



**WEST VALLEY WATER DISTRICT
855 W. BASE LINE ROAD, RIALTO, CA 92376
PH: (909) 875-1804
WWW.WVWD.ORG**

**ENGINEERING, OPERATIONS AND PLANNING COMMITTEE MEETING
AGENDA**

Thursday, July 24, 2025, 6:00 PM

NOTICE IS HEREBY GIVEN that West Valley Water District has called a meeting of the Engineering, Operations and Planning Committee to meet in the Administrative Conference Room, 855 W. Base Line Road, Rialto, CA 92376.

BOARD OF DIRECTORS

**President Gregory Young
Director Estevan Bennett**

Members of the public may attend the meeting in person at 855 W. Base Line Road, Rialto, CA 92376, or you may join the meeting using Zoom by clicking this link: <https://us02web.zoom.us/j/8402937790>. Public comment may be submitted via Zoom, by telephone by calling the following number and access code: Dial: (888) 475-4499, Access Code: 840-293-7790, or via email to administration@wvwd.org.

If you require additional assistance, please contact administration@wvwd.org.

CALL TO ORDER

PUBLIC PARTICIPATION

Any person wishing to speak to the Board of Directors on matters listed or not listed on the agenda, within its jurisdiction, is asked to complete a Speaker Card and submit it to the Board Secretary, if you are attending in person. For anyone joining on Zoom, please wait for the Board President's instruction to indicate that you would like to speak. Each speaker is limited to three (3) minutes. Under the State of California Brown Act, the Board of Directors is prohibited from discussing or taking action on any item not listed on the posted agenda. Comments related to noticed Public Hearing(s) and Business Matters will be heard during the occurrence of the item.

Public communication is the time for anyone to address the Board on any agenda item or anything under the jurisdiction of the District. Also, please remember that no disruptions from the crowd will be tolerated. If someone disrupts the meeting, they will be removed.

DISCUSSION ITEMS

1. Updates to the Engineering, Operations and Planning Committee
2. June 25, 2025 Meeting Minutes
3. Approve New Task Order Amendment for the Lord Ranch Facilities Project

ADJOURN

Please Note:

Material related to an item on this Agenda submitted to the Committee after distribution of the agenda packet are available for public inspection in the District's office located at 855 W. Baseline, Rialto, during normal business hours. Also, such documents are available on the District's website at www.wvwd.org subject to staff's ability to post the documents before the meeting.

Pursuant to Government Code Section 54954.2(a), any request for a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in the above-agendized public meeting should be directed to the Board Secretary, Elvia Dominguez, at least 72 hours in advance of the meeting to ensure availability of the requested service or accommodation. Ms. Dominguez may be contacted by telephone at (909) 875-1804 ext. 703, or in writing at the West Valley Water District, P.O. Box 920, Rialto, CA 92377-0920.

DECLARATION OF POSTING:

I declare under penalty of perjury, that I am employed by the West Valley Water District and posted the foregoing Agenda at the District Offices on July 17, 2025.

Elvia Dominguez

Elvia Dominguez, Board Secretary

MINUTES
ENGINEERING, OPERATIONS AND PLANNING COMMITTEE
MEETING

of the
WEST VALLEY WATER DISTRICT

June 25, 2025

I. CALL TO ORDER

Chair Young called the Engineering, Operations and Planning Committee meeting of the West Valley Water District to order at 6:00 p.m.

Attendee Name	Present	Absent	Late	Arrived
Gregory Young	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Estevan Bennett	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
John Thiel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Linda Jadeski	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Rocky Welborn	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Joanne Chan	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

II. PUBLIC PARTICIPATION

Chair Young inquired if anyone from the public would like to speak. No requests were received, therefore Chair Young closed the public comment period.

III. DISCUSSION ITEMS

1. Updates to the Engineering, Operations and Planning Committee.

Director of Operations Chan reported on a public records request staff responded to related to hydrant maintenance; the SCADA masterplan is progressing and the consultant will be coming out to each of our sites to evaluate the facilities; the Baseline Feeder North well is currently out of service and the contractor is investigating what rehabilitation work needs to be completed.

Director of Engineering Welborn reported that the Water Conservation Specialist has started and has already begun preparing for compliance with Conservation as a California Way of Life regulations, and presented proposed conservation activities and partnerships being explored with San Bernardino Valley Municipal Water District.

Assistant General Manager Jadeski described coordination with County Fire and County Supervisor Baca to explore the installation of heli-hydrants to fight wildfires.

2. April 24, 2025 and May 22, 2025 Meeting Minutes

The committee approved the minutes.

3. Agreement with Calgon Carbon Corporation for Granular Activated Carbon Media Replacement at the Oliver P. Roemer Water Filtration Facility

Director of Operations Chan presented the staff report. In response to Director Bennett's question, Ms. Chan provided information regarding the contractor selection methodology.

The committee approved moving the item forward to the next Board of Director's meeting consent calendar.

RESULT: REFERRED TO BOARD

Next: 7/17/2025 6:00 PM

4. Change Order No. 9 with PCL Construction Inc. for the Oliver P. Roemer Water Filtration Facility Upgrade and Expansion Project

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting under business matters and recommended combining it with item number 5.

RESULT: REFERRED TO BOARD

Next: 7/17/2025 6:00 PM

5. Consider an Amendment to Task Order No. 1 of the Professional Services Agreement with GHD Inc. for Professional Engineering Services for the Oliver P. Roemer Water Filtration Facility Project

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting under business matters and recommended combining it with item number 4.

RESULT: REFERRED TO BOARD

Next: 7/17/2025 6:00 PM

6. Award of Contract for Lord Ranch Facilities Project

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting under business matters and requested a presentation.

RESULT: REFERRED TO BOARD

Next: 7/17/2025 6:00 PM

7. Change Order No. 1 with Merlin Johnson Construction Inc. for the Zone 7 - 18-Inch Transmission Main Crossing Ontario I-15 Freeway Project

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting under business matters.

RESULT: REFERRED TO BOARD

Next: 7/17/2025 6:00 PM

8. Award of Contract for the Bloomington Alleyway Main Replacement Project – Phase 3C

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting under business matters and requested a presentation.

RESULT: REFERRED TO BOARD

Next: 7/17/2025 6:00 PM

9. Consider a Water System Infrastructure Installation and Conveyance Agreement with HDO 4, LLC for John Previti Ave (Ventana South) Improvements.

Director of Engineering Welborn presented the staff report.

The committee approved moving the item forward to the next Board of Director's meeting under the consent calendar.

RESULT: REFERRED TO BOARD

Next: 7/17/2025 6:00 PM

IV. ADJOURN

Chair Young adjourned the meeting at 7:01p.m.

ATTEST

Elvia Dominguez, Board Secretary

WVWD

Minutes: 6/25/25



STAFF REPORT

DATE: July 24, 2025

TO: Engineering, Operations and Planning Committee

FROM: Rocky Welborn, Director of Engineering

SUBJECT: Approve New Task Order Amendment for the Lord Ranch Facilities Project

STRATEGIC GOAL:

Manage and Deliver a Safe, Reliable, and Sustainable Water Supply

A. Increase System Capacity for Anticipated Growth

Apply Sound Planning, Innovation, and Best Practices

A. Increase Operational Efficiency, Resiliency, and Reliability

MEETING HISTORY:

N/A

BACKGROUND:

The Lord Ranch Site (Site) is located on the east side of Pepper Avenue, between Baseline Road and the 210 Freeway, in the City of Rialto. This Site is currently occupied by Pump Station 4-1, Reservoir 3-2, and Groundwater Wells 7, 8A, and 36. The West Valley Water District (District) proposes to construct several infrastructure improvements at the Site to increase operational capacity through the Baseline Feeder (BLF) transmission pipeline. The BLF delivers groundwater from the Bunker Hill Basin to the District, which can then be boosted into the District's northern service area.

The proposed project includes the construction and operation of a 1-million-gallon aeration tank (R3-5), and a new booster pump station (PS4-3), which will be housed within a concrete masonry building. Pipelines will be installed to connect the new facilities to the existing on-site infrastructure. Site grading and drainage improvements (Site Improvements) will also be completed to support the new construction and improve overall site functionality.

Engineering Resources of Southern California, Inc. (ERSC) was previously contract to be the Design Engineer for this project and provided support during the bidding phase of the Project. Subsequently, Amendment No. 1 to the task order was authorized for additional services, which included updates to the bidding and procurement documents. These updates included changing pump and motors selections, improving a ventilation system, adding an emergency standby generator, and new electrical components including a switchboard and motor control center. The project also integrates a new Supervisory Control and Data Acquisition (SCADA) System and telemetry to communicate with the District's control systems. Other site improvements include the installation of perimeter fencing, site grading, paving, and modifications to the existing drainage system. Collectively, these improvements will enhance the District's ability to deliver water reliability to the northern service area and increase overall system resilience

DISCUSSION:

ERSC has submitted a proposal to provide additional engineering support services during the construction of the Lord Ranch R3-5, PS4-3, and associated Site Improvements that should be performed by the Engineer of Record. These construction-phase services will include, but are not limited to, the following:

- Project coordination
- Participation in the pre-construction conference and additional meetings
- Review of contractor submittals to ensure design intent and requirements are met
- Review and response to request for information (RFIs) regarding design intent or equipment selection methodology
- Observation of over-excavation for the reservoir and pump station, and providing recommendations if field conditions are different from assumed conditions
- Assistance with change order preparation
- Support during startup and testing
- Preparation of as-built record drawings

Attached as **Exhibit A** is Task Order No. 2, Amendment No. 2, including the proposal from ERSC detailing the scope and cost of the additional work.

FISCAL IMPACT:

The cost to perform the services as outlined in Task Order No. 2, Amendment No. 2 is \$242,129.00. This project is included in the Fiscal Year 2025/26 Capital Improvement Plan (CIP) Budget and the District's five-year funding schedule. Sufficient funds have been allocated in the project budget to cover the costs associated with this amendment.

REQUESTED ACTION:

Staff recommends that the Committee forward a recommendation to the Board of Directors to:

1. Approve New Task Order No. 2, Amendment No. 2, with Engineering Resources of Southern California, Inc. in the amount of \$242,129.00 for the Lord Ranch Facilities Project (W15004); and
2. Authorize the General Manager to execute all necessary documents.

Attachments

[Exhibit A - ERSC Task Order No 2 Amandment No 2.pdf](#)

EXHIBIT A

AMENDMENT NO. 2 to TASK ORDER NO. 2

Professional Services for Lord Ranch Facilities Bidding Phase

This Task Order ("Task Order") is executed this ____ day of _____, 2025 by and between West Valley Water District, a public agency of the State of California ("District") and Engineering Resources of Southern California, Inc. ("Consultant").

RECITALS

- A. On or about June 16, 2022 District and Consultant executed that certain Agreement for Professional Services ("Agreement").
- B. The Agreement provides that the District will issue Task Orders from time to time, for the provision of certain services provided by Consultant.
- C. Pursuant to the Agreement, District and Consultant desire to enter into this Task Order for the purpose of setting forth the terms and conditions upon which Consultant shall render certain services to the District.

NOW, THEREFORE, THE PARTIES HERETO HEREBY AGREE AS FOLLOWS:

- 1. Consultant agrees to perform the services set forth on Exhibit "1" attached hereto and by this reference incorporated herein.
- 2. Subject to any limitations in the Agreement and this Task Order, District shall pay to Consultant the amounts specified in Exhibit "2" attached hereto and by this reference incorporated herein. The total compensation, including reimbursement for actual expenses, may not exceed the amount set forth in Exhibit "2," unless additional compensation is approved in writing by the District.
- 3. Consultant shall perform the services described in Exhibit "1" in accordance with the schedule set forth in Exhibit "3" attached hereto and by this reference incorporated herein. Consultant shall commence work immediately upon receipt of a notice to proceed from the District. District will have no obligation to pay for any services rendered by Consultant in advance of receipt of the notice to proceed, and Consultant acknowledges that any such services are at Consultant's own risk.
- 4. The provisions of the Agreement shall apply to this Task Order. As such, the terms and conditions of the Agreement are hereby incorporated herein by this reference.

[SIGNATURES APPEAR ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the parties have caused this Task Order to be executed effective as of the day and year first above written.

