge of grant requirements and applications from federal, state and private entities.

## **SUPERVISORY RESPONSIBILITIES:**

Ability to:

- Assign, review, plan, coordinate and guide the work of other employees.
- Recommend the transfer, promotion, salary increase, discipline or discharge of staff;
- Evaluate the work of employees and prepare performance appraisals;
- Promote staff development and motivation and to train staff;
- Analyze problems that arise in the areas under supervision and recommend solutions;
- Prepare procedures and processes for tracking and evaluating the budget throughout the year; and
- Use independent judgment in fairly non-routine situations, such as, but not limited to: water leaks, calculating anticipated revenue and/or expenditures and ensuring adequate supervision of programs.

## **Desirable Qualifications**

In addition to evaluating each candidate's relative ability, as demonstrated by quality and breadth of experience, the following factors will provide the basis for competitively evaluating each candidate:

- Strong leadership, interpersonal, and problem-solving skills.
- Knowledge and experience in water and wastewater treatment and management.
- Knowledge of the principles, practices, and trends of public administration, organization, and management.
- Knowledge of water and wastewater treatment policy, programs, trends, and issues.
- Knowledge of the interrelationship of federal, state, local, professional, and voluntary water agencies and the programs and services of such agencies.
- Demonstrated ability to review regulatory guidance and complex, interrelated policies, procedures, and practices.

- Demonstrated ability to manage and coordinate with large teams in multiple locations.
- Demonstrated ability to analyze complex problems and develop effective courses of action to solve them.
- Demonstrated ability to collaborate across high levels of government, external organizations, providers, industry associations, and member representatives.
- Demonstrated ability to lead change and transformation efforts within and outside the organization, utilizing excellent communication and change management strategies.

## **Minimum Qualifications**

### **EDUCATION:**

Education: Equivalent to graduation from college with a degree in civil/environmental engineering, public/business administration, chemistry, natural sciences or related field required. (Additional qualifying experience may be substituted for the required education on a year-for-year basis.)

Master's degree in science, engineering, or business is highly desirable.

Registration with the State of California as a Professional Engineer is highly desirable.

### **EXPERIENCE:**

Five (5) years effective Water and Wastewater utility administration experience including supervision, budget preparation, personnel management, operations and maintenance analysis, and analytical report preparation including four (4) years in a supervisory or management capacity.

### **LICENSES AND/OR CERTIFICATES:**

Possession of the category of a current California Driver's license required by the State Department of Motor Vehicles to perform the essential duties of the position. Continued maintenance of a valid driver's license, insurability, and compliance with established District vehicle operation standards are conditions of continuing employment.

Possession and maintenance of a Grade 4 Wastewater Plant Operator's Certificate of Competence issued by the California State Water Resources Control Board within 18 months of entering this position is required, and Possession and maintenance of a Grade 3 Water Treatment Operator's Certificate required by the California Department of Health Services within 18 months of entering this position is required.

Possession and maintenance of a Grade 1 Collection System Maintenance Certificate issued by either the CWEA or AWWA.

**OTHER SKILLS AND ABILITIES:**

Knowledge of supervisory principles and practices; Operation, administration, policies and procedures relating to governmental administration and finance; operate a computer at a skill level and with the degree of accuracy to meet job requirements; data management including word processing, spreadsheet and data base principles; Methods of preparing and monitoring annual budgets.

Ability to work with and communicate clearly with various Federal, State, County and local regulatory agencies, build and maintain a good working relationship with the applicable agencies.

Strong written and verbal communication skills.

**PHYSICAL DEMANDS:**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is regularly required to sit, talk, and hear. The employee frequently is required to walk. The employee is occasionally required to stand; use hands to manipulate, handle and feel objects, tools, and controls; reach with hands and arms; climb and balance; and taste and smell. The employee may be exposed to extreme dampness, heights and vibrations.

The employee must occasionally lift and/or move up to 50 pounds. Specific vision abilities required by this job include close vision, distance vision, color vision, peripheral vision, and depth perception.

**WORK ENVIRONMENT:**

The work environment characteristics described here are representative of those encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee may occasionally work near moving mechanical parts and in outside weather conditions and may occasionally be exposed to wet and/or humid conditions, toxic or caustic chemicals, biological hazards, vibration, and risk of electrical shock.

The noise level in the work environment is usually moderate.



Rancho Murieta residents are actively engaged, love the environment in which they live and are focused on maintaining a safe and secure community. The new Director of Operations will be viewed as one of the community's most visible public leaders. The successful candidate is ideally well-versed in community and public relations and possess an open, friendly demeanor that encourages community engagement and displays a commitment to exceptional customer service.

### COMPENSATION & BENEFITS

The annual salary for this position goes up to \$169,512 depending on qualifications and experience. The District offers a comprehensive benefit package including: vacation; sick leave; administrative leave; 12 holidays; Full coverage of medical, dental, and vision; life and long-term disability insurance; retiree medical; and a 2.5% employer contribution to deferred compensation. PERS retirement plans: 2% at 55 (Local Government) for PERS Classic (7% ee contribution);  
2% at 62 for PERS PEPRA (7.75% ee contribution). The District does not participate in Social Security.

### EXPERIENCE/EDUCATION/CERTIFICATIONS

A minimum of five years water treatment and management experience in the key areas identified in this brochure are expected.

**Grade 4 Wastewater Plant Operator's Certificate of Competence** required within 18 months of entering this position.

**Grade 3 Water Treatment Operator's Certificate** required within 18 months of entering this position  
**Graduation from high school** or GED equivalency required.

CA Driver's License required.

**Bachelors degree** in civil/environmental engineering, public/business administration, chemistry, natural sciences or related field required. **Additional qualifying experience may be substituted for the required education one a year-for-year basis.** Masters degree in science, engineering, or business highly desirable.

### APPLICATION PROCESS

To be considered for this exceptional career opportunity, submit your resume, cover letter, list of two work-related references (one supervisor and one direct report) by Monday, ~~July 29~~ August 19. Resumes should reflect years and months of employment, beginning/ending dates as well as size of staff and budgets you have managed.

Please email your application materials to:  
hlizama@rmcsd.com

Resumes will be screened in relation to the criteria outlined in this brochure. Candidates with the most relevant qualifications will be given preliminary interviews by the HR team. Candidates deemed most qualifies will be invited to participate in further interview and selection activities. An appointment will be made following reference and background checks.

# Rancho Murieta Community Services District DIRECTOR OF OPERATIONS



*This is a unique opportunity for an experienced, forward-thinking and community-minded leader to join a dedicated staff in managing water, wastewater and security services for an exceptional master planned community.*

## THE COMMUNITY

Nestled below the foothills of the Sierra Nevada Mountains, Rancho Murieta is a Planned Unit Development in Sacramento County, ideally located 25 miles Southeast from downtown Sacramento and 16 miles from Elk Grove, Folsom and Rancho Cordova. This private, gated, master planned community spans 3,500 acres of rolling hills and proudly boasts two championship golf courses at the Rancho Murieta Country Club. Flowing through the community, the Cosumnes River separates Rancho Murieta North from Rancho Murieta South and a beautiful bridge spanning the river provides access between the communities to bicycles, golf carts and pedestrians. Other world-class amenities include first rate community recreational facilities with championship bass fishing, boating and excellent hiking and mountain biking trails in addition to championship golf, tennis and pickleball facilities; a multitude of baseball, softball, soccer and lacrosse fields, trails, parks and incredible open spaces; the full-service 100-acre Murieta Equestrian Center; a hotel and spa, and a general aviation airport. Shopping is available within the community including grocery, hardware, banking, post office, several restaurants and personal services (dental, hair stylists, personal training, etc.). The combination of privacy, security (24/7/365), unlimited recreational opportunities and the feeling of living in a wildlife preserve (no hunting allowed) provides for an incredible quality of life all within 25 miles of the state capitol and for a much more affordable price than other major cities in the state.



Rancho Murieta is served by the award-winning Elk Grove Unified School District (EGUSD) and has some of the highest graduation rates in the State of California. Schools serving Rancho Murieta include Cosumnes River Elementary School, Katherine L. Albani Middle School, Pleasant Grove High School in addition to several other EGUSD schools. Many local children attend private/parochial elementary schools and high schools located in nearby communities as well.

Currently there are almost 2,800 households and 6,000 residents, with total build out allowing for no more than 5,000 housing units. The community is governed and serviced by several elected bodies, chiefly the Rancho Murieta Community Services District and the Rancho Murieta Association.

## THE COMMUNITY SERVICES DISTRICT

The Rancho Murieta Community Services District is the only entity that provides water, wastewater, storm water, security, and solid waste disposal services to the entire community. The mission of the District is to take a leadership role in responding to the needs of the residents and to deliver superior community services efficiently and professionally at a reasonable cost while responding to and sustaining the enhanced quality of life the community desires. The source of water for all uses is primarily the Cosumnes River plus some direct rainfall into the District's reservoir watersheds.



## THE POSITION

The Director of Operations is responsible for the engineering and operations activities of the District. S/he will also oversee development activities and financial expenses and reimbursements. The position is responsible for overseeing maintenance and improvement of District facilities and services. The Director of Operations reports to the General Manager and provides direction to the Chief Plant Operator and the Utilities Supervisor.

## THE IDEAL CANDIDATE

The District is seeking a highly ethical and pragmatic leader, who embraces open government and transparency, as well as having solid management, financial, and communication skills. It is expected that the new Director of Operations will treat all fairly, equally and respectfully and will provide reasoned and sound recommendations for the Board's consideration. The Director of Operations will provide strategic leadership, focus, and direction in support of the Board of Directors, District Improvements Committee and operations. The Director of Operations also interacts with various state agencies in ensuring regulatory compliance. The Director of Operations must possess outstanding listening and communication skills as well as excellent interpersonal skills. The Director of Operations will provide open, responsive & customer-oriented service to the community. S/he will be expected to maintain and improve cooperative working relationships with the county and other agencies in the region and the other governing bodies within the District. Experience working with planning/land use and community development very helpful.

Raw water from the river can only be drawn during the winter and spring months and is pumped from Granlees Dam into the Calero, Chesbro and Clementia reservoirs. Wastewater regulations require that it be treated and used for irrigation of the golf courses. When needed, the stored, partially treated wastewater is processed through a state-of-the-art tertiary system and the golf courses use this treated effluent to supplement and/or replace raw river water and to reduce wastewater reservoir levels. Long term, some additional reclaimed water will be used for parks and future homeowner irrigation. Storm water and irrigation runoff is collected in the drainage system throughout the community, a major component being the extensive amount of natural swales, streams and tributaries. Runoff is filtered through detention ponds prior to being returned to the Cosumnes River. The District is governed by a five-member Board of Directors elected at-large by the registered voters residing in the District and serve four-year staggered terms. District committees active today are the Improvements Committee, Security Committee, Personnel Committee, Communications and Technology Committee, Parks Committee and the Finance Committee. The District is healthy financially, has 32 full-time equivalent employees, maintains over \$56 million in plant, property, and equipment assets and this year's revenues are projected at \$10 million.

For more information on this incredible community please visit [www.rmcsd.com](http://www.rmcsd.com)





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## MEMORANDUM

Date: August 14, 2024  
To: Board of Directors  
From: Travis Bohannon, Interim Director of Operations  
Subject: Raw water conveyance pipeline from Granlees pump station to Calero Reservoir repair.

---

### HISTORY

On June 20, 2024, it was reported to the district that there was a potential leak in the Clementia spillway. After an investigation, it was believed that the raw water line that takes raw water from the Cosumnes River to Calero reservoir is broken.

### PROJECT UPDATE

On 8/1/24, the raw water line was exposed, and the break was found. TNT did more digging to completely expose the whole pipe. We will not be able to use the same type of pipe to do the repair due to the 1-year lead time to get a new stick of pipe in the same material. After the pipe was exposed and examined further, it was determined that a patch being welded on the break would not work because of the thickness of the pipe. It was determined that a 10-foot section of the pipe will be removed and replaced with a new ductile iron pipe. Since the old pipe is 33" and the new pipe will be 36", it was decided that new flanges would be fabricated to be able to adapt the two pipes together. TNT is in the process of getting the pipe and materials to make the repair. It is estimated to be completed by September 13<sup>th</sup>. Below are a couple of pictures of the pipe and the break.



**RESOLUTION NO. R2024-09**

**A RESOLUTION OF THE BOARD OF DIRECTORS AUTHORIZING THE DISTRICT TO REPAIR THE GRANLEES RAW WATERLINE LEAK UNDER THE MASTER SERVICES AGREEMENT WITH TNT INDUSTRIAL CONTRACTORS, INC. (TNT)**

**WHEREAS**, the District maintains the Granlees Raw Water line, and it was determined that the 33" raw water line that transports water from Cosumnes River via Granlees pump station to Calero Reservoir is leaking; and

**WHEREAS**, on July 15, 2024, TNT exposed the inspection plate on the raw water lines so that a video camera could be put into the pipe to locate the leak. On July 16, 2024, a camera was placed into the pipe and located multiple leaks and cracks in the pipe;

**WHEREAS**, at its regular meeting on July 17, 2024, the Board of Directors added the item to the agenda after determining unanimously that an emergency existed as defined by Government Code section 54956.5 and there was an immediate need to act, and the emergency came to the attention of the District subsequent to the agenda being posted; and

**WHEREAS**, the District has a limited supply of water and does not have time to issue requests for proposals ("RFPs") to solicit proposals to fix the leaks;

**WHEREAS**, the District did not know the material of the pipe or what exactly was needed for the repairs and did not have five weeks to bring RFPs back to the Board, the Board directed the District staff to have TNT Industrial Contractors, Inc. repair the leak under the Master Services Agreement with TNT Industrial Contractors, Inc., dated January 19, 2023.

**NOW, THEREFORE, BE IT RESOLVED AND ORDERED AS FOLLOWS:**

1. The Rancho Murieta Community Services District Board of Directors ratifies the direction of the Board adopted on July 17, 2024, and directs the General Manager to repair the leak under the Master Services Agreement with TNT Industrial Contractors, Inc.,
2. Authorize the cost of the repairs to be paid out of the Water Capital Replacement Reserve Fund, including the cost of TNT, materials, and supplies.
3. The General Manager is authorized to take all necessary and appropriate actions to carry out the purpose and intent of this resolution.
4. This Resolution shall take effect immediately upon adoption.
5. The Secretary shall certify to the adoption of this resolution.

PASSED, APPROVED, and ADOPTED by the Board of Directors of the Rancho Murieta Community Services District, Sacramento County, California, at a meeting held on the 21st day of August 2024, by the following roll call vote:

**Ayes:**  
**Noes:**  
**Absent:**  
**Abstain:**

---

Timothy E. Maybee, President of the Board  
Rancho Murieta Community Services District

[SEAL]  
ATTEST:

---

Amelia Wilder, District Secretary

## MEMORANDUM

Date: August 15, 2024  
 To: Board of Directors  
 From: Travis Bohannon, Interim Director of Operations  
 Subject: RFP Review for Professional Services for District Engineer and Construction Inspection Services

---

### RECOMMENDED ACTION

It is recommended that the Board approve the three-year contract for Professional Services for District Engineer and Construction Inspection Services with Domenichelli and Associates on a time and material basis.

### BACKGROUND

The three-year contract previously entered into with Domenichelli and Associates for Engineer and Construction Inspection Services expired in March of 2024. A new RFP was issued and sent directly to 13 engineering firms, posted to the District website and on CSDA’s website. The district received two bids for Engineering Services. One bid was from Domenichelli and Associates and the other bid was from SNG & Associates. The bids were reviewed and scored by Director Pohll and I. Staff are recommending continuing with Domenichelli and Associates. Below is the scoring sheet for the bids received.

<i>MASTER RFP Scoring Matrix for On-Call Professional Services for District Engineer and Construction Inspection Services</i>					
		Respondents (Score Respondants 0-10)			
		Domenichelli & Assoc		SNC	
Criteria	Criteria Weight	Score	Total	Score	Total
<b>1. Understanding of Scope of Work &amp; Project Objectives</b>	10	9	90	7	70
<b>2. Project Approach</b>	20	10	200	6	120
<b>3. Quality of Overall Work Plan</b>	5	8	40	7	35
<b>4. Proposed Project Schedule for Timely Completion of Work</b>	5	10	50	5	25
<b>5. Company Experience Completing Similar Projects</b>	10	10	100	7	70
<b>6. Individual Team Member Experience Completing Similar Projects</b>	10	9	90	6	60
<b>7. Reference Quality - to be scored by one reviewer</b>	5	9	45	8	40
<b>8. Pricing - to be ranked after items #1-7 are complete and fitted between 0-10 based on highest to lowest pricing.</b>	35	0	0	0	0
		Totals:	<b>615</b>	Totals:	<b>420</b>
Rank			<b>1</b>		<b>2</b>

## **SUMMARY**

It is recommended the Board approve the contract with Domenichelli and Associates for a three-year term for Engineering Services and Construction Inspection Services on a time and materials basis. This item was reviewed by the Improvements Committee, who recommended it be sent to the Board for approval.

**PROPOSAL FOR  
ON-CALL PROFESSIONAL SERVICES FOR DISTRICT ENGINEER  
AND  
CONSTRUCTION INSPECTION SERVICES**



SUBMITTED BY:



Domenichelli and Associates, Inc.  
5180 Golden Foothill Parkway, Suite 220  
El Dorado Hills, CA 95762  
PHONE: (916) 933-1997  
<http://www.daengineering.net>

**MAIN PROPOSAL CONTACT:**

Joe Domenichelli, President  
PHONE: (916) 933-1997,  
CELL: (916) 716-4207,  
[joed@daengineering.net](mailto:joed@daengineering.net)

**Proposal Date:** July 26, 2024





July 26, 2024

Mr. Travis Bohannon  
Director of Field Operations  
Rancho Murieta Community Services District (RMCS D)  
PO Box 1050  
Rancho Murieta, CA 95683

**Subject: Cover/commitment letter for Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services**

**Dear Travis,**

**Domenichelli and Associates, Inc. (D&A)** is pleased to submit the attached Proposal for RMCS D's On-Call District Engineer and Construction Inspection Services. As a local water resources firm, D&A has served municipalities throughout the State since 2002. Domenichelli & Associates has worked closely with RMCS D for the past 3-years as the consulting District Engineer and previously on several projects since our inception. We are familiar with the District's facilities, standards, and operations. During our time providing district engineering services, we have continued to build our working relationship with the District, and we look forward to continuing this relationship. We are currently working on several CIP projects and development review projects that would be best served by continuing our commitment to the District through a renewed contract for On-Call Services.

Our point of contact will be myself, Joe Domenichelli, President at *JoeD@daengineering.net*. A second point of contact will be Daryl Heigher, Lead Project Manager at *DarylH@daengineering.net*. Our address and phone numbers are:

**Corporate Office:**

**Office Phone:** (916) 933-1997 **Cell:** (916) 716-4207 (Joe), or (530) 391-6548 (Daryl)

Our team is comprised of 6 registered engineers and 5 engineers-in-training/staff engineers at D&A, all of which are available for on-call engineering services. For construction inspection services we provide specialty inspections for mechanical and structural facilities. For full-time inspection service we utilize contract inspectors. Added to our inspection team is ICM Group, a local construction management firm that we have worked with for nearly 20 years and are confident in their expertise and availability to provide on-call inspection services. For other sub-consulting services not specifically requested in the RFP, we have a comprehensive pool of companies that have assisted us on both Rancho Murieta CSD projects, as well as numerous projects for other municipalities. They include ATEEM for electrical engineering support, geotechnical engineering from Youngdahl & Associates, and surveying services from CenterPoint Engineering. Environmental compliance can be provided by EN2 Resources if needed. We have worked successfully with each of our sub-consulting firms and as small to mid-sized firms, our companies will provide focused and cost-effective services with significant principal involvement on all of our District on-call projects.

As Principle in Charge of these efforts, I will also act as the District Engineer for RMCS D. These duties will include tasks such as; final review of development plans, assistance in CIP development; management of D&A project designs, making presentations to the Board as needed; assisting in infrastructure financial planning; attending special meetings to address development plans and future District facility needs; and providing general oversight and quality control for all services provided by the D&A team.

We have thoroughly reviewed the Request for Proposal and we are confident that the team we have assembled can provide services for every type of engineering service described in these documents. At D&A we pride ourselves



## DOMENICHELLI AND ASSOCIATES, INC. CIVIL ENGINEERING

in maintaining a group of engineers that have backgrounds in a wide variety of engineering practices. We also have the specialists to be a full service, civil, mechanical and structural engineering firm with added expertise in permitting, rate and fee structure development, Board presentations, construction management and complete inspection services. You will see in our proposal that we have a strong understanding of the District's needs and will provide the right team of highly qualified staff to complete your projects.

D&A and our subconsultants are committed to delivering services in a timely, cost effective manner and we have the necessary staff and resources available to perform these services over the 3-year contract period and beyond. We are excited to have this opportunity to propose as your On-Call consultant. We look forward to continued project successes with RMCSO.

If you have any questions or require additional information, please do not hesitate to contact myself or Daryl Heigher.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joe Domenichelli'.

**Joe Domenichelli, P.E. – President,**  
Domenichelli and Associates, Inc.



**RANCHO MURIETA COMMUNITY SERVICES DISTRICT**  
Proposal for On-Call Professional Services for District Engineer  
and Construction Inspection Services

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# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Proposal for On-Call Professional Services for District Engineer  
and Construction Inspection Services

## TECHNICAL PROPOSAL

### SECTION 1: STATEMENT OF WORK

#### A. District Engineering, Design Services, and Technical Support

Domenichelli & Associates (D&A) is a local civil engineering firm specializing in water resources, serving the region for the past 22 years. This statement of work will describe our understanding of the District facilities, the services needed, and our approach towards providing these services. We have enjoyed working with RMCS D staff on several engaging projects in the past and we are committed to continue providing the highest level of service to the District.

#### District Engineering

With **Joe Domenichelli** heading up the District Engineering efforts, the D&A team will provide District Engineering services to include:

- General engineering consultation for facility studies and project designs as requested for District water, wastewater, recycled water, and drainage systems.
- Provide development design review and review of capital improvement designs by others.
- Assistance in preparation of capital improvement plans and infrastructure financing programs.
- Assist in developing RFPs, administering bidding process and provide engineering services during construction.
- Providing day to day inspections services and specialty inspection when required.
- Provide surveying support and easement reviews.
- Provide CAD & GIS service when needed.
- Prepare for and attend Board meetings to present specific project updates and to discuss other agenda items requiring engineering expertise.

**All of the D&A staff** identified in this proposal will be available to support Mr. Domenichelli in performing the District Engineering services described above.

#### Project Designs

Our approach to the design process begins with the preparation of a Preliminary Design Report (PDR). This report establishes design criteria, provides basic alignments and site layouts, discusses environmental and right-of-way constraints, identifies permitting needs and special construction issues, and establishes a preliminary schedule and budget for the project. The PDR provides guidelines for the design of the project before any design documents are formulated. This helps avoid unnecessary re-design efforts and misunderstandings of the project goals and features between design team members.

D&A has a good template for the design process, and we have a strong understanding of the type of design challenges, such as utility conflicts, maintenance of existing facilities during construction, access, and traffic control that are typically encountered. We are also sensitive to the level of public awareness and involvement required for improvement projects within the District service area. Our knowledge of the District existing systems gives D&A the ability to efficiently complete designs.

As you will see under our Statement of Qualifications, the D&A team has the relevant experience to meet the needs of RMCS D's design and design related services for every design project type listed in the RFP. The following is a summary of the types of work we anticipate and the D&A team members with the experience to provide these design services.



