



**ELSINORE VALLEY MUNICIPAL WATER DISTRICT
Engineering Department
REQUEST FOR PROPOSALS**

FOR:

**CORYDON WELL REPLACEMENT PROJECT –
PROFESSIONAL DESIGN, BIDDING SUPPORT AND
ENGINEERING SERVICES DURING CONSTRUCTION**

**31315 Chaney Street
Lake Elsinore, CA 92530
951.674.3146**

July 2026

ELSINORE VALLEY MUNICIPAL WATER DISTRICT REQUEST FOR PROPOSALS (“RFP”)

1. INTRODUCTION

1.1 GENERAL

Elsinore Valley Municipal Water District (“EVMWD” or “District”) is requesting proposals (“Proposals”) from qualified consultants (“Respondents”) for:

CORYDON WELL REPLACEMENT PROJECT – PROFESSIONAL DESIGN, BIDDING SUPPORT, AND ENGINEERING SERVICES DURING CONSTRUCTION (“PROJECT”)

The purpose of the Proposal is to demonstrate the qualifications, competence, and capacity of Respondents to perform the work or provide the services described in this RFP. The Proposal should demonstrate the qualifications of the Respondents and of the particular staff to be assigned to this Project.

1.2 Project Description

The Corydon Well Replacement Project involves the design of a new municipal groundwater production well to replace and to abandon the existing Corydon well. The well is more than 40 years old, close to its lifetime expectancy for these types of wells, and its pumping capacity is only 25% of its original pumping capacity.

The Corydon Well extracts water from Elsinore Groundwater Basin. The well will be located within the same site on Elsinore Valley Municipal Water District (EVMWD) property, utilizing the existing transmission infrastructure. The project’s goal is to maintain and enhance potable groundwater water production to meet EVMWD’s growing water demand.

1.3 Project Schedule

EVMWD intends to initiate this Project on November 2026, anticipating completion in May 2028.

Respondents to this RFP must be able and willing to commit the necessary resources to complete the Project within this timeframe.

1.4 Pre-Proposal Meeting

EVMWD will conduct a **mandatory pre-proposal meeting** on **Microsoft Teams** on **Thursday, July 23, 2026 at 10:00 a.m. Microsoft Teams link:**

Microsoft Teams meeting

Join: <https://teams.microsoft.com/meet/26007454481302?p=lhqoUwdoP6XxctyLRE>

Meeting ID: 260 074 544 813 02

Passcode: gi2pU3UT

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1.5 Compliance with California Air Resources Board (“CARB”) Requirements

The CARB implemented amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulations (“Regulation”) which are effective on January 1, 2024, and apply broadly to all self-propelled off road diesel vehicles twenty-five (25) horsepower or greater and other forms of equipment used in California. A copy of the Regulation is available at <https://ww2.arb.ca.gov/sites/default/files/barcu/regact/2022/off-roaddiesel/appa-1.pdf>.

Respondents are required to comply with all CARB and Regulation requirements (including without limitation all applicable sections of the Regulation as codified in Title 13 of the California Code of Regulations (“CFR”) section 2449 *et seq.* throughout the duration of the Project. Proposers must provide, with their Proposals, copies of Proposer’s and all listed subcontractors’ most recent valid Certificate of Reported Compliance (“CRC”) issued by CARB. Failure to provide valid CRCs as required herein may render the Proposal non-responsive.

1.6 Funding Requirements

This Project will be funded, in whole or in part, through District funds and a Department of the Interior Bureau of Reclamation WaterSMART Planning and Project Design Grant (CFDA 15.507) (“BOR Grant”).

The BOR Grant provides up to four hundred thousand dollars (\$400,000) in Federal financial assistance toward the Project, with the remaining Project costs funded through non-Federal cost share.

Respondents shall comply with all applicable Federal statutes, regulations, grant terms and conditions, and procurement requirements applicable to the BOR Grant that are incorporated into the Professional Services Agreement and apply to the Consultant's performance of the Services. The District, as the recipient of the BOR Grant, remains responsible for compliance with the applicable Federal procurement requirements.

1.7 Federal Funding Compliance

Because this Project is funded, in part, by the BOR Grant, the successful Respondent shall comply with all applicable Federal requirements flowed down through the Professional Services Agreement associated with that funding source including, where applicable: (1) uniform administrative requirements, cost principles, and audit requirements for Federal awards (Part 200 to Title 2 of the CFR); (2) debarment and suspension requirements; (3) lobbying restrictions;

(4) record retention and access to records; (5) equal opportunity and nondiscrimination requirements; and (6) any additional requirements incorporated into the District's BOR Grant agreement and the professional services agreement.

2. SCOPE OF REQUIRED SERVICES

2.1 Summary of Services

The scope of services to be provided generally includes the following:

The preparation of the design, technical specifications, contract documents, and support during bidding and construction will consist of two phases:

Phase 1 - The design includes preparation of a set of technical specifications, civil site design drawings, and line-bid items for drilling and construction of the new well, and the abandonment of the existing Corydon Well in accordance with the Riverside County and California State Water Resources Control Board (SWRCB) requirements. Phase 1 scope includes bidding assistance and full time on-site construction management (CM) oversight.

Phase 2 - the scope of work includes the preparation of technical specifications, architectural, civil, mechanical, structural, electrical, instrumentation and controls (I&C) design drawings for the Corydon Well site, and line-item bid schedule for the equipping, testing and commissioning of the new groundwater production well. Also, the Consultant will provide support during bidding and engineering services during construction of this phase. District will procure a separate firm for the Phase 2 CM services. The project is funded by multiple State and Federal grants and consultant will be responsible to adhere to grants requirements including Good Faith Effort and monthly grant reporting requirements.

A detailed Scope of Services is attached hereto as Attachment "1". While the full scope of work shall be negotiated in a professional services agreement, the Respondent will be expected to fulfill (at a minimum) the services and technical requirements described in the attached Scope of Services.

2.2 Public Works Contractor Registration

If the scope of services to be provided pursuant to paragraph 2.1 above include public works project as defined by California Labor Code ("Labor Code") Section 1720, *et seq.*, and 1770, *et seq.*, then all contractors and subcontractors that wish to bid on, be listed in a bid proposal, or enter into a contract to perform public work must be registered with the Department of Industrial Relations ("DIR") pursuant to Labor Code sections 1725.5 and 1771.1. No proposal will be accepted nor any contract entered into without proof of the contractor's and subcontractors' current registration with DIR to perform public work. If awarded a contract, the Respondent (and its subcontractors, of any tier) shall maintain active registration with DIR for the duration of the Project.