DISTRICT:

**WEST VALLEY WATER DISTRICT,
a public agency of the State of California**

By _____
Gregory Young, President

By _____
John Thiel, General Manager

By _____
Elvia Dominguez, Board Secretary

CONSULTANT:

ENGINEERING RESOURCES OF SOUTHERN CALIFORNIA, INC.

By _____

Name _____

Its _____

EXHIBIT “1”

TO

AMENDMENT NO. 2 to TASK ORDER NO. 2

SCOPE OF SERVICES

Additional Professional Services for Lord Ranch Facilities Bidding Phase per the attached proposal letter dated July 11, 2025.

July 11, 2025

West Valley Water District

ATTN: Ms. Rosa Gutierrez, P.E., Senior Engineer
855 W. Base Line Rd.
Rialto, CA 92376

RE: Proposal to Provide Engineering Support During Construction of West Valley Water District's Lord Ranch Site Improvements, 3-5 Reservoir, and 4-3 Pump Station

Dear Ms. Gutierrez:

Engineering Resources of Southern California, Inc. (ERSC) appreciates the opportunity to continue assisting West Valley Water District (WVWD or District) with engineering support services during the construction of the Lord Ranch Site Improvements, 3-5 Reservoir, and 4-3 Pump Station. ERSC is proud to have the District as a client and has completed multiple similar projects for WVWD in previous years. The following is our proposal to provide engineering support services for the subject construction project.

Project Understanding

West Valley Water District is preparing to construct the 3-5 Reservoir and the 4-3 Pump Station on the District's existing Lord Ranch property. The reservoir will be a 1.0 MG welded steel tank constructed in accordance with the American Water Works Association's standard D100-21.

The 3-5 Pump Station will be constructed immediately east of and supplied by the 3-5 Reservoir. Initially, four (4) pumps will be installed. However, the building will be constructed to accommodate up to eight (8) pumps. A 750 kW standby power generator will also be installed. The project specifications established two (2) milestones for completion of the work. The first milestone requires completion of the reservoir and pump station, excluding the generator, within 540 calendar days. The second milestone requires completion of the installation and testing of the standby power generator system within 630 calendar days.

The soils beneath the reservoir and the pump station are to be over-excavated to a depth of 10 feet and recompacted to 90 percent relative compaction. It is recommended that Aragón Geotechnical, Inc. (AGI) be retained to observe the over-excavation to ensure the soils encountered are consistent with the findings of their previous geotechnical investigation and the materials recovered from their exploratory borings.

It is our understanding that WVWD would like ERSC to provide engineering support during the course of construction. This support will include the following:

- Project Coordination

- Attending the Pre-Construction Conference and Miscellaneous Meetings
- Reviewing Submittals
- Reviewing and Responding to the Contractor's RFIs
- Observing Over-Excavations for the Reservoir and Pump Station and Providing Recommendations (if different conditions are encountered)
- Assisting with Change Orders
- Assisting with Startup Testing
- Assisting with Developing Punch Lists
- Preparing As-Built Record Drawings
- Optional Task – Coatings Inspection for 3-5 Reservoir

Construction and/or contract management services and inspection will be provided by others. Accordingly, ERSC's team will serve in a support role as directed by WVWD staff. A detailed description of ERSC's proposed Scope of Work is provided in the following pages.

Detailed Scope of Work

Task 1 – Project Coordination and Meetings

ERSC will reserve this task for project management-related tasks, general coordination, and attending various meetings as directed. Select persons from ERSC's design team, including the Project Engineer, Structural Engineer, and Electrical Engineer (Mark Balan & Associates), will attend the Pre-Construction Conference. ERSC staff and subconsultants will attend other meetings as directed by District staff.

Deliverables:

- *Meeting agenda and minutes, if requested and as applicable (pdf and Word files)*
- *Monthly invoices (pdf files)*
- *General correspondence (pdf files)*

Task 2 – Review Submittals and Respond to Requests for Information (RFIs) from the Contractor

ERSC's team will be responsible for reviewing the contractor's submittals for materials, equipment, and related appurtenances. In addition to these submittals, ERSC will also review the shop drawings for various assemblies including but not limited to: yard piping, pump station suction and discharge piping manifolds, welded steel reservoir, valve assemblies, pumps, SCE service entrance equipment, main electrical switchgear, motor control center, pump control and telemetry panel, standby power generator and related systems, building reinforcement, structural steel joists, standing seam metal roof system, site fencing, motorized gate and control system, and SWPP BMPs.

ERSC's team will endeavor to review and return all submittals within two weeks or less. ERSC will not be responsible for reviewing administrative submittals such as the contractor's schedule and progress/pay estimates unless specifically requested by WVWD staff.

During the course of the project, it is expected that the contractor will have questions concerning the plans and specifications or will require clarification and/or direction regarding the design.

Accordingly, ERSC will review and respond, in writing, to the contractor's requests for information (RFIs) as directed by WVWD staff.

Deliverables:

- *Redlined or approved submittals with transmittal (pdf files)*
- *Written responses to RFIs (pdf files)*

Task 3 – Geotechnical Observation and Recommendations

During the design of the 3-5 Reservoir and 4-3 Pump Station, ERSC retained the services of Aragón Geotechnical, Inc. (AGI) to evaluate the surface and sub-surface conditions of the soils on the District's Lord Ranch property. They performed multiple borings to obtain samples, which were used to characterize the soils and provide recommendations for the design of the reservoir and pump station. As a result, their recommendations and ERSC's design are based on the information obtained through these limited number of borings. It is possible that during excavation, the contractor may encounter soil conditions that vary from AGI's prior observations. If this occurs, it may be necessary to modify the requirements for over-excavation, backfill, and compaction. If the allowable soil bearing capacity cannot be achieved due to the presence of poor-quality materials, it may become necessary to modify the limits of the excavation and/or the design of the foundations. Although this may not become an issue, ERSC believes it would be prudent to have AGI's Geotechnical Engineer onsite while the contractor performs the over excavation to verify that the conditions encountered are as expected, or if necessary, to make alternative recommendations. AGI will submit a letter report documenting their findings, applicable test results, and revised geotechnical recommendations.

Deliverables:

- *AGI's summary of geotechnical observations and test results (pdf files)*
- *Geotechnical recommendations (pdf files)*

Task 4 – Assist with Change Orders

It is ERSC's understanding that construction contract management services will be provided by others. WVWD staff may desire to make changes to the contractor's scope of work. Alternatively, changes may be initiated by the contractor. In either case, ERSC's team will be available as requested to review whether the proposed change is warranted and if the contractor's proposed cost is reasonable. Written responses will be provided in a timely manner to minimize potential impacts to the contractor's schedule.

Deliverables:

- *Written response to change order proposals or change order requests (pdf files)*
- *Supporting cost estimates when requested (pdf files)*

Task 5 – Startup Assistance and Testing

Startup testing and validation will be required for the 3-5 Reservoir and 4-3 Pump Station. Major equipment to be tested and/or validated includes: altitude valve, pressure relief/surge anticipator valve, electrical switchgear, pumps/motors, pump/motor controls, standby power generator, HMI touch screen, and the automated entrance gates. ERSC's team will be available to assist District staff with equipment and facility startup testing on an as-needed/as-requested basis.

Deliverables:

- *Summary of testing/validation results (pdf and dwg format)*

Task 6 – Prepare As-Built Record Drawings

ERSC's team will prepare final as-built record drawings for the three (3) sets of plans:

- Site Improvements
- 4-3 Pump Station
- 3-5 Aeration Reservoir

Redline prints from the Contractor, subcontractors, and field inspectors will be collected and reviewed for completeness. This will include a review of all RFIs and Change Orders to ensure that all changes are represented on the redlines. The design AutoCAD files will then be modified to reflect the changes. A "delta" number, as appropriate, will be noted in the drawing where the change(s) were made. "As Constructed" will be noted in the revision block on each drawing with the corresponding "delta" number. ERSC will provide the final as-built record drawings to WVWD upon completion.

Deliverables:

- *As-Built Site Improvements Drawings (pdf and dwg format)*
- *As-Built 3-5 Pump Station Drawings (pdf and dwg format)*
- *As-Built 4-3 Aeration Reservoir Drawings (pdf and dwg format)*

Optional Task 1.0 – Quality Control and Reservoir Coatings Inspections

If requested, ERSC can provide inspection services for the interior and exterior coatings of the Aeration Reservoir. It is recommended that a National Association of Coatings Engineers (NACE) "certified inspector" be present on-site to monitor the surface preparation and application of the coatings. The specified epoxy coating systems are highly specialized and are subject to pre-mature failure if not performed under precise conditions and strictly following the coating manufacturer's printed instructions. ERSC's Coating Inspector shall be onsite full-time during the coating and painting operations and maintain daily inspection reports of the Contractor's personnel and equipment working at the job site. Any items deemed unsatisfactory by ERSC's inspector will be communicated to the construction manager.

Inspection reports will include weather, labor, equipment, materials, quantities, batch numbers, surface preparation, conditions, correspondence, and issues observed. The inspection reports will also integrate the daily project photos. Additionally, the reports will include any tickets from material delivery to ensure accurate cost accounting when payment is requested. Reports will be in a format acceptable to the District and submitted on a weekly basis.

The specifications require the Contractor to provide a 24-month warranty on the tank interior coating. A warranty inspection is to be scheduled between the twelfth and twenty-third months after the date of the Notice of Acceptance. The timing of this inspection is solely at the District's discretion. If requested, ERSC's inspector will assist with this inspection and provide a written

letter report with photo documentation of the condition of the interior coatings.

Deliverables:

- *Inspection Reports (pdf format)*
- *Photographs (pdf or jpg format)*
- *24-Month Inspection Report (pdf format)*

Scope of Proposal

ERSC's proposal is based on our best guess for the level of effort required for this project. The hours projected represent our best estimate. The construction contract requires all work for Milestone 1 and Milestone 2 to be completed within 520 calendar days (74 weeks) and 630 calendar days (90 weeks), respectively. ERSC's proposal is based on this duration. It follows that, if for reasons beyond ERSC's control, the contract duration is extended, the amount of effort required (i.e., project coordination, meetings, RFIs, and correspondence) may need to be increased. Similarly, if contractual matters arise between parties that are beyond ERSC's control, the scope of ERSC's contract may need to be modified.

As noted, this proposal is an estimate of the work that may be needed. ERSC intends to bill only for services rendered (i.e., hours worked on individual tasks as directed). WVWD may limit the work requested of ERSC staff. Therefore, this proposal is being offered as a "cafeteria plan," in which WVWD staff "pick and choose" which portion of the work will be directed to ERSC.

The following items are not included in ERSC's proposed scope of work:

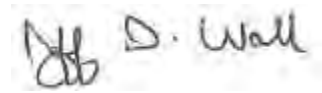
- Construction contract management services
- Inspection of works other than the optional items specifically noted above
- Construction survey services
- Materials testing services
- Compaction testing services
- Preparation of Water Quality Management Plans
- Qualified SWPPP Developer (QSD) and Qualified SWPPP Practitioner (QSP) services

However, ERSC can provide these additional services if requested.

A schedule of ERSC's estimated level of effort and the associated fee to complete the project is shown in the attached Exhibit "A". ERSC's latest Schedule of Rates is provided as Exhibit "B". Qualifications for each of the ERSC team members assigned to this effort are outlined in the resumes included as Exhibit "C."

Thank you for the opportunity to provide this proposal. Should you have any questions regarding the information herein, please call me at 909-890-1255 or email me at jwall@erscinc.com.

Best regards,

A handwritten signature in dark ink, appearing to read "Jeff D. Wall". The signature is written in a cursive, slightly slanted style.

Jeff D. Wall, PE
Sr. Principal Engineer

Attachments: Exhibit "A" – Fee Estimate
Exhibit "B" – ERSC's Schedule of Rates
Exhibit "C" – ERSC's Project Team

JDW/jdw

Jeff D. Wall, PE | Sr. Principal Engineer

CA, Civil Engineer No. C51914

Education

Masters Degree in Public Administration;
California State University, San Bernardino
B.S. Electrical Engineering Technology;
LeTourneau College, Longview, TX

Affiliations

American Public Works Association

Mr. Wall joined the ERSC team as an accomplished, results oriented manager with 14 years of proven success directing engineering, operations, and maintenance staffs in both large and medium size municipal water districts through innovation, optimization, performance management, and leadership. His experience includes developing and managing multi million dollar budgets for multiple water district operations and maintenance departments, implementing tiered water rates, automated meter reading, on-line bill payment, and asset databases, and managing pipe replacement bond programs, and wastewater capital improvement programs.