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

### List of Potential Design Services and Assigned Staff

Potential Design Service	Typical Staff Member Assigned
<b>Treatment Plant Upgrades</b>	Joe Domenichelli, Daryl Heigher, Juan Mercado
<b>Pump Stations, Lift Stations and Tanks</b>	Joe Domenichelli, Daryl Heigher, Adam Motiejunas, Matt Domenichelli, Alex Mendoza
<b>Pipelines and Appurtenances</b>	Joe Domenichelli, Adam Motiejunas, Bryon Deubel, Ryan Luu
<b>Storm Drains and Ponds</b>	Brian Hammer, Mickey Johnson, Matt Domenichelli
<b>Water Wells</b>	Joe Domenichelli, Daryl Heigher, Adam Motiejunas, Jim Cade
<b>Reservoir Improvements</b>	Joe Domenichelli, Brian Hammer, Matt Domenichelli
<b>Structural Design</b>	Daryl Heigher
<b>Civil -Grading/Drainage/Paving</b>	Joe Domenichelli, Matt Domenichelli

See Project Team Section 3 for qualifications of individual staff members

### Technical Services and Support

D&A has several highly qualified engineers to provide technical engineering and support to the District. The following is a list of services provided along with in-house staff available to complete various technical services and support efforts.

- Technical studies and reports for planning of improvements to District facilities.
- Review of development plans and studies from various private firms representing new development within the District. **(Joe Domenichelli, Brian Hammer, Matt Domenichelli, Bryon Deubel).**
- Hydraulic analyses of treatment plants, water conveyance facilities, and storm drain systems for District improvement projects. **(Daryl Heigher, Brian Hammer, Alex Mendoza, Matt Domenichelli)**
- Structural analyses for hydraulic structures, buildings, and miscellaneous foundations. **(Daryl Heigher)**
- Identification of permitting agencies and their requirements for District projects. **(Adam Motiejunas, Alex Mendoza)**
- Updating District development standards, standard plans and standard specifications. **(Joe Domenichelli, Daryl Heigher, Bryon Deubel, Elias Mayol)**
- Project Cost estimating for capital improvement projects ad special consulting services **(Joe Domenichelli, Daryl Heigher, Adam Motiejunas)**

These types of deliverables are often in the form of a formal report or, at the request of the District, can be a shorter technical memorandum. For development reviews the deliverables will typically be a formal letter containing comments to be returned to the developer on District or D&A letterhead. District standard plan updates will be completed in AutoCAD. D&A has the sub-consulting team members needed to complete required surveying, geotechnical studies, and electrical analyses including SCADA communications and Arc flash studies.

### Bidding and Engineering Services During Construction

With D&A’s extensive construction experience we have a clear understanding of the construction challenges, time constraints, and public awareness associated with public infrastructure projects. D&A has the necessary field and office experience during construction to effectively provide the support service required by the District. Our engineers have extensive experience with field engineering and with working closely with construction contractors. Communication is the key and our approach will always include methods to improve communication through regular construction meetings, e-mail, proper log keeping, and every attempt to maintain a friendly working environment. We anticipate that our engineers will periodically visit construction sites on behalf of the District to ensure that construction projects are meeting the requirements of contract documents.



## RANCHO MURIETA COMMUNITY SERVICES DISTRICT

### Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

#### B. On-Call Construction Inspection Services

Whether or not D&A provides a Construction Manager (CM), our construction inspection team will be available with extensive experience to conform to any construction management process desired by the District. Our sub-consulting inspectors from ICM Group all have more than 10 years of experience inspecting water, wastewater and drainage public infrastructure projects. Our approach to providing on-call construction inspection services will be to gain a clear understanding of the scope of the project, as well as considering past working relationships with the selected contractor (when appropriate) in order to best utilize our inspection staff.

Typical construction inspections services include:

- Full or part time (as desired by the District) on-site review of the construction for compliance relative to the contract construction documents, District Standards and codes, any permit requirements and all safety rules and regulations.
- Attending pre-construction conferences, periodic (generally weekly) on-site construction meetings, change order review meetings and appropriate conflict resolution meetings.
- Providing daily inspection reports (except during less frequent part time inspections). The report will include
  - Date and time of observed construction,
  - Weather conditions,
  - Staff present,
  - Comments describing the work for the day,
  - Issues encountered,
  - Items meeting approval as completed or not meeting approval.

The daily inspection report will be accompanied by construction photos to help document the inspectors notes and will be provided to the construction manager at the end of each working day.

D&A will also provide specialty inspection conducted by our engineering team (for structural and mechanical) or by a specific sub-consultant for items such as electrical inspections.

Our inspectors know when it is appropriate to stop work due to safety concerns and when not to interfere with work by directing the contractor's "means and methods" towards completing the work. In any case, if the inspector stops the work or is not comfortable with how the contractor is proceeding, our inspecting staff know to contact the District representative (CM) and the design engineer right away.

In cases where stopping work is necessary or conflicts arise between the inspector and contractor, D&A engineering staff will be available to assist immediately by phone or in person in approximately 30 minutes from our local office in El Dorado Hills.



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

### SECTION 2: RELEVANT EXPERIENCE AND EXPERTISE

D&A has been a leader in the area of on-call engineering services throughout the region for several years. The following is a list of clients where D&A provides services similar to those required by the District.

Client	Services Provided	Project Examples
<b>Sacramento Suburban Water District</b> Serving a large portion of Sacramento County with water supply and distribution	Pipeline replacement, Pump Station designs and Construction Management.	Over 300,000lf of pipe replacement, including construction management and inspection services. Antelope Pumpback 10,000gpm booster pump station project design and inspection services.
<b>San Juan Water District</b> Providing treated water to multiple local water purveyors	Pipelines, pump stations, WTP structural and mechanical improvement.	Barton Rd Intertie and pump-back station with PCWA. Hinkle reservoir new hypalon cover. Eureka Rd. 18" potable water pipeline design, inspection and construction management. WTP channel lining project design and inspection. WTP corporation yard improvements and booster pump station.
<b>City of Folsom</b> Providing water and sewer services for the City	Water storage tanks, pipelines, and WTP upgrades	WTP booster pump station building upgrades. Rehabilitation designs for two local storage tanks. Replacement of mainline supply pipeline from the WTP. Three water pipeline replacement projects.
<b>Placer County Water Agency</b> Providing treated water to customers within the County	Pipeline designs, treatment plant building upgrades structural designs.	Several waterline replacement projects from 8-inch to 20-inch diameter, Foothill WTP building structural modifications. Northstar booster pump station.
<b>City of Roseville</b> Providing water and wastewater services for the City	Pipeline designs. Bore & jack creek crossings. Pipeline conditions investigations and lining projects.	Dry Creek Douglas Rd Bridge pipeline crossing. Hillcrest Neighborhood pipeline replacement. Cirby Creek pipeline crossing. Atlantic Street pipe investigation and lining alternatives analysis.
<b>City of Sacramento</b> Providing water and sewer services for the City	Engineering and Drafting support.	Pipeline designs, well pump station improvements for many of the City's existing wells.
<b>County of Sacramento</b> Providing water and sewer services for the County	Pipeline designs and Construction Management.	5-year program for County pipeline replacement project including CM and inspection services
<b>EL Dorado Irrigation District</b> Serving the west slope of El Dorado County for water and wastewater	Water/Wastewater pumping and conveyance designs, Structural designs, water system modeling and construction inspection.	Motherload Force Main, 15,000lf of 18" to 20" sewer force main replacement. 4 water booster station design and rehabilitation of 5 sewage lift stations, 3 water storage tank repair designs, treatment plant structures and building improvements, Inspection services for several pipeline projects and a hydroelectric plant design.
<b>County of Sacramento DWR</b> Providing Drainage and Flood Control services for Sacramento County	Third Party Review	Providing specialty third party review for drainage studies, scour analysis, and stormwater quality for developments within Sacramento County.



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

Many of the above clients and projects are of a larger scale compared to RMCS D, however nearly all of them have utilized D&A for fast turnaround smaller assignments, such as emergency repair design of a highway crossing (PCWA Banvard crossing), or structural modifications at water treatment plants or abandonment of sewage lift stations.

We utilize several contract inspectors for small and large projects, often as part of on-call agreements, where agencies cannot keep these inspectors as year-round employees. Our staff structural design engineer Daryl Heigher is frequently called upon to provide specialty structural inspections, most recently at the PCWA American River and Ophir raw water pumping Stations, where structural improvements were necessary to support heavy equipment loading platforms for these large capacity pump stations. His inspections and recommended for rehabilitation have also led to design and construction on multiple tanks for El Dorado Irrigation District. A majority of our work at D&A originates from repeat requests from existing clients, often under our on-call contracts.

In addition to the above reference projects, D&A has provided engineering support and design services for **several projects for the Rancho Murieta Community Service District**, both prior to and during our assignments for on-call District Engineering services. Listed below are descriptions of some those efforts, several of which are still ongoing.

Rancho Murieta CSD Projects	Description of Work	Year Services Provided
<b>Projects Completed Prior to Current On-Call Contract</b>		
WWTP Facilities Painting, Pole Barn Construction, Warehouse Expansion	Provide design plans and specifications for the treatment plan re-painting of all above ground piping and structures, design for a new pole barn for equipment storage and the expansion the warehouse.	2003
Rio Oso Tank, Booster Station Upgrades	Provided design and support during construction for piping improvements, pump modifications and installation of VFDs at the Rio Oso Tank Booster Station	2004
Water Treatment Plant Expansion Design Review	Provided detailed review of design plans and specifications and hydraulic calculations (by another firm) for upgrades to the RMCS D water treatment plant on behalf of the District.	2003
Stormwater Quality Improvement Plan	Created stormwater quality guidelines and standards for the District in accordance with State regulations and r discharge permit.	2003
Water Storage Expansion Study	Provided a feasibility report for expanding water storage for drought mitigation. Alternatives included purchase and expansion of the private reservoir at the NW corner of Highway 16 & Stonehouse Rd	2012
Calero Reservoir Expansion Study	Provided preliminary design and costs for expanding Calero Reservoir to the south and east to gain significant storage capacity.	2016
Yellow Bridge Re-Painting	Provided specifications for re-painting of the Yellow Bridge over the Cosumnes River including lead paint removal & containment.	2009
Water Well Design	D&A provided design for two well sites including package treatment facilities and tie-in to the existing District system. One well facility was raised several feet onto a steel platform designed to keep the pump motor and electrical components above the 100-yr flood level.	2014





# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

Rancho Murieta CSD Projects	Description of Work	Year Services Provided
<b>Projects Completed as On Call District Engineer (2021 to 2024)</b>		
On-going Development Reviews	Currently providing District Engineering review of development projects for compliance to District and general engineering standards	2021 to present
Water Treatment Drying Beds	Designed Improvements to the sludge pond facility to remedy overfilling due to faulty underground drainage system	2021
Lake 11 Emergency Storm Drain	Provided fast track design and engineering services during construction for a drainage bypass pipeline around Lake 11 to assure separation of storm water from Lake 11 reclaimed water	2022
Studies for WWTP hypochlorite system and DAF circ pump	Provided analysis and recommended improvements for the wastewater treatment plant facilities	2022/ 2023
DSOD Inundation Maps and Emergency Action Plans	Provided hydraulic modeling and mapping of dam break scenarios for all District reservoirs. Also provided emergency action plans for each in the event of dam failure.	2022 to 2023
Granlees Diversion Repairs and Upgrades	Provided improvement design to the diversion structure at the Cosumnes River intake to increase safety, provide improved access and to repair operational components damaged by flood events.	Currently under construction
Four Sewage Lift Station Upgrades	Provided design for upgrades to List Stations 6B, 3B, Starter Shack and Alameda. These stations are in various stages of final design or construction. All are anticipated to be completed this year or early next year.	On-going design and construction services
Various Engineering Analyses & Reports	Provided analyses for DSOD annual reporting, CIA Ditch repair, Rio Oso new upgrade design report, Greens lift station repairs, Colbert Dr. sinking pavement.	2021 to present



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

## Relevant Project Descriptions

The following section highlights some of the **D&A’s recent experience that is relevant to the type of services that may be provided under the on-call services contract.** The projects were selected to provide the District with a representation of the variety of services D&A can provide and the depth of our team’s knowledge base. The projects include the following:



**On-call Pipeline Replacement Projects – Sacramento Suburban Water District (SSWD)** – Provided design services for over 200,000 feet of 8-inch, 12-inch and 16-inch ductile iron mainline replacement as part of the District’s long-term distribution main relocation program. The District is relocating mainlines from the backyards into streets in an effort to make access easier as well as replace aging and leaking



systems. In addition to mainline replacements, water meters are being added to each service as part of the District’s on-going meter retrofit project. D&A also provided construction management services including full time inspection services.



**Arden Service Area Pipeline Replacement Project – Sacramento County Water Agency (SCWA)** – D&A has been contracted with Sacramento County Water Agency (SCWA) since 2016 for a multi-year, multi-phased water main and meter installation project that will bring the Agency into compliance with SB 2572 and to ensure the system is adequately sized to meet fire flow demands. The entire Project will install over 38 miles of 6- to 16-inch ductile iron and C900 PVC pipe within residential and major arterial roads (Watt Ave., Fair Oaks Blvd, and Howe Ave.) and over 3,000 residential and commercial water meters. This project will abandon existing water mains located in backyard easements and install new water mains within the road right-of-way to allow better maintenance access. Construction of all phases will be complete in 2025.

**Diamond Valley Ranch Irrigation Improvements Project – South Tahoe Public Utility District (STPUD)** – D&A has worked with STPUD since 2010 to design, permit, and construct the Diamond Valley Irrigation Improvements Project. The project included 20,000 feet of 18-inch recycled water pipeline, a hydroelectric plant, freshwater pump station and a center pivot water irrigation system which disperses recycled water. In addition, D&A designed approximately 2,000 feet of 48-inch diameter pipeline to replace a portion of an irrigation supply canal that was experiencing significant seepage losses in this stretch of ditch. D&A provided on-going support for three years following construction for irrigation scheduling and annual discharge permitting reporting.



**Barton Road Intertie Project – San Juan Water District/Placer County Water Agency (PCWA)** – Provided design and engineering services during construction for San Juan Water District’s Barton Road Intertie Project. The project included approximately 2,500 feet of new 12-inch pipeline and provides SJWD and PCWA the flexibility to convey water between the two water providers during drought times. At the intertie, a pressure reducing/flow control station provides flow to SJWD. The station includes a pump-back feature which will allow water to be pumped from SJWD’s system back into PCWA’s system.



## RANCHO MURIETA COMMUNITY SERVICES DISTRICT

### Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

**East Ridge Water Tank & Pump Stations** – The East Ridge development is a new 750 home community planned for construction in the El Dorado Hills area. In order to serve these homes, EID required the design and construction of a water tank, a transfer pump station and a booster station. The transfer pump station moves water from an existing EID storage tank to the new tank designed by D&A under this project. The booster pump station raises the pressure in a portion of the development that cannot be adequately served by the tank alone.



**Granite Bay Pump Station – San Juan Water District (SJWD)** – Upgrades to the Upper Granite Bay Pump Station were required due to increases in water demands and for reliability. The new facility had to be designed and physically built around the existing pump system as it had to keep running during construction and final testing. D&A provided hydraulic system analysis, piping design, structure design, construction observation, and shop drawing review.

**Big Trees Tank Replacement – Calaveras County Water District (CCWD)** – D&A provided design for two new glass-lined bolted steel tanks to replace the existing redwood tanks in the Big Trees system. D&A assisted the District with coordination with State Parks to revise the easement and address environmental concerns. The new tanks replace the existing capacity at 150,000 gallons and 80,000 gallons.



### **Corporation Yard Safety Improvement Project – Citrus Heights Water District (CHWD)** –

D&A provided design and construction management services for improvements to the District’s Corporation Yard which include the following: covered vehicular wash station, two (2) open vacuum excavation dump pits, covered material storage areas (storage of AB, sand, concrete and asphalt), expanded parking, paving and security improvements, drainage improvements, water pipeline improvements including the addition of fire hydrants, replacement of existing sewer pipeline. Services include obtaining

all environmental and building permits required for the project.

**Tank Improvements Project – City of Folsom** – D&A provided plans and specifications for renovations to several of the City’s potable water tanks which were originally constructed in the mid-1980’s and were in need of seismic upgrades, coatings, access improvements and general repairs.



## RANCHO MURIETA COMMUNITY SERVICES DISTRICT

### Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

## SECTION 3: PROJECT TEAM

### Project Managers & Senior Staff

Domenichelli & Associates (D&A) is comprised of six (6) registered engineers, two (3) engineers-in-training, two (2) staff engineers, a part-time drafter, and office administrative staff all of whom may have involvement in RMCS D's projects. Our project Principal, **Joe Domenichelli** brings over 40-years of experience in water resources planning and design. He will provide QA/QC for all projects as well as project management services, with Mr. Domenichelli providing typical district engineer services. **Daryl Heigher** with over 28-years of experience, **Brian Hammer** with 17-years of experience, and **Adam Motiejunas** with 15-years of experience are all registered engineers with D&A who have the capability to manage and provide project design engineering for the on-call services contract. The following section provides a brief statement of qualification for each of our principal and senior staff members relative to the on-call services requested.

### Other D&A Engineering Staff

All of our other professional engineers, engineers-in-training and staff engineers, will work with our senior level staff on the District's projects. They include Mikey Johnson (PE), Matthew Domenichelli (ME), Alex Mendoza and Bryon Deubel all with 3 to 5 years of experience with municipal infrastructure designs. More recent hires with one to two years of experience are Juan Mercado, Ryan Luu and Elias Mayol.

The D&A team members are all proficient in the use of the latest design software, including AutoCAD Civil 3D and water system modeling software, including H2ONet. All of our engineers have experience preparing plans and specifications, providing cost estimates, bidding support (including addendum preparation) and construction support (including plan revisions).

### Construction Inspectors

D&A will use ICM Group, a sub-consulting construction management and inspection company located in Folsom, CA. ICM has been performing construction management and inspection on water and wastewater pump stations, pipelines, and treatment plants since founded in 2004. They have dedicated their careers to working on projects exactly like those at Rancho Murieta.

ICM has successfully completed over 20 pump station projects, over 50 pipeline projects, and over 20 treatment plant projects. All of these projects are located in the Sacramento region, including some of the adjacent foothill communities. They have one of the largest groups of resident engineers and inspectors in northern California. They currently have 3 resident engineers and 14 construction inspectors, including electrical inspectors.

### D&A Key Staff

The following pages highlight D&A's key staff and some of their qualifications and accomplishments.



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

### Domenichelli & Associates Key Team Profiles



#### Joe Domenichelli, PE

##### Area of Expertise

District Engineer, QA/QC, Water Resources Planning & Design

##### Years of Experience

43 Total

##### Registration

Professional Engineer, CA, NV  
C38068

##### Education

B.S. Civil Engineering, CSU Chico

As District Engineer and the main point of contact for RMCS D’s On-call services, Mr. Domenichelli’s responsibilities will include overall QA/QC, District Engineer duties as well as design assistance and review. Mr. Domenichelli has 43 years of engineering experience primarily in the area of water resources engineering. He has provided a variety of services from master planning of water systems for entire communities to the design and construction management of municipal improvements such as water pipelines, wells, pump stations and storage tanks. His understanding of the District’s needs through similar work will allow him to provide quality assurance review and management necessary to complete design and construction management services on time and on budget.

##### Project Experience

- RMCS D - On call District Engineer
- Sacramento Suburban Water District (SSWD) - On-call Engineering
- City of Folsom - On-Call Engineering
- El Dorado Irrigation District - On-call Engineering
- PCWA -On-call Engineering
- City of Roseville – On call Engineering
- City of Sacramento- On call Engineering
- Carmicheal Water District- On-call Engineering



#### Daryl Heigher, PE

##### Area of Expertise

Structural Engineering, Pump Stations, Treatment Plants and Tanks

##### Years of Experience

28 Total

##### Registration

Professional Engineer, CA  
C62011

##### Education

B.S. Civil Engineering, CSU Sacramento

Daryl Heigher is a California registered engineer with 28 years of experience. Mr. Heigher has been with Domenichelli and Associates since 2012. Mr. Heigher has extensive experience in gravity and pressure pipeline design, pump station design, hydraulic structure design, structural design, cost estimating, construction inspection, and shop drawing review. He has served as project engineer for the design of water and wastewater treatment plants, pipelines pump stations, and storage tanks. He has worked on the designs for several sewage lift stations for RMCS D, EID and Olivehurst PUD. Water booster station designs include six for EID, two for PCWA, two for SJWD and one for SSWD. Pipeline designs include several miles of water lines up to 42-inch diameter.

##### Project Experience

- RMCS D – On-call Services
- Foothill WTP & Antelope Canal Improvements – PCWA
- Antelope Pump Station
- EID Sewer Lift Station Designs
- EID Tank Inspections and Renovations
- Two Bolted Steel Water Tanks – CCWD
- Eastridge Tank and Booster Station – EID
- City of Folsom – Water Storage Tank Improvement Designs



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

## Domenichelli & Associates Key Team Profiles



### Brian Hammer, PE

**Area of Expertise**

Hydrology and Hydraulics

**Years of Experience**

17 Total

**Registration**

Professional Engineer, CA

C77713

**Education**

B.S. Civil Engineering, California Polytechnic University, San Luis Obispo

Brian Hammer is a California Registered Civil Engineer with 15 years of experience in hydrology, hydraulics and water conveyance designs. He has extensive experience working with local, state and federal agencies on flood control designs and associated permitting processes. He is proficient in the use of several hydrologic and hydraulic modeling programs including: HEC-HMS, HEC-RAS(1&2D), SacCalc, River 2D, and XPStorm.

**Project Experience**

- Yuba City Feather River Parkway – River Modeling, COE coordination, CVFCB permitting and restoration designs.
- Tuolumne Irrigation District - River Restoration 2D modeling,
- Trinity River Restoration Project, Mc Bain & Trush – 2D river modeling, restoration and fish passage designs
- CLOMRs and LOMRs for several agencies including: Sacramento County., San Joaquin County, City of Salinas, Various development projects throughout Northern California
- Water system modeling using H2O Net, WaterCad, Info Water for various agencies and development projects.
- Central Valley Flood Control Board permitting for various levee, bridge and development projects throughout Northern and Central California



### Adam Motiejunas, PE

**Area of Expertise**

Engineering Design

**Years of Experience**

15 Total

**Registration**

Professional Engineer, CA

C90060

**Education**

B.S. Civil Engineering, CSU Sacramento

Adam Motiejunas is a Registered Engineer who has been with D&A since 2013, serving D&A’s clients on a multitude of water and wastewater infrastructure projects. Mr. Motiejunas’ experience includes multiple water system designs and modeling projects with thousands of feet of pipe length ranging in diameter from 4 to 18 inches.

**Project Experience**

- Alta Loop Pipeline
- 20-inch Banvard Pipeline
- Design Engineer for the Downtown Water Mains Replacement Project Hillcrest Neighborhood
- State Streets Water Capacity and Sewer Rehabilitation Project, City of West Sacramento
- Pardi Way Water Main Replacement Project



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

### Project Team Differentiators

There are multiple factors that differentiate the Domenichelli and Associates (D&A) team from others including:

- 1 **Response and timeliness** – Due to D&A’s proximity to RMCS D’s service area, our staff has the ability to respond to the District’s requests and needs promptly.
- 2 **Similar Project Experience** – As discussed in the experience section of this proposal, D&A team members have extensive experience working on projects similar in nature to those proposed by RMCS D. We have also provided similar “On-Call” services with multiple agencies.
- 3 **Principal Involvement** – Our philosophy is to have significant principal involvement on every project. No deliverable leaves the office without an extensive review by a principal member of our staff.
- 4 **Competitive Rates** – As you will see in our included rate sheet, by remaining a smaller firm, D&A has been able to keep our rates extremely competitive.