3. SCHEDULE OF EVENTS

Timetable for Reviewing and Evaluating Proposals:

- | | |
|---|-------------------|
| 1. RFP Release | July 16, 2026 |
| 2. Mandatory Pre-Proposal Meeting | July 23, 2026 |
| 3. Preproposal Requests for Clarification Due | August 25, 2026 |
| 4. Proposal Due Date | September 1, 2026 |
| 5. Anticipated Final Selection | October 8, 2026 |
| 6. Project Start | November 2, 2026 |

4. PROPOSAL REQUIREMENTS

4.1 Proposal Format

Respondent's Proposal shall be clear, accurate, and comprehensive. Excessive or irrelevant materials will not be favorably received. The Proposal shall be signed by an individual or individuals authorized to execute legal documents on behalf of the Respondent.

Proposals shall be organized and numbered in the order presented below:

(a) Cover Letter. Identify Respondent's legal name, background, and contact person, including corporate office and local office address, city, state, zip code, telephone number, fax number, web site address, and e-mail address. Identify the individuals that are authorized to sign the Respondent's legal documents, such as the Agreement or Professional Services Agreement. Identify the Project Manager and/or Principal-In-Charge. Summarize key elements of the proposal. The letter must stipulate that the cost proposal will remain valid for a period of at least 180 days.

(b) Understanding of Project and Project Approach. A detailed description of Respondent's understanding of and approach to the project. Provide a detailed scope of services which reflects the Scope of Services described in this RFP.

(c) Personnel. Identify the names and specific qualifications, experience, and appropriate licenses held, if applicable, of the primary staff to be assigned to the project. Include a resume for all primary staff. Include any subconsultants which Respondent proposes to use for any portion of the services.

(d) List Of Representative Projects. List of representative projects undertaken by Respondent in the last 5 years demonstrating experience in each category of the project.

(e) References. Provide three (3) references regarding the Respondent's experience and performance performing similar services. Include the following information: (1)

Organization contact name, phone number, e-mail address; and (2) Project size and description, if applicable, and description of services. Each reference must be from a different organization.

(f) District Experience. Identify all previous and current contracts with the District. Include a contact name, description of services, and dates of services performed.

(g) Cost Proposal. Include a detailed cost proposal for each phase of work inclusive of all hourly rates, anticipated travel, and other incidental costs and charges. Costs shall be broken down by task. It is anticipated that a not-to-exceed dollar limit will be negotiated with the successful Respondent.

(h) Conflict of Interest Disclaimer. Respondent must submit the Conflict of Interest Disclaimer statement disclosing interest, ownership or remuneration of any type that has been received or is anticipated from any manufacturer, supplier or distributor which may be recommended on the project. The Conflict of Interest Disclaimer is included in Attachment “2” Required Forms.

(i) Acknowledgment of Insurance Requirements. Respondent must submit the attached “Acknowledgment of Insurance Requirements” form acknowledging that it has reviewed the insurance requirements and will provide such insurance. The Acknowledgment of Insurance Requirements Form is included in Attachment “2” Required Forms. The applicable insurance requirements are described in section 3.6 of the Professional Services Agreement, attached hereto as Attachment “3”.

(j) Public Works Contractor Registration Certification. Respondent and subconsultants must complete the Public Works Contractor Registration Certification, attached hereto as Attachment “2”.

(k) Iran Contracting Act of 2010. In accordance with Public Contract Code Section 2200 *et seq.*, the District requires that any person that submits a Proposal with the District of one million dollars (\$1,000,000) or more, certify at the time the Proposal is submitted that the person is not identified on a list created pursuant to subdivision (b) of Public Contract Code Section 2203 as a person engaging in investment activities in Iran described in subdivision (a) of Public Contract Code Section 2202.5, or as a person described in subdivision (b) of Public Contract Code Section 2202.5, as applicable. The form of such Iran Contracting Certificate is included with the Proposal Forms and must be signed and dated under penalty of perjury.

(l) Non Collusion Declaration. Respondents on all public works contracts are required to submit a declaration of non-collusion with their Proposal. Respondents must complete the Executive Order N-6-22 Certification attached hereto in Attachment “2”. This form is included with the Proposal Forms and must be signed and dated under penalty of perjury.

(m) N-6-22 Certification. Executive Order N-6-22 issued by Governor Gavin Newsom on March 4, 2022 directs all agencies and departments that are subject to the Governor’s authority to a) terminate any contracts with any individuals or entities that are determined to be a target of economic sanctions against Russia and Russian entities and individuals, and b) refrain from entering into any new contracts with such individuals or entities while the aforementioned sanctions are in effect. Respondents must complete the Executive Order N-6-22 Certification attached hereto in Attachment “2”.

(n) American Iron and Steel Certification. Identification of American-made Iron and Steel Products: The Respondent certifies that this Proposal reflects the Respondent's best, good faith effort to identify domestic sources of iron and steel products for every component contained in the Proposal solicitation where such American-made components are required. The term "iron and steel products" means the following products made primarily of iron or steel – lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials. Respondent must complete the American Iron and Steel Certification, attached hereto in Attachment "2".

(o) Certification Regarding Lobbying. The undersigned [Consultant] certifies, to the best of his or her knowledge, that: No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement. Respondents must complete the Certification Regarding Lobbying, attached hereto as Attachment "2".

(p) Debarment and Suspension Certification. Respondents must complete the Debarment and Suspension Certification; and System for Award Management (SAM) Information form, attached hereto as Attachment "2".

(q) Respondent's List. Respondents are required to provide information for all Disadvantaged Business Enterprises (DBE) subconsultants who provided a proposal or quote. This information must be submitted with the proposal attached hereto as Attachment "2".

(r) Addendum Acknowledgement (if any). All Addenda issued by the District shall be acknowledged and included in the Proposal and made part of the Contract Documents. Failure to acknowledge and include all Addenda may be sufficient cause for rejecting a Proposal.

4.2 No Deviations from the RFP

In submitting a Proposal, Respondent is certifying that it takes no exceptions to this RFP including, but not limited to the Professional Services Agreement attached hereto as Attachment "3." Respondent is directed to carefully review the proposed Professional Services Agreement and, in particular, the insurance and indemnification provisions therein.

5. **SUBMITTAL INSTRUCTIONS**

To be considered, Respondent must submit the Proposal via EVMWD's PlanetBids Vendor Portal at the website set forth below, prior to **10:00 a.m. local time on September 1, 2026.**

PlanetBids Website

<https://vendors.planetbids.com/portal/32069/bo/bo-detail/144001>

6. EVALUATION

6.1 Evaluation Criteria

A Selection Committee will evaluate and rank the proposals. Proposals will be evaluated based on, but not limited to, the following criteria:

Evaluation Criteria	Description	%
Relevant Qualifications/Experience	Relevant experience in similar projects, qualifications of team members, past performance with utilities or government agencies, positive responses from references.	25
Understanding of Project and Project Approach	Clarity, feasibility, and soundness of the technical solution. Demonstrated understanding of the project scope, objectives, and District operations.	25
Innovation	Unique or forward-thinking solutions that improve efficiency, sustainability, resilience, or public value. Must be practical and implementable.	10
Scope of Work and Schedule	Project timeline, risk mitigation strategies, and clarity of roles and responsibilities.	20
Cost	Overall cost, value for money, and transparency of pricing. Consider total cost of ownership, not just upfront costs.	10
Overall Quality Of Proposal	Completeness of the proposal, adherence to submission instructions, well organized and easy to follow.	10

Respondents should note that the lowest cost proposal is not the sole determining factor in the final selection.