Similar Project Experience:

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.

Reservoirs B1 and B2 Rehabilitation and Recoating, Bighorn-Desert View Water Agency, Yucca Valley, CA – Project Manager responsible for the team in the preparation of plans and specifications to rehabilitate two welded steel water reservoirs and construct modifications needed to bring them into compliance current OSHA and California's State Water Resources Control Board Division of Drinking Water standards. The project is funded through Proposition 1 and administered through the State Water Resources Control Board.

Zone 8-3 2.0 Million Gallon Reservoir, West Valley Water District, Rialto, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. As a part of ERSC's On-Call Engineering services contract with the District, the firm provided engineering design and construction management services for a 2.0 Million Gallon Reservoir.

Lord Ranch 1.0 Million Gallon Steel Welded Reservoir, West Valley Water District, Rialto, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC designed a 1.0 MG Steel Welded Reservoir in Zone 3, allowing the District to utilize additional capacity through the Baseline Feeder (BLF) transmission pipeline, the source of which is currently purchased groundwater from the San Bernardino Valley Municipal Water District (Valley District). ERSC designed the reservoir for placement on 14-acre existing Lord Ranch Facility to provide storage capacity for the pressure zone.

Seismic Retrofit and Rehabilitation of 7 Reservoirs, East Valley Water District - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering design services for the retrofitting of seven potable water reservoirs, made possible by funds from the FEMA Hazard Mitigation Grant Program (HMGP). Phase 1 entails the development of construction documents for retrofitting the designated reservoirs, and Phase 2 involves the implementation of the retrofits. Updates to the reservoirs are a result of structural/seismic evaluations carried out to identify areas of concern during seismic events.

Assistant General Manager of Operations and Maintenance, Eastern Municipal Water District - Executive responsible for the operation and maintenance of the District's potable water, wastewater, and recycled water facilities. Actively managed a \$203 million operating budget with a staff of 288 employees to achieve the District's strategic objectives. Potable water facilities included: two water filtration plants, two brackish groundwater desalination plants, 87 pump stations, 79 storage tanks, 26 groundwater wells, and 2,442 miles of pipelines. Wastewater facilities included: four water reclamation plants, 55 sewage pump stations, and 1,840 miles of sewer pipelines. Recycled water facilities included: 7,600 acre-feet of seasonal storage, four storage tanks, 14 pump stations, and 225 miles of recycled water pipelines.

Director of Water Reclamation, Eastern Municipal Water District - Department executive responsible for the operation and maintenance of four water reclamation plants producing 46 million gallons per day of Title 22 tertiary recycled water for beneficial reuse. Actively managed a \$26 million operating budget with a staff of 87 employees to achieve the District's strategic objectives. Accomplishments included: an 18 percent reduction in chemical costs, a five percent reduction in chlorine costs, a 35 percent reduction in overtime, and significant improvements in both recycled water production reliability and water quality.

Assistant General Manager/Chief Engineer, Lake Hemet Municipal Water District - Managed a \$12 million operating budget and directed a staff of 66 employees comprising

Jeff D. Wall, PE | Sr. Principal Engineer

the Administration, Finance, Engineering, Operations and Maintenance departments, as well as, the Lake Hemet Campground. Developed and managed the District's capital improvement program including construction of the District's new Administrative and Operations Center. Devised innovative programs including the implementation of: an automated meter reading system, tiered water rates, on-line and automatic account withdrawal bill payment systems, and an electronic asset database. During this time, conservative fiscal policies and unity with the Board of Directors and General Manager resulted in a 44 percent increase in the District's capital reserves in spite of the economic recession.

Senior Civil Engineer, Eastern Municipal Water District - Directed all aspects of the agency's \$250 million wastewater capital improvement program including the planning and design of capital improvement projects for wastewater treatment plants, sewer pumping facilities, sewer pipelines and forcemains. Responsibilities included: supervision of Engineering Department staff and consultant engineers, Board presentations, serving as the main liaison between Engineering and Operations Departments, project management, performing long-term planning, conducting engineering studies, preparing written reports, performing quality control review of plans and specifications, and preparing contract documents.

Civil Engineer (Registered), Eastern Municipal Water District - Served as Project Engineer on numerous water and wastewater capital improvement projects including potable water tanks, pump stations, sewage lift stations, waterlines, sewerlines, sewer forcemains, and roadways. Served as District's liaison with consultant's electrical engineering staff to facilitate standardization of electrical and instrumentation system designs.

Civil Engineering, Eastern Municipal Water District - Began career as a plan checker in the Engineering Department and quickly advanced to the Planning Department. Shortly thereafter, accepted another promotion in the Engineering Department to serve as a project engineer on capital projects in the Engineering Department. Served as District's liaison with consultant's electrical engineers on pump station, lift station, and treatment plant projects to facilitate standardization of electrical and instrumentation system designs.

Bloomington Business Park Lift Station and Forcemain, City of Rialto, CA - Plan Reviewer responsible for review of plans, maps, special studies, and similar documents for conformance to engineering practice, city standards, and applicable codes. ERSC's team provided plan checking and construction inspection services during the permitting and construction of the sewer improvements for the Bloomington Business Park. The new industrial facility was required to construct sewer improvements including a new lift station, 6,000LF of gravity sewer, and 2,300LF of Sewer Force Main. ERSC plan check staff reviewed all plans specifications and supporting information related to the project's sewer and lift station improvements.



CA, Professional Engineer No.90924
AZ, Professional Engineer No. 73812
QSD No. C90924

Education

BS, Civil Engineering, Loyola Marymount
University, Los Angeles, CA

Areas of Expertise

Water System Modeling
Site Layout & Geometrics
Hydrology & Drainage
AutoCAD Civil 3D
Traffic and Transportation
Water and Wastewater
WQMP Preparation
SWPPP Compliance
SWPPP Development

Mr. Brudin is a Registered Civil Engineer in the states of California and Arizona. He was introduced to the industry in 2012 as an intern at Lake Hemet Municipal Water District. Since then, he has held positions as Project Engineer at C.W. Driver, and Associate Civil Engineer at Parsons Corporation. Trent joined ERSC in early 2016.

Trent is a highly skilled engineer assisting in the management of a wide variety of projects at ERSC. Trent regularly performs complex design level tasks on water resources, civil site design, and transportation related projects included hydrology studies, drainage design, site grading, geometric site layout, WQMP and SWPPP documentation, intersection improvements, traffic signal modifications, water and wastewater pipeline design, and water feasibility studies

Trent Brudin, PE, QSD | Engineering Manager

Similar Project Experience:

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Technical Advisor responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.

Hydraulic Modeling Updates, City of Redlands, CA - Senior Modeler responsible for concept development, design recommendations, and special study drafting throughout the assignment. Under an on-call agreement, ERSC was contracted to update the City's water and sewer models. The new hydraulic models accurately represent the water distribution and wastewater collection systems and produce reliable results suitable for engineering and operations decision-making related to capacity and performance with respect to established hydraulic design criteria.

Quail Valley Subarea 4 Sewerage Feasibility Study and Preliminary Design, Eastern Municipal Water District, Quail Valley, CA - Assistant Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to conduct a feasibility study for sewer service in Sub-Areas 4 and 9, which was required to lift the 2006 Regional Water Quality Control Board and County of Riverside moratoriums on septic tanks in Quail Valley. The study evaluated multiple alternatives that would satisfy the requirements of property owners, the District, and the funding sources/agencies. The new system included a combination of packaged lift stations, vacuum sewer systems, regional lift stations, and sewer conveyance gravity/force mains.

CSA70J H2ONet Analysis, San Bernardino County Office of Special Districts - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC evaluated the H2ONet Map analysis for Zone J. Staff assisted the District with the evaluation of options including line extensions or looping the new system to meet new demands.

CSA 70J Muscatel Street and Aster Road 1,500-foot Line Extension, San Bernardino County Office of Special Districts - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC provided design services for an approximately 1,500 feet CSA 70J line extension from the intersection of Muscatel Street and Aster Road.

Sewer Structural Rehabilitation, City of Victorville, CA - Project Engineer during the replacement of existing sewer main in-kind. Removal and replacement of approx. 12,000 feet of 8-12" Vitrified Clay Pipe (VCP) Sewer mainline. Sewer rehabilitation was completed in numerous locations of the City. Majority of locations were within the Public ROW, but certain reaches required close coordination with property owners including private landowners and the San Bernardino County Flood Control District were pipe was designed in Easements or within the requirements of an encroachment permit.

Sewer Capacity Improvement Project C-1, City of Victorville, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the upgrading of 3,022 feet to 15-inch pipe from existing 10-inch pipe. The project intends to allow additional capacity to the sewer system to allow and account for increased commercial and industrial development in this part of the City. The project is generally located in an industrial area around Hesperia Road and Nisqualli Road and generally has impacts on several distribution sites as well as some retail/gas stations.

Sewer Capacity Improvement Project C-2, City of Victorville, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the upgrading of 1,748 feet to 12-inch pipe from existing 8-inch pipe. The project is generally located in a residential area and crosses an existing golf course. The project is also contiguous to City sewer project C3 as well as several Structural Sewer Replacement Lines. This was important to note because turned

Trent Brudin, PE, QSD | Engineering Manager

out to be beneficial to include both items of work in the same project/contract. This work generally took place in easements, and only has impacts on a small segment of Public La Paz Drive as well as Arrowhead Drive.

[Sewer Capacity Improvement Project C-3, City of Victorville, CA](#) – Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the upgrading of 6,550 of 18-inch pipe upgraded from 12-inch pipe. The project is generally located in residential areas and crosses a park in an easement. The City of Victorville has identified the potential to construct a new sewer main in the San Bernardino County Flood Control District's (SBFCD) access road, next to the Oro Grande Wash from Austin Road to Seneca Road. This relocation eliminates a series of existing lines that traverse several properties, which requires the abandonment of any existing easements. This requires coordination with several residences, and the new alignment will require coordination with SBFCD and their approval. It is assumed that this has been discussed with SBFCD but will require appropriate reviews and permitting.

[Canyon Lake S. Blackhorse Driveway Improvement, Elsinore Valley Municipal Water District, CA](#) - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional engineering services for the design of driveway improvements necessary to allow adequate access to the Canyon Lake South 1MG Reservoir Site by District staff, cell phone companies, and inhabitants of an adjoining single-family residence. The design replaced the driveway due to deterioration from heavy service-vehicle traffic and an 8-inch ductile iron pipe beneath it. Work included project management, design survey, structural calculations, PS&E preparation, bidding support, and construction administration.



CA, Civil Engineer No. C74906
DE, Civil Engineer No. C13235

Education

BS, Civil Engineering, Southern University and
A&M College, Baton Rouge, LA
MS, Civil Engineering, New Jersey Institute of
Technology, Newark, NJ

Affiliations

American Concrete Institute

Areas of Expertise

Construction Management
Structural Engineering
Structural Analysis
Material Analysis

Mr. Toorzani joined the ERSC team in 2003, with more than 45 years of rich and extensive experience. He has gained particular skill in design, and a distinguished reputation for the overall supervision of large and complicated projects, insuring that the contracted works meets the required specifications. He has managed several site supervision teams and played a major role in completing projects according to program and within budget. In addition, Mr. Toorzani has practiced as an analyst, designer and site superintendent in the implementation of major civil infrastructure projects mainly in the United States and Iran.

Since joining ERSC, Mr. Toorzani has focused his extensive experience and expertise on the design and peer review of various structures. His design experience includes large scale solar projects, walls and foundations, reinforced concrete box storm drains and substructures and block enclosures and small wood framed structures at pump station and large metal buildings. Has conducted peer review for conical wind turbine foundations in the City of Palm Springs, Con-Span bridge structures along the Cactus Valley Wash in the City of Hemet and reinforced concrete structures crossing the East Garden Grove/Wintersburg Channel in the City of Huntington Beach.