### Other Sub-Consultant Project Team Members

D&A and our preferred sub-consulting firms are relatively small, specialized firms, that will provide **principal involvement** on every District project. Our project team is comprised of highly qualified and committed people who are enthusiastic about making each project a success. Our use of subconsultants will depend on the project scope and needs of the District and will be approved by the District prior to finalizing our team on all projects.

The following provides a list of our preferred (non-inspection) subconsultants and the types of services they provide. This is followed by brief SOQ information provided by each firm. We have created a network of subconsultants to allow use of another qualified firm if one is busy at the time of a request. Additional information on these subconsultants (including key personnel resumes) can be provided upon request.

Sub-consultant	Services Provided	Example Projects that D&A has teamed on
A T.E.E.M.	Electrical Controls SCADA	SSWD Antelope Pump Station, Various On-call assignments for EID, RMCS D lift stations
Youngdahl Consulting	Geotechnical Investigations Specialty Testing during construction	Ranch Del Oro Lift Station, Tanner Hydro-electric Station, Vacaville Sewage Lit Station and Force Main
CenterPoint Engineering	Surveying Easement Documentation	RMCS D Lake 11 Project, PCWA Bowman Pipeline Project, City of Folsom several pipeline replacement projects, City of Vacaville Force main.
EN2 Resources	Environmental Compliance CEQA/NEPA Environmental Surveys	CCWD Big Trees Tank, RLECWD Well 15 and Transmission Main Project, CHWD Corporation Yard Improvements, City of Placerville Pardi Pipeline Project, Feather River Parkway.



## RANCHO MURIETA COMMUNITY SERVICES DISTRICT

### Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

#### SECTION 4: QUALITY ASSURANCE/ CONTROL; CONFLICTS

##### Project Management and Quality Control/ Assurance

Our project management approach involves strong leadership and communication. Our management team members are principal and senior level staff. This level of commitment and expertise has made D&A's project teams highly successful with continued solicitation for services from our current clients. We provide concise and complete meeting minutes and progress reports along with monthly billing reports describing work performed, percent complete, and remaining budget. We are committed to communication often and early between design team members, client staff, regulatory staff, and public and private interests to assure quick and efficient response to District needs.

Our QA/QC plan and process begins and ends with the Project Manager. Our project manager is always a senior level firm member that has personal responsibility for the final product. As a smaller firm, we have the flexibility to manage our workload in order to ensure that each project receives commitment from our principals who have a vested interest in the success of each project and, therefore, in the quality of each work product. Relative to design and technical services deliverables QA/QC, it is company policy that all design and technical documents be reviewed by a principal member of our staff before submittal. We have not wavered from this policy since the company was formed in 2002.

##### Potential Conflicts

Relative to potential conflicts that may hinder D&A from carrying out the services as described in our Statement of Work, we have no such conflicts, nor do we anticipate any future conflicts that could hinder our ability to perform these services.

#### SECTION 5: ON-CALL CLIENT REFERENCES

D&A currently provides similar on-call services for multiple public agency clients. The following references are provided for four of our current on-call contracts.

**San Juan Water District (SJWD)** – D&A is currently on the District on-call engineering services list. Typical contracts with the District have included water pump station designs, pipeline replacement design, water treatment plant upgrades and structural support.

**Reference:** Tony Barela, Operations Manager (916) 791-6939, [tbarela@sjwd.org](mailto:tbarela@sjwd.org)

**Placer County Water Agency** – D&A has been providing on-call services for PCWA since 2015. D&A has and continues to work on multiple pipeline projects, pump stations and mechanical and structural improvements at water treatment plants.

**Reference:** Kelly Shively (530) 823-4883 [kshively@pcwa.net](mailto:kshively@pcwa.net)

**City of Roseville Utilities** – D&A has been providing on-call engineering services for the City since 2020. Work has included primarily pipeline replacement project designs within the older neighborhoods. Also provided are designs for pipe crossing under streams using trenchless methods.

**Reference:** Janice Gainey (530) 223-7860 [JRGainey@roseville.ca.us](mailto:JRGainey@roseville.ca.us)

**El Dorado Irrigation District** – D&A has worked on EIDs on-call projects since 2004, including water and wastewater treatment plant upgrades, pipelines, water pump stations, sewer lift station and various structural improvement designs.

**Reference:** Brian Mueller, Director of Engineering, (530) 642-4329, [BMueller@eid.org](mailto:BMueller@eid.org)





# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

## SECTION 6: CONTRACT REQUIREMENTS

D&A acknowledges acceptance of the terms and conditions in the District’s standard agreement for professional services, “Rancho Murieta Community Services District Services Agreement”, provided as Attachment C in the RFP.

## SECTION 7: INSURANCE REQUIREMENTS

A. Insurance Coverage – D&A’s insurance is provided by the following providers:

**General Liability:**

ISU Insurance Service – BC Env. Brokerage  
 Policy #FEI-ECC-12948-11  
 1037 Suncast Lane, Suite 103  
 El Dorado Hills, CA 95762  
 Coverage expires on February 12, 2025

**Workers’ Compensation Insurance:**

State Fund Compensation Insurance  
 Policy #1727130-2024  
 P.O. Box 8192  
 Pleasanton, CA 94588  
 Policy expires on January 1, 2025

As shown in the table to the right, D&A meets all RMCS D minimum insurance requirements. Additionally, D&A will maintain the RMCS D minimum coverages throughout the duration of the contract and will submit proof of insurance in compliance with Attachment C of the RFP. D&A will verify all subconsultants maintain the same indemnity and insurance requirements as stated in Attachment C of the RFP.

Producer	Type of Insurance/Endorsement	RMCS D Minimum Requirement	D&A Coverage
ISU Insurance Services	Com'l GL - Bodily Injury and Personal Injury	\$2,000,000 occ	\$5,000,000 occ
	Property Damage	\$2,000,000 occ	\$5,000,000 occ
	Automobile Liability	\$1,000,000 occ	\$1,000,000 occ
	Additional insured Endorsement	Required	Provided
	Automobile Liability Endorsement	Required	Provided
	Waiver of Subrogation Endorsement	Required	Provided
	Errors & Omissions	\$2,000,000 claim \$4,000,000 agg	\$5,000,000 claim \$5,000,000 agg
State Compensation Insurance Fund	Workers Compensation	\$1,000,000 occ	\$1,000,000 occ
	Additional insured Endorsement	-	Provided
	Waiver of Subrogation	Required	Provided



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

## Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

### RESUMES

Resumes are provided for the following Key D&A Staff Members that will be assigned the majority of work for the District:

#### D&A

Joe Domenichelli	President- Principal 1
Daryl Heigher	Project Manager 1
Brian Hammer	Senior Engineer 1
Adam Motiejunas	Project Manager 2
Matt Domenichelli	Project Engineer 1
Mikey Johnson	Project Engineer 1
Bryon Deubel	Project Engineer 2
Alex Mendoza	Project Engineer 2
Juan Mendoza	Staff Engineer 2
Jim Cade	Senior CAD Drafter

#### ICM

Paul Lopez	Construction Inspector
Matt Livingston	Construction Inspector
Joseph Saylor	Construction Inspector

Other subconsultant resumes are available upon request as needed.

Mr. Domenicelli has over 40 years of engineering experience, including project management, primarily in the area of water resources engineering. Assignments have included the study, design and planning of water, wastewater and flood control facilities from design of major pipeline and pump station systems to master planning for entire counties.

## Education

B.S., Civil Engineering,  
California State  
University, Chico, 1981

## Registration

Professional Civil  
Engineer, 1983  
California No. 38068

Professional Civil  
Engineer, 2009  
Nevada No. 20368

## Professional Endeavors

Domenicelli &  
Associates  
2002 to present

HDR Engineering, Inc.  
1995-2002

Nolte and Associates  
1993-1995

Psomas and Associates  
1985-1993

Auslam and Associates  
1983-1985

Los Angeles County  
Flood Control  
1981-1983

## RELEVANT PROJECT EXPERIENCE

**Water Distribution Improvements Project, City of Roseville – Project Role, QA/QC.** Provide management and QA/QC reviews for design, plans and specifications for a construction project with three distinct water pipeline project sites. Two project sites included stream crossings, one by bore and jack beneath a creek and one with the pipe attached to a bridge over a creek. The third project site traverses through a commercial zone near interstate 80.

**Upper Main Ditch Piping Project, El Dorado Irrigation District – Project Role, Project Manager.** Management and design services for EID's Upper Main Ditch Piping Project. Project includes design of over 12,000 feet of 42-inch welded steel pipeline to replace the existing water supply ditch (from Forebay to Res 1 WTP). Included pipeline hydraulic capacity calculations, surge analysis, air/vacuum systems sizing and drainage modeling to determine the effects of the project on the Main Ditch floodwater conveyance.

**Diamond Valley Ranch Recycled Water Pipeline, South Tahoe Public Utilities District - Project role, QA/QC.** Provided design, plans and specifications for over 10,000 feet of high pressure 18-inch cross- country ductile iron pipeline in Alpine County as part of a larger project to install three irrigation pivots, pump station, several freshwater diversions and a potential hydroelectric station. Engineering services also included design of approximately 2,000 feet of 48-inch steel and 1,500 feet of 48-inch PVC raw water pipeline, SWPPP preparation, bidding assistance, utility coordination and engineering services during construction.

**Sly Park Intertie System Optimization Study, (EID) - Project Role, Project Manager.** Provided Project Management and report preparation for a hydraulic and cost evaluation for pipeline rehabilitation and replacement alternatives for the existing Sly Park Intertie pipeline. The hydraulic evaluation led to recommendations for a new pipeline replacement option in lieu of several pipe lining alternatives. The recommendations included pipe material selection and sizing. Also included in this effort was an analysis for pumping flow from the existing Res A WTP back to the Res 1 WTP. A pumping cost analysis was conducted to compare pumping costs of the existing system to a new pump station. The recommended preferred facility is a new pump station.

**City Creek Water Transmission Line, San Bernardino County Water District – Project Role, Project Manager.** Provided Project Management, design and construction support services for a 2,400 foot 18-inch and 30-inch ductile iron pipeline to replace an existing undersized pipe serving the East Valley WTP. Also included in the design was a new turnout from the existing 60-inch Foothill Pipeline and a new 500KW in-conduit hydroelectric station to help offset power cost to run the treatment plant.

**Antelope Pump Station, Sacramento Suburban Water District (SSWD) - Project Role, Project Manager.** Project Management and design for SSWD's Antelope Pump Back Project. The project allows groundwater to be pumped from SSWD's system to San Juan Water District (SJWD)'s system through the Cooperative Transmission Pipeline. The capacity of the station is

## Professional Activities

Association of  
California Water  
Agencies  
Floodplain Management  
Association

## Presentations

“Bridging the Gap in  
Levee Freeboard,”  
presented at the Flood  
Plain Management  
Association conference,  
Sacramento, California,  
September 12, 1997.  
“San Joaquin Area  
Flood Control Agency  
Flood Protection  
Restoration Project,”  
Presented at ASCE,  
June 26, 1996  
“Regional Conjunctive  
Use Projects” Presented  
to Mountain Counties  
Spring 2014

15,000gpm with three 5,000gpm pumps. A fourth 3,000gpm pump provides water to a separate low-pressure zone in the SSWD system. The pump station was constructed with a 48-inch flow meter and associated 48-inch welded steel pipe.

**PCWA- Lower Banvard Canal Pipeline Replacement Project - Project Role, QA/QC.** Provided reviews from hydraulic analysis, design plans, specifications, and cost estimating to replace approximately 500-foot reach of 20-inch steel pipe traversing steep cross-country terrain and crossing under Interstate 80 within 30-inch concrete pipe. The crossing replacement pipe is 20-inch fused PVC pipe installed within the existing 30-inch casing new 20-inch steel pipe is installed within the Interstate road embankments and adjacent private properties. Also assisted in lengthy encroachment permitting negotiations with Caltrans.

**Whitney Boulevard Water Main Replacement Project, Placer County Water Agency, Rocklin, California - Project Role, QA/QC.** Currently in design to provide plans and specifications for over 4,100 feet of 18-inch ductile iron mainline replacement. The project proposes to abandon old deteriorated mains and fire hydrants and install new mains in City right-of-way along with new fire hydrants and reconnect 79 meter services. Engineering services also include pipeline design, obtaining an encroachment permit, bidding assistance, utility coordination and engineering services during construction.

**Pardi Way Water Main Replacement Project, City of Placerville - Project Role, QA/QC.** Currently in design to provide plans and specifications for over 4,000 feet of 6-inch, 8-inch and 12-inch PVC mainline replacement. The project will abandon old backyard mains and fire hydrants and install new mains in Caltrans and City right-of-way along with new fire hydrants and reconstructions to 46 metered services. Engineering services also include pipeline design, obtaining a Caltrans encroachment permit, bidding assistance and utility coordination and engineering services during construction.

**Barton Road Intertie, San Juan Water District, Granite Bay, California - Project Role, QA/QC.** Construction completed in 2015. Provided design, plans and specifications for over 2,250 feet of 12-inch ductile iron pipeline installed within Barton Road and the design of a joint lift station and pressure reducing station that serves as the intertie between San Juan Water District and Placer County Water Agency. Engineering services also include bidding assistance, utility coordination and engineering services during construction.

**Moose Hall Pump Station, El Dorado Irrigation District - Project Role, Project Manager.** The Moose Hall Pump Station is a critical link in the EID water supply system. Since the current Sly Park Intertie is inoperable, it is part of the only link that allows water to be transferred from the Reservoir A WTP to the Reservoir 1 distribution system. D&A took this sensitivity to a shut down into account in the station’s layout by designing it to be constructed while keeping the existing pumps running.

**Granite Bay Pump Station, San Juan Water District - Project Role: Project Manager.** Upgrades to the Upper Granite Bay Pump Station were required due to increases in water demands and for reliability. The existing pump station was built within the confines of a concrete block fence, which the new

pump station was required to fit inside of as well. The new facility had to be designed and built around the existing pump system, as it had to keep running during construction and final testing. D&A provided hydraulic system modeling, piping design, structure design, construction observation, and shop drawing review.

**Pleasant Oak Main Project, El Dorado Irrigation District**– *Project Role, Project Manager.* Provided independent QA/QC, pipe material selection and pipeline alignment design for 5 miles of new 36-inch treated water pipeline for El Dorado Irrigation District. The pipeline replaced an existing aging techite pipe that was experiencing failure causing significant damage to properties and local drainage channels. The pipeline traversed difficult terrain with pressures up to 300psi were crossing low elevation ravines.

**Wholesale Water Transmission System Metering Improvements Project, SJWD** – *Project Role, Project Manager.* Provided QA/QC and project management for the project which, in total, replaced 33 meters and added approximately 1,000-feet of water pipelines ranging in size from 8-inch to 72-inch.

**Bowman WTP Improvements, PCWA**- *Project Role, Project Manager.* Provided design and project management for pipe, building enclosure, bridge crane system, pipe coating and catwalk improvements at the Bowman Treatment Plant.

**Storage Tanks, Calaveras County Water District**– *Project Role, Project Manager.* Provided project management and QA/QC for the design and project management for two glass lined steel tanks (80K and 150K gallons) and one 200,000-gallon elevated storage tank. The two steel tanks are located in the Big Trees State Park requiring special permitting and environmental studies with the associated State agencies. The elevated tank included addressing comments from the FCC regarding potential interference of radio signals.

**Sacramento Suburban Water District, On-going Main Replacement Projects**- Provided QA/QC and Project Management services for over 300,000 feet of 8-inch, 12-inch and 16-inch ductile iron mainline replacement as part of the District's long-term distribution main relocation program. The District is relocating mainlines from the backyards into streets in an effort to make access easier as well as replace aging and leaking systems. In addition to mainline replacements, water meters are being added to each service as part of the District's on-going meter retrofit project.

**East Ridge and Salmon Falls Booster Pump Stations- EID, Private Developments, El Dorado County** - *Project Role, Project Manager.* Provided project management and QA/QC for two projects within the El Dorado Irrigation District service area. The East Ridge Project includes two booster stations and one storage tank and the Salmon Falls project includes one booster station, all that must meet EID standards as the District will take over these facilities once in operation.

**Small Hydro Development and Design, El Dorado Irrigation District** – *Project Role, Project Manager.* Provided design services for two small hydro projects located within EID's existing drinking water system. These

projects were identified during a study performed by a project team including D&A as the lead for evaluating project components, costs, and constructability.

**Sand Hill WTP Hydroelectric Station, San Gabriel Water Company**– *Project Role, QA/QC.* D&A provided design services for an In-Conduit Hydroelectric project, located at the Sandhill Water Treatment Plant (Sandhill) in Rialto, California. The hydroelectric station houses two pump-turbine type turbine-generators and has a combined nameplate rating of 310 kilowatts (kW). D&A also provided services during construction. The project was commissioned in 2013.

**Tanner WTP Hydroelectric Station, Amador County Water Agency**– *Project Role, Project Manager.* D&A provided design for two hydroelectric projects for Amador County Water Agency. The Tanner Water Treatment Plant project includes design for inflow pipeline modifications and an in-line pumps as turbines hydroelectric plant. The Ione Project includes design of high pressure waterline into the station and new Pelton Wheel hydroelectric station and new outflow pipelines to an existing reservoir.

**Southern California Hydroelectric Stations –West Valley WTP, Roemer WTP, Waterman Spreading Basin, and Purdue (San Diego) WTP** – *Project Role, Project Manager.* Management and design for 4- 350KW to 900KW in-conduit hydroelectric projects in Southern California. Three project use pumps as turbines (PATs) and one is a Pelton Wheel design with new 24-inch welded steel turnout, a large capacity strainer system and associated above ground steel turbine manifold pipeline and appurtenances. All of these projects are currently on-line and producing clean energy.

**Eureka Road Main Replacement Project, San Juan Water District (SJWD)** - *Project Role, Project Manager.* Provided QA/QC for design plans, specifications, and cost estimate for approximately 3,750 feet of 18-inch DIP. The project abandons old 16&18-inch steel mains and fire hydrants and installs new mains in County right-of-way along with new fire hydrants and reconnecting 17 metered services. The project is being designed on a fast track to complete construction before the County's pavement project.

**Midas Avenue Main Replacement Project Phase 2, Placer County Water Agency (PCWA)**- *Project Role, QA/QC.* Provided QA/QC for design plans, specifications, and cost estimate for approximately 2,500 feet of 12-inch PVC, 450 feet of cross county DIP and 450 feet of fusible PVC. The project abandons old 16-inch steel mains and installs new mains in County right-of-way along with new fire hydrants and 43 meter replacements.

**Q Street Main Replacement Project, Sacramento Suburban Water District (SSWD)** - *Project Role, QA/QC.* Provided QA/QC, provided design, plans and specifications for over 23,000 feet of 12-inch ductile iron mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 183 meter reconnections. Engineering services also include pipeline design, obtaining an encroachment permit, engineering services during construction and utility coordination.

*Mr. Heigher has 29 years of experience in pump station design, structural design, cost estimating, construction inspection, and shop drawing review. He has served as project engineer for the design of water and wastewater treatment plants, pipelines and pump stations. His experience includes pump and equipment selection, facility layout, analysis of existing structures, design of new structures (including reinforced concrete, steel, aluminum, fiberglass and timber) and site layout.*

## Education

B.S., Civil Engineering,  
California State  
University, Sacramento,  
1995

## Registration

Professional Civil  
Engineer, 2001  
California No. 62011

## Professional Endeavors

Domenichelli &  
Associates 2012 to  
Present

Psomas 2010 to 2012

Owen Psomas 2007-  
2010

Owen Engineering  
1995-2007

Caltrans, Intern 1993-  
1994

## RELEVANT PROJECT EXPERIENCE

### **Water Distribution Improvements Project, City of Roseville**

*Project Role: Senior Engineer*

Provided design plans, specifications and cost estimating to intertie existing watermains and provide additional redundancy to improve the water infrastructure reliability in the City of Roseville. The project includes a creek crossing using jack and bore methods, open trenching and hanging pipe from the Dry Creek Bridge on Douglas Road.

### **Automation of Pleasant Grove Pump Station, City of Roseville**

*Project Role: Senior Engineer*

Provided analysis and design of actuator system for existing manual shutoff valves to be incorporated with the existing SCADA system. This included specification preparation, coordination with actuator suppliers, and engineer's estimate. This pump station is being incorporated into the City of Roseville's remote SCADA system to increase efficiency of their domestic water supply when water demand is high, and sources are limited.

### **Oliverhurst South Yuba County Water and Sewer Infrastructure Project |**

*Project Role: Senior Engineer*

Provided design support for 8 sewer lift stations. This design includes wet wells, pump selection, and pipeline design. Special consideration was given to the design of biofilter media beds to provide odor control. In close proximity to residential and commercial buildings.

### **Upper Main Ditch, El Dorado Irrigation**

*Project Role: Senior Engineer (2020-21)*

Provided design of 12,700 feet of 42" raw water piping as well as the tie-in to the headworks of the Water Treatment Plant. The design also included details for appurtenances such as large air vacuum release valves. During construction, provided review of contractor submittals for compliance with specifications and design. The upper main ditch pipeline was constructed across widely varied terrain, with relatively tight tolerances. Site visits were required to confirm alignment and utility clearances.

### **Leisure Town Sewer Lift Station and Sewer Force Main Expansion, City of Vacaville |**

*Project Role: Project Manager (currently in design)*

D&A is providing design reports, plans, specifications, and cost estimates for the expansion and upgrade of the City's largest sewer lift station to increase capacity from 7MGD to 15MGD. The design will include odor control, new electrical and site development. The project also includes the design of approximately 3,300 feet of up to 24-inch sewer force main including two creek/ bridge under crossings and junction structure design.

### **Caltrans Pipeline HWY49, El Dorado Irrigation District |**

*Project Role: Engineer*

D&A provided water line design and engineering services for EID in coordination with a Caltrans project that replaced a bridge and section of roadway on HWY49 in Coloma. The design included approximately 2,900 linear-feet of 6-inch DIP and fusible 6-inch PVC in the bridge deck along

with associated appurtenances, fire hydrants, air relief valves, etc. D&A coordinated with Caltrans and provided plans in their format.

**Reservoir No. 7B Tank Painting and Modifications, El Dorado Irrigation District**  
*| Project Role: Senior Engineer*

Plans include miscellaneous repairs to the tank's structural rafters and columns. New appurtenances for installation include a sample station, diver cleanout, drain, guardrail, roof vent and paint work.

**El Dorado Hills Water Treatment Plant – VFD Air Conditioning Unit Installation, El Dorado Irrigation District**  
*| Project Role: Senior Engineer*

D&A was requested to analyze an existing CMU wall surrounding the Variable Frequency Drive (VFD) units to determine how it could be modified to allow ducting from new air conditioning units to be routed through the wall and to the VFDs.

**El Dorado Hills Wastewater Treatment Plant - Recycled Water Pump Improvements, El Dorado Irrigation District**  
*| Project Role: Senior Engineer*

D&A was selected as part of the design team in conjunction with Frisch Engineering to design improvements to the recycled water system at the El Dorado Hills WWTP. The improvements included electrical and mechanical upgrades and modifications to accommodate a new recycled water pump to supply non-potable water for use on the plant site.

**Deer Creek Wastewater Treatment Plant - Main Circuit Breaker Project, El Dorado Irrigation District**  
*| Project Role: Senior Engineer*

D&A was selected as part of the design team in conjunction with Frisch Engineering to design improvements to the main electrical feed breakers for the Deer Creek Wastewater Treatment Plant Main Circuit Breaker Project. D&A designed improvements including rerouting a drainpipe, adding drop inlets, designing a slab and foundation for the breaker panels, rerouting site drainage and creating an accurate background drawing by measuring the position and relative elevations of existing features via a total station.