Upon determination of the highest ranked firm, EVMWD will endeavor to negotiate a mutually agreeable scope and fee with the selected firm. In the event that EVMWD is unable to reach agreement, EVMWD will proceed (at its sole discretion) to negotiate with the next firm selected by EVMWD.

6.2 Interviews

EVMWD may, at its discretion, invite a shortlist of Respondents to participate in a panel interview to be held at EVMWD. No Respondent shall be entitled to or otherwise guaranteed an interview with EVMWD.

6.3 Award of Contract

If awarded, the contract will be awarded on the basis of demonstrated competence and professional qualifications. EVMWD reserves the right to reject all proposals and to contract for services in the manner that most benefits EVMWD including awarding more than one contract if desired.

Any Respondent awarded a contract shall execute EVMWD's Professional Services Agreement, which is attached as Attachment "3" without exception.

7. GENERAL PROVISIONS

Respondent is encouraged to review this RFP carefully in its entirety prior to preparation of its Proposal. EVMWD reserves the right to reject any or all Proposals or to select the Proposal most advantageous to EVMWD. EVMWD reserves the right to verify all information submitted in the Proposal.

- 7.1 Amendments to RFP. EVMWD reserves the right to amend the RFP or issue to all Respondents a Notice of Amendment to answer questions for clarification.
- 7.2 No Commitment to Award. Issuance of this RFP and receipt of proposals does not commit EVMWD to award a contract. EVMWD expressly reserves the right to postpone the RFP process for its own convenience, to accept or reject any or all proposals received in response to this RFP, to negotiate with more than one Respondent concurrently, or to cancel all or part of this RFP.
- 7.3 Amendments to Proposals. No amendment, addendum, or modification will be accepted after the deadline stated herein for receiving Proposals. Respondent may modify or amend its Proposal only if EVMWD receives the amendment prior to the deadline stated herein for receiving Proposals.
- 7.4 Non-Responsive Proposals. A Proposal may be considered non-responsive if conditional, incomplete, or if it contains alterations of form, additions not called for, or other irregularities that may constitute a material change to the Proposal.
- 7.5 Late Proposals. EVMWD will not be responsible for Proposals that are delinquent, lost, incorrectly marked, sent to an address other than that given herein, or sent by mail or courier service and not signed for by EVMWD.
- 7.6 Costs for Preparing. EVMWD will not compensate any Respondent for the cost of preparing any Proposal, and all materials submitted with a Proposal shall become the property of EVMWD. EVMWD will retain all Proposals submitted and may use any idea in a Proposal regardless of whether that Proposal is selected.
- 7.7 Alternative Proposals. Only one final proposal is to be submitted by each Proposer. Multiple proposals will result in rejection of all proposals submitted by the Respondent.
- 7.8 Public Documents. All Proposals and all evaluation and/or scoring sheets shall be available for public inspection at the conclusion of the selection process.
- 7.9 No Exceptions. Submission of a Proposal constitutes acceptance by Respondent of the conditions contained in this RFP and the Professional Services Agreement, should Respondent be selected.

8. REQUESTS FOR CLARIFICATIONS

All questions, interpretations, or clarifications (either administrative or technical) must be requested in writing via PlanetBids under the Project's Online Question and Answer ("Q&A") tab.

All written questions will be answered in writing and conveyed via PlanetBids under the Project's online Q&A tab. Oral statements regarding this RFP by any persons should be considered unverified information unless confirmed in writing. To ensure a response, questions must be received in writing by 10:00 a.m. local time on Tuesday, August 25, 2026.

**ELSINORE VALLEY MUNICIPAL WATER DISTRICT
REQUEST FOR PROPOSALS**

**ATTACHMENT 1
SCOPE OF SERVICES**

**ELSINORE VALLEY MUNICIPAL WATER DISTRICT
REQUEST FOR PROPOSALS**

**ATTACHMENT 1
SCOPE OF SERVICES**

I. BACKGROUND

The existing Corydon Well site is on EVMWD property located at 31642 Corydon Street, Wildomar, CA 92595. The parcel APN is 370060051. The project Latitude is 33°37'53.3"N and Longitude is 117°17'31"W. The nearest cross street is Cereal Street. The replacement well will be located in the same existing Corydon well site. Please refer to the following Exhibits:

Exhibit "1": Project Location Map for Corydon Well

Existing Corydon Well Specifications & Replacement Requirements:

The existing Corydon Well was built in 1983. Based on a 2010 rehabilitation project, the following details summarize the driller's log report and equipment specifications for Corydon Well:

- Bore hole 30 inches.
- Sanitary seal to a depth of 100 feet below ground surface (ft bgs)
- Casing depth: 1,280 ft bgs
- Casing: 14-inch diameter stainless steel wire-wrapped screen 0 ft to 648 ft
- Casing: 18-inch diameter mild steel full-flo louver 648 ft to 1,243 ft
- Casing: Open hole at 1,280 ft
- Perforations from 340' - 1260' at 3/32" X 2 1/2"
- Static Water Level: Approx. 540 ft bgs
- Pump type: 12-inch vertical turbine; oil lubricated tube & shaft; threaded column sections
- Pump setting: 714 ft bgs
- Pump rated capacity: 1,000 gallons per minute (gpm)
- Pump rated total dynamic head: 738 ft
- Pump stages: 10
- Pump motor horsepower: 300

The replacement well design shall be similar in size and closely match the existing casing depth with sanitary seal placement in accordance with current AWWA potable water well construction standards. The well casing shall be 24-inch diameter stainless steel Ful-Flo louvered well screen with specified perforations compatible with the geological formation, which will be determined during drilling of the new production well.

The new well pump and ancillary equipment shall match existing vertical turbine equipment application, as noted above.

The well discharge piping shall be configured to tie into the existing Corydon Blend station and the transmission main that allows the water to be blended at the Malaga blending location.

II. PROJECT DESCRIPTION/ SCOPE OF WORK

Elsinore Valley Municipal Water District (EVMWD or the District) is soliciting proposals from qualified firms to provide professional engineering services for the design, bidding and construction management support for the replacement of Corydon Well project.

The preparation of the design, technical specifications, contract documents, and support during bidding and construction will consist of two phases:

Phase 1 - The design includes preparation of a set of technical specifications, civil site design drawings, and bid schedule for drilling and construction of the new well, and the abandonment of the existing Corydon Well in accordance with the Riverside County and California State Water Resources Control Board Division of Drinking Water (SWRCB-DDW) requirements. Phase 1 scope includes bidding assistance and full time on-site construction management (CM) oversight whenever the contractor is working.