Reza Toorzani, PE | Assistant Principal Engineer

Similar Project Experience:

R2-3 Tank Rehabilitation Project, West Valley Water District, Rialto, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. Also served as Construction Manager responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. As a part of a development proposal in the area, the project's proponent was required to rehabilitate and upsize a 4MG capacity tank that was constructed in 1991 on a 2.281 acres site shared with another Tank, 2-2. ERSC provided design for the rehabilitation of the tank's structure, coating, floors, and site improvements including site and transmission piping. CM staff coordinated and inspected structural rehabilitation during all site and pipeline construction, internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.

Washwater Tank No.2 Rehabilitation, City of Poway, CA - Construction Manager responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. ERSC's team provided construction management and inspection services during the rehabilitation of the Washwater 2 tank at the City's Wastewater Treatment Plant. The tank was originally constructed in 1995 and required coating and structural rehabilitation. CM staff coordinated and inspected structural rehabilitation during internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.

South Gate Park Infrastructure Improvements (Area S Picnic Area), City Project No. 488-PRK - Construction Manager during the course of the project. The project will include conversion of an existing Roller Hockey rink into a group picnic area. The park improvements are located near the northwest corner of South Gate Park, near the intersection of Southern Avenue and Hildreth Avenue, at the roller court facility. Work will include construction/installation of concrete flatwork, decomposed granite paving, seat wall, tree planters, landscaping, picnic structures, and park furniture.

State Street Park, and Cycle 8 & 9 Safe-Route-to-School Projects, City of South Gate - Construction Manager during a \$3.5 Million project for construction of a new park and several Street and Intersection Safety improvements projects in the City of South Gate. The project involves working with School District, LADWP, Fire Department and the adjacent community. The work involves street resurfacing, and construction of curb & gutter, sidewalk, ADA Ramps, installation of signs and markings, installation of Traffic Loops, grading, drainage, water quality systems, landscaping, hardscaping, building facilities, playground facilities, picnic shelters, utilities, lighting, and basketball court/sport facilities.

Palm Springs Master Drainage Plan Lines 6A and 8 and Laterals 20C and 20CA, Palm Springs, CA - Project Engineer and Construction Manager during the design and construction of the three major flood control projects across the City. Located along Sunrise Way Line 6A and Line 8 will result in the elimination of "down and under drains" and support commercial development between Via Escuela and Vista Chino Drive and Andreas Road and the Baristo Channel, respectively. Similarly, Laterals 20C and 20CA will result in the elimination of "down and under drains" and support residential development along El Cielo and Baristo Road. Mr. Toorzani provided review and modification of master plan hydrology, utility coordination, alignment selection and analysis, hydraulic modeling and the development of plans, specifications and estimates, and construction management.

Horseshoe Development, Soboba Band of Luiseno Indians, San Jacinto, CA - Construction Manager attending construction/coordination meetings each week, maintained all meeting minutes, R.F.I. logs and change order logs. Review of all shop drawings/submittals for conformance with plans and specs. Maintained the submittal log and provided weekly updates. Provided daily oversight of construction activities by the contractors and subcontractors and maintained daily inspection reports. Provided value engineering as needed to maintain the project construction on track and within budget. Work also included coordinating commissioning of the Fire Station, tests of all mechanical/electrical systems performance for conformance with plans/specs. Inspectors also performed a punch list and back check review of the substantially completed building.

Reza Toorzani, PE | Assistant Principal Engineer

[Soboba Sports Park and Parking Lot, San Jacinto, CA](#) - Construction manager and Project Engineer for the design, survey, and construction management services in preparation of grading and drainage improvement plans for a new sports park on the reservation. The project included construction of a proposed building, restrooms, removal and replacement of an existing playground, 8 row bleacher and parking lot expansion. The new parking lot included new paved spaces to accommodate additional traffic expected from the park's expansion.

[Soboba Fire Station Project, Soboba Band of Luiseno Indians, San Jacinto, CA](#) - Construction Manager responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. ERSC provided the design and preparation of PS&E for all on-site utilities including sewer, water, and storm drain. Upon completion of the design, ERSC provided Owner's Representative services for the construction of the Fire Station. Water improvements included the design and construction of an 8" PVC waterline. Sewer improvements included design and construction of an 8" VCP from extending from the fire station site to Lake Park Drive, connecting to the existing EMWD 10" sewer pipeline. As the Owner's Representative, ERSC coordinated contractor and subcontractor construction activities, reviewed and processed billing, conducted troubleshooting as needed, conducted progress meetings with the contractors and Tribal staff, and prepared punch lists upon completion of the construction of the fire station project.

John Ward | Sr. Engineering Associate

Education

Bachelor of Science, Information Systems
- Systems Engineering, California Baptist
University, Riverside, CA

AS Degree, Engineering, Mt. San Jacinto
College, San Jacinto, CA

Affiliations

Microsoft Certified Professional MCP #277993
Windows NT Workstation Windows NT Server

Mr. Ward joined ERSC following a 35-year career of successful programs, projects, and process improvements for a local water district, successfully pursuing hundreds of millions in grants and loans, managing the capital improvement program with an average annual budget of \$105M, and successfully acquiring 220 acres of fee-owned property in support of the Capital Improvement Program. His leadership skills directing, organizing, and motivating staff contribute to his identifying, pursuing, and administering external funding opportunities in support of capital, technology, and conservation programs.

Mr. Ward demonstrates an ability to design and implement effective project controls to manage scope, schedule, and budget of robust capital programs. He brings an ability to manage all facets of Real Property including acquisition, management, and disposition of fee-title property and easements.

Similar Project Experience:

Seismic Retrofit and Rehabilitation of 7 Reservoirs, East Valley Water District, Highland, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering design services for the retrofitting of seven potable water reservoirs, made possible by funds from the FEMA Hazard Mitigation Grant Program (HMGP). Phase 1 entails the development of construction documents for retrofitting the designated reservoirs, and Phase 2 involves the implementation of the retrofits.

Reservoirs B1 and B2 Rehabilitation and Recoating, Bighorn-Desert View Water Agency, Yucca Valley, CA – Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional engineering services for the rehabilitation of two welded steel water reservoirs and construct modifications needed to bring them into compliance with current OSHA and California's State Water Resources Control Board Division of Drinking Water standards. The project is funded through Proposition 1 and administered through the State Water Resources Control Board.

Construction Management and Inspection Services, 1.6MG Reservoir, City of Loma Linda, CA - Construction support responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. ERSC's team provided inspection services during the construction of a new 1.6 million-gallon welded steel reservoir that provides additional supply to the City's 1A, 2, and 2A pressure zones in the event that the existing reservoirs are taken offline for repairs or maintenance. ERSC inspectors were present for observation of the tank construction and also access road improvements, various site improvements, storm drain improvements, SWPPP compliance, SCADA, and electrical component installation as well as coordination of geotechnical and coating inspections.

Director of Engineering Services, Eastern Municipal Water District, Perris, CA - Served in executive level leadership for more than 10 years, managing more than 30 employees. Duties included:

- Grant Pursuit and Post Award Administration
- Capital Project Controls systems and performance monitoring
- Real Property acquisition, management, and disposition
- GIS management of EMWD facilities and land-base
- Facility Locations in support of construction
- Enterprise Performance Metrics

Engineering Program Manager, Manager, Improvement Program Manager, Eastern Municipal Water District, Perris, CA - In service of the Engineering Services Department, Mr. Ward managed the development of Enterprise Performance Measures and acted as Grant Administrator of Awarded Grants – Responsible for \$360 Mil since.

Senior Engineering Systems Analyst, Eastern Municipal Water District, Perris, CA - While assigned to the Engineering Admin Department, Mr. Ward's duties included:

- Managed the Engineering Systems Management Division
- Systems Development – Implemented Project Cost Tracking System
- Project Management and Control System –
- Technology Systems Management for Engineering Branch
- Quality Control for select water and sewer facilities

Civil Engineering Associate II, Computer Systems Manager, Eastern Municipal Water District, Perris, CA - This assignment with the Engineering Department included producing Engineering plans for construction of District projects with a focus on potable water tanks and recycled storage ponds.

Civil Engineering Assistant, Eastern Municipal Water District, Perris, CA - This assignment with the Engineering Department included:

- Civil Engineering Design including forty-five acre Constructed Wetlands
- Computer System Management and Support of 60 users
- Plan check Developer plans for conformance to District standards



Engineer in Training

Education

California Baptist University, Civil Engineering

Areas of Expertise

Civil 3D
AutoCAD
Surveying
Adobe Photoshop
Microsoft Office
Excel

Mr. Shea joined ERSC, bringing an acumen for civil design, consulting, and client service. His duties on our team include applying engineering judgment to design solutions for various public works projects. He is also tasked with interacting with clients as the point of contact for various projects. Nathan also creates legal documents for right of way dedications and land easements.

In previous assignments he drafted conceptual grading plans for industrial projects using Civil 3D, wrote drainage reports using FEMA and survey data for submittal to clients, and drafted lot exhibits for residential land development projects.

Nathan Shea, EIT | Engineer II

Similar Project Experience:

Seismic Retrofit and Rehabilitation of 7 Reservoirs, East Valley Water District, Highland, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide professional engineering design services for the retrofitting of seven potable water reservoirs, made possible by funds from the FEMA Hazard Mitigation Grant Program (HMGP). Phase 1 entails the development of construction documents for retrofitting the designated reservoirs, and Phase 2 involves the implementation of the retrofits.

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.

Hydraulic Modeling Updates, City of Redlands, CA - Assistant Modeler responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to update the City's water and sewer models. The new hydraulic models accurately represent the water distribution and wastewater collection systems and produce reliable results suitable for engineering and operations decision-making related to capacity and performance with respect to established hydraulic design criteria.

R2-3 Tank Rehabilitation Project, West Valley Water District, Rialto, CA - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. As a part of a development proposal in the area, the project's proponent was required to rehabilitate and upsize a 4MG capacity tank that was constructed in 1991 on a 2.281 acres site shared with another Tank, 2-2. ERSC provided design for the rehabilitation of the tank's structure, coating, floors, and site improvements including site and transmission piping. CM staff coordinated and inspected structural rehabilitation during all site and pipeline construction, internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.

Tank 10 Inspection and Cleaning, Bighorn-Desert View Water Agency, Yucca Valley, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted for the cleaning and condition summary of a 10,000 gallon, 12' x 12', potable water storage tank. Services included cleaning the interior bottom surfaces, evaluating the interior surfaces to determine the condition of the existing coating system, and repairing the float/target system for Tank level monitoring.

Alamitos Reservoir Potable Tank No. 7 & Recycled Tank No. 22 Rehabilitation, Long Beach Water Department, City of Long Beach, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. Work includes preparing two construction bid packages and providing construction management & inspection services for the rehabilitation of two 3.3 million gallon water tanks at LBWD's Alamitos Reservoir. ERSC prepared one set of construction documents for each tank including cost estimates and provide bid phase services for the Projects.

TELD-4 Storage Forebay Reservoirs Condition Assessment, Coachella Valley Water District, Palm Desert, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. Services consisted of evaluating the exterior and interior surfaces to determine the condition of the existing coating systems, structural integrity, and to evaluate the reservoir for Cal/OSHA requirements, SWRCB compliance, and AWWA D100 regulations.

Washwater Tank No.2 Rehabilitation, City of Poway, CA - Project Designer responsible for preparation of project documents and completion of computer aided design throughout all phases of the assignment. ERSC was contracted to provide construction management and inspection services during the rehabilitation of the Washwater 2 tank at the City's Wastewater Treatment Plant. CM staff coordinated and inspected structural rehabilitation during internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.

Robert Ollerton, PLS | Principal Surveyor

CA, Land Surveyor No. 7731

Education

Civil Engineering & Land Surveying
Coursework, University of California at
Riverside, Riverside, CA

Areas of Expertise

Civil3D
MicroStation
ArcGIS
Boundary Surveying
Right-Of-Way & Easements
Construction Surveying
Topographic Mapping
Consulting Surveyor to Municipal Agencies
Land Development and Entitlements

Robert has over 39 years of professional experience in land surveying for municipal agencies. He has managed a wide variety of land survey projects including surveys for topographic mapping, geodetic control, right of-way, boundary, construction projects, and public utility.

Most recently, Robert's responsibilities as the Principal Surveyor include the management and coordination of construction staking contracts for civil engineering projects, boundary surveys, title analysis, topographic mapping, detailed design surveys, ALTA Surveys and mapping. Since joining ERSC, Robert's wide range of skills and background have enabled ERSC to provide clients with localized and personalized service, keeping true to ERSC's philosophy of dedication to customer service and satisfaction.