**Caples Lake Parking Lot, El Dorado Irrigation District**  
*| Project Role: Senior Engineer*

D&A provided design services to reconstruct the parking lot near the dam at Caples Lake. These improvements, as well as those performed at related sites (Ferguson Point, Woods Creek Trail Head, and Silver Lake Campground) were completed to satisfy El Dorado National Forest requirements related to FERC licensing. Improvements included paving, adding or replacing prefabricated restrooms, minor site grading and accommodation for ADA compliant restroom and picnic area access.



## **Outingdale Water Treatment Plant - Tank Design, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

In January of 2013, D&A was contracted to aid EID Staff in the inspection of eight of EID's potable water tanks with the intent to visually determine the extent of the corrosion existing in each tank and recommend a prioritization order for repair of each tank. The Outingdale Water Treatment Plant Lower Tank was in very bad shape. See photo to the right.



The steel rafters and many other structural members were delaminating due to severe corrosion. The tank design project replaces the existing, corroded tank with a new tank. The components of this design included a retaining wall to provide a foundation on the side of a steep slope, construction sequencing to keep the existing plant running during construction, piping provisions to add a future contact tank and demolition of the existing tank.

## **Caples Lake and Silver Lake East Campground Renovations, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided design services to renovate the Caples Lake and Silver Lake East campgrounds. These improvements were completed to satisfy El Dorado National Forest requirements related to FERC licensing. Improvements included paving, adding or replacing prefabricated restrooms, minor site grading and accommodation for ADA compliant restroom, camping and picnic area access.

## **Lift Station Fall Protection, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided design services for the installation of fall protection safety railing at ten lift stations. Each station had to be examined individually to determine the appropriate configuration of railing to allow staff to perform their work, while still protecting them from fall hazards.

## **Lifting Lug Design Check, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

Prior to the operations staff using an EID shop built lifting lug to remove and replace a roof structure at the Camino Heights Water Treatment Plant, D&A was asked to review the design of the lifting lugs to ensure they provided an adequate factor of safety.

## **Moose Hall Pump Station Vault Modifications, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided design services to replace aging sleeve valves used to reduce pressure when transferring water from Reservoir 1 Water Treatment Plant to the Moose Hall reservoir. In addition to the sleeve valves, a bypass around the valve vault and a new access hatch were designed into the project to aid operations staff in operating and servicing the station.

## **Old Forest Road Waterline Repair, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided design services to repair a broken waterline and a damaged earthen slope. The project involved rerouting and replacing the existing asbestos cement pipe with a new ductile iron pipe, lining a very steep channel slope with rock slope protection, concrete diversion structures and repaving the asphalt roadway where it was disturbed for the repair.

### **Equipment Replacement Design Check, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

EID replaced/renewed a number of gantry cranes used to service pumps, valves and other equipment. Some of the units required special heights or lengths and the EID fabrication shop constructed those. D&A reviewed a design prepared by the fabrication shop to ensure there was sufficient factor of safety in the design. D&A provided design review, structural calculations and a detailed drawing.

### **Reservoir A Hypochlorite Conversion - As-Built drawings, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided field measurement and drafting services to produce a set of as-built drawings for the Reservoir A Hypochlorite Project.

### **Sly Park Parking Lot, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided design services for taking field measurements and preparing a set of figures to aid the EID Parks and Recreation Department to apply for grant funds for the design and construction of a new parking lot and picnic area at the Sly Park Recreation Facility. The proposed facilities consist of a cut and fill area for parking, accessible restrooms, standard and accessible picnic areas with accessible trails.

### **Rancho Ponderosa Lift Station Abandonment, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided design services to abandon the existing Rancho Ponderosa Lift Station. The flow was rerouted into Green Valley Road such that it can drain via gravity, eliminating the need for a lift station. The challenge for this project is the minimal change in grade available to slope the new gravity pipe from manhole to manhole. In addition, the best available alignment for the pipe required trenches which were 22 to 24 feet deep.

### **Tank 3 Vault Lid Evaluation, El Dorado Irrigation District |**

*Project Role: Senior Engineer*

D&A provided design services to evaluate the existing sleeve valve vault lid to permit an access opening to be cut into the lid for a new access hatch to be installed. This aided operations staff in operating and servicing the station.

### **Pardi Way/Big Cut Rd/Sacramento Street Water Main Replacement Project – City of Placerville |**

*Project Role: Senior Engineer*

Construction completed in 2017. Provided design, plans and specifications for over 4,000 feet of 6-inch, 8-inch and 12-inch PVC mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in Caltrans and City right-of-way along with new fire hydrants and reconnections to 46 metered services. Engineering

services also include pipeline design, obtaining a Caltrans encroachment permit, bidding assistance and utility coordination and engineering services during construction.

**Diamond Valley Ranch Irrigation Improvements, Phase 1 – South Tahoe Public Utility District | *Project Role: Senior Engineer***

Construction completed in 2018. Provided design, plans and specifications for several underground concrete pump and hydraulic control structures in Alpine County as part of a larger project to install three irrigation pivots, pump station, several freshwater diversions and a potential hydroelectric station. Engineering services also include hydraulic structure concrete and steel design, bidding assistance, utility coordination and engineering services during construction.

**Mackay & Soms/Placer County, Department of Facilities Services - Rancho Del Oro Sewage Lift Station | *Project Role: Senior Engineer***

This project consists of a six-foot diameter 30 foot deep wet well built into very solid rock. This lift station was designed to be able to take flows from its associated development and three outside sources and consolidate three separate lift stations into one. This project included a deep wet well, masonry building, standby generator, odor control and remote monitoring via SCADA.

**Highland Hills Lift Station Upgrade, El Dorado Irrigation District - California | *Project Role: Project Engineer***

This project expanded and upgraded the capacity of the existing lift station located on a small 0.1-acre site in an upscale neighborhood. Upgrading the raw sewage lift station included engineering two pumps, piping, valves, concrete, concrete masonry building enclosure, a new wet well, standby generator, providing temporary bypass pumping during construction, and connections to existing facilities, sewer replacement, water service extension, paving and site restoration.

**El Dorado Lift Station South Equalization Pond Reconstruction/Lining – El Dorado Irrigation District, California | *Project Role: Project Engineer***

Project engineer for design and preparation of construction cost estimates for the El Dorado Lift Station South Equalization Pond Reconstruction/Lining project. The project included design of a concrete overflow structure and installation of a high density polyethylene liner in a 3-million-gallon wastewater equalization pond.

**Reservoir A Filtration Plant - El Dorado Irrigation District, California | *Project Role: Project Engineer***

Project engineer for structural design for an addition to an existing masonry building for the Reservoir A Filtration Plant to house chemical tanks, as well as renovations to the existing building to improve its usability.

**City of Ukiah - Water Distribution System Improvement, California | *Project Role: Project Engineer***

Project engineer for structural design and construction engineering for the approximately \$11.9 million City of Ukiah Water Distribution System

Improvement projects. The project includes two post-tensioned concrete DYK tanks (1.5 MG each), one glass-fused bolted steel tank and substantial upgrades at the water treatment plant.

**Lake of the Pines Gravity Filters and Clearwell - Nevada Irrigation District, California** | *Project Role: Project Engineer*

Project engineer for detail design, construction cost estimates, and temporary construction inspection for the \$6.3 million Lake of the Pines Gravity Filters and Clearwell project, which included structural design, site layout, detail design of piping tie-ins, construction detailing to allow construction of new gravity filters, a 0.6 MG partially buried clearwell and a high service pump station on a small site within a residential community.

**Auburn Water Treatment Plant, Placer County Water Agency, California** | *Project Role: Project Engineer*

Project engineer for structural design and construction engineering for an approximately \$27 million upgrade and expansion for an 8 mgd water treatment plant. The improvements included a new raw water pump station, treatment facility built around Actifloc treatment units and a 600,000-gallon reinforced concrete filtered water clearwell and foundations for a pre-engineered steel building.

**Bowman Water Treatment Plant - Placer County Water Agency, California** | *Project Role: Project Engineer*

Project engineer for the Bowman Water Treatment Plant. Provided site layout, detail design, shop drawing review and structural design for a 200-foot-long concrete wall used to divide a large storage pond into two parts.

**Sunset WTP - Placer County Water Agency, California** | *Project Role: Project Engineer*

Project engineer involved in the structural design of upgrades for the \$1.1 million Sunset Water Treatment Plant project. Responsibilities included designing the structural wall and roof systems in the chemical building, as well as designing a new wall to be added to the existing basin.

**Sandhill WTP In-Conduit Hydroelectric Project - NLine Energy/San Gabriel Valley Water District** | *Project Role: Senior Engineer*

Project engineer for the design of a small in-conduit hydroelectric power plant. This Project included pre-purchasing the turbines and control panels as they are long lead-time items, design of piping, flow and pressure control systems, retaining walls, surge analysis, surge relief facilities, and integrating the facility into an operating water treatment plant.

**Project 184 – Flume 49/50 Reconstruction - El Dorado Irrigation District, California** | *Project Role: Project Engineer*

Project engineer for design of the \$4.7 million Project 184 – Flume 49/50 reconstruction project, which included improvements to replace an existing wooden spillway with a reused precast reinforced concrete structure and automated controls. The project requirements include demolition of existing improvements and construction of a reinforced concrete spillway (including two slide gates and a passive spillway), overlying steel control building and

a retaining wall. In addition, the contract documents had to be prepared within a short 60-day period. He performed structural design, provided engineering during construction as well as periodic site inspection visits.

### **El Dorado Canal Spillway No. 20 Reconstruction - El Dorado Irrigation District, California | *Project Role: Project Engineer***

Project engineer responsible for structural design for reinforced concrete, masonry and steel structures for the \$0.8 million El Dorado Canal Spillway No. 20 Reconstruction project improvements. The improvements included rock excavation, demolition, reinforced concrete walls, installation of gates and operators, concrete masonry control building, doors, metal work, and other general building construction, all designed to be constructed in a remote mountainous location.

### **Hazel Creek Campground – El Dorado Irrigation District |**

*Project Role: Project Engineer*

As part of the renovation of the Hazel Creek Campground, a new horse/pedestrian bridge was designed and constructed spanning forty feet. A number of issues had to be dealt with in the design process. EID wanted the bridge constructed of a material that would blend in the surrounding forest environment as well as be relatively maintenance free. Weathering steel was chosen for its natural color as well as its durability and lack of required maintenance.

The material for the walking surface had to be chosen carefully such that it was hard enough that it would not wear quickly but was soft enough that the horse's shoes would bite into it for traction and would be easily replaceable. Douglas Fir was chosen as it fit all of these requirements. The elevation of the bridge was also an issue. During high creek flow debris, including large ice chunks and parts of broken trees, is pushed downstream. So, the bridge had to be arched high enough for most of the debris to pass, but not so high as to make the entrance and departure angles uncomfortable for the horses. The width of the bridge was also critical. It needed to be wide enough a horse was comfortable entering and not so wide that it could spook and turn around mid-bridge, throwing a rider over the side.

The foundation at each end needed to be designed taking into account possible future erosion of the streambed, the weight of abutments, bridge and horses, as well as seismic forces and the force of any debris pushing against it from the streamflow.

### **Stafford Water Treatment Plant North Marin Water District |**

*Project Role: Project Engineer*

The Stafford WTP is built on two sides of a creek. In order to pass water, chemicals, power and signal conduits to both sides of the creek, a bridge was constructed. The span was nearly 100 ft and it needed to be wide enough to carry a 30 inch water pipe as well as number of other conduits.

Locked gates were added to discourage casual use of the bridge. The structure needed to be stiffer than a typical walking bridge to minimize the deflection of the bridge and therefore the piping.

Weathering steel was chosen as the material for this bridge as it requires little to no maintenance.



*Mr. Hammer's experience includes water system design, hydrology and hydraulics, hydrogenation, construction services, and water resources engineering. Mr. Hammer has provided hydrologic and hydraulic analysis for bridges, streams, and rivers, and communities throughout Sacramento County, El Dorado County, San Joaquin County, Placer County, and Stanislaus County. Mr. Hammer has experience in pipeline design for various agencies in Sacramento County, El Dorado County, Placer County, and Santa Clara County with pipe sizing ranging from 6-inch to 16-inch mainlines.*

## **Education**

B.S., Civil Engineering, California Polytechnic State University, SLO, 2007

## **Registration**

Professional Civil Engineer, 2011  
California No. 77713

## **Professional Endeavors**

Domenichelli & Associates 2007 to Present

## **RELEVANT PROJECT EXPERIENCE**

### **Folsom Plan Area Storm Drain Master Plan, Folsom, California|**

*Project Role: Project Engineer/Lead Hydraulic Modeler*

Performed detailed hydrologic and hydraulic analyses using SacCalc, HEC-RAS and XPSWMM for this 3,000 acre planning area south of Highway 50 in eastern Sacramento County. Sizing of detention facilities included incorporation of Hydro-modification principles and modeling. Calculations and modeling were also provided to include consideration for stormwater quality facilities within the plan area. 100-yr floodplain limits were established for the main stream and several small tributaries running through the project to establish appropriate setback for flooding and riparian open space corridors.

### **Sibley/Bidwell Street Drainage Project, Folsom, California| Project Role:**

*Project Engineer/Lead Hydraulic Modeler*

Prepared design plans and specifications for approximately 5,000 feet of up to 48-inch drainage pipelines, drainage culverts and a major outfall channel within the Historical Redevelopment District in the City of Folsom. The outfall channel design includes a bike trail which meanders through and across the channel.

### **Hinkle Reservoir Inundation Mapping, Folsom, California | Project**

*Role: Project Manager/ Lead Hydraulic Modeler*

Managed and reviewed the modeling and mapping of the Hinkle Reservoir dam break inundation study. Project had an accelerated schedule due to regulatory deadlines and was completed on-time allowing the District to remain in compliance.

### **Mather South Storm Drain Masterplan, Sacramento County, California | Project Role: Project Engineer/Lead Hydraulic Modeler**

Performed hydrologic and hydraulic analyses using SacCalc and HEC-RAS for this 900 acre development in southern Sacramento County. Analysis included HEC-RAS modeling from off-site development to determine existing limits of floodplains and create setbacks for development. Detention basins were sized to meet hydromodification, water quality, and flood control requirements.

### **Five Bridges Scour Protection Designs, San Joaquin County, California**

*| Project Role: Project Engineer/Lead Hydraulic Modeler*

Performed hydraulic and scour analysis, channel scour protection and bank stabilization designs for five major stream crossing in San Joaquin County. Crossings include Jack Tone Road Bridge over Mormon Slough and Mariposa Road over Littlejohn's Creek. All of the crossings require encroachment permits from the Central Valley Flood Control Board.

### **Glenborough Storm Drain Master Plan, Sacramento County, California | Project Engineer/Lead Hydraulic Modeler**

Performed detailed hydrologic and hydraulic analyses using SacCalc, HEC-RAS and XPSWMM for this 1,000 acre development south of

## Specialized training

Civil 3D 2011  
Advanced, CAD  
Masters, Inc. Training  
Course, Sacramento,  
CA April 2011.

HEC-RAS Unsteady  
Flow and Advanced  
Topics, Association of  
State Floodplain  
Managers Course,  
Sacramento, CA  
November 2009.

Obtaining and  
Developing Base Flood  
Elevations in Zone A  
Areas, California  
Department of Water  
Resources Course,  
Stockton, CA May  
2009.

Highway 50 in eastern Sacramento County. Analysis included detailed HEC-RAS modeling to determine limits of floodplains for construction of detention basins and public facilities.

### **Elverta Storm Drain Master Plan, Sacramento County, California | Project Engineer/Lead Hydraulic Modeler**

Performed hydrologic and hydraulic analyses using SacCalc and HEC-RAS for this 1,500 acre development north of Rio Linda in northern Sacramento County. Analysis included HEC-RAS modeling to determine existing limits of floodplains and proposing new channel configurations to contain the 100-year flow post construction. Detention was provided in-channel for the proposed development. Detention features included hydromodification and stormwater quality facilities.

### **Elder / Gerber Creek LOMR, Sacramento County, California | Project Role: Project Engineer/Lead Hydraulic Modeler**

Performed a LOMR for both Elder and Gerber creek in southern Sacramento County. Analysis included HEC-RAS modeling with use of the RAS-Mapper. Modeling took as-built conditions of the development and channel and mapped the floodplain to FEMA standards. LOMR was prepared and submitted.

### **Arbor Ranch Storm Drain Master Plan, Sacramento County, California | Project Role: Lead Hydraulic Modeler**

Performed hydraulic analyses using HEC-RAS for this 600 acre development in southern Sacramento County. Analysis included HEC-RAS modeling to determine the future channel configuration for phased development as well as the ultimate configuration. Detention basins were sized to meet water quality and flood control requirements.

### **Panhandle Drainage Study, City of Sacramento, California | Project Role: Project Engineer/Lead Hydraulic Modeler**

Performed a hydrologic and hydraulic analysis for a private development within the City of Sacramento. The project is a greenfield project located in the North Natomas Community Plan Area. XPS storm was used to size the backbone infrastructure and determine the mitigation measures necessary for the project.

### **Moose Hall Pump Station Hydraulic Modeling, El Dorado Irrigation District (EID) | Project Role: Lead Hydraulic Modeler**

Provided a simple system model to determine if the upgrades to the Moose Hall Reservoir pump station would adequately serve the project needs over various head conditions. Confirmed the adequacy of the pumps to be installed.

### **Surge Analysis for Various Hydroelectric Stations, Varies | Project Role: Lead Hydraulic Modeler**

Provided surge analyses for various hydroelectric projects in California. Projects include Waterman Hydroelectric Project, Kaweah Hydroelectric Project, Tanner Hydroelectric Project, Reservoir 7 Hydroelectric Project, and others. Analysis included study of the pipeline to determine limit of



surge modeling required, analysis of the turbine to determine best modeling approach of shutdown characteristics, and determining necessary surge countermeasures.

**Reservoir 7 In-Conduit Hydroelectric Project, El Dorado Irrigation District (EID) | Project Role: Project Engineer**

Provided preliminary design of an in-line hydroelectric facility to replace the functionality of PRS 5 on the Pleasant Oak Main for EID. Preliminary design detailed connections to the existing water lines as well as piping and building layout to accommodate three pumps as turbines. The preliminary design was used in the development of the final plans and specs.

**East Ridge Tank and Pump Station Hydraulic Modeling, Cooper Thorn and Associates (CTA) | Project Role: Lead Hydraulic Modeler**

Provided hydraulic model and surge analysis for the East Ridge Pump Station for CTA. Worked closely with the project engineer to understand El Dorado Irrigation District surge concerns for the project. Determined limits of surge analysis and provided a design solution to reduce the surge in the system in the event of power loss to the pump station. Recommended changes to the pipe layout to accommodate the necessary surge countermeasures.

**Upper Main Ditch Pipeline Design Project, El Dorado Irrigation District (EID) | Project Role: Project Engineer**

Provided a drainage study and hydraulic modeling of the Upper Main Ditch to supplement the Upper Main Ditch Basis of Design Report. Assisted the project team with design decisions and cost estimating to establish the most cost-effective design solution. Designed detailed site grading plan and determined project cut and fill to balance the site in construction sections.

**Rocklin Front Yard Water Main Replacement Project, Placer County Water Agency (PCWA) | Project Role: Project Engineer**

Construction completed in 2016. Provided design, plans and specifications for over 10,000 feet of 4-inch, 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandons old deteriorated mains and fire hydrants and installs new mains in City right-of-way along with new fire hydrants and reconnection of existing meters. Engineering services also include pipeline design, obtaining an encroachment permit, bidding assistance, utility coordination and services during construction.

**North Highlands Water Main Replacement Project Phases 1-3, Sacramento Suburban Water District, Sacramento (SSWD) | Project Role: Project Engineer**

Construction completed in 2013. Provided design, plans and specifications for over 48,000 feet of 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 985 meter retrofits. Engineering services also include pipeline design, public outreach, obtaining an encroachment permit, SWPPP preparation, bidding assistance, utility coordination and construction management. Project included potholing during design and incorporation of profiles along major roads.

**New Broadmoor Water Main Replacement Project, Sacramento Suburban Water District (SSWD) | Project Role: Associate Engineer**

Constructed in 2010. Provided design, plans and specifications for over 31,000 feet of 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 260 meter retrofits. Engineering services also include pipeline design, public outreach, obtaining an encroachment permit, bidding assistance, utility coordination and construction management.

**Bohemian Village Water Main Replacement Project, Sacramento Suburban Water District (SSWD) | Project Role: Associate Engineer**

Constructed in 2009. Provided design, plans and specifications for over 27,000 feet of 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 330 meter retrofits. Engineering services also include pipeline design, public outreach, obtaining an encroachment permit, SWPPP preparation, meter location survey sheets preparation, bidding assistance, utility coordination and construction management.

**Terry Lynn Water Main Replacement Project, Sacramento Suburban Water District (SSWD) | Project Role: Associate Engineer**

Constructed in 2008. Provided design, plans and specifications for over 23,000 feet of 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 478 meter retrofits. Engineering services also include pipeline design, public outreach, obtaining an encroachment permit, bidding assistance, utility coordination and construction management.

**Chestnut Street, Vermont Street, McKendrie Avenue, and Conrad Court Main Replacement, San Jose Water Company (SJWC) | Project Role: Design Engineer**

Design completed and constructed in 2016. Provided design and plans for 600 feet of 12-inch, 900 feet of 8-inch and 300 feet of 6-inch ductile iron mainline replacement. The project retired old water main, fire hydrants and meters and install new ductile iron pipeline along with 5 new fire hydrants and 30 metered services.

**Hull Avenue Main Replacement, San Jose Water Company (SJWC) | Project Role: Design Engineer**

Design completed and constructed in 2016. Provided design and plans and for 900 feet of 6-inch ductile iron mainline replacement. The project retired old water main, fire hydrants and meters and install new ductile iron pipeline along with 2 new fire hydrants and 38 metered services.

**Wunderlich Drive, Pedergast Avenue, Tuggle Avenue, Minette Drive and Minette Place Main Replacement, San Jose Water Company (SJWC) | Project Role: Design Engineer**

Design completed and constructed in 2016. Provided design and plans and for 2,700 feet of 6-inch and 500 feet of 4-inch ductile iron mainline replacement. The project retired old water main, fire hydrants and meters

and install new ductile iron pipeline along with 6 new fire hydrants, 57 metered services and two 6-inch tie-ins.

**Byerley Avenue, Johnston Avenue and Creek Drive Main Replacement, San Jose Water Company (SJWC) | Project Role: Design Engineer**

Design completed and constructed in 2016. Provided design and plans and for 1,500 feet of 6-inch and 200 feet of 4-inch ductile iron mainline replacement. The project retired old water main, fire hydrants and meters and install new ductile iron pipeline along with 3 new fire hydrants, 35 metered services and 1 6-inch tie-ins.

**Lucena Drive, Lucena Court, Caliente Way, Monte Cresta Way and Camino Del Rey Main Replacement, San Jose Water Company (SJWC) | Project Role: Design Engineer**

Design completed and constructed in 2016. Provided design and plans and for 2,000 feet of 6-inch and 200 feet of 4-inch ductile iron mainline replacement. The project retired old water main, fire hydrants and meters and install new ductile iron pipeline along with 4 new fire hydrants, 34 metered services and 1 6-inch tie-ins. Engineering services also include pipeline design and fast-track development for construction plans.