Phase 2 - The scope of work includes the preparation of technical specifications, architectural, civil, mechanical, structural, electrical, instrumentation and controls (I&C) design drawings for the Corydon Well site, and line-item bid schedule for the equipping, testing and commissioning of the new groundwater production well. Also, the Consultant will provide support during bidding and engineering services during construction of this phase. District will procure a separate firm for the Phase 2 CM services. The Project is funded, in part, through the Department of the Interior Bureau of Reclamation WaterSMART Planning and Project Design Grant (CFDA 15.507) ("BOR Grant"). Consultant shall comply with all applicable Federal grant requirements (including procurement requirements, recordkeeping, and reporting assistance reasonably requested by the District) to support compliance with the BOR Grant.

The construction of this Project is to be subject to the Build America, Buy America Act, Public Law 117-58, §§ 70911–70917, the Buy America Preference established under 2 CFR Part 184, and the applicable implementation requirements, guidance, certifications, and waivers of the federal agency providing financial assistance for construction. The Consultant shall prepare the plans, specifications, bidding documents, and construction contract documents to facilitate compliance with these requirements and with any additional funding requirements provided by EVMWD

In submitting a proposal, the Consultant acknowledges that their firm has the ability to complete all the items identified in the Scope of Work (SOW). Consultant proposal need not be limited by the SOW of this RFP. Consultant is encouraged to include any other recommendations for additions, deletions, exceptions, and/or modifications pertinent to the project. The agreed upon SOW will become an appendix to the Professional Services Agreement to be executed between the District and the Consultant. The Tasks of the Scope of Work are described below. Tasks 1, 2 and 3 apply to both Phases 1 and 2. Tasks 4 through 7 are for Phase 1 only and Tasks 8 and 9 apply to Phase 2 only.

The Consultant's cost proposal shall include cost of each phase separately.

III. TASK DESCRIPTION

Task 1 Project Management (Phase 1 & 2)

The purpose of this task is to establish and maintain effective Project management and communication throughout the Project. Project management shall ensure fulfillment of the Project scope of work within budget and schedule. This task addresses the management responsibilities associated with proper scheduling, budget control, review of work product and deliverables, invoice preparation, and coordination with District staff and the Consultant's Project team.

As part of the Project management task, the Consultant shall:

- A. Assign a Project Manager that will be the point of contact and coordinate all communication with the District.
- B. Arrange a Kick-off meeting that will be attended by selected Consultant, sub-Consultants, and District staff. Prior to the kick-off meeting, the Consultant shall prepare a work plan to set forth the significant milestones and deliverables to ensure compliance with the established Project execution strategy and Project goals. Work plan will be presented at the kick-off meeting.
- C. Have monthly progress meetings with the District staff during the project and also include appropriate number of other meetings to discuss/present results at key steps of the project . The Consultant shall prepare and distribute the meetings agenda at least five working (5) days ahead of the meeting, lead the meetings, and prepare and distribute meeting minutes within five (5) working days of the meeting.
- D. Have 1 virtual workshop to have community engagement and stakeholders' collaboration during the design process.
- E. Maintain a Project schedule outlining all tasks, durations, milestone dates, and District's review periods, which will be 4 weeks for all major deliverables (e.g. Preliminary Design Report (PDR), 60% design, 90% design, 100% design, etc.). After each major deliverable, Consultant shall schedule a workshop with District staff to review and go over comments.
- F. Provide quality assurance and quality control (QA/QC) reviews through the course of the Project. Provide adequate reviews of all work products and adherence to industry practices and standards.
- G. Submit monthly progress reports and Project schedule status updates along with invoices. Monthly progress reports shall include work performed, Project concerns and schedule impacts, and work anticipated for the upcoming month. Progress report shall include percent of work complete based on the scope of work and percent of cost spent based on the invoice.

Task 2 Data Gathering, and Literature Review (Phases 1 and 2)

The purpose of this task is to gather information to establish the basis of design and design criteria for the Project. As part of this task, the Consultant shall:

- A. Prepare and submit a data collection request to the District.
- B. Review reports and data applicable to the design including historical well operations data, water quality results, groundwater basin levels, geotechnical reports, and other pertinent information.
- C. Conduct visits to the well site to understand space constraints as well as feasibility of well construction, operations, and maintenance.
- D. Become familiar with District standards and specifications for construction including District's Supervisory Control and Data Acquisition (SCADA) integrator and Site Security/monitoring services vendor.
- E. Identify specific procurement items from District Sole Source List.
- F. Become familiar with State of California and Riverside County potable water well construction and abandonment standards.

Task 3 Preliminary Design Report (Phases 1 and 2)

PDR that will be used as the basis for the development of the contract documents (i.e. plans, specifications, engineer's estimate, and permitting) for the following two phases:

- 1. Well Drilling for new Corydon production Well (Phase 1)
- 2. Abandonment of existing Corydon Well (Phase 1)
- 3. Well Equipping for new Corydon production Well (Phase 2)

The PDR including up to 30% level design effort for both Phases 1 and 2 shall be submitted as separate report for District review. Phase 2 PDR will commence after the completion of construction and well development of Phase 1 well drilling and abandonment of existing well. EVMWD will review and approve the concepts, criteria, and analysis before the Consultant proceeds to integrate the data into the 60% Design.

The Consultant shall:

- A. Consultant shall familiarize themselves with EVMWD's existing well facilities near the replacement well site, including District's design standards and specifications, Radio Telemetry Units (RTUs), radios, antennas, potable water distribution pipelines, potential points of discharge, potential discharge constraints, electrical power availability, and other field conditions to gain a thorough understanding of potential construction constraints that will impact the design.
- B. Consultant shall identify all permits (e.g. California SWRCB, DDW, National Pollution

Discharge Elimination System (NPDES), discharge permit requirements, building codes, City Traffic Control Ordinances, etc.) approvals, and regulatory authorizations required for the design, construction, and operation of the Project. The Consultant shall identify the permits and approvals for which the Consultant is responsible for preparing application packages, technical documentation, and providing permitting support, as well as any permits that must be obtained by the District. The Consultant shall also identify all permits, licenses, and approvals that will be the responsibility of the Construction Contractor to obtain and maintain during construction. These requirements shall be clearly identified and incorporated into the Contract Documents and Technical Specifications.

- C. Collect and review all applicable plans, specifications, reports, and existing utility data provided by EVMWD. Consultant shall research and obtain available existing record data and other (private and public) utilities information pertinent to this Project. Consultant shall contact in writing other utility companies and agencies to coordinate and obtain needed permits and easements on behalf of the EVMWD and verify the horizontal and vertical locations of existing parallel and intersecting facilities. Consultant shall accurately indicate on the construction plans, the locations and elevations of existing utilities, improvements, and review related facilities from information provided by utility owners.
- D. Meet with EVMWD personnel and representatives of utilities, government agencies, DDW, and City of Wildomar to determine all requirements of the construction documents.
- E. Conduct informal meetings as necessary (in addition to the meetings mentioned above) with EVMWD to review the progress of the Project and exchange ideas and information.
- F. Meet with EVMWD to discuss the key design issues and develop general Project criteria for construction, including site layout for new Well construction, scheduling constraints and possible ways of minimizing problems.
- G. The Consultant shall coordinate with the District and gather all pertinent operational, hydraulic, water quality, and facility information necessary to evaluate and incorporate multiple operational modes associated with the new well facilities. The Consultant shall prepare an exhibit demonstrating how the new well and wellhead facilities will accommodate the following operational scenarios involving delivery of Flush-to-Waste (FTW), Raw Water (RW), and Treated Water (TW) flows. Refer to Exhibits 2 and 3, showing EVMWD Backbasin Groundwater Blending and Treatment Schematic and Map.