Similar Project Experience:

Construction Phase Services, MDP Line J and J-1- Phase I Soboba Band of Luiseño Indians, San Jacinto, CA - Principal Surveyor responsible for oversight of review of survey documents throughout the assignment. ERSC was contracted to provide construction staking and inspection for Phase I of the Soboba MDP Line J. The Soboba MDP Lines J and J-1 will intercept upstream flows and convey south under Castile Canyon Road to Poppet Creek Channel. Phase I consists of construction of approximately 390' of 8'W x 7'H RCB, one manhole, a collection basin, and a transition structure at the junction with MDP Line J-1.

Riverside County Surveyor - Under direction of the County Surveyor, checked tract maps for conformance with the Subdivision Map Act, County ordinances, and development standards. Reviewed records of surveys and corner records for conformance with the Land Surveyor's Act. Managed on-call field surveying services for aerial mapping, control, topographic and construction surveys.

City Surveyor Services - Currently the acting City Surveyor for the Cities of Rialto, Lake Elsinore and Colton. Supervises the review of subdivision maps, parcel mergers, lot line adjustments, dedications and easements.

Survey for Traffic Signal Design Services for Rubidoux Blvd at 24th St and Wineville Rd at Riverside Dr, STC Traffic, Inc., Jurupa Valley, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC's team provides support to the STC Traffic, Inc. team for the completion of improvement plans for the HSIP and local funded projects in the City of Jurupa Valley. The planned improvements include traffic signals and upgraded curb ramps to comply with ADA at two intersections. ERSC provides field and office support to STC's team in mapping existing right-of-way, existing topography, and contours at each site.

Survey Services, Fire Station No. 3, City of Palm Springs, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide professional surveying services related to the development of a Boundary, Topographic, and Utility AsBuilt Survey for Fire Station #3 in the City of Palm Springs. More specifically, the site-in-question is located at the northwest corner of Via Miraleste and Raquet Club.

Reservoir Site Survey, Riverside Highland Water Company - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC provided surveying services at the RHWB Spring Mountain Ranch reservoir site. ERSC survey crews located existing monumentation for the site and searched for existing monuments. It was found that monuments were destroyed by construction of the Site's wall and ERSC provided services to replace damaged or missing monuments.

Street Improvements, City of Temecula - Managed and performed construction surveying for street improvements along Jefferson Street and Winchester Road.

County of Riverside Winchester Road (Highway 79) Widening - Survey manager for control and topographic surveying of over eight miles of Highway 79/Winchester Road for ultimate widening to six lanes from Domenigoni Parkway to Benton Road.

Widening and signalization of State Highway 79 at Auld Road - Performed construction surveying for the widening of State Highway 79 and extending improvements towards the Temecula Valley Airport.

Cucamonga Valley Water District, La Senda Road - Preparation and delivery of a 1,500-lineal foot topographic survey map. Map included found monuments, street centerline, right-of-way, property lines, and location of wet and dry utilities.

Limonite Avenue Phase IV Widening Project, Riverside County Economic Development Agency, in conjunction with the Riverside County Transportation Department - Managed topographic and construction surveying services for widening of Limonite Avenue to four lanes.

Highway 111 Widening from Jefferson Street to Madison Street, City of Indio - Managed the construction surveying for the widening of Highway 111 which included new street curbs, sidewalks and medians and over one mile of 48" storm drain.

Highway 111 Bridge over the La Quinta Channel, City of Indio - Managed construction

Robert Ollerton, PLS | Principal Surveyor

staking for the bridge, underground utilities and a commercial parking lot.

Monroe Street Widening, City of Indio - Managed control, topographic and construction staking for the widening of Monroe Street between Avenue 52 and Avenue 49. The project included the undergrounding of over a mile of electrical transmission lines and street improvements.

City of Hemet Public Works Department, Hemet, CA - Designed and implemented the City of Hemet's PMS/GIS link project. The project involved linking the city's pavement management tabular database with a street centerline shapefile developed by the Thomas Bros. Map Company. The data was used with ArcView to produce a graphical street network depicting the pavement condition of each city street. The PMS/GIS link provided a better method for city staff to evaluate the condition of the streets and analyze the best cost benefits of street maintenance and rehabilitation programs.

San Bernardino Valley Water Conservation District, Redlands, CA - Performed surveys using differential GPS (DGPS) and conventional methods to locate district facilities including canals, headworks, monitoring wells and recharge basins. Develop GIS graphic and tabular database to map district facilities, regional water facilities, wells and groundwater plumes. Data was used for the analysis of water quality and water availability for the district's annual Engineering Investigation.

San Bernardino Valley Water Conservation District, Redlands, CA - At the direction of the district biologist, performed DGPS field surveys to locate protected plant species areas for the Santa Ana Woolly Star and Stephens' Kangaroo Rat. The data was used in ArcView to determine suitable areas for the district's sand and gravel mining operations in the Santa Ana River Wash.

City of Indio Storm Drain System, Indio, CA - Oversaw field surveys to locate all city storm drain facilities that outlet into the Whitewater River Channel. The survey utilized RTK GPS methods to locate the storm drain networks and outfalls to the river channel. Using ArcGIS, the data was used to develop a map atlas for public works crews.

Heli-Hydrant Fire Protection System Project, Jurupa Community Services District, Jurupa Valley, CA - Survey Party Chief responsible for oversight of field data collection and processing including data reduction and base mapping supervision. ERSC was contracted to provide professional surveying, engineering design, and hydraulic modeling activities to install Heli-Hydrants at two strategic locations within the District's service area. The Heli-Hydrant represents cutting-edge technology developed for pilot-controlled, remote-activated refill via snorkel of aerial firefighting helicopters operated by CAL FIRE.



CA, QSP No. 26269
CESSWI No. 4852
CA DRE Real Estate Sales Person 02212819

Education

BS, Environmental Policy & Management
BA, Business Managerial Studies

Affiliations

CASQA

Areas of Expertise

Land Survey
Mapping
Erosion and Sediment Control
Water Quality
Improvement Plan Check
Construction Management

Mr. Brudin has been with the ERSC team since 2014. Since joining, he has become a valuable member of ERSC's project team in both survey related tasks and plan and map review services. While providing these services he has gained extensive working knowledge of the subdivision map act, local grading manuals, ordinances and design guidelines, the California Building Code, local wet utility design guidelines and the preparation and evaluation of erosion control plans.

In various Cities, he is responsible for the review of maps, legal documents, mass and rough grading plans, residential precise grading plans, grading plans for residential development, commercial development projects, sewer improvement plans, and erosion control plans.

As a part of ERSC's survey and geospatial department, Mr. Brudin acts as party chief and oversees mapping efforts during various projects. He is in oversight of field work related to boundary, topographic, and control surveys for ERSC's team.

Craig Brudin, QSP | Director of Operations

Similar Project Experience:

Parcel Map for City Property, City of Palm Springs, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. Under an on-call agreement, ERSC was contracted to map 10 acres of City-owned property near the City's wastewater treatment plant for disposition. Our team conducted all research, data collection, mapping, and processing.

Santa Rosa Farms Construction Staking, W.E. O'Neil Construction, Santa Rosa Band of Cahuilla Indians, Mountain Center, CA - Survey Party Chief responsible for oversight of field data collection and processing including data reduction and base mapping supervision. ERSC was contracted to provide professional surveying services related to the construction of the Santa Rosa Farms Hemp Farm facility. Scope included pad certification survey and staking of rough grade slopes around building area and parking lot, rough grade building pad and parking lot subgrade, building column footings, exterior building grid lines, asphalt finish surface, miscellaneous finish grade surfaces and swales, fire and domestic waterline, road centerline finish surface, road slopes, three light poles and foundations, leech field and sewer line, and perimeter fence line.

Land Survey Related Assistance for Encroaching Properties, City of Chino Hills, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. Under an on-call agreement, ERSC was contracted to provide professional services and technical guidance required to assist City staff during the evaluation of real property encroachments onto City-owned properties.

Construction Phase Services, MDP Line J and J-1- Phase I Soboba Band of Luiseño Indians, San Jacinto, CA - Survey Party Chief responsible for oversight of field data collection and processing including data reduction and base mapping supervision. ERSC was contracted to provide construction staking and inspection for Phase I of the Soboba MDP Line J. The Soboba MDP Lines J and J-1 will intercept upstream flows and convey south under Castile Canyon Road to Poppet Creek Channel. Phase I consists of construction of approximately 390' of 8'W x 7'H RCB, one manhole, a collection basin, and a transition structure at the junction with MDP Line J-1.

As-Needed Professional Land Surveyor Services, Eastern Municipal Water District - Project Engineer responsible for concept development, design recommendations, and special study drafting throughout the assignment. ERSC was contracted to provide professional land surveyor services on an as-needed basis for support of the District's Capital Improvement Program (CIP), Annexation Program, and New Development Projects.

East Drop Structure Repair Mitigation Within Whitewater River Channel, City Of Indian Wells, Indian Wells, CA - Survey Party Chief responsible for oversight of field data collection and processing including data reduction and base mapping supervision during redesign of the East Drop Structure along the Whitewater River. Site analyses and development of potential replacement structures such as a concrete drop structure that incorporates a baffle chute at the outlet of the low flow channel, a USBR stilling basin or a drop structure similar to the one constructed in 1995 using materials sized to withstand the anticipated flows. Regulatory permitting and clearance for an RWQCB CWA Section 401 Water Quality Certification, CDFW 1602 Streambed Alteration Agreement, USACE Nationwide Section 404 Dredge and Fill Permit, and CEQA IS/MND coordination.

Winchester Property Land Survey Mapping Services, Soboba Band of Luiseno Indians, San Jacinto, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide professional surveying and mapping services related to the Tribe's property at the Northeast and Southeast corners of the intersection of Winchester Road and Domenigoni Parkway.

11th Street Pavement Rehabilitation Project, City of Chino, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions during design of a street pavement reconstruction, alley, and intersection accessibility project. Special considerations were paid to concurrent storm drain projects as well as potential impacts from asphalt conditions, existing utilities, and ADA requirements in affected alleyways.

Murrieta Inverted Sewer Siphon, Western Municipal Water District, Murrieta, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions during the design of an upgrade an existing 8-inch sewer

Craig Brudin, QSP | Director of Operations

siphon. The project will upgrade the siphon from a single barrel to a larger diameter or a “double barrel” configuration where the line crosses below a Flood Control District owned channel. ERSC will develop a profile of the 8-inch inverted siphon using CCTV and prepare plan and profile drawings of this line.

Strawberry Creek Diversion Pipeline, Idyllwild, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. The existing pipeline begins at the diversion structure near the intersection of Strawberry Creek and Tahquitz Road. The pipeline paralleled the creek above ground for approximately 400 feet across private property and then below ground to the District’s well site on Fern Valley Road. To further complicate matters, the exiting pipeline crossed under an existing private residence. ERSC performed a topographic survey of the diversion structure and the pipeline alignment to the well site, legal documents for the portion of pipeline crossing private property, and design of new pipeline to avoid existing structures and above ground pipes.

Stagecoach and Substation Topographic Survey, On-Call Engineering and Design Services, City of Banning, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions as part of an on-call engineering agreement. ERSC was contracted for land surveying services related to the development of the Ivy Substation Project at 1581 Charles Street and the Stagecoach Substation Project located on Hargrave Street. ERSC performed boundary and topographic surveys of both sites to establish the boundary and locate the property corner monuments.

Service Area Landscape Measurement GIS Analysis, Riverside Highland Water District - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC provided services related to data collection, mapping, and database management to transfer verify the RHW’s state provided landscaped area information. Data provided from the state included aerial imagery, Shapefiles, and methodology. ERSC verified model accuracy and recommended model accuracy improvements where needed.

Survey for Traffic Signal Design Services for Rubidoux Blvd at 24th St and Wineville Rd at Riverside Dr, STC Traffic, Inc., Jurupa Valley, CA - Survey Party Chief responsible for oversight of field data collection and processing including data reduction and base mapping supervision. ERSC’s team provides support to the STC Traffic, Inc. team for the completion of improvement plans for the HSIP and local funded projects in the City of Jurupa Valley. The planned improvements include traffic signals and upgraded curb ramps to comply with ADA at two intersections. ERSC provides field and office support to STC’s team in mapping existing right-of-way, existing topography, and contours at each site.