*Mr. Motiejunas has 18 years of Experience working in water resources for purveyors and land development consulting and has performed system modeling, design, drafting and inspection during construction*

## Education

B.S., Mechanical Engineering, California State University, Sacramento, 2002

## Registration

Professional Civil Engineer, 2019  
California No. 90060

## Professional Endeavors

Domenichelli & Associates, 2013 to Present

Sacramento Suburban Water District, 2012 to 2013

GC Wallace, 2005 to 2009

Sacramento Suburban Water District, 2003 to 2005

Sacramento County Water Agency, Intern 2001 to 2003

## Specialized training

Hydraulic Modeling Using HEC-RAS, Sacramento, November 2007

## RELEVANT PROJECT EXPERIENCE

**Phase 4,5&6 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Project Engineer (currently in construction)** D&A is providing design plans, specifications, and cost estimate for approximately 80,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes replacing fire hydrants, reconnecting interties, reconnecting wells and 1,300 metered service reconnections. Engineering services also include pipeline design, water system modeling, engineering services during construction and utility coordination.

**Phase 3 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Project Engineer (currently in construction)** D&A is providing design plans, specifications, and cost estimate for approximately 45,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes 74 fire hydrants, 2-interties, well reconnections and 622 metered service reconnections. Engineering services also include pipeline design, water system modeling, engineering services during construction and utility coordination.

**Leisure Town Sewer Lift Station and Sewer Force Main Expansion, City of Vacaville | Project Role: Project Engineer (currently in design)** D&A is providing design reports, plans, specifications, and cost estimates for the expansion and upgrade of the City's largest sewer lift station to increase capacity from 7MGD to 15MGD. The design will include odor control, new electrical and site development. The project also includes the design of approximately 3,300 feet of up to 24-inch sewer force main including two creek/ bridge under crossings and junction structure design.

**Watt Avenue Main Extension Project – Sacramento Suburban Water District (SSWD) | Project Role: Project Engineer (construction completed in 2023)**  
D&A provided design plans, specifications, and cost estimate for approximately 3,100 feet of new 16-inch DIP. The project provides a new loop and redundancy within the system for the District. The alignment is within a major road and will require crossing a substantial creek requiring first geotechnical and environmental analysis.

**Eureka Road Main Replacement Project – San Juan Water District (SJWD) | Project Role: Project Engineer (construction completed in 2023)**  
D&A provided design plans, specifications, and cost estimate for approximately 3,750 feet of 18-inch DIP. The project abandons old 16&18-inch steel mains and fire hydrants and installs new mains in County right-of-way along with new fire hydrants and reconnecting 17 metered services. The project is being designed on a fast track to complete construction before the County's planned pavement project.

**Midas Avenue Main Replacement Project Phase 2, Placer County Water Agency (PCWA) | Project Role: Project Engineer (currently in construction)**  
D&A is providing design plans, specifications, and cost estimate for approximately 2,500 feet of 12-inch PVC, 450 feet of cross county DIP and

450 feet of fusible PVC. The project abandons old 16-inch steel mains and fire hydrants and installs new mains in County right-of-way along with new fire hydrants and 43 meter replacements. Critical to the project is navigating a tie-in to the Agency's supply tank as well as navigating a pipe bursting effort to replace the existing pipe within a side yard easement with new fusible PVC.

**Q Street Main Replacement Project – Sacramento Suburban Water District (SSWD) | Project Role: Project Engineer (currently in design)**

Provided design, plans and specifications for over 23,000 feet of 12-inch ductile iron mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 183 meter reconnections. Engineering services also include pipeline design, obtaining an encroachment permit, engineering services during construction and utility coordination.

**Downtown Water Mains Replacement Project Hillcrest Neighborhood – City of Roseville | Project Role: Project Engineer**

Provided plans, specifications and cost estimates for 20,300 linear feet of new 12-inch and 8-inch pipe (DIP and PVC) within an established residential neighborhood with narrow streets and multiple utilities present. The project includes reconnection of 340 services and 29 fire hydrant replacements and coordinating with the Department of Drinking Water (DDW) for pipe separations and crossings.

**Feasibility Analysis for I-80 Water Crossings – City of Roseville | Project Role: Project Engineer**

D&A evaluated the feasibility and cost impacts related to replacing three existing water line crossings under Interstate 80 due to a Caltrans widening project the requires all crossing to meet Caltrans standards. The analysis mapped out existing features, existing utilities, soil types, and provided proposed alignments, construction methods and costs, and construction schedule time frames.

**Elm Avenue Main Replacement Project – Orange Vale Water Company | Project Role: Project Engineer**

The design includes preparing plans, specifications, and cost estimates for approximately 1,400 feet of new 12-inch water main on a narrow, hilly road. The alignment is impacted by the existing Oak tree drip lines and the sewer main. The project includes reconnection of 23 water meters, replacement of a fire hydrant, air release valves and restoration of homeowners' hardscape.

**Central Avenue Main Replacement Project – Orange Vale Water Company | Project Role: Project Engineer (currently under construction)**

The design includes preparing plans, specifications, and cost estimates for approximately 1,235 feet of 12-inch PVC waterline, approximately 90 feet of 8-inch PVC waterline, and all associated appurtenances including installing a new 1" AVR, reconnecting an existing 6-inch blow off valve, 2 new fire hydrant replacements and gate valves, etc. The project also consists of installing 12 new residential water services and reconnecting to 12 existing meters, and installing 5 new residential water services, meters and boxes and reconnection to existing in-tracts.

**Alta Loop Pipeline – Cable Road Water Main Replacement Project – Placer County Water Agency (PCWA) | Project Role: Associate Engineer (currently in construction)** Project includes design of a 6-inch PRV station and 4,660 linear-feet of 8-inch ductile iron pipeline within residential streets. The design included mainline replacement of old undersized main, replacing fire hydrants and reconnecting 42 residential metered services. The project required establishing an extensive water system model from the source to analyze the distribution system and confirm fire flows and PRV pressure settings.

**Placer County Government Center – Placer County Water Agency (PCWA) | Project Role: Design Engineer**

Performed hydraulic sewer and water modeling for the redevelopment of the Placer County Government Center in Auburn Ca. Involved converting previous out of date models, calibrating the models to current fire flow test data and updating them to include new design layouts. Water modeling included analyzing fire flows in existing, interim and ultimate conditions and making recommendations to upsize/loop to achieve the required fire flows in during all phases of development.

**Lower Banvard Canal Pipeline Replacement Project, Placer County Water Agency (PCWA) | Project Role: Associate Engineer (Currently Under Construction)**

Providing design plans, specifications, and cost estimating to replace 240 feet of 20-inch steel pipe traversing Interstate 80 within a 30-inch concrete pipe and replacing approximately 50 feet of 20-inch steel pipe within the Interstate's road embankment. The replacement pipe will be 20-inch fused PVC pipe installed within the existing 30-inch casing and new 20-inch steel pipe installed within the Interstate road embankment. The design includes preparing the necessary Caltrans encroachment permit documentation and supporting PCWA during the encroachment permit process. The project will include providing bid support and engineering services during construction.

**Greenberry – Sacramento Suburban Water District (SSWD) | Project Role: Associate Engineer**

D&A analyzed the water system supplying the Greenberry apartment complex and provided SSWD with recommendations for its replacement. The analysis included preparing a hydraulic model and creating four different scenarios of pipe networks. The scenarios included minor upgrades and connections, individual meters, master meters, and full upsizing and replacement of all water mains. D&A prepared a technical report for the study which included the construction costs of different scenarios as well as a cost impact analysis factoring connection costs and metering rates for the homeowner's association to remain a public or become a private water system.

**Barton Road Intertie PR Station and Pump Project – San Juan Water District (SJWD) | Project Role: Associate Engineer**

D&A provided design engineering services for 2,500 feet of 12-inch pipeline connecting SJWD's and PCWA's system. Project included a pressure reducing station and pump facility to allow flow in each direction between the two systems.

**State Streets Water Capacity and Sewer Rehabilitation Project, City of West**

## **Sacramento (CoWS) | Project Role: Associate Engineer**

The design includes preparing plans, specifications, and cost estimate for approximately 10,000 feet of new water main and rehabilitating approximately 38,000 feet of gravity sewer main within the CoWS State Street area. The prepared Contract Documents will allow CoWS to bid both the water mains and sewer main rehabilitations as a single project.

## **Lower Banvard Canal Pipeline Replacement Project, Placer County Water Agency (PCWA) | Project Role: Associate Engineer**

Providing design plans, specifications, and cost estimating to replace 240 feet of 20-inch steel pipe traversing Interstate 80 within a 30-inch concrete pipe and replacing approximately 50 feet of 20-inch steel pipe within the Interstate's road embankment. The replacement pipe will be 20-inch fused PVC pipe installed within the existing 30-inch casing and new 20-inch steel pipe installed within the Interstate road embankment. The design includes preparing the necessary Caltrans encroachment permit documentation and supporting PCWA during the encroachment permit process. The project will include providing bid support and engineering services during construction.

## **Water Distribution System Improvement Project – Blue Lake Springs Mutual Water Company (BLSMWC) | Project Role: Associate Engineer**

Construction beginning in 2018 and still ongoing. Provided design, drafting and plans for approximately 62,000 feet of 8-inch through 2-inch PVC mainline replacement. The project proposes to abandon old deteriorated mains and fire hydrants and install new mains in City right-of-way along with new fire hydrants, pressure reducing stations, and reconnect 900 meter services. Engineering services also include pipeline drafting.

## **Caples Lake Parking Lot, El Dorado Irrigation District |**

*Project Role: Design Engineer*

D&A provided design services to reconstruct the parking lot near the dam at Caples Lake. These improvements, as well as those performed at related sites (Ferguson Point, Woods Creek Trail Head, and Silver Lake Campground) were completed to satisfy El Dorado National Forest requirements related to FERC licensing. Improvements included paving, adding or replacing prefabricated restrooms, minor site grading and accommodation for ADA compliant restroom and picnic area access.

## **Outingdale Water Treatment Plant - Tank Design, El Dorado Irrigation District |**

*Project Role: Associate Engineer*

In January of 2013, D&A was contracted to aid EID Staff in the inspection of eight of EIDs potable water tanks with the intent to visually determine the extent of the corrosion existing in each tank and recommend a prioritization order for repair of each tank. The Outingdale Water Treatment Plant Lower Tank was in very poor condition. The steel rafters and many other structural members were delaminating due to severe corrosion. The tank design project replaces the existing, corroded tank with a new tank. The components of this design included a retaining wall to provide a foundation on the side of a steep slope, construction sequencing to keep the existing plant running during construction, piping provisions to add a future contact tank and demolition of the existing tank.

## **Lift Station Fall Protection, El Dorado Irrigation District | Project Role: Associate**

## *Engineer*

D&A provided design services for the installation of fall protection safety railing at ten lift stations. Each station had to be examined individually to determine the appropriate configuration of railing to allow staff to perform their work, while still protecting them from fall hazards.

## **Reservoir A Hypochlorite Conversion - As-Built drawings, El Dorado Irrigation District | *Project Role: Associate Engineer***

D&A provided field measurement and drafting services to produce a set of as-built drawings for the Reservoir A Hypochlorite Project.

## **Caltrans Pipeline HWY49, El Dorado Irrigation District | *Project Role: Associate Engineer***

D&A provided water line design and engineering services for EID in coordination with a Caltrans project that replaced a bridge and section of roadway on HWY49 in Coloma. The design included approximately 2,900 linear-feet of 6-inch DIP and fusible 6-inch PVC in the bridge deck along with associated appurtenances, fire hydrants, air relief valves, etc. D&A coordinated with Caltrans and provided plans in their format.

## **Town Center Force Main Project Phase 4, El Dorado Irrigation District | *Project Role: Associate Engineer (Currently Under Design)***

The design includes preparing plans, specifications, and cost estimates for the replacement of approximately 3,300 linear-feet of failing 8-inch AC sewer force main pipe with new 10-inch PVC pipe. This includes replacing approximately 250-feet of encased 8-inch sewer pipe across a Caltrans overpass, installing three ARV assemblies, making tie-ins to the existing lift station and existing force main. The design includes two vehicle pull-out locations along the alignment and facility improvements at the lift station. Engineering services includes assisting with obtaining a County encroachment permit and Caltrans encroachment permit, bid support, and engineering during construction.

## **Town Center Force Main Project Phase 3, El Dorado Irrigation District | *Project Role: Associate Engineer***

Recently Bid June 6, 2019. The design included preparing plans, specifications, and cost estimate for replacing approximately 4,100 linear-feet of failing 8-inch AC sewer force main pipe with new 10-inch PVC pipe. This included installing a new 20-inch steel casing under an existing railroad and 50 feet of 10-inch fused PVC pipe, a check valve structure, and two tie-ins to existing sewer force main.

Engineering service included design coordination with the El Dorado Irrigation District, El Dorado County DOT, and Sacramento Placerville Transportation Corridor JPA; assisting in obtaining a County encroachment permit; and will include bid support and engineering during construction.

## **Town Center Force Main Project Phase 2, El Dorado Irrigation District | *Project Role: Associate Engineer***

Construction completed in 2018. The design included prepared plans, specifications, and cost estimates for installing approximately 4,600 linear feet of new 10-inch sewer force main, two combination air vent assemblies, two 4-inch blow-offs, reconnecting two pumped service connections, and



the abandonment of the existing 8-inch AC sewer force main and appurtenances. Engineering service included assisting the District obtain the County encroachment permit, bid assistance, and engineering service during construction.

**Arden Service Area Main Replacement and Meter Retrofit Design – Sacramento County Water Agency (SCWA) | Project Role: Associate Engineer**

Currently providing design services for SCWA's Arden Service Area which includes over 38 miles of pipelines and 3,000 meter installations. Project includes a transmission main (16-inch DIP) along Fair Oaks Boulevard from Watt Avenue to Howe Avenue. Project also includes crossing the intersection of Watt and Fair Oaks with dual 12-inch pipeline.

**Whitney Boulevard Water Main Replacement Project – Placer County Water Agency (PCWA) | Project Role: Associate Engineer**

Construction completed in 2017. Provided design, plans and specifications for over 4,100 feet of 18-inch ductile iron mainline replacement. The project proposes to abandon old deteriorated mains and fire hydrants and install new mains in City right-of-way along with new fire hydrants and reconnect 79 meter services. Engineering services also include pipeline design, obtaining an encroachment permit, bidding assistance, utility coordination and engineering services during construction.

**Rocklin Front Yard Water Main Replacement Project – Placer County Water Agency (PCWA) | Project Role: Associate Engineer**

Construction completed in 2016. Provided design, plans and specifications for over 10,000 feet of 4-inch, 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandons old deteriorated mains and fire hydrants and installs new mains in City right-of-way along with new fire hydrants and reconnection of existing meters. Engineering services also include pipeline design, obtaining an encroachment permit, bidding assistance, utility coordination and engineering services during construction.

**Diamond Valley Ranch Recycled Water Pipeline – South Tahoe Public Utilities District (STPUD) | Project Role: Associate Engineer**

Construction completed in 2018. Provided design, plans and specifications for over 10,000 feet of 18-inch ductile iron pipeline in Alpine County as part of a larger project to install three irrigation pivots, pump station, several freshwater diversions and a potential hydroelectric station. Engineering services also include pipeline design, SWPPP preparation, bidding assistance, utility coordination and engineering services during construction.

**City Creek Turnout and Pipeline – East Valley Water District |**

*Project Role: Associate Engineer*

Construction completed in 2017. Provided design, plans and specifications for over 10,000 feet of 18-inch ductile iron pipeline in Alpine County as part of a larger project to install three irrigation pivots, pump station, several freshwater diversions and a potential hydroelectric station. Engineering services also include pipeline design, SWPPP preparation, bidding assistance, utility coordination and engineering services during construction.

**Pardi Way/Big Cut Rd/Sacramento Street Water Main Replacement Project – City of Placerville | Project Role: Associate Engineer**

Construction completed in 2017. Provided design, plans and specifications for over 4,000 feet of 6-inch, 8-inch and 12-inch PVC mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in Caltrans and City right-of-way along with new fire hydrants and reconnections to 46 metered services. Engineering services also include pipeline design, obtaining a Caltrans encroachment permit, bidding assistance and utility coordination and engineering services during construction.

**Gilmore, Polaris, and Ridgeway Waterline Project – El Dorado Irrigation District (EID) | Project Role: Associate Engineer**

Construction completed in 2016. Provided design, plans and specifications for over 10,000 feet of 4-inch, 6-inch, and 8- ductile iron mainline replacement. The project abandons old deteriorated mains and fire hydrants and installs new mains in City right-of-way along with new fire hydrants and reconnection of existing meters. Engineering services also include pipeline design, obtaining an encroachment permit, bidding assistance, utility coordination and engineering services during construction.

**Reservoir Floating Cover Evaluation and Assessment Report, El Dorado Irrigation District | Project Role: Design Engineer**

D&A prepared a report for EID summarizing the material condition of seven hypalon covered and lined reservoirs. The report analyzed independent inspection data, repair history, ongoing operation and maintenance plans and previous studies to make a determination of their condition compared to a general initial design life.

**Reservoir No. 7B Tank Painting and Modifications, El Dorado Irrigation District | Project Role: Design Engineer**

Plans include miscellaneous repairs to the tank's structural rafters and columns. New appurtenances for installation include a sample station, diver cleanout, drain, guardrail, roof vent and paint work.

**Arden Oaks Water Main Replacement Project Phases 1&2 – Sacramento Suburban Water District (SSWD) | Project Role: Associate Engineer**

Construction completed in 2015. Provided design, plans and specifications for over 35,000 feet of 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 403 meter retrofits. Engineering services also include pipeline design, public outreach, obtaining an encroachment permit, SWPPP preparation, meter location survey sheets preparation, bidding assistance, engineering services during construction, utility coordination and full construction management.

**San Jose Water Company Main Replacement Projects – West Valley Construction | Project Role: Design Engineer**

Provided design plans for over 50,000 feet of 6-inch, 8-inch, and 12-inch mainline replacement for West Valley Construction design-build Engineering services for San Jose Water Company. Projects include fast-track development of plans.

*Mr. Domenichelli is a Professional Engineer, with 6 years of experience as a project engineer working on a range of challenges from mechanical systems for specialized buildings to pump stations and distribution pipelines. Working as a design-build engineer has provided valuable experience in deliberations with large project teams spanning multiple disciplines to provide a quality product in a condensed project timeline.*

## Education

B.S., Mechanical Engineering, University of Hawaii at Manoa, HI, 2018

## Registration

Professional Engineer, CA, Certificate No. M41765

## Professional Endeavors

Domenichelli & Associates 2020 to Present

Dorvin D. Leis Co., Inc. Design Build Division 2018 to 2020

## PROJECT EXPERIENCE

### **Historic Pipeline Replacement Project, Olivehurst Public Utility District**

*Project Role: Project Engineer (2024)*

Provide design plans, specifications and cost estimating to replace approximately 7,000 feet of old steel pipelines in the town of Olivehurst. Included in the project are two jack and bore crossings, meter relocations, hydrants replacements, and accommodations for future storm drain infrastructure. The design includes preparing the necessary documentation for the Department of Drinking Water waivers, coordination with Yuba County for Encroachment permitting and accommodations for future storm drain improvements, and supporting Olivehurst Public Utility District during the bidding and construction process to provide a quality product.

### **Water Distribution Improvements Project, City of Roseville**

*Project Role: Project Engineer (2023)*

Provided design plans, specifications and cost estimating to intertie existing water mains and provide additional redundancy to improve the water infrastructure reliability in the City of Roseville. The project includes a creek crossing established using jack and bore methods, open trenching and hanging pipe from the Dry Creek Bridge on Douglas Road.

### **Ginger Drive and Valley View Drive Pipeline Replacement, Placer County Water Agency**

*Project Role: Project Engineer (2022)*

Provided design plans, specifications and cost estimating to replace approximately 2,000 feet of backyard water mains with new PVC mains installed in the roadway and relocation of meters. The replacement pipe was 8-inch fully restrained PVC. The design included preparing the necessary documentation for the Department of Drinking Water waivers, coordination with the City of Auburn for Encroachment permitting and supporting PCWA during the bidding and construction process to adapt to unforeseen conflicts and provide a quality product.

### **Automation of Pleasant Grove Pump Station, City of Roseville**

*Project Role: Project Engineer (2021)*

Provided analysis and design of actuator system for existing manual shutoff valves to be incorporated with the existing SCADA system. This included specification preparation, coordination with actuator suppliers, and engineer's estimate. This pump station is being incorporated into the City of Roseville's remote SCADA system to increase efficiency of their domestic water supply when water demand is high, and sources are limited.

### **Oliverhurst South Yuba County Water and Sewer Infrastructure Project | Project Role: Project Engineer (2021)**

Provided design support for 8 sewer lift stations. This design includes wet wells, pump selection, and pipeline design. Special consideration was given to the design of biofilter media beds to provide odor control. In close proximity to residential and commercial buildings.

## **Upper Main Ditch, El Dorado Irrigation**

*Project Role: Project Engineer (2020-21)*

Provided review of contractor submittals for compliance with specifications and design. The upper main ditch pipeline is being constructed across widely varied terrain with relatively tight tolerances. Site visits were required to confirm alignment and utility clearances for project amendments. Provided new details for appurtenances such as large air vacuum release valves.

## **Inundation Studies and Emergency Action Planning**

*Project Role: Project Engineer (2020-2021)*

Provided dam breach analysis and inundation mapping for several reservoirs in California to meet Department of Water Resource: Division of Safety of Dams' standards. In addition to the dam breach and inundation study an emergency action plan was prepared for each reservoir and provided to CalOES and first responders to be used in the event of an uncontrolled release from the reservoir.

## **Hydrology and Pipeline Hydraulics for Private Development | MacKay & Soms | Project Role: Project Engineer (2020-21)**

Provided hydrology analysis and design of open channel and complex stormwater pipeline for several large developments in Sacramento and Placer El Dorado County. Including analysis of overland release and pressure flow in piped systems.

## **Hydrology and Pipeline Hydraulics for Private Development | CTA Engineering & Surveying | Project Role: Project Engineer (2021)**

Provided hydrology analysis and design of open channel and complex stormwater pipeline for developments in El Dorado County. Including analysis of overland release and pressure flow in piped systems.

## **Hawaii State Hospital | Psychiatric Detention Facility | Design Build**

*Project Role: Project Engineer (2018-20)*

Provided analysis for mechanical systems in the new patient facility for the state of Hawaii on Oahu. This facility required special consideration as a psychiatric detention facility. This includes security grade products and materials. Mechanical systems designed included HVAC, sanitary sewer, domestic water, emergency generator and smoke control systems.

## **Schofield Barracks | Multiservice Facility | Design Build**

*Project Role: Project Engineer (2018-20)*

Provided analysis for mechanical systems in the multiservice facility. Mechanical systems designed included HVAC, sanitary sewer, domestic water, and dental clinic systems. Dental clinic systems provided include centralized compressed air for patient use, compressed air for lab use, vacuum systems for oral evacuation, reverse osmosis pure water for patient use, and central oxygen for patient use.

*Mr. Deubel has 5 years of experience working in water and wastewater projects. He has performed system modeling, design, drafting, software development, and inspection during construction for water infrastructure projects.*

## Education

B.S., Mechanical Engineering, California State University, Sacramento, 2019

## Professional Endeavors

Domenichelli & Associates, 2019 to Present

## Specialized training

SolidWorks with CSWA, Sacramento, November 2019

## RELEVANT PROJECT EXPERIENCE

### **Arden Service Area Pipe and Meter Installation Project -Phase 1B – Sacramento County Water Agency (SCWA) | Project Role: Project Engineer (currently in construction)**

Provide design, plans and specifications for over 9,000 feet of new 16-inch DIP, and over 21,900 linear ft of 12-inch, 8-inch, and 6-inch DIP mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way, public utility easements or commercial areas. The design also includes new fire hydrants, valves, interties, 160 residential meters, and 296 non-residential metered reconnections. Engineering services includes pipeline design, obtaining encroachment permits, engineering services during construction and utility coordination.