Delivery of raw water and CT-treated water to the future dual-purpose FTW and RW Supply Pipeline, which is a separate District project currently planned for design and construction during the 2026–2028 timeframe.

Delivery of CT-treated water to the District's existing blending pipeline system to facilitate conveyance of blended water to the distribution system via the Corydon Blend Station and/or the Malaga blending locations.

The exhibit shall be prepared to scale and include dimensions, operational and maintenance access to the well pump and appurtenances, and the layout of all associated

mechanical, electrical, instrumentation, controls, and piping components. The exhibit shall also incorporate security measures and site access features consistent with comparable EVMWD facilities.

- H. Prepare the PDR to memorialize the preliminary design effort prior to entering the design phase and provide a summary of anticipated groundwater quality, groundwater elevations, production potential, water level interference with nearby wells, construction constraints, logistics and conflicts, permitting constraints, blending constraints, and other risk management analysis. The PDR will be prepared based on this information, including a basis of design and planning-level estimate of contractor costs which will include options for treatment facilities with operational costs.
- I. As a minimum, the preliminary design shall address the following subjects:
 - 1. Site Assessment for the new well location:
 - a. Review of existing hydrogeologic data and reports: groundwater level and water quality data, aquifer and specific capacity data, geologic and well construction logs, from nearby water wells, etc.
 - b. Summary of the hydrogeologic setting
 - c. Assessment of water level interference
 - d. Assessment of potential sources of groundwater contamination
 - e. Determination of final well location
 - f. Development of anticipated conditions
 - g. Evaluation of construction logistics and constraints
 - h. Evaluation of DDW requirements and preparation for site approval letters
 - 2. Casing size and screen materials for new well construction
 - 3. Sounding tubes (transducer, sounding ports, etc.)
 - 4. Method of construction to include sanitary seal
 - 5. Permit requirements to install, test, and equip the new well
 - 6. Equipment size and location
 - 7. Mechanical connections to the existing distribution system
 - 8. Discharge pipeline and pump to waste pipeline (if selected) alignments
 - 9. Pump, motor, column and well head discharge
 - 10. Electrical and SCADA improvements
 - 11. Site improvements
 - 12. The new well and associated on-site facilities shall be designed to provide sufficient hydraulic contact time (CT) at design flow rates to achieve a minimum 0.5-log Giardia inactivation using free chlorination. It will include a chemical Disinfection System required to achieve regulatory compliance and operational objectives. The Disinfection system will include the required online Water Quality Analyzers necessary for regulatory compliance, operational monitoring, and optimization of the treatment process.
 - 13. Need for Noise mitigation and recommended methods
 - 14. Construction schedule for drilling, equipping, permitting, start up and commissioning of the new Corydon Well, and abandonment of the existing Corydon Well
 - 15. The location and quantity of new valves (drawings shall include valve tables)
 - 16. Conflicts with other existing utilities
 - 17. Preferred materials for construction

18. Areas where construction work is limited or controlled
 19. Impacts to surrounding business and residential areas
 20. Prepare a potholing plan
 21. Provide pipeline conveyance drawings in plan and profile including temporary pump to waste lines and well discharge lines
 22. Preparation of engineer's preliminary estimates of construction cost for drilling, equipping, permitting, start up and commissioning of the new Corydon Well, and abandonment of the existing Corydon Well
- J. The PDR shall include 30% design drawings showing typical well casing, valve locations, construction phasing and other proposed/replacement structures and details, layouts, figures, studies, and exhibits and shall emphasize their impact on existing water facilities, other utility facilities and adjacent facilities in the area. The proposed preliminary layout showing the locations of the facilities shall be submitted to the EVMWD staff for review and concurrence. Changes in layout and location of facilities suggested by the EVMWD shall be investigated. A final layout and location of facilities shall then be established. The design shall also include relocation of existing utilities at the site, as necessary, for the construction of the new water well.
- K. Include in the PDR design all civil, hydraulic, structural, mechanical, electrical, instrumentation and SCADA, or other calculations, details, and preliminary drawings necessary for starting the design of all Project facilities at the Project site.
- L. The Consultant shall identify the impact of well discharge to EVMWD's existing system (refer to Exhibits 2 and 3) and size pump by: Performing hydraulic analysis and surge analysis of distribution main. Upon request EVMWD will provide the Consultant with the distribution system hydraulic model in an InfoWater software format. The Consultant shall perform hydraulic analysis using the model to size the pump and ensure no adverse impacts to existing facilities.
- M. Southern California Edison (SCE) Preliminary Service Plan: The Consultant shall coordinate with SCE to begin preparation of the SCE preliminary service plan and shall support SCE as needed to develop the final, SCE-approved service plan during the final design phase, including submitting survey files, exhibits, and CAD files in the required SCE format.
- N. Electrical Loads: The Consultant shall evaluate the existing and proposed site electrical loads to confirm the size of the electrical service to the site and determine if a new electrical service is required. The Consultant shall provide a single line diagram depicting all starters, bypass starters and feeders, equipment elevations and schematic diagrams for all equipment.
- O. Controls: Consultant, in coordination with District and District's selected integrator, shall conceptually evaluate the instrumentation, Telemetry Control Panel (TCP), and site communication for the project. The Preliminary Design Report shall identify all major field instrumentation, control strategies, and communication requirements. The Consultant shall identify equipment furnished by the District's System Integrator and equipment that will be specified under this Contract. The PDR shall also identify the

proposed Motor Control Center (MCC) configuration and size. The starter pushbuttons, Hand-Off-Auto (HOA) switches, relays, pilot lights, Terminal Blocks (TBs), and other low-voltage control components will be housed within a dedicated low-voltage section (relay panel) of the MCC, consistent with District standards. The final MCC configuration shall be developed during final design.

- P. Provide periodic submittals of information and hold meetings with EVMWD staff during the preliminary design development to assure agreement on its contents and to reduce review and comment time and effort by EVMWD.
- Q. Submit to EMVWD the PDR along with the 30% design drawings, calculations, studies, reports, hydraulic model results, list of technical specifications, an engineer's cost estimate, and findings. The Consultant must show the duration for the preparation of the PDR.
- R. Finalize PDR in PDF with clickable "live links" to Figures, Tables, Section Numbers, Appendices, and Table of Contents along with the 30% design drawings, calculations, studies, reports, hydraulic model results, list of technical specifications, an engineer's cost estimate, and findings for EVMWD review.
- S. Build America Buy America Requirements:

The construction of this Project is to be subject to the Build America, Buy America Act, Public Law 117-58, §§ 70911–70917, the Buy America Preference established under 2 Code of Federal Regulations (CFR) Part 184, and the applicable implementation requirements, guidance, certifications, and waivers of the federal agency providing financial assistance for construction. The Consultant shall prepare the plans, specifications, bidding documents, and construction contract documents to facilitate compliance with these requirements and with any additional funding requirements provided by EVMWD.