Survey Services, Fire Station No. 3, City of Palm Springs, CA - Survey Party Chief responsible for oversight of field data collection and processing including data reduction and base mapping supervision. ERSC was contracted to provide professional surveying services related to the development of a Boundary, Topographic, and Utility AsBuilt for Fire Station #3 in the City of Palm Springs. More specifically, the site-in-question is located at the northwest corner of Via Miraleste and Raquet Club.

On-Call Construction Inspection Services, Elsinore Valley Municipal Water District, Lake Elsinore/Canyon Lake, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. Under an on-call agreement ERSC provides construction inspection services for developer-funded and CIP projects through the District service area. ERSC inspectors are responsible for oversight of construction for various water system improvements, including pipelines, reservoirs, lift stations, booster stations, service connections, and related infrastructure and improvements.

Natural Parkland Trails Project, City of Highland, CA - Construction Manager responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. ERSC was contracted to provide Construction Management and Inspection Services, including contract administration and public works inspection for the federally funded Recreational Trails Program (RTP) Natural Parkland Trails Project, City Project No. tra20001, Federal Project No. RT-36-013. Work includes trailhead improvements, accessible parking and path of travel to the trailhead on Base Line, restoration of existing trails, drainage culvert improvements, and educational area improvements.

Construction Management and Inspection Services, 1.6MG Reservoir, City of Loma Linda, CA - Construction Manager responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. ERSC’s team provided inspection services during the construction of a new 1.6 million-gallon welded steel reservoir that provides additional supply to the City’s 1A, 2, and 2A pressure zones in the event that the existing reservoirs are taken offline for repairs or maintenance. ERSC inspectors were present for observation of the tank construction and also access road improvements, various site improvements, storm drain improvements, SWPPP compliance, SCADA, and electrical component installation as well as coordination of geotechnical and coating inspections.

On-Call Construction Inspection Services, City of Banning, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC was contracted to provide construction management and oversight of construction activities for street, sewer, water, grading, and storm drain projects and their related improvements in the City of Banning. Since 2019, ERSC has completed over 430 individual assignments. This is inclusive of the 4,000-unit Atwell development, for which ERSC has been in oversight of all grading and improvement construction activities.

SWPPP Compliance Inspection for Soboba Economic Development Corporation Commercial/Retail Project, San Jacinto, CA - Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. ERSC was contracted to provide weekly inspection, rain event inspection, quarterly report, annual report during the construction,

Craig Brudin, QSP | Director of Operations

and the notice of termination when the project site is fully stabilized and completed. The work followed site improvements and civil design services completed by ERSC on the Horseshoe Property Gas Station Project located southwest of the intersection of Soboba Road and Lake Park Drive. ERSC also prepared the Storm Water Pollution Prevention Plans (SWPPP) documents in compliance with the Regional Water Quality Control Board (RWQCB) requirements. As a Data Entry Person (DEP) ERSC uploaded the SWPPP documents in the SMARTS System to obtain the Waste Discharge ID (WDID) number for the project prior to construction.

CARB Consolidation Project, Riverside, CA – Project Manager and QSP inspector during the ground up construction of the California Air Resources Board testing facility in Riverside, CA. Craig was responsible for all inspections, reporting, recommendations, training, and annual report filing during the course of the project.

Rio S.T.E.A.M Academy, Oxnard, CA – Project Manager and QSP Inspector during all phases of the construction of the Rio School District's STEAM school in Oxnard, CA. Craig directed installation of all erosion controls for the 10-acre site including Fiber Roll, Inlet Protections, and Plate-only stabilized enter. Craig also directed the maintenance of controls throughout the project to ensure compliance with the state's CGP and local requirements. Craig was also responsible for performing all QSP inspections for the project throughout all phases including weekly inspections and all rain event inspections.

MSJC Sports Facilities Improvements, San Jacinto, CA – Project Manager and QSP Inspector during all phases of the Mount San Jacinto College's Sports Facilities Improvements. The project included installation, maintenance, and removal of all structural BMPs for the project. Fiber Roll, Silt Fencing, Inlet Protection, and traditional Rock-Plate stabilized entrances were included.

Soboba Horseshoe Development, San Jacinto, CA - Project Manager and QSP Inspector during all phases of the Soboba Band of Luiseno Indians Horseshoe Development Improvements. The NPDES portion of the project included installation, maintenance, and removal of all structural BMPs for the project. Fiber Roll, Silt Fencing, Inlet Protection, and traditional Rock-Plate stabilized entrances were included.

30" Transmission Mainline Improvements on Highland Ave., West Valley Water District, Rialto, CA - Construction Manager responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review during this improvement project which involves the construction of a new waterline and associated appurtenances in Highland Avenue between Oakdale Avenue and Pepper Avenue in the City of Rialto. Construction includes installation of approximately 3,700lf of CML&C water line. The proximity to Interstate 210 will require interfacing with CalTrans and coordination with the agency's procedures.

Bloomington Business Park Lift Station and Forcemain, City of Rialto, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC's team provided plan checking and construction inspection services during the permitting and construction of the sewer improvements for the Bloomington Business Park. The new industrial facility was required to construct sewer improvements including a new lift station, 6,000LF of gravity sewer, and 2,300LF of Sewer Force Main. ERSC inspectors were present to observe work during the construction of the lift station and associated sewer improvements.

On-Call Construction Inspection Services, City of Chino Hills, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC offers comprehensive plan check and inspection services for CIP and development projects within the City of Chino Hills. The scope of construction inspection services encompasses the oversight of improvements related to streets, sewers, water systems, grading, and storm drains, along with their associated construction activities.

Serenity Grove, Construction Inspection Services, City of Chino Hills, CA - Project Manager responsible for day-to-day project guidance, team oversight, client contact, as well as schedule and budget management throughout the assignment. ERSC's Inspection provided inspection services for the Serenity Grove single-family residential project in the City. This 50-unit subdivision includes extensive grading, erosion control, drainage, and retaining/MSE wall improvements. The project is further complicated by sensitive existing residential uses and environmental constraints on the project site. ERSC's inspectors provide full-time oversight of the project from groundbreaking to final occupancy. The ERSC team is currently overseeing grading, erosion control, retaining/MSE wall construction, on/offsite water and sewer, drainage, traffic, and street improvements for the project.

CMIS Ion Exchange Water Treatment Facility, Riverside Highland Water Company, Grand Terrace, CA - Construction Manager responsible for contract administration, progress meetings, material/RFI submittals, correspondence, labor compliance, and progress payment review. ERSC's team provided construction management services during the construction of a potable water treatment facility and accompanying infrastructure. The facility is intended to treat water from a high producing local well site that is high in nitrate and PFAS concentration. The facility includes two 18" CMLC transmission pipelines, grading/site improvements, electrical, mechanical, and structural components related to the Ion Exchange treatment facility. The treatment system is housed in a new 4,000 sqft building with associated paving and drainage improvements at the RHWC's corporate yard. ERSC's team is in oversight of all construction activities related to the project.

Bryce Romine | Surveyor I

Education

California Baptist University - Survey Coursework

Areas of Expertise

Topographic Survey
Control Survey

Bryce brings a wealth of experience to the ERSC survey team. He provides survey map drafting for records of survey, legals and plats, and topographic survey efforts. Bryce is also charged with executing records research, control survey, topographic survey, staking, and boundary survey. He also provides aerial drone support and is honing his photogrammetry study skillset.

Similar Project Experience:

Construction Phase Services, MDP Line J and J-1- Phase I Soboba Band of Luiseño Indians, San Jacinto, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide construction staking and inspection for Phase I of the Soboba MDP Line J. The Soboba MDP Lines J and J-1 will intercept upstream flows and convey south under Castile Canyon Road to Poppet Creek Channel. Phase I consists of construction of approximately 390' of 8'W x 7'H RCB, one manhole, a collection basin, and a transition structure at the junction with MDP Line J-1.

Survey Services, Fire Station No. 3, City of Palm Springs, CA - Crewman/Survey Tech responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide professional surveying services related to the development of a Boundary, Topographic, and Utility AsBuilt for Fire Station #3 in the City of Palm Springs. More specifically, the site-in-question is located at the northwest corner of Via Miraleste and Raquet Club.

Survey Services, Washington Street Treatment Facility, Riverside Highland Water Company - Crewman/Survey Tech responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to research record calculations, conduct boundary survey, prepare record of survey and process with San Bernardino County, and set boundary corners.

Survey Services, Miller Reservoir As-Built and Record of Survey, Riverside Highland Water Company - Crewman/Survey Tech responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to research record calculations, conduct boundary survey, prepare record of survey and process with San Bernardino County, and set boundary corners.

Survey Services, Grand Terrace Road Easement Staking, Riverside Highland Water Company - Crewman/Survey Tech responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to review record documents, conduct office calcs, and mark the easement in the filed for property owner reference during construction of private improvements.

Survey Services, Pavement Rehabilitation and Street Improvement Project, City of Fontana - Crewman/Survey Tech responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. Under an on-call agreement, ERSC was contracted to provide professional engineering services related to the Pavement Rehabilitation and Street Improvement Project for various street segments throughout the City.

Design Survey, Campo Kumeyaay Nation Travel Plaza Project, Oak & Stone Development, Campo, CA - Crewman/Survey Tech responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide professional surveying services to Oak and Stone Development necessary to support the planned Travel Plaza for the Campo Kumeyaay Nation in Campo, CA.

Bogert Trail Lift Station As Built Survey, City of Palm Springs, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide preparation of a plat map and legal description for additional easement for the City to install the lift station.

STC Traffic, HSIP Cycle 11 Intersection Improvements, City of Cathedral City, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide professional surveying services necessary to support the planned Pedestrian Improvements in Cathedral City related to HSIP Cycle 11 Grant Funding. Our team provided field and office support to STC in mapping existing right-of-way, existing topography, and contours at each site.

Survey for Traffic Signal Design Services for Rubidoux Blvd at 24th St and Wineville Rd at Riverside Dr, STC Traffic, Inc., Jurupa Valley, CA - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC's team provides support to the STC Traffic, Inc. team for the completion of improvement plans for the HSIP and local funded projects in the City of Jurupa Valley. The planned improvements include traffic signals and upgraded curb ramps to comply with ADA at two intersections. ERSC provides field and office support to STC's team in mapping existing right-of-way, existing topography, and contours at each site.

Bryce Romine | Surveyor I

[STC Traffic, Topographic Survey Services, Highland, Santa Ana, and Jurupa Ave Intersection Improvements, City of Fontana, CA](#) - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to perform office and field work required to prepare the background for the project design. Survey was also performed to locate right-of-way, curb, gutter, sidewalk, trees, streetlights, signage, and surface utilities, with the specific intention of identifying obstructions to the installation of interconnection of the traffic signals between these intersections.

[Topographic Survey of the Strawberry Creek Diversion Pipeline, Idyllwild Water District, Idyllwild, CA](#) - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide Topographic Survey services as part of the Strawberry Creek Diversion Pipeline replacement project. Our team performed a topographic survey of the diversion structure and the pipeline alignment to the well site, including record data research, control survey, and topographic survey and mapping.

[Survey for Temecula Sports Park Hockey Rink, AD Engineering Group, Temecula, CA](#) - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide professional surveying services necessary to support Hockey Rink Improvements at the Temecula Sports Park. Our team provided ground survey to collect the data, including the collection of necessary topographic data to create a topographic map and TIN Surface to be used in grading/improvement design.

[Survey for Riverside Ave Outer Highway Street Lighting Project, San Bernardino County Department of Public Works, Special Districts, CA](#) - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide professional surveying services to perform a survey to support street lighting improvements for the Riverside Ave Outer Highway in the Rialto area. Our team prepared a topographic survey of the subject street between Peach and Knollwood for design and installation of the 6 planned streetlights.

[Survey for Rialto El Rancho Verde Street Lighting Project, San Bernardino County Department of Public Works Special Districts, Rialto, CA](#) - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. ERSC was contracted to provide professional surveying services to perform a survey to support street lighting improvements for the El Rancho Verde Street Lighting Project in the Rialto area. Our team prepared a topographic survey of Country Club Drive between Riverside Outer Highway and N Sycamore Ave for design and installation of 4 planned streetlights.