### **Arden Service Area Pipe and Meter Installation Project - Phase 3 – Sacramento County Water Agency (SCWA) | Project Role: Associate Engineer (Constructed)**

Provide design, plans and specifications for over 45,000 feet of 8-inch, 10-inch, and 12-inch ductile iron mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants, valves, interties, 616 residential meters, and 6 commercial metered reconnections. Engineering services also include pipeline design, obtaining an encroachment permit, engineering services during construction and utility coordination.

### **Barton Road Pipeline, Phase 1 – Placer County Water Agency (PCWA) | Project Role: Project Engineer (currently in design)**

D&A is providing design plans, specifications, and cost estimate for approximately 3,100 feet of new 24-inch pipe. The project provides a new loop and redundancy within the system for the Agency. The alignment is within a major road and will require crossing multiple large crossings including one 36-inch box culvert. Engineering services includes assisting with obtaining a county encroachment permit and encroachment permits from various property owners along the alignment, bid support, and engineering during construction.

### **Motherlode Force Main Phase 3A, 3B and 3C El Dorado Irrigation District | Project Role: Project Manager (currently in construction)**

The design includes preparing plans, specifications, and cost estimates for the replacement of approximately 5,700 linear-feet of failing 12-inch AC sewer force main pipe with new 18-inch PVC pipe, and modifications to 6-inch gravity sewer system and 12-inch water main facilities. The design includes two vehicle pull-out locations along the alignment, and improvements to the El Dorado Pump Station access road. Engineering services includes assisting with obtaining a county encroachment permit and Caltrans encroachment permit, bid support, and engineering during construction.

### **Watt Avenue Main Extension Project – Sacramento Suburban Water District (SSWD) | Project Role: Design Engineer (constructed)**

D&A is providing design plans, specifications, and cost estimate for approximately 3,100 feet of new 16-inch DIP. The project provides a new

loop and redundancy within the system for the District. The alignment is within a major road and will require crossing a substantial creek requiring geotechnical and environmental analysis and regulatory compliance.

### **Eureka Road Main Replacement Project – San Juan Water District (SJWD) |**

*Project Role: Design Engineer (constructed)*

D&A provided design plans, specifications, and cost estimate for approximately 3,750 feet of 18-inch DIP. The project abandons old 16&18-inch steel mains and fire hydrants and installs new mains in County right-of-way along with new fire hydrants and reconnecting 17 metered services. The project is being designed on a fast track to complete construction before the County's planned pavement project.

### **Rocklin Main Replacement Project Phase 2, Placer County Water Agency (PCWA) | Project Role: Design Engineer (currently in construction)**

D&A is providing design plans, specifications, and cost estimate for approximately 2,500 feet of 12-inch PVC, 450 feet of cross county DIP and 450 feet of fusible PVC. The project abandons old 16-inch steel mains and fire hydrants and installs new mains in County right-of-way along with new fire hydrants and 43 meter replacements. Critical to the project is navigating a tie-in to the Agency's supply tank as well as navigating a pipe bursting effort to replace the existing pipe within a side yard easement with new fusible PVC.

### **Q Street Main Replacement Project – Sacramento Suburban Water District (SSWD) | Project Role: Design Engineer (currently in design)**

Provided design, plans and specifications for over 23,000 feet of 12-inch ductile iron mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 183 meter reconnections. Engineering services also include pipeline design, obtaining an encroachment permit, engineering services during construction and utility coordination.

### **Cactus Pipeline, San Bernardino Valley MUD (SBVMUD) |**

*Project Role: Design Engineer (constructed)*

Providing design plans, specifications, and cost estimate for approximately 5,500 feet of 30-inch to 48-inch C905 PVC pipe along paved residential road within the City of Rialto, CA. The large diameter pipe will convey raw water to SBVMUD recharge basins. The design includes determining the hydraulic grade line (HGL) and the pipe alignment through numerous existing utilities and developing connection details to the existing drain system. The project will include bid support and engineering services during construction.

### **Downtown Water Mains Replacement Project Hillcrest Neighborhood – City of Roseville | Project Role: Design Engineer (2019-2022)**

Providing plans, specifications, and cost estimates for 20,300 linear feet of new 12-inch and 8-inch pipe (DIP and PVC) within an established residential neighborhood with narrow streets and multiple utilities present. The project includes reconnection of 340 services and 29 fire hydrant replacements and coordinating with the Department of Drinking Water (DDW) for pipe separations and crossings.

### **Stanley Avenue Water Main Replacement Project, Carmichael Water District |**

**Project Role: Project Engineer (2020-21)**

Construction completed in 2021. Provided design plans, specifications, and cost estimates for 1,900 feet of 16-inch ductile iron pipe and 1,100 feet of 8-inch ductile iron pipe, 59 new metered service connection, fire hydrant replacement, two new 4-inch meters with backflow devices, a water sampling station, and a combination air valve. All work will occur within residential streets under Sacramento County jurisdiction.

**Feasibility Analysis for I-80 Water Crossings – City of Roseville | Project Role: Project Engineer**

D&A evaluated the feasibility and cost impacts related to replacing three existing water line crossings under Interstate 80 due to a Caltrans widening project that requires all crossings to meet Caltrans standards. The analysis mapped out existing features, existing utilities, soil types, and provided proposed alignments, construction methods and costs, and construction schedule time frames.

**Grant Avenue Mainline Replacement Project, Carmichael Water District |**

**Project Role: Design Engineer (2018-19)**

Provided design and engineering service during construction of 6,430 feet of 8-inch and 6-inch ductile iron pipe within minor and major Sacramento County roads, fire hydrant relocation and replacements, 76 new water service connections, and a 50-foot horizontal directional drill installation. Engineering services included assisting in obtaining an encroachment permit from the County of Sacramento, bid assistance, utility investigation and coordination, and engineering services during construction.

**State Streets Water Capacity and Sewer Rehabilitation Project, City of West Sacramento (CoWS) |**

**Project Role: Project Engineer (2019-2022)**

The Project received ASCE's 2020 Outstanding Utilities Award. The design included preparing plans, specifications, and cost estimate for approximately 10,000 feet of new water main and rehabilitating approximately 38,000 feet of gravity sewer main within the CoWS State Street area.

The water main design involves aligning the pipelines to avoid conflicts with existing utilities, minimizing areas not complying with California Waterworks Standards for horizontal and vertical separations from non-potable water pipe, and reconnection of 213 existing metered water services. The water main design also includes multiple connections to the existing water system.

The sewer design includes coordinating the Television Inspection (TVI) subconsultant and conducting a condition assessment of the entire gravity sewer system. Based on the condition assessment, rehabilitation recommendations are being made using either cured-in-place pipe (CIPP) or a full remove and replacement of the sewer main. The project includes reconnecting to approximately 500 sewer laterals.

**Town Center Force Main Project Phase 4, El Dorado Irrigation District |**

**Project Role: Design Engineer (Design on Hold Pending Prioritization)**

The design includes preparing plans, specifications, and cost estimates for the replacement of approximately 3,300 linear-feet of failing 8-inch AC sewer force main pipe with new 10-inch PVC pipe. This includes replacing approximately 250-feet of encased 8-inch sewer pipe across a Caltrans

overpass, installing three ARV assemblies, making tie-ins to the existing lift station and existing force main. The design includes two vehicle pull-out locations along the alignment and facility improvements at the lift station. Engineering services includes assisting with obtaining a County encroachment permit and Caltrans encroachment permit, bid support, and engineering during construction.

**San Jose Water Company Main Replacement Projects – West Valley Construction** | *Project Role: Design Engineer*

Construction beginning in 2009 and still ongoing. Providing design plans for over 50,000 feet of 6-inch, 8-inch, and 12-inch mainline replacement for West Valley Construction design-build Engineering services for San Jose Water Company. Projects include fast-track development of plans.



*Mr. Johnson's experience includes water system design, hydrologic and hydraulic analysis, and has performed system modeling, design, and drafting.*

## Education

M.S. Civil Engineering, Hydrology and Water Resource Management, University of Colorado, Boulder, 2014

B.S., Civil Engineering, California State University, San Francisco, 2010

## Registration

Professional Registered Engineer, 2024  
C96028

## Professional Endeavors

Domenichelli & Associates, 2021 to Present

University of Nevada, Reno. 2019 to 2021

## Specialized training

Hydraulic Modeling Using HEC-RAS 1D & 2D, Australian Water School 2021

Hydraulic Modeling of Structures Using HEC-RAS 1D & 2D, Australian Water School 2022

Dam Breach Analysis Using HEC-RAS 1D & 2D, Australian Water School 2022

## RELEVANT PROJECT EXPERIENCE

### **MacKay and Soms Drainage Report Development** | *Project Role: Associate Engineer and Computational Modeler (Multiple Projects)*

D&A has subcontracted with MacKay and Soms to provide drainage design, calculations, and studies for development projects throughout the Sacramento region. D&A provides studies in the region, many of which are for projects in Sacramento County DWR jurisdiction. Level 1, Level 2, and Level 4 studies have been prepared following the County's drainage study requirements. In all cases, hydrology and hydraulics follow the County Drainage Manual Volume 2 and improvement plan Section 9 (Storm Drain Design). Drainage studies also considered the Sacramento Stormwater Quality Partnership Hydromodification Management Plan and the Sacramento Region Stormwater Quality Design Manual. D&A takes a comprehensive approach to drainage design to incorporate low-impact development, stormwater quality, hydromodification, and flood control.

### **San Joaquin County Bridge Hydrologic and Hydraulic Analysis and Reports, San Joaquin County** | *Project Role: Associate Engineer and Computational Modeler*

D&A has provided Hydraulic Location Studies for several bridge designs throughout San Joaquin County. The two projects that I work on were Buckman Road Bridge over Duck Creek and Miller's Ferry Bridge over the Mokelumne River. This work includes the development of event hydrology and hydraulic analysis of bridge and floodplain conditions. Working with the county D&A develops technical reports to show the bridge designs meet the criteria of Caltrans and the Central Valley Flood Protection Board.

### **Phase 4,5&6 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA)** | *Project Role: Associate Engineer (currently in design)*

D&A is providing design plans, specifications, and cost estimate for approximately 80,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes replacing fire hydrants, reconnecting interties, reconnecting wells and 1,300 metered service reconnections. Engineering services also include pipeline design, water system modeling, engineering services during construction and utility coordination.

### **Phase 3 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA)** | *Project Role: Associate Engineer (currently in design)*

D&A is providing design plans, specifications, and cost estimate for approximately 45,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes 74 fire hydrants, 2-interties, well reconnections and 622 metered service reconnections. Engineering services also include pipeline design, water system modeling, engineering services during construction and utility coordination.

### **Alta Loop Pipeline – Cable Road Water Main Replacement Project – Placer**

**County Water Agency (PCWA) | Project Role: Associate Engineer**

Design complete and awaiting construction. Project includes design of a 6-inch PRV station and 4,660 linear-feet of 8-inch ductile iron pipeline within residential streets. The design included mainline replacement of old undersized main, replacing fire hydrants and reconnecting 42 residential metered services. The project required establishing an extensive water system model from the source to analyze the distribution system and confirm fire flows and PRV pressure settings.

**Motherlode Force Main, Phase 3A, El Dorado Irrigation District | Project Role: Associate Engineer**

Prepared contract plans and specifications for approximately 5,700 linear-feet of 18-inch DR 18 PVC force main within El Dorado County right-of-way and EID property. The design is the first of three phases to replace the remain portions of AC pipe force main that is being replaced. The Design included two main connections to existing force main pipe; reconnection of two pump to sewer lateral; realignment of 12-inch water main found to be in conflict; realignment of an EID 2-inch water service line; and replacement of a 6-inch gravity sewer.

**Greenberry – Sacramento Suburban Water District (SSWD) | Project Role: Associate Engineer**

D&A analyzed the water system supplying the Greenberry apartment complex and provided SSWD with recommendations for its replacement. The analysis included preparing a hydraulic model and creating four different scenarios of pipe networks. The scenarios included minor upgrades and connections, individual meters, master meters, and full upsizing and replacement of all water mains. D&A prepared a technical report for the study which included the construction costs of different scenarios as well as a cost impact analysis factoring connection costs and metering rates for the homeowner's association to remain a public or become a private water system.

**State Streets Water Capacity and Sewer Rehabilitation Project, City of West Sacramento (CoWS) | Project Role: Associate Engineer**

The design includes preparing plans, specifications, and cost estimate for approximately 10,000 feet of new water main and rehabilitating approximately 38,000 feet of gravity sewer main within the CoWS State Street area. The prepared Contract Documents will allow CoWS to bid both the water mains and sewer main rehabilitations as a single project.

**Stanley Avenue Water Main Replacement Project, Carmichael Water District | Project Role: Associate Engineer**

Construction completed in 2020. Prepared design and contract documentation for approximately 1,900 feet of 16-inch ductile iron pipe and 1,100 feet of 8-inch ductile iron pipe, 59 new metered service connection, fire hydrant replacement, two new 4-inch meters with backflow devices, a water sampling station, and a combination air valve. All work occurred within residential streets under Sacramento County jurisdiction.

*Mr. Mendoza has 7 years of In-field and professional Experience working in water resources for purveyors and land development consulting. He has performed design, drafting, developer project review, and inspection during construction for water infrastructure.*

## Education

B.S., Civil Engineering,  
California State  
University, Sacramento,  
2021

## Registration

Engineer-in-Training,  
2021 No. 174289

## Professional Endeavors

Domenichelli &  
Associates, 2022 to  
Present

Mackay & Soms Civil  
Engineers, 2021

Sacramento Suburban  
Water District, 2020 to  
2021

Kirby's Pump &  
Mechanical Inc., 2020

Lower Tule River  
Irrigation District, 2017  
to 2019

## RELEVANT PROJECT EXPERIENCE

**Phase 1B Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Project Engineer (currently in construction)** D&A is providing design plans, specifications, and cost estimate for approximately 9,000 feet of new 16-inch DIP, and 21,900 linear ft of 12-inch, 8-inch, and 6-inch DIP mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way, public utility easements or commercial areas. The design also includes new fire hydrants, valves, interties, 160 residential meters, and 296 non-residential metered reconnections. The engineering services provided encompassed a range of activities, such as acquiring encroachment permits, conducting quantity takeoffs for parcels within the project area, reviewing specifications, designing pipelines, managing public outreach, and providing engineering support throughout the construction phase.

**Phase 3 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Project Engineer (constructed)** D&A is providing design plans, specifications, and cost estimate for approximately 45,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes 74 fire hydrants, 2-interties, well reconnections and 622 metered service reconnections. The engineering services provided pipeline design, assessment of specifications and DDW submittals, engineering assistance throughout the construction phase, as well as coordination of utilities.

**Phase 4, 5, & 6 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Project Engineer (currently in construction)** D&A is providing design plans, specifications, and cost estimate for approximately 80,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes replacing fire hydrants, reconnecting interties, reconnecting wells and 1,300 metered service reconnections. Engineering proficiencies encompass creating meter installation documents for customer review, managing coordination between multiple agencies, verifying specifications and standards, and designing pipelines.

**Watt Avenue Main Extension Project – Sacramento Suburban Water District (SSWD) | Project Role: Staff Engineer (constructed)** D&A is providing design plans, specifications, and cost estimate for approximately 3,100 feet of new 16-inch DIP. The project provides a new loop and redundancy within the system for the District. The alignment is within a major road and will require crossing a substantial creek requiring first geotechnical and environmental analysis. The engineering services consisted of the review of district standards and specifications, evaluation of DDW submittals, and coordination of utilities.

**Rocklin Water Main Replacement Project Phase 2, Placer County Water Agency (PCWA) | Project Role: Staff Engineer (currently in construction)**

D&A is providing design plans, specifications, and cost estimate for approximately 2,500 feet of 12-inch PVC, 450 feet of cross county DIP and 450 feet of fusible PVC. The project abandons old 16-inch steel mains and fire hydrants and installs new mains in County right-of-way along with new fire hydrants and 43 meter replacements. Critical to the project is navigating a tie-in to the Agency's supply tank as well as navigating a pipe bursting effort to replace the existing pipe within a side yard easement with new fusible PVC. Engineering services involved providing drafting aid and construction support.

**Q Street Main Replacement Project – Sacramento Suburban Water District (SSWD) | Project Role: Staff Engineer (currently in design)**

Provided design, plans and specifications for over 23,000 feet of 12-inch ductile iron mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 183 meter reconnections. Engineering services also include pipeline design, obtaining an encroachment permit, engineering services during construction and utility coordination.

**Downtown Water Mains Replacement Project Hillcrest Neighborhood – City of Roseville | Project Role: Staff Engineer (constructed)**

Providing plans, specifications and cost estimates for 20,300 linear feet of new 12-inch and 8-inch pipe (DIP and PVC) within an established residential neighborhood with narrow streets and multiple utilities present. The project includes reconnection of 340 services and 29 fire hydrant replacements and coordinating with the Department of Drinking Water (DDW) for pipe separations and crossings. During construction, the engineering services rendered included assistance with as-built and record drawings, oversight and coordination of pothole activities, as well as design modifications to the pipeline.

**Riparian Area Distribution System, Lower Tule River Irrigation District (LTRID) | Project Role: Operations Personnel (constructed)**

This construction project replaced an open channel distribution system with a pipeline distribution system to conserve water lost through seepage in the current distribution system consisting of natural channels of the Tule River. The project constructed three new laterals in the Lateral A service area of approximately 2,200 acres. This lateral system will cross the North Fork of the Tule River and the Middle Fork of the Tule River via a proposed underground pipeline. Water conservation will be achieved through this project by eliminating seepage losses through the natural channel and provide in-lieu recharge by offsetting groundwater pumping currently required to supplement the surface water delivery losses. Services provided included the installation of pipelines and the utilization of surveying techniques to ensure accuracy of planned grades.

*Mr. Mercado has 8 months of experience working in water resources and has performed system modeling, design, drafting, and inspection during construction.*

## Education

B.S., Mechanical Engineering, California State University, Sacramento, 2022

## Registration

Engineer-in-Training, 2023 No. 178701

## Professional Endeavors

Domenichelli & Associates, July 2023 to Present

## Specialized training

SolidWorks with CSWA, May 2023

## RELEVANT PROJECT EXPERIENCE

**Phase 1B Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Staff Engineer (currently in construction)** D&A is providing design plans, specifications, and cost estimate for approximately 9,000 feet of new 16-inch DIP, and 21,900 linear ft of 12-inch, 8-inch, and 6-inch DIP mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way, public utility easements or commercial areas. The design also includes new fire hydrants, valves, interties, 160 residential meters, and 296 non-residential metered reconnections. The engineering services provided encompassed a range of activities, such as acquiring encroachment permits, conducting quantity takeoffs for parcels within the project area, reviewing specifications, designing pipelines, managing public outreach, and providing engineering support throughout the construction phase.

**Phase 3 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Staff Engineer (constructed)** D&A is providing design plans, specifications, and cost estimate for approximately 45,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes 74 fire hydrants, 2-interties, well reconnections and 622 metered service reconnections. The engineering services provided pipeline design, assessment of specifications and DDW submittals, engineering assistance throughout the construction phase, as well as coordination of utilities.

**Phase 4,5&6 Arden Service Area Pipe and Meter Installation Project, Sacramento County Water Agency (SCWA) | Project Role: Staff Engineer (currently in construction)** D&A is providing design plans, specifications, and cost estimate for approximately 80,000 feet of new 12-inch, 10-inch and 8-inch DIP mainline. The project abandons old undersized backyard mains and includes replacing fire hydrants, reconnecting interties, reconnecting wells and 1,300 metered service reconnections. Engineering services also include pipeline design, water system modeling, engineering services during construction and utility coordination.

**Q Street Main Replacement Project – Sacramento Suburban Water District (SSWD) | Project Role: Staff Engineer (currently in design)** Provided design, plans and specifications for over 23,000 feet of 12-inch ductile iron mainline replacement. The project abandoned old ACP mains and fire hydrants and installed new mains in County right-of-way along with new fire hydrants and 183 meter reconnections. Engineering services also include pipeline design, obtaining an encroachment permit, engineering services during construction and utility coordination.

*Mr. Cade has 20 years of Experience and has assisted with the design and drafting for multiple pipeline and pump station projects.*

## Education

B.S., Agriculture  
Mechanics,  
Pennsylvania State  
University, 1976

## Professional Endeavors

Domenichelli &  
Associates, 2013 to  
present

Psomas, 2007-2013

Owen Engineering,  
2002-2007

Dowl Engineering,  
2001-2002

## RELEVANT PROJECT EXPERIENCE

**Leisure Town Sewer Lift Station and Sewer Force Main Expansion, City of Vacaville** | *Project Role: Senior Drafter (currently in design)* D&A is providing design reports, plans, specifications, and cost estimates for the expansion and upgrade of the City's largest sewer lift station to increase capacity from 7MGD to 15MGD. The design will include odor control, new electrical and site development. The project also includes the design of approximately 3,300 feet of up to 24-inch sewer force main including two creek/ bridge under crossings and junction structure design.

**Midas Avenue Main Replacement Project Phase 2, Placer County Water Agency (PCWA)** | *Project Role: Senior Drafter (currently in construction)*

D&A is providing design plans, specifications, and cost estimate for approximately 2,500 feet of 12-inch PVC, 450 feet of cross county DIP and 450 feet of fusible PVC. The project abandons old 16-inch steel mains and fire hydrants and installs new mains in County right-of-way along with new fire hydrants and 43 meter replacements. Critical to the project is navigating a tie-in to the Agency's supply tank as well as navigating a pipe bursting effort to replace the existing pipe within a side yard easement with new fusible PVC.

**Water Distribution Improvements Project, City of Roseville**

*Project Role: Senior Drafter (2023)*

Provided design plans, specifications and cost estimating to intertie existing watermains and provide additional redundancy to improve the water infrastructure reliability in the City of Roseville. The project includes a creek crossing established using jack and bore methods, open trenching and hanging pipe from the Dry Creek Bridge on Douglas Road.

**Ginger Drive and Valley View Drive Pipeline Replacement, Placer County Water Agency**

*Project Role: Senior Drafter (2022)*

Provided design plans, specifications and cost estimating to replace approximately 2,000 feet of backyard water mains with new PVC mains installed in the roadway and relocation of meters. The replacement pipe was 8-inch fully restrained PVC. The design included preparing the necessary documentation for the Department of Drinking Water waivers, coordination with the City of Auburn for Encroachment permitting and supporting PCWA during the bidding and construction process to adapt to unforeseen conflicts and provide a quality product.

**Alta Loop Pipeline – Cable Road Water Main Replacement Project – Placer County Water Agency (PCWA)** | *Project Role: Senior drafter (currently in construction)* Project includes design of a 6-inch PRV station and 4,660

linear-feet of 8-inch ductile iron pipeline within residential streets. The design included mainline replacement of old undersized main, replacing fire hydrants and reconnecting 42 residential metered services. The project required establishing an extensive water system model from the source to analyze the distribution system and confirm fire flows and PRV pressure settings.

## **Historic Pipeline Replacement Project, Olivehurst Public Utility District**

*Project Role: Senior Drafter (2024)*

Provide design plans, specifications and cost estimating to replace approximately 7,000 feet of old steel pipelines in the town of Olivehurst. Included in the project are two jack and bore crossings, meter relocations, hydrants replacements, and accommodations for future storm drain infrastructure. The design includes preparing the necessary documentation for the Department of Drinking Water waivers, coordination with Yuba County for Encroachment permitting and accommodations for future storm drain improvements, and supporting Olivehurst Public Utility District during the bidding and construction process to provide a quality product.