The Consultant shall identify the iron and steel products, manufactured products, and construction materials incorporated into the Project that are subject to the applicable Build America, Buy America Act ("BABA") requirements. The Consultant shall include appropriate BABA provisions in the bidding and construction contract documents, including applicable definitions, domestic-content requirements, bidder and contractor certifications, product-origin documentation requirements, submittal requirements, record-retention requirements, and procedures for reviewing proposed substitutions or non-compliant products. The Consultant shall coordinate these requirements with the technical specifications, approved-equal provisions, procurement schedule, and construction administration procedures.

During design, the Consultant shall evaluate the availability of BABA-compliant products and materials necessary for the Project. The evaluation shall include, as appropriate, outreach to manufacturers, suppliers, distributors, and industry representatives; review of available product literature and sourcing information; assessment of lead times and production capacity; comparison of technical specifications and product quality; and review of pricing for domestic and nondomestic alternatives. The Consultant shall notify EVMWD promptly upon identifying any product, material, or component that may not be

reasonably available in a BABA-compliant form or that may materially affect the Project's cost, schedule, performance, or constructability.

For any Project component, product, or material that cannot reasonably satisfy the applicable BABA requirements, the Consultant shall prepare a project-specific waiver memorandum for EVMWD's review and potential submission to the applicable federal funding or oversight agency. The memorandum shall identify each affected item, describe its intended use and relevant technical requirements, summarize the applicable BABA requirement, document the Consultant's compliance and market-availability evaluation, and state the recommended basis for the waiver request.

As applicable, the waiver memorandum shall identify and support one or more of the following statutory waiver bases:

1. **Public Interest Waiver:** Applying the BABA requirements would be inconsistent with the public interest, including an explanation of the specific Project circumstances and the anticipated public, operational, environmental, health, safety, schedule, or service impacts that support the request.
2. **Nonavailability Waiver:** The required products, materials, or components are not produced or manufactured in the United States in sufficient and reasonably available quantities or of a satisfactory quality. The memorandum shall summarize the domestic market research performed, manufacturers and suppliers contacted, responses received, available quantities, anticipated lead times, technical or performance limitations, and reasons available domestic alternatives are not suitable for the Project.
3. **Unreasonable Cost Waiver:** Use of BABA-compliant domestic products would increase the total Project cost by more than 25 percent. The memorandum shall include supporting cost quotations, assumptions, calculations, and comparisons between compliant and noncompliant alternatives and shall clearly explain how the anticipated cost increase was determined.

The waiver memorandum shall include supporting documentation appropriate to the requested waiver, which may include manufacturer and supplier correspondence, telephone or email outreach logs, product data, country-of-origin information, domestic-content certifications, procurement records, cost quotations, cost estimates, technical evaluations, quality or performance comparisons, lead-time information, and calculations of the anticipated effect on the overall Project cost. The Consultant shall identify reasonable alternatives considered, including alternative manufacturers, products, materials, designs, specifications, procurement methods, or construction approaches, and explain why each alternative is unavailable, unsuitable, impracticable, or insufficient to avoid the need for a waiver.

The Consultant shall prepare the waiver memorandum in the form and level of detail required by the applicable federal agency and shall assist EVMWD in responding to agency questions or requests for additional information. The Consultant shall revise the memorandum and supporting documentation in response to EVMWD and agency comments within the Consultant's authorized scope of services. The Consultant shall also identify any potential effect of the waiver process on the Project schedule, including

anticipated agency review periods, procurement deadlines, and risks associated with proceeding before a waiver determination is issued.

The Consultant shall not specify, approve, or authorize incorporation of a noncompliant product based solely on the preparation or submission of a waiver request. Any use of a product or material that does not comply with the applicable BABA requirements shall be subject to EVMWD's written authorization and approval of the waiver by the applicable federal agency, unless otherwise permitted in writing by that agency. Preparation or submission of a waiver request shall not constitute a representation or guarantee by the Consultant that the requested waiver will be approved.

Phase 1: Design and Construction Management Services – Drilling and Construction of New Well and Abandonment of Existing Well (Tasks 4 through 6):

Task 4 Design – Drilling and Construction of New Well and Abandonment of Existing Well

4.1 Prepare 60% Design Submittal

The Technical Specifications for the new well drilling and construction shall include, but not be limited to the following:

- A. The specifications shall address all aspects of new well drilling and abandonment of existing well. The Consultant shall review EVMWD's template sections and make revisions as necessary. If EVMWD has no template sections available, the Consultant shall develop new sections using EVMWD's specification format and cross reference EVMWD's available specification sections.
- B. List of required records and document submittals for the drilling contractor. Permits to be obtained and notifications to be completed by the Well drilling and abandonment contractor.
- C. Coordination of plan checks by local agencies, if needed.
- D. Requirements for mobilization, demobilization, site clean-up, and site Restoration.
- E. Site control requirements including noise mitigation, drilling waste, power, lighting, and site materials during well construction and testing.
- F. Description of stormwater Best Management Practices (BMPs) during Construction.
- G. Requirements for treatment, control, sampling, and analysis by the drilling Contractor of all water discharged to comply with NPDES and Waste Discharge Requirement (WDR) permits. Drilling fluid properties and measurement methods for pilot hole drilling and reaming.
- H. Daily record keeping requirements and drill cutting sampling procedures

Depths and dimensions for the conductor borehole, pilot hole, and reamed borehole.

- I. Details for downhole drift, geophysical surveying (electric logging) and caliper logging.
- J. Procedures for isolated aquifer zone testing.
- K. Plumbness and alignment testing requirements, via gyroscopic, magnetic, and mechanical methods for pilot hole, reamed borehole, and installed well casing.
- L. Well casing types, dimensions, and depths with the anticipated perforation depth intervals and perforation type.
- M. Dimensions and depths of associated accessory tubes (sounding, camera, and gravel feed tubes).
- N. Anticipated gravel pack gradation based on sieve analysis of selected formation samples.
- O. Anticipated depth(s) of the final borehole reams, deep cement annular seal(s) and/or aquifer seals, and gravel pack.
- P. Specifications for mechanical, chemical, and pumping development operations.
- Q. Criteria for final step drawdown and constant rate pumping tests, and flowmeter surveys.
- R. Procedures and protocols for step and constant rate pumping tests.
- S. Video surveys, Well disinfection, and Well capping specifications.
- T. The construction drawings for the drilling of the new Well and abandonment of existing Well shall include at a minimum:
 - 1. Title sheet, location map, vicinity map, and signature blocks applicable to the Project.
 - 2. Typical Well section, water level and gravel feed pipe installation, and other pertinent details.
 - 3. Demolition and removal of the existing Well with installation of mushroom cap.
 - 4. Symbols and abbreviations.
 - 5. Create base maps if one is not provided by EVMWD. Verify and revise street rights-of-way and curb lines with sectional map data for the pump to waste connections.
 - 6. Drawings shall be prepared on 24" x 36" full size sheets in AutoCAD utilizing EVMWD symbols, text standards, and construction notes. The Consultant may use their own standard construction details that are applicable to the Project. All Project drawings shall be electronically signed and sealed by a professional engineer and certified hydrogeologist registered in the appropriate discipline in the State of California. Detailed plans shall be drawn to a scale of 1" = 8' or larger. An electronic copy of the native AutoCAD file (*.DWG) and a complete PDF set shall be provided to EVMWD. After final approval, Consultant shall provide one full size set (24" x 36").