[Pavement Rehabilitation and Street Improvement Project - Hot Spot, City of Fontana, CA](#) - Project Surveyor responsible for field data collection, base map preparation, plat maps, and drafting of legal descriptions. Under an on-call agreement with the City of Fontana, ERSC was contracted to provide professional engineering services related to pavement rehabilitation and PCC improvements of various streets. Work included preparation of plans, specifications, quantity and cost estimates, suitable for approval by the City for construction of street improvements, including pavement rehabilitation and installation of various street items, including AC berms, concrete curb and gutter, ADA ramps, and sidewalk.

Cooly Smith | Chief Inspector

Education

Water Distribution D-3, State of CA DHS
Water Treatment T-1, State of CA DHS
Certified Backflow Tester, AWWA
Coating Inspector Level 1, NACE
NASSCO Cured in Place
Pipe CIPP 911-0643
Concrete Field Testing Technician Grade 1, ACI
Recycled Water Site
Supervisor Certificate

Areas of Expertise

Municipal Inspection
Water Infrastructure
Caltrans

Mr. Smith has over 25 years of experience in the engineering and construction industry. He has worked in the water industry since 1990 starting in operations and maintenance and then transitioning to Supervising Engineering Inspector. He has extensive experience in inspecting and managing the construction of facilities in the area of water, sewer and recycled which includes pipelines, Sewer Lift Stations, Reservoirs, PRV Stations and Booster stations. He has agency maintenance and operations experience holding positions in meter service department. He has extensive inspection experience for land development and capital projects.

Duties include preparing daily inspection reports, job site photos, coordinating materials testing services, and coordinating with local and state agencies. He assists in the development of District Standards and has planned and executed hundreds of system shut downs to upgrade, repair or replace overtaxed or failing water or sewer appurtenances. He has inspected and certified conformance of completed work including all backflow devices that are installed on new District and Developer projects. He is able to resolve field and operational issues related to the construction of infrastructure projects through a detailed knowledge of the systems operational requirements, construction contractors means and methods, and by developing and maintaining good working relations with contractors, agency staff and other local agencies.

Similar Project Experience:

On-Call Construction Inspection Services – City of Banning, CA

Chief Inspector in management and oversight of construction activities for street, sewer, water, grading, and storm drain projects and their related improvements in the City of Banning.

Since 2019 ERSC has completed over 430 individual assignments in the City. This is inclusive of the 4,000-unit Atwell development, for which ERSC has been in oversight all grading and improvement construction activities related to the project. Cooly was responsible for management of inspection personnel or inspection of the following in the City of Banning:

- Sewer, Water, Storm Drain, and Street Improvements: Tract #37365, Tract #37474, Tract #37298, Tract #37298-2, Tract #37298-3, Tract # 37298-1, and Highland Springs Avenue
- Wilson Sewer Trunk Line Installation
- Wilson Sewer Lift Station Installation
- Sunset Sewer Trunk Line
- Well NP-1 Equipping and Enclosure
- Non-Potable Water Improvement Segment D-1
- Foothill West Reservoir 3.76 Million Gallon
- Irrigation Water Supply System Segment – B Phase 1
- Interconnect facility for Beaumont Cherry Valley & The City of Banning

Non-Potable Water Improvements - NP-1 Pump Line – City of Banning, CA

Sr. Construction Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. Well NP-1 located near the City's treatment plant is a production site for non-potable water to the City's water system. The project included 5,000 LF of 24" DIP pipeline from the well site to connect to the City's system.

Construction of the pipeline required directional boring with casing beneath large storm drain infrastructure in Lincoln Street. ERSC inspectors were required to practice superior vigilance on the project due to faulty gaskets received from the manufacturer with potential for leaks.

CA-91 Express Lanes Project – RCTC – Corona, CA

Construction Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. During the project, Cooly was primarily responsible for sewer and water relocations, new installations, drainage improvements, and landscaping. Under his supervision, crews successfully completed 3 directional borings and casing installations for water and sewer pipelines under active and future highway lanes.

CA-101 Slope Stabilization and Improvements – CalTrans – Camarillo, CA

Construction Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. Cooly provided construction inspection services during slope improvements along CA-101 to mitigate rock fall potential and enhance highway safety.

Vail Lake Native Vegetation Restoration – Rancho California Water District (RCWD) – Temecula, CA

Site Inspector for this native vegetation restoration of wetland and non-wetland waters of the United States as a result of installation of 14,000 lineal feet of a 48-inch pipeline to comply with mitigation requirements pursuant to Section 404 of the Federal Clean Water Act and Section 1600 et seq. of the California Fish and Game Code. Duties included inspection, preparing daily reports, coordinate with materials testing consultant, job photos, quality assurance, coordinate with maintenance and operations departments.

Vail Lake Transmission Main & Pump Station – Rancho California Water District (RCWD) – Temecula, CA

Inspection supervisor for this installation of 14,000 lineal feet of 48-inch CML & C pipeline and construction of a booster station capable of pumping 80 cfm of raw water to the District Vail Lake facilities for a cost of approximately \$6 million. Duties included oversight of inspection staff, review daily reports, manage materials testing consultant, review project submittals, RFI's, correspondence, change orders, and monthly progress payments.

Hillside Trail Sewer Relocation at Bear Creek – Murrieta, CA

Supervising Construction Inspector responsible for a 300-foot relocation of sewer pipe and construction of two new manholes. Oversight of inspection activities, development of daily reports with photographic record detailing the workers, equipment, activities, and material incorporated. Provided utility coordination, coordination of materials testing, geotechnical, and other specialty inspection consultants.

Reclamation Pond No. 5 Project – Rancho California Water District (RCWD) – Temecula, CA

Supervising Construction Inspector for this \$8 million Recycled Pond project. The project features include 1.5 million cubic yards of grading, construction of new pond number 5 and relining other ponds with new foundation and membrane, drainage structures, connection piping systems and controls, road construction, landscaping and irrigation. Duties include daily reports with photographic records, detailing the workers, equipment, activities and material incorporated into the project each day. Duties also include utility coordination, coordination of materials testing, geotechnical and other specialty inspection consultants.

Hillside Trail Sewer Relocation at Bear Creek – Murrieta, CA

Supervising Construction Inspector responsible for a 300-foot relocation of sewer pipe and construction of two new manholes. Oversight of inspection activities, development of daily reports with photographic record detailing the workers, equipment, activities, and material incorporated. Provided utility coordination, coordination of materials testing, geotechnical, and other specialty inspection consultants.

District Headquarters and Senga Doherty Pump Station Solar Power Project – Rancho California Water District (RCWD) – Temecula, CA

Inspection Supervisor responsible for installation of 1.0 MW and a 0.5MW Photovoltaic System. Oversight of inspection staff, reviewed daily reports, managed materials testing consultants, reviewed project submittals, RFIs, correspondence, change orders, and monthly progress payments.

Soboba Casino Storage Reservoir – Soboba Band of Luiseno Indians – San Jacinto, CA

Senior Construction Inspector during the construction of the Tribes 1MG welded steel reservoir. The tank was designed to provide adequate capacity to serve the additional demand that the newly constructed casino would place on the tribe's water system. Cooly provided inspection during the entire project term including grading, ring pour, sand placement, welding, and performed coating inspections.

Reclamation Pond No. 5 Project – Rancho California Water District (RCWD) – Temecula, CA

Supervising Construction Inspector for this \$8 million Recycled Pond project. The project features include 1.5 million cubic yards of grading, construction of new pond number 5 and relining other ponds with new foundation and membrane, drainage structures, connection piping systems and controls, road construction, landscaping and irrigation. Duties include daily reports with photographic records, detailing the workers, equipment, activities and material incorporated into the project each day. Duties also include utility coordination, coordination of materials testing, geotechnical and other specialty inspection consultants.

30" Transmission Mainline Improvements on Highland Ave. – West Valley Water District – Rialto, CA

Supervising Construction Inspector during this improvement project which involves the construction of a new waterline and associated appurtenances in Highland Avenue between Oakdale Avenue and Pepper Avenue in the City of Rialto. Construction includes installation of approximately 3,700lf of CML&C water line. The proximity to Interstate 210 will require interfacing with CalTrans and coordination with the agency's procedures.

R2-3 Tank Rehabilitation Project, West Valley Water District, Rialto, CA - Chief Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. As a part of a development proposal in the area, the project's proponent was required to rehabilitate and upsize a 4MG capacity tank that was constructed in 1991 on a 2.281 acres site shared with another Tank, 2-2. ERSC provided design for the rehabilitation of the tank's structure, coating, floors, and site improvements including site and transmission piping. CM staff coordinated and inspected structural rehabilitation during all site and pipeline construction, internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.

Bloomington Business Park Lift Station and Forcemain, City of Rialto, CA - Chief Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. ERSC's team provided plan checking and construction inspection services during the permitting and construction of the sewer improvements for the Bloomington Business Park. The new industrial facility was required to construct sewer improvements including a new lift station, 6,000LF of gravity sewer, and 2,300LF of Sewer Force Main. ERSC inspectors were present to observe work during the construction of the lift station and associated sewer improvements.

Washwater Tank No.2 Rehabilitation, City of Poway, CA - Chief Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. ERSC's team provided construction management and inspection services during the rehabilitation of the Washwater 2 tank at the City's Wastewater Treatment Plant. The tank was originally constructed in 1995 and required coating and structural rehabilitation. CM staff coordinated and inspected structural rehabilitation during internal support, rafter, and floor replacement, surface preparation and coating, coating mixing and application, curing, and overall project schedule, budget, safety, and conformance.

On-Call Construction Inspection Services, City of Chino Hills, CA - Chief Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. ERSC offers comprehensive plan check and inspection

Cooly Smith | Chief Inspector

services for CIP and development projects within the City of Chino Hills. The scope of construction inspection services encompasses the oversight of improvements related to streets, sewers, water systems, grading, and storm drains, along with their associated construction activities.

[Serenity Grove, Construction Inspection Services, City of Chino Hills, CA](#) - Chief Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. ERSC's Inspection provided inspection services for the Serenity Grove single-family residential project in the City. This 50-unit subdivision includes extensive grading, erosion control, drainage, and retaining/MSE wall improvements. The project is further complicated by sensitive existing residential uses and environmental constraints on the project site. ERSC's inspectors provide full-time oversight of the project from groundbreaking to final occupancy. The ERSC team is currently overseeing grading, erosion control, retaining/MSE wall construction, on/offsite water and sewer, drainage, traffic, and street improvements for the project.

[Well NP-1 Site Development and Equipping, City of Banning, CA](#) - Chief Inspector responsible for daily project oversight for conformance to contract documents, agency requirements, permit compliance, and job safety. Provided inspection services during the equipping and site development for the NP-1 Well Site - a non-potable well used as a production facility for the City's new Recycled Water System. The 600' well was equipped with a single 250HP motor capable of 1,000 GPM. The well, pump, and equipment were housed in a new CMU building with a retractable roof. The site was improved with electrical equipment, SCADA integration, site security fencing/lighting, asphalt access paving, and building apron.

Randy Crowell | Sr. Construction Inspector

Education/Certifications

Distribution 3
Water Treatment 2
Mechanical Technologist 2
Plant Maintenance 1 Crane Certified
NACE Coating Inspector 1
AWWA Operator D2 Certification ACWA/JPIA
Operations Certification
Supervisor Basics Certification
Risk Management Certification
Human Resources Certification
Water Management and Leadership
Certification Program, California State
University, San Marcos
Contract Law 101; Project Management 101
Certification, Universal Class, Inc.
Water Technology Certification, Palomar
College

Areas of Expertise

OSHA Confined Space/Competent Person
California Crane School
Commercial Vehicle Safety Program
Traffic Control & Flagger
OSHA Trench Shoring
Maintenance Welding Procedures
Asbestos Training
Welding Requirements & Safe Practices
Plant Maintenance (Mechanical)
Emergency Response to Fire and Chemical
Spills
Electrical Grounding and Bonding Negotiations
Policy Development Leadership / Motivation
Employee / Labor Relations
OSHA / Regulatory Compliance
Safety Standards / Safety Management Capital
Improvement Projects

Mr. Crowell is dependable, diligent and self-directed professional with a strong work ethic. He is knowledgeable of principles and practices of public utility service, and engineering and public works inspection and construction. Randy is a collaborative and pro-active leader, skilled at selecting, supervising, training, and evaluating staff. He is proficient at reading and interpreting district water plans and specifications. His experience includes completing department budgets, annual performance reviews, claims, and timecards. He is analytical and detail oriented - accomplished at identifying problems and developing solutions.