## **Moose Hall Pump Station Upgrade – El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services to replace aging sleeve valves used to reduce pressure when transferring water from Reservoir 1 Water Treatment Plant to the Moose Hall reservoir. In addition to the sleeve valves, a bypass around the valve vault and a new access hatch were designed into the project to aid operations staff in operating and servicing the station.

## **Upper Main Ditch Pipeline Design - El Dorado Irrigation District (Ongoing)|**

*Project Role: Senior Drafter*

D&A provided design services to convert the conveyance of a portion of EID's Main Ditch to an underground pipeline. The pipeline is proposed to be 42 inches in diameter, about 6 feet deep, and 12,300 feet in length. Approximately 8,200 feet of the pipeline will be within Blair Road; 1,500 feet will be within the existing ditch; and 2,600 feet will be in cross-country terrain.

## **Granite Bay Pump Station - San Juan Water District | Project Role: Senior Drafter**

Upgrades to the Upper Granite Bay Pump Station were required due to increases in water demands and for reliability. The existing pump station was built within the confines of a concrete block fence, which the new pump station was required to fit inside of as well. The new facility had to be designed and built around the existing pump system, as it had to keep running during construction and final testing. D&A provided hydraulic system modeling, piping design, structure design, construction observation, and shop drawing review.

## **Diamond Valley Ranch Recycled Water Pipeline – South Tahoe Public Utilities District (STPUD) | Project Role: Drafter**

Construction completed in 2018. Provided design, plans and specifications for over 10,000 feet of 18-inch ductile iron pipeline in Alpine County as part of a larger project to install three irrigation pivots, pump station, several freshwater diversions and a potential hydroelectric station. Engineering services also include pipeline design, SWPPP preparation, bidding assistance, utility coordination and engineering services during construction.

## **Antelope Pumpback Pump Station – Sacramento Suburban Water District |**

*Project Role: Senior Drafter*

Completed design of the 15,000 gpm pump station that will allow

groundwater to be pumped back to San Juan Water District through the existing Cooperative Transmission Pipeline during drought conditions or water supply emergencies. This project provides emergency water to several water districts from Folsom Lake to west of I80 in the community of Antelope. With the pump station, the transmission main can convey over 10,000 gpm through an existing 24" to 72" pipeline that traverses a major portion of the north Sacramento County.

**Caltrans Waterline Replacement, Route 49 and American River Bridge Replacement – El Dorado Irrigation District (EID) | Project Role: Senior Drafter**

D&A provided water line design and engineering services for EID in coordination with a Caltrans project that replaced a bridge and section of roadway on HWY49 in Coloma. The design included approximately 2,900 linear-feet of 6-inch DIP and fusible 6-inch PVC in the bridge deck along with associated appurtenances, fire hydrants, air relief valves, etc. D&A coordinated with Caltrans and provided plans in their format.

**Ridgeview 10 Lift Station Removal - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services to remove an existing sanitary sewer lift station from EID's system. The existing lift station was removed in its entirety and flow was provided through manholes in the opposite direction to the new development. The existing road was extended for manhole access. New piping was extended to the future neighborhood and connection.

**Town Center Force Main Replacement, All Phases - El Dorado Irrigation District**

*| Project Role: Senior Drafter*

The design includes preparing plans, specifications, and cost estimates for the replacement of approximately 3,300 linear-feet of failing 8-inch AC sewer force main pipe with new 10-inch PVC pipe. This includes replacing approximately 250-feet of encased 8-inch sewer pipe across a Caltrans overpass, installing three ARV assemblies, making tie-ins to the existing lift station and existing force main. The design includes two vehicle pull-out locations along the alignment and facility improvements at the lift station. Engineering services includes assisting with obtaining a County encroachment permit and Caltrans encroachment permit, bid support, and engineering during construction.

**Bass Lake Paint Facility Building - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design and plans for a prefabricated metal building to house a large painting facility to coat equipment and vehicles. The prefabricated building included a painting booth, abrasive blasting unit and stall, dust collection and fire suppression system.

**Mormon Island and Lakeridge Oaks Lift Station Abandonment - El Dorado Irrigation District | Project Role: Senior Drafter**

D&A analyzed EID's existing sewer system to find ways to reduce operations and maintenance costs. It was determined that the Mormon Island and Lake Ridge Oaks lift station could be eliminated and replaced with gravity sewer, by redirecting the sewage to an existing nearby lift station, thereby combining the flows from three lift stations into one.



## **Caples Lake Dam Parking Lot, Woods Creek Trailhead, Silver Lake West Campground, and Ferguson Point Improvements - El Dorado Irrigation District**

*Project Role: Senior Drafter*

D&A provided design services to reconstruct the parking lot near the dam at Caples Lake. These improvements, as well as those performed at related sites (Ferguson Point, Woods Creek Trail Head, and Silver Lake Campground West) were completed to satisfy El Dorado National Forest requirements related to FERC licensing. Improvements included paving, adding or replacing prefabricated restrooms, minor site grading and accommodation for ADA compliant restroom and picnic area access.

## **Silver Lake East Campground Improvement - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services for the Silver Lake East Campground improvements to include the configuration of camp sites and parking stalls, installation of new water lines, re-pavement of the existing access road, and locations for new prefabricated bathrooms.

## **Caples Lake Campground Improvement - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services for the Silver Lake East Campground improvements to include the configuration of camp sites and parking stalls, installation of new water lines, re-pavement of the existing access road, and locations for new prefabricated bathrooms. Designed and provided new ADA compliant hiking trails.

## **Lift Station Fall Protection - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services for the installation of fall protection safety railing at ten lift stations. Each station had to be examined individually to determine the appropriate configuration of railing to allow staff to perform their work, while still protecting them from fall hazards.

## **Rancho Ponderosa Lift Station Abandonment - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services to abandon the existing Rancho Ponderosa Lift Station. The flow was rerouted into Green Valley Road such that it can drain via gravity, eliminating the need for a lift station. The challenge for this project is the minimal change in grade available to slope the new gravity pipe from manhole to manhole. In addition, the best available alignment for the pipe required trenches which were 22 to 24 feet deep.

## **Sly Park Parking Lot - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services for taking field measurements and preparing a set of figures to aid the EID Parks and Recreation Department to apply for grant funds for the design and construction of a new parking lot and picnic area at the Sly Park Recreation Facility. The proposed facilities consist of a cut and fill area for parking, accessible restrooms, standard and accessible picnic areas with accessible trails.

## **Old Forest Road Waterline Relocation and Slope Protection Project – El Dorado Irrigation District | *Project Role: Senior Drafter***

D&A provided design services to repair a broken waterline and a damaged earthen slope. The project involved rerouting and replacing the existing asbestos cement pipe with a new ductile iron pipe, lining a very steep channel slope with rock slope protection, concrete diversion structures and repaving the asphalt roadway where it was disturbed for the repair.

## **Moose Hall Vault Lid Replacement – El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services to replace aging sleeve valves used to reduce pressure when transferring water from Reservoir 1 Water Treatment Plant to the Moose Hall reservoir. In addition to the sleeve valves, a bypass around the valve vault and a new access hatch were designed into the project to aid operations staff in operating and servicing the station.

## **Outingdale Lower Tank Redesign – El Dorado Irrigation District |**

*Project Role: Senior Drafter*

In January of 2013, D&A was contracted to aid EID Staff in the inspection of eight of EID's potable water tanks with the intent to visually determine the extent of the corrosion existing in each tank and recommend a prioritization order for repair of each tank. The Outingdale Water Treatment Plant Lower Tank was in poor condition. The steel rafters and many other structural members were delaminating due to severe corrosion. The tank design project replaces the existing, corroded tank with a new tank. The components of this design included a retaining wall to provide a foundation on the side of a steep slope, construction sequencing to keep the existing plant running during construction, piping provisions to add a future contact tank and demolition of the existing tank.

## **El Dorado Hills Wastewater Treatment Plant Recycled Water Pump Improvements - El Dorado Irrigation District | *Project Role: Senior Drafter***

D&A was selected as part of the design team in conjunction with Frisch Engineering to design improvements to the recycled water system at the El Dorado Hills WWTP. The improvements included electrical and mechanical upgrades and modifications to accommodate a new recycled water pump to supply non-potable water for use on the plant site.

## **Promontory Lift Station No. 1 Odor Control - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided services to design and install an odor control unit and related piping at the existing lift station.

## **Gilmore Rd. & Polaris St. Waterline Replacement Project – El Dorado Irrigation District | *Project Role: Senior Drafter***

Construction completed in 2016. Provided design, plans and specifications for over 10,000 feet of 4-inch, 6-inch, and 8- ductile iron mainline replacement. The project abandons old deteriorated mains and fire hydrants and installs new mains in City right-of-way along with new fire hydrants and reconnection of existing meters. Engineering services also include pipeline

design, obtaining an encroachment permit, bidding assistance, utility coordination and engineering services during construction.

### **Tank 3 Vault Lid Evaluation - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A provided design services to evaluate the existing sleeve valve vault lid to permit an access opening to be cut into the lid for a new access hatch to be installed. This aided operations staff in operating and servicing the station.

### **East Ridge Water Tank and Pump Stations - El Dorado Irrigation District (ongoing) | Project Role: Senior Drafter**

D&A was asked to design a new booster pump station and tank to provide for a future housing development. Also installed a transfer pump station at EID's existing tank facility at El Dorado Hills WWTP. The transition pump station provided water for the new tank and the booster pump station would supply elevated areas and increased fire protection.

### **Shinn Ranch Lift Station - El Dorado Irrigation District (Ongoing) |**

*Project Role: Senior Drafter*

D&A provided design services for a new sanitary sewer lift station at a future development in the Mother Lode area.

### **Tank 7 In-Conduit Hydroelectric Project - El Dorado Irrigation District |**

*Project Role: Senior Drafter*

D&A was asked to provide design services for the construction of an in-conduit hydroelectric facility at EID's Tank 7 reservoir. Facilities included turbines with flow control and bypass.

### **Water Distribution System Improvement Project – Blue Lake Springs Mutual Water Company (BLSMWC) | Project Role: Senior Drafter**

Construction beginning in 2018 and still ongoing. Provided design, drafting and plans for approximately 62,000 feet of 8-inch through 2-inch PVC mainline replacement. The project proposes to abandon old deteriorated mains and fire hydrants and install new mains in City right-of-way along with new fire hydrants, pressure reducing stations, and reconnect 900 meter services. Engineering services also include pipeline drafting.

### **State Streets Water Capacity and Sewer Rehabilitation Project, City of West Sacramento (CoWS) | Project Role: Senior Drafter**

The design includes preparing plans, specifications, and cost estimate for approximately 10,000 feet of new water main and rehabilitating approximately 38,000 feet of gravity sewer main within the CoWS State Street area. The prepared Contract Documents will allow CoWS to bid both the water mains and sewer main rehabilitations as a single project.

### **Arden Service Area Main Replacement and Meter Retrofit Design – Sacramento County Water Agency (SCWA) | Project Role: Senior Drafter**

Currently providing design services for SCWA's Arden Service Area which includes over 38 miles of pipelines and 3,000 meter installations. Project includes a transmission main (16-inch DIP) along Fair Oaks Boulevard from Watt Avenue to Howe Avenue. Project also includes crossing the

intersection of Watt and Fair Oaks with dual 12-inch pipeline.

**Pardi Way/Big Cut Rd/Sacramento Street Water Main Replacement Project – City of Placerville | *Project Role: Senior Drafter***

Construction completed in 2017. Provided design, plans and specifications for over 4,000 feet of 6-inch, 8-inch and 12-inch PVC mainline replacement. The project abandoned old backyard mains and fire hydrants and installed new mains in Caltrans and City right-of-way along with new fire hydrants and reconnections to 46 metered services. Engineering services also include pipeline design, obtaining a Caltrans encroachment permit, bidding assistance and utility coordination and engineering services during construction.

**Whitney Boulevard Water Main Replacement Project – Placer County Water Agency (PCWA) | *Project Role: Senior Drafter***

Construction completed in 2017. Provided design, plans and specifications for over 4,100 feet of 18-inch ductile iron mainline replacement. The project proposes to abandon old deteriorated mains and fire hydrants and install new mains in City right-of-way along with new fire hydrants and reconnect 79 meter services. Engineering services also include pipeline design, obtaining an encroachment permit, bidding assistance, utility coordination and engineering services during construction.

**Rocklin Front Yard Water Main Replacement Project – Placer County Water Agency (PCWA) | *Project Role: Senior Drafter***

Construction completed in 2016. Provided design, plans and specifications for over 10,000 feet of 4-inch, 6-inch, 8-inch and 12-inch ductile iron mainline replacement. The project abandons old deteriorated mains and fire hydrants and installs new mains in City right-of-way along with new fire hydrants and reconnection of existing meters. Engineering services also include pipeline design, obtaining an encroachment permit, bidding assistance, utility coordination and engineering services during construction.

**City Creek Turnout and Pipeline – East Valley Water District |**

*Project Role: Senior Drafter*

Construction completed in 2017. Provided design, plans and specifications for over 10,000 feet of 18-inch ductile iron pipeline in Alpine County as part of a larger project to install three irrigation pivots, pump station, several freshwater diversions and a potential hydroelectric station. Engineering services also include pipeline design, SWPPP preparation, bidding assistance, utility coordination and engineering services during construction.



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*Mr. Lopez has 30 years of experience as a public works construction inspector and assistant construction manager. He has performed inspection on water and wastewater treatment and distribution projects including pipelines, treatment facilities, and pump stations. He has also assisted the construction manager and the design engineer with change orders, RFIs, submittal, and progress payment review.*

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## **Qualifications**

### **Education/Certifications**

Civil Engineering, California State University, San Diego, 1983 to 1986

Registered Construction Inspector (Division 1), American Construction Inspectors Association, No 6035 (not renewed)

D1 – Water Distribution Operation, California Department of Health, No 42251 (not renewed)

Competent Person Training, Trenching and Excavation

Confined Space Training, Asbestos Concrete Pipe Safety Training

### **Regional Surface Water Supply Project, Stanislaus Regional Water Authority**

Provided inspection support for the \$250 million construction of a new 15 MGD treatment plant and 7 miles of 42" and 5 miles of 30" CMCL steel pipe. Final capacity will be 45 MGD. System components included pre-oxidation with permanganate; flash mixing; flocculation; sedimentation; ozonation; GAC/sand filters; chlorine disinfection; clearwell; finished water pumping station; residuals handling facility; chemical storage and feed equipment; corrosion control; cybersecurity provisions; power supply and emergency generator power; instrumentation and controls; administration, operation, maintenance, and laboratory facilities; and site civil improvements.

### **Delta Diablo Pump Station Rehabilitation Project – Antioch, CA**

Inspector for the Delta Diablo Sanitation District Pump Station Rehab project which consisted of rehabilitation of five pump stations. Work included all trades including pipelines, pumping systems, electrical, instrumentation and controls, coatings, concrete, HVAC, and building construction.

**Carson Creek Pump Station – El Dorado Irrigation District, CA.** Inspector for the demolition of an existing sewer pump station and construction of a new replacement pump station. The work included new wet well, electrical/operations building, pumps, emergency generator, force main piping, gravity piping, electrical, and site civil.

### **River Bluff Pump Station and Pipeline Project, City of Ceres**

Provided inspection support for the construction of a 5 MGD booster pump station, 3 million gallon DN tank, 18" to 30" pipelines including CMCL steel pipe, electrical building, and related electrical, controls, instrumentation, piping, and site civil work. Mr. Inferrera was responsible for contract administration, inspection, change orders, resolution of contractor conflicts and of technical issues.

### **Surface Water Treatment Facility, Stanislaus Regional Water Authority**

Provided inspection support services as the owner's representative on this Design Build project. This \$230 million project includes a raw water pump station, finished water pump station, three pipelines and a water treatment plant.

### **Municipal Well Pump Station and Piping System - City of Woodland, CA**

Senior construction inspector on this \$1.5 million water pumping and piping system. The project included over 4,000 feet of underground piping including ductile iron pipe in City roadways. As the inspector of record, provided oversight of all construction activities, coordinated work activities with the general contractor, and was responsible for project daily inspection and report writing.

**Fair Oaks 40 inch American River Canyon Pipeline Project – San Juan Water District, CA.** Inspector for the installation of the new 40 inch pipeline over the American River Canyon including **steel pipe**, epoxy coated and lined.

**Olive Ranch Water Pipeline Project – San Juan Water District, CA.** Inspector for the installation of 8 inch ductile iron potable water mainline installed within roadways. The work included trenching, shoring, bedding, backfill, traffic control and interfacing with the public and multiple agencies.

**Bohemian Village Water Main Replacement – Sacramento Suburban Water District, CA.** Inspector for the installation of 2 miles of water main. This project consisted of 8 to 16 inch ductile iron main line construction down the center of Marconi Ave. The project encountered extensive underground interferences. Inspection was performed on the pipe installation, lateral tie ins, bedding and backfill, shoring, and traffic control.

**Palm Ave. Pipeline Project – Citrus Heights Water District, CA.** Inspector for the installation of over 5,000 linear feet 6 and 8 inch ductile iron and C900 potable water mainline. The work included trenching, shoring, jack and bore, bedding, backfill, traffic control and interfacing with the public.

**Sedimentation and Flocculation Improvements Project – San Juan Water District, CA.** Inspector for the replacement of sludge removal system, flocculator drive motors and paddles, rapid mixers and motor control cabinets (MCC). Work included new structural support columns, 500 linear feet of a concrete settled water channel, chlorine and polymer distribution systems, stainless steel and ductile iron piping systems and new sample pumps and analyzers.

#### **Treatment Plant Improvements Project, City of Manteca, CA**

Inspector for a sludge removal system, water diversion structure, mechanical shop and employee locker room. The work included new masonry buildings, concrete diversion structure, underground pipelines, aboveground piping systems, including ductile iron pipe, mechanical systems and electrical improvements. As the inspector of record, provided oversight of all construction activities, coordinated work activities with the general contractor, and was responsible for project daily inspection and report writing. In addition, worked directly with the engineer to resolve construction issues.

#### **Van Maren Pumping Station, County of Sacramento, CA**

Construction inspector for a new \$17 million pump station. This 2 year project included a T-lock lined 35 foot deep wet well, two diversion structures, three tunnel borings and 1500 feet of 36" sanitary sewer pipeline 24 feet below grade. With poor soil conditions, shoring and dewatering was critical. Inspected subgrade, rebar, formwork, concrete placement, T-lock lining system, pipeline installation including ductile iron pipe, backfill, pump installation, and instrumentation. Reviewed progress payments, submittals, RFI's and SWPPP.

#### **Treatment Plant Expansion Project, City of Woodland, CA**

Senior construction inspector on this \$28 million wastewater treatment plant expansion project. With a project duration of two years, provided inspection and reporting of over 10 structures including a new pump station at a depth of 15 feet including dewatering and Class 3 soils. Underground pipe trenches were shored and dewatered, soil conditions were poor. Inspected aboveground and underground pipelines including ductile iron pipe, also concrete structures, manholes, and pump and mechanical systems. As the inspector of record, provided oversight of all construction activities, coordinated work activities with the general contractor, and was responsible for project daily inspection and report writing.

**Pleasant Grove Treatment Plant, City of Roseville, CA**

Inspector the Pleasant Grove \$98 million wastewater treatment plant. For three years, provided inspection and reporting of over 20 structures including the pump station and headworks. Covered civil, structural and mechanical disciplines. Inspected deep underground pipelines that required shoring and dewatering. Inspected ductile iron pipe, vitrified clay pipe, reinforced concrete pipe, and lined piping systems. Mechanical inspection included vertical turbine pumps, compressed air filtration and HVAC systems. Inspected utilities, reinforced concrete and masonry structures, structural backfill, and roadway construction. Provided inspection for coatings and electrical.

**Treatment Plant Improvements Project, City of Yuba City, CA**

Inspector and assistant construction manager for this two year project that included underground and aboveground pipelines including ductile iron pipe, new bar screen, rehabilitated digester system, new sludge dewatering system, new electrical room, new PLCs, new transformers.





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*Mr. Livingston has over 20 years of experience as a construction inspector. His experience includes tunnelling, site civil work, pipelines, force mains, gravity lines, trenching, working in streets and working with the public. His inspector duties include ensuring work is installed per plans and specifications, documenting work with photographs and daily reports, completing as-built drawings, and coordinating with the design engineer, agencies, and public.*

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### **Qualifications**

#### **Certifications:**

ICC Building Inspector,  
5232456-10

ACI Level 1 01031459

Troxler Nuclear Gauge  
Certification 44154

**SRWA Water Treatment Plant and Pipeline Project.** The Stanislaus Regional Water Agency's \$250 million Regional Surface Water Supply Project consisted in the construction of a new 15 MGD water treatment plant, 7 miles of potable water pipeline to the City of Turlock, 5 miles of potable water pipeline to the City of Ceres, and a 1 mile raw water pipeline from the Tuolumne River Water Intake Pump Station to the treatment plant. Matt was inspector on this 3-year project from start to finish. The pipelines consisted of two potable water force mains made of 30" MCML and 40" MCML steel pipe, and one 48" MCML raw water pipeline. There were six jack and bore tunnels including two under the Santa Fe Railroad and others under EID canals. The treatment plant consisted of rapid mix tanks, flocculation and sedimentation tanks, filter building, chemical building, backwash tank, sludge lagoons, administration building, laboratory, and maintenance building.

**SRWA Raw Water Pump Station Project.** This was a separate project from the treatment plant and occurred two years prior to the treatment plant. Inspector for a 45,000 gpm (100 cfs) raw water pump station in the levee of the Tuolumne River, near Hughson. This work included soil freeze shoring to a depth of 75 feet that facilitated the excavation and construction of a large pump station within the levee. Site civil work in the flood plain and discharge of high pump station flows in the river made this Project environmentally sensitive.

**North Trunk Sewer Project – Manteca, CA.** This project involved the construction of two miles of 48-inch RCP sewer pipe and 12-inch C900 water force main. Matt was the inspector mostly for the micro tunnel portion of the Project. Two micro tunnels were constructed. The first micro tunnel consisted in a 230 foot long, and 30 foot deep, 80-inch micro tunnel under Airport Road. The second micro tunnel consisted in a 375 foot long, and 35 foot deep, 60-inch micro tunnel under Yosemite Boulevard.

**FEZ South Trunk Sewer Project – Manteca, CA.** This project involved the construction of two miles of 48-inch RCP sewer pipe and 12-inch C900 water force main. Matt was the inspector mostly for the micro tunnel portion of the Project. The micro tunnel consisted in a 500 foot long, and 30 foot deep, 80-inch micro tunnel under State Highway 120.

**SFPUC San Joaquin Eastern Segment Water Pipeline.** Civil QA Inspector on a 6.7-mile, 78-inch water pipeline project with a construction cost of \$45,000,000. Responsible for QA inspection of rebar & concrete construction for three Valve Vault structures and the Oakdale Portal Protection structure.



**SFPUC San Joaquin Western Segment Water Pipeline.** Civil QA Inspector on an 11-mile, 78-inch water pipeline project with a construction cost of \$48,000,000. Responsible for QA inspection of native soil cement placement in the pipe zone & trench backfill.

**SFPUC Tesla Water Treatment Facility.** Civil QA Inspector on design-build project with a construction cost of \$84,000,000. Responsible for inspection of concrete, roofing, building inspection of the various building trades, AC paving, and punch list inspections.

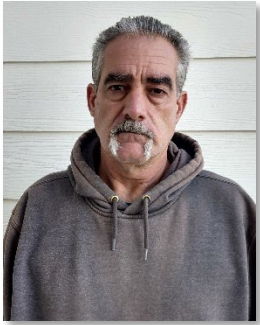
**WQCF Digester Project – Manteca, CA.** lead inspector for the construction of two digesters, and rehabilitation of two existing digesters including grading, stone column soil densification, underground utilities (gas, electrical, process piping, storm water), reinforced concrete structures, CMU digester control building, 17kv power, instrumentation, controls, CMMS, and SCADA.