7. All font types and sizes shall be consistent throughout the plans.

4.2 90% Design Submittal

- A. Consultant shall address all EVMWD comments on the 60% design submittal and provide a written response matrix documenting the disposition of each comment. The Consultant shall incorporate the accepted comments into the 90% design documents.
- B. The 90% design submittal for the well drilling and abandonment of existing well shall include, at a minimum, electronic copies of the following documents: updated plans and technical specifications, updated calculations, updated permit status, updated engineer's opinion of probable construction cost, complete bid schedule, written response to all 60% review comments.
- C. EVMWD will review the 90% Design submittal in a time as specified in Task 1.D.

4.3 Final (100%) Design Submittal

- A. Consultant shall address all EVMWD comments on the 90% design submittal and provide a written response matrix documenting the disposition of each comment. The Consultant shall incorporate the accepted comments into the 100% design documents.
- B. The Final (100%) design submittal for the well drilling and abandonment of existing well shall include, at a minimum, the following final electronic (PDF, and native where applicable) documents: signed and stamped plans and technical specifications, calculations, permit completion, engineer's opinion of probable construction cost, complete bid schedule, written response to all 90% review comments.
- C. Consultant shall prepare construction specifications and other contract documents for competitive bidding for the proposed construction work and for the materials and equipment required for the bid package. Technical specification sections specific for Well construction and abandonment shall be developed by Consultant to match EVMWD's standard specification formats and cross references.
- D. Consultant's Project manager, Project engineer and QA/QC coordinator shall perform routine and final review prior to signing the plans to ensure accuracy, conformance, and integrity of all plans and specifications.
- E. Consultant shall attend a final plan check meeting to review the construction documents with EVMWD.
- F. EVMWD will review the Final (100%) Design submittal in a time as specified in Task 1.D.

Task 5. Bid Phase Support – Drilling and Construction of New Well and Abandonment of Existing Well

- A. Coordinate bid issuance dates, times, and place with EVMWD. Prepare final notice inviting bid for the Contract.
- B. Conduct pre-bid conferences at dates, times, and place set by EVMWD. The pre-bid conferences shall:
 - 1. Instruct prospective bidders and suppliers as to the types of information required by the contract documents and the format in which bids should be presented.
 - 2. Review special Project requirements and contract documents in general.
 - 3. Receive requests for interpretations, which will be answered by addendum.
 - 4. Prepare minutes for interpretations, which will be answered by addendum.
- C. Prepare and issue addenda or interpretation to the bid documents when required.

Task 6. Construction Management / Hydrogeological Services – New Well Drilling and Existing Well Abandonment

6.1 Tracking Project Schedule and Costs

- A. Schedule Tracking. Using schedule information provided by the Contractor, Consultant should review monthly project schedule updates relative to provided baseline.
- B. Cost Tracking. Using the approved schedule of values from the Contractor the Consultant shall track overall construction costs as the project progresses, reflecting the as-built conditions for the drilling, construction, and abandonment of the wells and any District-approved changes to the contract (e.g., change orders or deductions). The Consultant will track the number of bid items completed (e.g. linear feet of drilling and hours of well development, etc.) to review contractors pay request and recommendations to EVMWD for invoice approval.

6.2 Tracking and Review of Contractor Submittals and Request for Information (RFI)

- A. The Consultant shall track, review, and approve Contractor submittals; respond to Requests for Information (RFI), and track notice of change of delay, etc, as required by the specifications. The Technical Specifications shall include a list of required Contractor submittals.
- B. The Consultant shall be responsible for the review and evaluation of proposed construction change orders arising from field conditions, design modifications, regulatory requirements, unforeseen conditions, owner-requested changes, or contractor requests. The Consultant shall provide technical analyses and recommendations regarding the necessity and appropriateness of the proposed changes, and shall prepare supporting technical documentation, including revised calculations, exhibits, specifications, and drawings as necessary. For this RFP, please assume 10 change orders for the project.

6.3 Oversight of Drilling and Construction of New Well and Abandonment of Existing Well

- A. Provide oversight of all drilling operations, and existing Well decommissioning to assure achieving conformance with contract plans and specifications.
- B. Provide on-site inspection whenever the contractor is working.
- C. Provide a hydrogeologist during Well drilling and tasks listed in Item D below to observe the contractor's construction progress, attend meetings with EVMWD and the contractor regarding Project schedules. Hydrogeologist shall be ready to answer questions at any time during construction.
- D. Hydrogeologist should be onsite during the following tasks, including but not limited to:
 - 1. Existing Well Abandonment Activities
 - 2. Installation of conductor casing
 - 3. Pilot borehole drilling
 - 4. Geophysical borehole logging
 - 5. Zone testing and analysis
 - 6. Borehole reaming
 - 7. Well construction
 - 8. Initial development
 - 9. Final development
 - 10. Video camera surveys
 - 11. Plumbness and alignment surveys
 - 12. Well disinfection
 - 13. Wellhead completion
- E. Assist and coordinate with the District and Contractor in notifying affected EVMWD customers, property owners, and other stakeholders of construction activities, including temporary utility shutdowns, traffic detours, and other impacts or inconveniences. Prepare Public Notifications, Notices to Residents, and other required communications, and coordinate their distribution in accordance with project requirements. Prior to the beginning of the construction, submit one set of digital photographs and video indicating original status of the work sites.
- F. Maintain daily construction progress reports, project logs, photos, etc., of the progress of the construction work. Consultant shall submit the information to the District when requested.
- G. Establish a punch list as construction progresses. Prepare subsequent and final inspections of the punch list items completed by the Contractor.