Similar Project Experience:

Rancho California Water District, Temecula, CA - Mr. Crowell has more than 30 years of experience with the District and expertise as a Manager. Assignments include:

Field Services Manager (10/2017 – 5/2022)

Plans, implements, manages and coordinates the activities of the Field Services Construction Department including the construction and maintenance of District facilities, such as reservoirs, pump stations, pipeline (water, sewer, and recycled water), and related equipment. Oversees the Field Services Facilities Department which encompasses building and grounds, meter maintenance and repairs, and fleet services work centers. Responsibilities include organizational, budget, and personnel administration for the assigned functional areas of responsibility.

- Deliver supervision, training, and annual performance reviews for full-time employees, as well as review 40 additional reviews.
- Plan, organized, budgeted, and executed the replacement of internal mainline replacement projects resulting in improved assets within the distribution system.
- Review and evaluate work methods, procedures, services, and products; identify and recommend evaluation standards and criteria; monitor and assess measures of effectiveness and efficiency
- Manage the preventive and corrective maintenance of Districts' facilities including potable, reclaimed and raw water pipelines and related appurtenances.
- Develop and recommend the department's budget; participate in monitoring appropriations and expenditures; allocate required work hours, recommend midyear adjustments as necessary
- Plan, schedule, and manage maintenance and construction projects and communicate status to division director and fellow division managers.
- Evaluate operational and administrative problems and formulate effective strategies and solutions.

Construction Inspector Supervisor (06/2015 – 10/2017)

Perform comprehensive inspection of new construction and repairs of water lines, pump stations, and reservoirs, with oversight for up to \$11 million in new construction projects. Provide supervisory inspections, guidance and assist in problem resolution for two inspectors (Senior Inspector and Inspector II). Complete daily reports and conduct monthly safety tailgate and progress payment meetings. Ensure all work is done accurately, safely, and in compliance with company guidelines and governmental regulations.

- Deliver supervision, training, and annual performance reviews for temporary and full-time employees.
- Helped developed a procedure for coating interior reservoirs to improve employee safety which eliminated the need to be inside the reservoirs.
- Led the transition from legacy paper systems to computerized forms to improve accuracy and efficiency in the inspection department.
- Attend meetings for the City of Temecula and City of Murrieta as a representative of the Rancho California Water District to discuss RCWD interests in projects during the pre-construction phase.
- Serve as one of the On-Call managers to respond to emergencies.

Inspector I (05/2007 – 11/2007)

Inspector II (11/2007 – 03/2009)

Senior Inspector (03/2009– 06/2015)

Service Worker I (10/1991)

Service Worker II (07/1994 - 07/2003)

Service Worker III (07/2003 – 05/2007)

EXHIBIT “2”

TO

AMENDMENT NO. 2 to TASK ORDER NO. 2

COMPENSATION

Additional Professional Services for Lord Ranch Facilities Bidding Phase per the attached proposal letter dated

Task	Description	Cost
1	Project Coordination and Meetings	\$51,824.00
2	Submittals and RFI's	\$109,346.00
3	Geotechnical Observation and Recommendations	\$9,755.00
4	Assist with Change Orders	\$37,067.00
5	Assist with Startup Testing	\$15,658.00
6	As-Built Drawings	\$18,479.00
	Grand Total	\$242,129.00



Exhibit A – Fee Estimate

TASK NO.	DESCRIPTION	Sr. Principal Engineer Jeff Wall, PE	Principal Engineer Trent Brudin, PE	Principal Engineer Reza Toorzani, PE	Sr. Engineering Assoc. John Ward	Project Engineer II Nathan Shea, EIT	Principal Surveyor Robert Ollerton, PLS	Surveyor I Bryce Romine	2-Man Survey Crew C. Brudin, B. Romine	Construction Manager Craig Brudine	Senior Construction Inspector (NACE Certified)	Administrative Support Administrative Assistant II	ERSC SUBTOTAL	Aragon Geotechnical, Inc.	Mark Balan & Associates Electrical, Instrumentation, and SCADA Engineering	SUBCONSULTANT SUBTOTAL	TOTAL
		\$270	\$225	\$240	\$200	\$140	\$225	\$110	\$320	\$225	\$165	\$95					
1.0	Project Coordination and Meetings																
1.1	Project Coordination	12	36									12	\$ 12,480		\$ 13,408	\$ 13,408	\$ 25,888
1.2	Pre-Construction and Misc. Meetings	12	24	8		8	4					12	\$ 13,720		\$ 12,216	\$ 12,216	\$ 25,936
	SUBTOTAL	\$ 6,480	\$ 13,500	\$ 1,920	\$ -	\$ 1,120	\$ 900	\$ -	\$ -	\$ -	\$ -	\$ 2,280	\$ 26,200	\$ -	\$ 25,624	\$ 25,624	\$ 51,824
2.0	Submittals and RFI's																
2.1	Review and Approve Contractor Submittals	12	40	32	24	40						28	\$ 32,980		\$ 24,330	\$ 24,330	\$ 57,310
2.2	Review and Respond to Contractor RFI's	12	40	32	24	40						28	\$ 32,980		\$ 19,056	\$ 19,056	\$ 52,036
	SUBTOTAL	\$ 6,480	\$ 18,000	\$ 15,360	\$ 9,600	\$ 11,200	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,320	\$ 65,960	\$ -	\$ 43,386	\$ 43,386	\$ 109,346
3.0	Geotechnical Observation and Recommendations																
3.1	Observe Excavations and Provide Recommendations (if necessary)	2	8	8								1	\$ 4,355	\$ 5,400	\$ -	\$ 5,400	\$ 9,755
	SUBTOTAL	\$ 540	\$ 1,800	\$ 1,920	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95	\$ 4,355	\$ 5,400	\$ -	\$ 5,400	\$ 9,755
4.0	Assist with Change Orders																
4.1	Assist with Change Orders	12	40	8	8	24						1	\$ 19,215		\$ 17,852	\$ 17,852	\$ 37,067
	SUBTOTAL	\$ 3,240	\$ 9,000	\$ 1,920	\$ 1,600	\$ 3,360	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 95	\$ 19,215	\$ -	\$ 17,852	\$ 17,852	\$ 37,067
5.0	Assist with Startup Testing																
5.1	Conduct Startup Testing - Pump Station	8				4						2	\$ 2,910		\$ -	\$ -	\$ 2,910
5.2	Conduct Startup Testing - Reservoir		8		4							2	\$ 2,790		\$ -	\$ -	\$ 2,790
5.3	Conduct Startup Testing - Standby Power Generator	8				4						2	\$ 2,910		\$ -	\$ -	\$ 2,910
5.4	Conduct Startup Testing - Electrical, Instr, SCADA & Security												\$ -		\$ 7,048	\$ 7,048	\$ 7,048
	SUBTOTAL	\$ 4,320	\$ 1,800	\$ -	\$ 800	\$ 1,120	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 570	\$ 8,610	\$ -	\$ 7,048	\$ 7,048	\$ 15,658
6.0	As-Built Drawings																
6.1	Prepare As-Built Record Drawings - Site Improvements		2			8						1	\$ 1,665		\$ -	\$ -	\$ 1,665
6.2	Prepare As-Built Record Drawings - Pump Station		2			32						1	\$ 5,025		\$ -	\$ -	\$ 5,025
6.3	Prepare As-Built Record Drawings - Reservoir		2			12						1	\$ 2,225		\$ -	\$ -	\$ 2,225
6.4	Prepare As-Built Record Drawings - Elect, Instr, SCADA & Security												\$ -		\$ 9,564	\$ 9,564	\$ 9,564
	SUBTOTAL	\$ -	\$ 1,350	\$ -	\$ -	\$ 7,280	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 285	\$ 8,915	\$ -	\$ 9,564	\$ 9,564	\$ 18,479
8.0	Reimburseables																
8.1	Mileage												\$ 840	\$ 300	\$ 500	\$ 800	\$ 1,640
8.2	Reimburseables, Reproduction, Etc.												\$ 500		\$ -	\$ -	\$ 500
	SUBTOTAL	-	-	-	-	-	-	-	-	-	-	-	1,340	300	500	800	2,140
	TOTAL	\$ 21,060	\$ 45,450	\$ 21,120	\$ 12,000	\$ 24,080	\$ 900	\$ -	\$ -	\$ -	\$ -	\$ 8,645	\$ 133,255	\$ 5,400	\$ 103,474	\$ 108,874	\$ 242,129
OPTIONAL TASKS																	
1.0	Optional Task - Reservoir Coatings Inspection																
i	Coatings Inspection - NACE Certified Inspector **									8	320	4	\$ 54,980			-	54,980
ii	Warranty coatings Inspection - NACE Certified Inspector **									4	16	2	\$ 3,730			-	3,730
iii	Mileage												\$ 800			-	800
iv	Reimburseables, Reproduction, Etc.												\$ 500		-	-	500
	SUBTOTAL	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,700	\$ 55,440	\$ 570	\$ 60,010	\$ -	\$ -	\$ -	\$ 60,010
** NOTE: ERSC's Inspection staff have NACE certification.																	



Engineering Resources of Southern California, Inc. | Schedule of Rates

Professional Staff

President	\$320.00
Vice President.....	\$275.00
Sr. Principal Engineer.....	\$270.00
Principal Engineer.....	\$240.00
Assistant Principal Engineer	\$225.00
Engineer V	\$205.00
Engineer IV	\$185.00
Engineer III	\$170.00
Engineer II	\$155.00
Engineer I	\$135.00

Engineering Staff

Principal Engineering Associate.....	\$220.00
Senior Engineering Associate	\$200.00
Engineering Associate V	\$175.00
Engineering Associate IV	\$150.00
Engineering Associate III.....	\$140.00
Engineering Associate II.....	\$125.00
Engineering Associate I.....	\$120.00
Engineering Aide II	\$70.00
Engineering Aide I	\$65.00

Survey and Geospatial Staff and Services

Principal Surveyor.....	\$225.00
Senior Surveyor	\$185.00
Surveyor III	\$150.00
Surveyor II	\$130.00
Surveyor I	\$110.00
2-Man Survey Crew (Std Equipment/Truck)	\$320.00
1-Man Survey Crew (Std Equipment/Truck)	\$250.00
3rd Man on Survey Crew	\$140.00
Senior GIS Analyst	\$165.00
GIS Analyst.....	\$145.00
GIS Technician	\$110.00

Construction Support Staff

Construction Manager.....	\$225.00
Chief Construction Inspector	\$175.00
Sr. Construction Inspector	\$165.00
Construction Inspector.....	\$150.00
Inspector Overtime (Hours 8-12/Saturdays)	\$200.00
Inspector Overtime (Hours 12+/Sundays)	\$235.00

Administrative Staff

Operations Manager	\$125.00
Operations Specialist.....	\$105.00
Administrative Assistant II	\$95.00
Administrative Assistant I	\$85.00

Other Direct Expenses

Vehicle Mileage	\$0.70/Mile
Subconsultant.....	Cost + 20%
Reimbursable Expenses/Charges	Cost + 15%
Forensic Analysis	Standard Rate X 2
Expert Witness	Standard Rate X 3

NOTE: All rates hereon are subject to automatic increase upon July 1st of each year. Rates will be adjusted by the percent increase in California Consumer Price Index-All Urban Consumers for the twelve-month period ending February as calculated by the California Department of Industrial Relations (CADIR) California Consumer Price Index Calculator. Prevailing Wage Rates are dictated by the CADIR. All classifications which are subject to Prevailing Wages will be adjusted when revised determinations are published by the CADIR.

Unless otherwise established by contractual agreement, payment is due and payable upon receipt. Payment is considered delinquent if not paid within 30 days of invoice date. If payment is not completed within agreed terms, Client agrees to pay a service charge on the amount past due at the rate of 1.5% per month (18% per annum).

January 1, 2025

EXHIBIT “3”
TO
AMENDMENT NO. 2 to TASK ORDER NO. 2
SCHEDULE

Schedule to be determined by District staff.