**BART Intermodal Modernization Project - Union City CA.** as a Quality Control Manager, provided all inspection work for civil, underground, concrete structures and building trades.

**Presidio Monterey, General Instruction Building.** Provided QC inspection of structural construction. Perform civil and building inspection of general civil works and the various building trades. This was a \$42 million project.

**Deuel Institute, Water Treatment Facility - Tracy CA.** Performed civil inspection and testing.

**Deuel Institute, Reverse Osmosis Facility - Tracy CA.** Performed civil inspection and testing throughout entire project. Performed special inspections including epoxy anchors and pull testing. This was a \$32 million facility.



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*Mr. Saylor has more than 35 years' experience working on construction projects. His experience includes MCML steel pipeline, HDPE pipeline, trenchless technologies, site civil work, working in streets and working with the public. His inspector duties include ensuring work is installed per plans and specifications, documenting work with photographs and daily reports, completing as-built drawings, and coordinating with the design engineer, agencies, and the public.*

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**Qualifications**

10Hr OSHA Safety Training

Confined Space Training

**Mother Lode Force Main Project – El Dorado Irrigation District, Shingle Springs, CA**

This \$13 million project consisted 3 miles of 18- and 20-inch C900 force main installed from the El Dorado Lift Station to the Shingle Springs Lift Station mostly in the east bound lane of Mother Lode Drive, including rock excavation, tunnelling, paving, valves and appurtenances. All three phases of pipeline installation are on track to be completed on time.

**Inspector for a variety of El Dorado Irrigation District pipeline project.**

Mr. Saylor has worked with on a number of District pipeline projects as the lead inspector for the last 6 years.

**Pipeline Contractor**

Mr. Saylor has worked as a pipeline contractor for 30 years. He is experienced installing force main and gravity pipelines of every material type and all soil conditions found in the Sacramento and Placerville areas.



DOMENICHELLI AND ASSOCIATES, INC.  
CIVIL ENGINEERING

July 26, 2024

Amelia Wilder  
Rancho Murieta Community Services District (RMCS D)  
PO Box 1050  
Rancho Murieta, CA 95683

**Subject: Cost Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services**

**Dear Amelia,**

**Domenichelli and Associates, Inc. (D&A)** is pleased to submit the attached Cost Proposal for RMCS D's On-Call District Engineer and Construction Inspection Services. This cost proposal includes:

1. The Contract Bid Schedule form,
2. D&A's current hourly labor rates and direct expense charges for on-call District Engineering Services,
3. Construction Inspection Services rate,
4. Rates for our selected subconsultants that are anticipated to perform work under the proposed contract.

Travel time to the District, will not exceed 30 minutes each way with mileage billed at the current IRS approved rate. Subconsultant fees will be marked up at 10%. Other expenses such as printing and reproduction will be charged at cost.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Joe Domenichelli', is written over a light blue horizontal line.

**Joe Domenichelli, P.E. – President,**  
Domenichelli and Associates, Inc.



**RANCHO MURIETA COMMUNITY SERVICES DISTRICT**  
 Proposal for On-Call Professional Services for District Engineer  
 and Construction Inspection Services

**SECTION 8. COST PROPOSAL: CONSULTANT FEE**

The attached rate sheets are provided for 2024. The rates include all overhead to cover costs and minor expenses. Expenses including printing and postage will be billed at cost. D&A reserves the right to negotiate with the District to increase rates annually by up to 5%. Subconsultants will be marked up at 10%.

Travel time billed to the District for meetings or other purposes shall not exceed 30 minutes each way. Return travel after normal work hours shall not be billed. Mileage shall be billed at the current IRS approved rate.

**CONTRACT BID SCHEDULE**

ITEM #	DESCRIPTION	COST
1	Engineering Services	Attach rate schedule separately
2	Construction inspection services	Attach rate schedule separately
	<b>Total Cost</b>	-

Respectfully Submitted:

\_\_\_\_\_  
 Signature  
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 President  
 \_\_\_\_\_  
 Title  
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 Domenichelli & Associates  
 \_\_\_\_\_  
 Company  
 \_\_\_\_\_  
 5180 Golden Foothill Parkway, Suite 220  
 \_\_\_\_\_  
 Address  
 \_\_\_\_\_  
 El Dorado Hills, CA 95762  
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 City, State  
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 07/26/2024  
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 Date  
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 (916) 933-1997  
 \_\_\_\_\_  
 Phone Number  
 \_\_\_\_\_  
 Federal Tax ID # \_\_\_\_\_ 78-0806846



# RANCHO MURIETA COMMUNITY SERVICES DISTRICT

Proposal for On-Call Professional Services for District Engineer and Construction Inspection Services

## ENGINEERING SERVICES RATE SHEET

Job Title	2024 Rate (\$/hr)
<b>Project Principal 1 – QA/QC</b>	<b>\$210.00</b>
<b>Project Principal 2</b>	<b>\$195.00</b>
<b>Project Manager 1</b>	<b>\$188.00</b>
<b>Project Manager 2</b>	<b>\$180.00</b>
<b>Senior Engineer 1</b>	<b>\$173.00</b>
<b>Senior Engineer 2</b>	<b>\$165.00</b>
<b>Project Engineer 1</b>	<b>\$154.00</b>
<b>Project Engineer 2</b>	<b>\$140.00</b>
<b>Staff Engineer 1</b>	<b>\$138.00</b>
<b>Staff Engineer 2</b>	<b>\$121.00</b>
<b>Senior CAD Drafter</b>	<b>\$126.00</b>
<b>CAD Drafter 1 / Intern</b>	<b>\$105.00</b>

## INSPECTION RATE SHEET

Job Title	* Rate (\$/hr)
<b>Construction Inspection (ICM)</b>	<b>\$165.00</b>

\* Includes 10% mark-up on labor and expenses



**RANCHO MURIETA COMMUNITY SERVICES DISTRICT**  
Proposal for On-Call Professional Services for District Engineer  
and Construction Inspection Services

**RATES FOR OTHER POTENTIAL SUBCONSULTANTS**

ICM

ATEEM

CenterPoint Engineering

EN2 Resources

Youngdahl Consulting Group

Rates shown are not marked up. Rates will be marked up 10% when billed.

# Inferrera Construction Management Group, Inc. Fee Schedule 2024

## Labor Hourly Rates by Position

Construction Manager	\$210
Construction Inspector	\$140
Electrical Inspector	\$170
Administrator	\$85
Other ICM Support	\$170

## Expense Rates

Vehicle (per hour)	\$8
Field Computer/Phone (per month)	\$150
Other ODCs billed separately	

## Administrative Fees

Expenses	0%
Subconsultants	5%

### Notes:

1. Minimum 4-hour onsite charge per site or off-site visits.
2. Overtime for work performed on Monday thru Friday will be charged 1.5 times the hourly rate for time worked over eight hours a day up to 12 hours, and 2 times the hourly rate for time worked over twelve hours.
3. Work on Saturday will be charged the 1.5 time overtime rate for the first eight hours and 2 times the hourly rate for time worked over 8 hours.
4. Work on Sunday and Holidays will be charged at the 2 time overtime rate.
5. Second shift work performed commencing after 2 p.m. or before 4 a.m. will be charged an additional \$20 per hour.
6. Vehicle is charged from point of initiation to point of return.
7. This Rate Schedule is valid until December 31, 2024.



**A T.E.E.M. 2024~2028 STANDARD RATES**

The following lists *A T.E.E.M.*'s Standard Hourly Rates for *City of Roseville*. Labor rates will stay the same for any overtime work charges to the project. All work will be invoiced per the following rate schedule:

**A T.E.E.M. ELECTRICAL ENGINEERING  
RATE SCHEDULE**

	2024	2025	2026	2027
Field Programmer:	\$250 per hour	\$260 per hour	\$270 per hour	\$280 per hour
Office Programmer:	\$240 per hour	\$250 per hour	\$260 per hour	\$270 per hour
P.E. Field Engineering:	\$240 per hour	\$250 per hour	\$260 per hour	\$270 per hour
P.E. Office Engineering:	\$230 per hour	\$240 per hour	\$250 per hour	\$260 per hour
Engineering Assistant:	\$200 per hour	\$210 per hour	\$220 per hour	\$230 per hour
Technical Assistant:	\$130 per hour	\$140 per hour	\$150 per hour	\$150 per hour
Travel Expenses:	Included in hourly rate	Included in hourly rate	Included in hourly rate	Included in hourly rate
Miscellaneous Expenses:	Cost + 5%	Cost + 5%	Cost + 5%	Cost + 5%

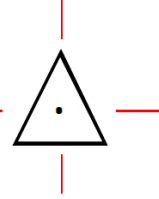
All hourly costs include standard office costs, such as copying and binding documents, telephone charges, insurance, overhead, computer usage, software and profit. Also included in the field engineering and electrical inspector hourly rates are all travel costs to the jobsite.

The rates **DO NOT** include lodging, meals for overnight stays, rental equipment or special project material, when necessary. These miscellaneous expenses will be billed at cost plus 5%.



# **CenterPoint Engineering, Inc.**

**Land Surveying & Construction Staking**



## **Hourly Rate Schedule**

<b>Position</b>	<b>Hourly Rate</b>
Licensed Land Surveyor	\$135.00
Registered Civil Engineer	\$135.00
Civil Design Technician	\$95.00
Survey Office Technician	\$80.00
CAD Technician	\$80.00
Administrative Assistant	\$60.00
2-Man Survey Crew	\$200.00
1-Man GPS or Robotic Instrument Survey Crew	\$175.00

The overtime hourly rate is \$275.00 for a 2-Man Survey Crew and \$225.00 for a 1-Man GPS or Robotic Instrument Survey Crew. Overtime rates for all other positions are 1.20 times the regular hourly rate.

The double overtime hourly rate is \$300.00 for a 2-Man Survey Crew and \$250.00 for a 1-Man GPS or Robotic Instrument Survey Crew.

Rates are effective until July 31, 2025. Survey rates include survey equipment, supplies, and mileage. Other reimbursable expenses will be billed at cost plus 15%. Sub-consultants will be billed at cost plus 10%. Expert witness services will be billed at 1.5 times the corresponding hourly rate.

## 2024 Billing Rates

Labor Category	Staff Name	Hourly Rate*
<u>EN2 Resources, Inc.</u>		
President/Contract Manager	Rick Lind	\$194
Economist	Kreg McCollum	\$175
Registered Professional Archaeologist	Sharon Waechter	\$150
Project Manager/Ecologist/GIS Specialist	Jeremy Waites	\$136
Assistant Project Manager/Administrative Services Manager	Rayann La France	\$131
Biologist/Natural Resources Analyst	Kristen Hunter	\$127
Environmental Scientist	Summer Abel	\$96
Assistant Environmental Scientist	Aria Pauling	\$92
Administrative Assistant	Marissa DeFazio	\$77
Field Assistant/Intern	TBA	\$72
<u>Direct Expenses (daily rates unless otherwise indicated)</u>		
Trimble Geo7x		\$75.00
Trimble Nomad 900GLC Handheld		\$75.00
YSI 556 MPS		\$75.00
LaMotte 2020 Turbidimeter		\$25.00
FP101 Global Flow Probe		\$15.00
2003 Dodge Ram Crew Cab 4x4 (Daily Rate plus mileage)		\$100.00
Copies (per b/w page)		\$0.20
Copies (per color page)		\$1.00
CNDDDB Quadrangle Queries per Quad		\$50.00
Mileage - IRS 2024 Reimbursement Rate per Mile		\$0.67

\*The hourly rates listed above are valid through 2024; EN2 would increase subsequent year rates between 3% and 5% annually.

**FEE SCHEDULE FOR PROFESSIONAL SERVICES (2024)**

<b>PERSONNEL</b>	<b>STANDARD RATE</b>
Principal Engineer	\$ 226.00 /hr
Senior Engineer/Geologist/Scientist	\$ 182.00 /hr
Project Engineer/Geologist/Environmental Scientist	\$ 160.00 /hr
Staff Engineer/Geologist/Scientist	\$ 150.00 /hr
Field Supervisor	\$ 134.00 /hr
NDT Special Inspector/Floor Flatness	\$ 126.00 /hr
AWS/CWI Certified Special Inspector	\$ 130.00 /hr
ICC Certified Special Inspector	\$ 102.00 /hr
ACI Certified Special Inspector	\$ 94.00 /hr
Soils Engineering Technician (Includes use of nuclear gauge as required)	\$ 105.00 /hr
Environmental Technician	\$ 112.00 /hr
QSD-Qualified SWPPP Developer	\$ 154.00 /hr
QSP-Qualified SWPPP Practitioner	\$ 114.00 /hr
Laboratory Manager	\$ 160.00 /hr
Senior Laboratory Technician	\$ 124.00 /hr
Laboratory Technician	\$ 100.00 /hr
Draftsperson	\$ 110.00 /hr
Clerical	\$ 104.00 /hr

**BASIS OF CHARGES**

**Equipment Charges:**

All of the above rates are inclusive of routine test equipment.

**Exceptions:**

- Coring Machine - \$200/day
- Generator - \$75/day
- High Precision GPS Receiver - \$150/day
- Photo-Ionization Detector - \$100/day
- Skidmore - \$100/day
- Fireproofing Adhesion - \$25/test

**Hours are billed portal to portal in accordance with the following minimum charges:**

- Times are rounded up to the nearest ½ hour.
- 2-hour minimum on-site charge for each site visit.
- 4-hour minimum on-site charge for weekend work.
- 2-hour minimum charge for work scheduled that was not cancelled by 5pm the day before.

**Overtime:**

- Over eight (8) hours a day - 1.5 x hourly rate
- Saturdays - 1.5 x hourly rate
- Sundays and Holidays - 2.0 x hourly rate
- Over twelve (12) hours a day - 2.0 x hourly rate
- Night Work 5:00 pm – 5:00 am - \$10+ hourly rate

**Mobilization Charge:**

A mobilization charge of \$ 80.00/site visit will be added for all projects requiring site visits within 40 miles of our corporate yard. For projects beyond 40 miles, a mileage fee will be assessed at \$0.95/mile portal to portal per visit from our corporate headquarters address to the project site. Distance will be determined by Google Maps quickest calculated distance.



**BASIS OF CHARGES (Cont.)**

**Expert Witness Services:**

Mediation, arbitration, deposition, expert witness testimony and public hearing attendance will be billed at 2 times normal hourly rates in 4-hour incremental blocks.

**Rush Charges:**

Field:

An additional 1 hour of field time at the appropriate personnel rate may be charged to expedite work which requires dispatching after 4:30 pm of the previous day, or the same day, as requested by the contractor or client.

**Large Format Plotting:**

- Color or Black & White - \$12 minimum setup + 0.65 per sq. foot

**Miscellaneous Charges:**

- Supplies and outside services are billed at cost +15%
- Airfare, rental vehicles, lodging, and meals for authorized out-of-town travel, will be charged per person per day using the current IRS per diem rate applicable to the area.
- Subcontracted work will be billed at cost +15%
- Projects with specialized accounting protocol required to be filled out for the client will be charged an additional 4% of the project budget
- Copying and distribution for project reporting includes 4 reports. If additional report copying is necessary, a \$25.00 charge will be billed for each additional report
- Projects requiring Level C PPE will be charged at 1.5 x normal hourly rate
- \$10.00 surcharge may be applied to normal rates for projects where naturally occurring asbestos (NOA) is present.

**TERMS AND CONDITIONS:**

Youngdahl Consulting Group, Inc. shall perform professional services in accordance with the generally accepted professional practice of its profession within the area where the work is performed on behalf of the client. Upon entering into this agreement many risks potentially affect Youngdahl Consulting Group, Inc. The principal risk is the potential for human error by Youngdahl Consulting Group, Inc. Client agrees to limit our liability to Client and to all other parties for damages arising from any and all claims, losses, costs, damages of any nature whatsoever or claims expenses from any cause or causes, including attorneys' fees and costs and expert-witness fees and costs shall be limited to \$25,000.00 and Client further agrees to indemnify and hold harmless Youngdahl Consulting Group, Inc. from and against all liabilities in excess of monetary limit established above.

(Fee Schedule for Professional Services on Front of Sheet)



**FEE SCHEDULE FOR LABORATORY SERVICES (2024)**

The following contains the soils and material testing prices for services rendered by Youngdahl Consulting Group, Inc. Prices are valid for 2024. Unless noted, test prices include routine sample preparation, test set-up, performance of test, calculations, and reporting of results. Please call us at (916) 933-0633 for further information.

TEST	TEST METHOD(S) <sup>1</sup>	UNIT PRICE (\$)
<b>SOILS TESTS</b>		
<b>Classification and Index Properties</b>		
Sieve Analysis, Fine with No. 200 Wash	D422, D6913, CTM 202, T88	\$ 145.00 Each
Sieve Analysis, Coarse and Fine Combined	D422, D6913, CTM 202, T88	\$ 230.00 Each
Percent Passing No. 200 Sieve, Soil	D1140	\$ 105.00 Each
Percent Passing No. 200 Sieve, Rocky Sample	D1140	\$ 200.00 Each
Hydrometer Analysis	D422, D7928	\$ 260.00 Each
Atterberg Limits	D4318, T89, T90	\$ 230.00 Each
Moisture Content	D2216, D4643	\$ 25.00 Each
Moisture Content & Dry Density	D7263	\$ 50.00 Each
Specific Gravity	D854	\$ 260.00 Each
Soil pH	D4972	\$ 50.00 Each
Pinhole Dispersion	D4647	\$ 775.00 Each
Organic Content	D2974	\$ 155.00 Each
Soil Corrosion Properties*	CTM 417, 422, 643	\$ 225.00 Each
(*Includes Soil pH, Minimum Resistivity, Chlorides, and Sulfates)		
<b>Moisture Density Relations-Compaction</b>		
Proctor – 4"	D698, D1557, T99, T180	\$ 325.00 Each
Proctor – 6"	D698, D1557, T99, T180	\$ 325.00 Each
California Impact	CTM 216	\$ 325.00 Each
Check Point		\$ 205.00 Each
<b>Strength</b>		
Unconfined Compression	D2166	\$ 165.00 Each
Unconfined Compression, Chemically-Treated	D1633 (Mod), CTM373 (Mod)	\$ 620.00 Each
Quicklime Saturation (Eades and Grim)	C977, D6276	\$ 205.00 Each
Direct Shear, 3 Points	D3080	\$ 515.00 Each
Triaxial Shear, UU	D2850	\$ 205.00 Each
Triaxial Shear, CU (3 Points)	D4767	\$ 1,700.00 Set
Resistance "R-Value"	CTM 301, D2844	\$ 360.00 Each
Sample Preparation		\$ 100.00 Hour
<b>Hydraulic Conductivity</b>		
Flexible Wall Permeability	D5084	\$ 385.00 Each
Permeability (>10 <sup>-3</sup> )	D2434	\$ 385.00 Each
<b>Consolidation/Swell</b>		
Consolidation	D2435	\$ 600.00 Each
One-Dimension Swell or Collapse	D4546, Method A	\$ 500.00 Each
One-Dimension Swell or Collapse	D4546, Method B	\$ 200.00 Each
One-Dimension Swell or Collapse	D4546, Method C	\$ 600.00 Each
Expansion Index	D4829	\$ 230.00 Each

**NOTES**

- 1 Test methods listed are as follows:
  - Those beginning with a C, D, or E are ASTM International methods
  - CTM – California Test Method, California Department of Transportation
  - Those beginning with a T are AASHTO methods
  - Those beginning with an MS are Asphalt Institute methods
- 2 Any testing where lime or cement is required to be added, cost of test may be increased by 20%
- 3 Rush Fee: 150% of standard unit price



TEST	TEST METHOD(S) <sup>1</sup>	UNIT PRICE (\$)	
<b>AGGREGATE TESTS</b>			
Sieve Analysis – Coarse (without wash)	C136, CTM 202, T27	\$ 125.00	Each
Sieve Analysis – Fine (including wash)	C136, CTM 202, T27	\$ 145.00	Each
Sieve Analysis – Coarse and Fine Combined	C136, CTM 202, T27	\$ 230.00	Each
Percent Passing No. 200 Sieve	C117, T11	\$ 105.00	Each
Specific Gravity and Absorption, Coarse	C127	\$ 105.00	Each
Specific Gravity and Absorption, Fine	C128	\$ 155.00	Each
Organic Impurities in Sand	C40	\$ 50.00	Each
Unit Weight, Loose or Rodded	C29	\$ 95.00	Each
Sand Equivalent	CTM 217, D2419	\$ 180.00	Each
Crushed Particles (fractured faces) (per sieve size)	CTM 205, D5821	\$ 105.00	Each
Flat and Elongated Particles (per sieve size)	D4791	\$ 105.00	Each
Clay Lumps and Friable Particles	C142	\$ 200.00	Each
Los Angeles Abrasion Test	C131, C535	\$ 260.00	Each
Durability Index	CTM 229, D3744	\$ 290.00	Each
Durability, Coarse or Fine	CTM 229, D3744	\$ 145.00	Each
Cleanness Value	CTM 227	\$ 145.00	Each
Mortar Sand Strength	CTM 515, C87	\$ 775.00	Each
<b>CONCRETE/MASONRY TESTS</b>			
Concrete Compression (including mold)	C39	\$ 50.00	Each
Mortar Compression (including mold)	C780	\$ 50.00	Each
Grout Compression (including mold)	C1019	\$ 100.00	Each
CLSM Compression (including mold)	D4832	\$ 50.00	Each
Concrete Core Compression	C42	\$ 70.00	Each
Shotcrete Core Compression (including coring)	C1604	\$ 105.00	Each
Core Height (Length/Thickness)	C1542	\$ 15.00	Each
Modulus of Elasticity	C469	\$ 350.00	Each
Flexural Strength, Beam	C78	\$ 105.00	Each
Laboratory Trial Batch (incl. 9 compression tests)	C192	\$ 2,060.00	Each
Concrete Drying Shrinkage (set of 3)	C157 (Mod)	\$ 515.00	Each
Sample Cutting and Trimming (1/4 hour minimum)		\$ 100.00	Hour
CMU Dimension Verification	C140	\$ 75.00	Each
CMU Moisture Absorption/Unit Weight/Moisture	C140	\$ 75.00	Each
CMU Block Compression	C140	\$ 105.00	Each
CMU Composite Prism Compression	C1314	\$ 180.00	Each
CMU Core Shear	CBC 2105A.4/5	\$ 60.00	Each
<b>ASPHALT CONCRETE TESTS</b>			
Solvent Extraction, % Asphalt	D2172, T164	\$ 300.00	Each
Gradation of Extracted Aggregate	D5444, T30	\$ 180.00	Each
Unit Weight of Core or Briquette	CTM 308, D2726, D1188, T166, T275	\$ 75.00	Each
Thickness of Core	D3549	\$ 15.00	Each
Theoretical Maximum Specific Gravity (Rice Method)	D2041, CTM 309, T209	\$ 180.00	Each
AC Moisture Content	CTM 370, T329	\$ 55.00	Each
AC Air Void Determination	D3203, T269	\$ 55.00	Each
AC VFA Determination	MS-2	\$ 55.00	Each
AC VMA Determination	MS-2	\$ 55.00	Each
<b>MISCELLANEOUS</b>			
Fireproofing Density Test	E605	\$ 105.00	Each
Non-Masonry Mortar/Grout Compression Test	C579	\$ 50.00	Each
Bend and Tensile Test (up to #11 bar)		\$ 200.00	Each