- H. At the completion of the Project, submit one complete set of construction progress photographs indicating scope of work and critical elements, mounted, identified, and indexed in notebook form. During the pumping development, an 8-hr step-drawdown test, a 24-hr constant-rate test, and a 4-hr recovery test shall be performed. The Consultant shall analyze the tests and recommend to EVMWD the rate at which the well should be pumped and recommend the pumping equipment to best match the pumping rate, drawdown, and head parameters.
- I. The Consultant shall prepare a Report that documents the new Well construction and existing Well abandonment activities. The Report will include the following information:
1. Project background
 2. A timeline of new Well drilling and construction and abandonment of existing Well
 3. Compilation of Daily Inspection Reports performed by the Consultant and the contractor.
 4. Pre-Destruction Video Survey Report
 5. Well Destruction Records
 6. Department of Water Resources (DWR) Well Completion Report – Destruction
 7. New Well Construction Records
 8. New Well Development Records
 9. Aquifer Pump Test Results and Recommendation
 10. Lithologic Log
 11. Geophysical Logs
 12. Title 22 Laboratory Report
 13. All Video Survey and Records if applicable
 14. Plumbness and Alignment Analyses
 15. Final New Well Design
 16. DWR Well Completion Report
 17. Additional Information if applicable

The Consultant shall submit:

1. A draft Report to the District for review within 60 days of completion of well construction and abandonment activities and receipt of all required information from the Contractor.
2. A final Report within four weeks of receipt of the District's comments on the draft report.

The draft Report's review period will be as specified in Task 1.D.

- J. Provide accurate and complete final As-built drawings submitted in AutoCAD format and in pdf format. The Consultant shall submit approved final as-built drawings to EVMWD

before submitting a request for final payment.

6.4 Drinking Water Source Assessment and Protection (DWSAP)

- A. Provide permitting assistance and submit draft DWSAP using drilling and testing as-built information. Identify form fields to be completed by others using data only available from the subsequent Well equipping project.

Phase 2: Design and Engineering Services During Construction – Wellhead Facilities (Tasks 7 through 9):

Task 7 Design of Wellhead Facilities

7.1 Design (60% Completion)

Consultant shall meet with EVMWD to receive the PDR (30% design) comments. Consultant shall document EVMWD's comments and provide a written response to each comment with the 60% design submittal. Consultant shall build upon the finalized PDR to develop the 60% design plans, technical specifications, list of required permit applications (building, electrical, mechanical, encroachment, traffic control, etc.), SCADA requirements, design and coordination of SCE adjustments to service, and any other documentation required to make the Well fully operational.

Consultant shall develop the 60% design plans, and technical specifications, engineer estimate, calculations, and any other required documentation as referenced herein for the equipping of the new Corydon Well.

Consultant shall review and modify EVMWD's front-end specification sections and prepare technical specifications for the Well using EVMWD's specification format. The Consultant shall develop specifications that conform to the EVMWD format and cross references and submit them in native format of the latest version of Microsoft (MS) Word for Windows, *.docx for review. All technical specification section in this 60% submittal shall be reviewed in MS Word Review Track Change mode. Consultant shall review and provide responses to EVMWD comments and update specifications to address EVMWD comments. An original set of the final specifications will be provided to EVMWD in MS Word with one specification section per MS Word document with file naming convention by specification section number followed by specification name and a single PDF version file containing all specification sections with each specification section bookmarked for ease in reproduction. Submit an electronic copy of the PDF and MS Word files to a shared MS Teams folder.

The specifications shall address all aspects of Well equipping and site improvements. The Consultant shall review EVMWD's template sections and make revisions as necessary. If EVMWD has no template sections available, the Consultant shall develop new sections using EVMWD's specification format and cross reference EVMWD's available specification sections.

The Consultant must show the duration for the preparation for each of these submittals and allow EVMWD review period of 4-weeks for 60% submittal. Consultant shall review the Well's construction report to set the design point for the Well pumping rate and continue to develop the

electrical, instrumentation and control drawings and specifications from the 30% design submittal to 60% level.

The Consultant shall coordinate and get input and approval from District's selected integrator for all electrical and instrumentation components of the design. Staff should be consulted regarding instrumentation and the cost implications. Provide a communication block diagram for all ethernet connections including but not limited to Radio, PLC, ethernet switch, Variable Frequency Drivers (VFD's), soft starters, other field devices. Consultant shall provide P&IDs to the District in electronic AUTOCADD file format and as PDFs.

Provide conduit schedule for all equipment. Show point to point conduit layout on the plans. Home runs are not acceptable.

The construction drawings for the Well equipping contract documents shall include at a minimum:

1. Title sheet, location map, vicinity map, and signature blocks applicable to the Project.
2. Typical Well section, water level and gravel feed pipe installation, and other pertinent details.
3. General site plan with appropriate general excavation, shoring and miscellaneous notes.
4. Symbols and abbreviations.
5. Create base maps if one is not provided by EVMWD. Verify and revise street rights-of-way and curb lines with sectional map data for the pump to waste connections.
6. Show the position of all known or proposed underground utilities and all other pertinent data on pipeline drawings.
7. Structural, block wall enclosure. Note enclosure shall be reviewed with EVMWD Staff for security and accessibility and may change to removable chain-link fence.
8. Research existing curb/pavement thickness and material at the City of Wildomar's public works office or appropriate agency and provide available information in the bid documents.
9. Plans showing all record information regarding utilities, obstructions, and appurtenant data.
10. Drawings shall be prepared as specified in section 4.1.T.6
11. All font types and sizes shall be consistent throughout the plans.

7.2 Wellhead Facilities

Consultant shall develop a complete set of civil, mechanical, structural, electrical, instrumentation and control plans and specifications for the complete development of the well site, including the following items:

- A. Changes to electrical services. Consultant shall coordinate with the electric utility (SCE).
- B. Electrical design which includes switchboards, VFD, MCC, controls, and communication. Consultant shall be responsible for the complete design of a new electrical system, including:
 1. Exterior located conduit, wiring, and controls for the operation of the well pump.

2. Switchgears/MCC, control panels, properly rated cabinetry, and concrete pad(s).
- C. Wellhead completion details in accordance with SWRCB-DDW, DWR, AWWA Standards, and EVMWD requirements.
1. Wellhead facilities, which will include the Well pump equipment, Well discharge piping (including flow meter and valves), site electrical and SCADA, and site perimeter enclosure/fencing.
 2. The Well pump equipment will be oil lubed, line-shaft vertical turbine pump with surface discharge head. The pump will be equipped with a variable speed electric drive motor with a pre-lube system. For purposes of bidding, design of the new Well pump equipment shall closely match the existing Corydon Well equipment. Final equipment selection shall take place after the new Well is drilled and has undergone complete development and water quality testing.
 3. The Well discharge piping will be equipped with a tee and a manual isolation valve that allows discharge to the ground outside the Well pump enclosure structure.
 4. The flow meter will be an electromagnetic flow meter compatible with District Automated Metering Infrastructure (AMI) network.
 5. The Well head shall be equipped with four (4) access ports; two (2) 2-inch ports for a level transmitter (primary and backup), one (1) 1-inch port for an airline, and one (1) 1-1/2-inch port for manual Well sounding.
 6. The Well level transducer shall be installed, connected and confirmed signal to SCADA, then the level transducer shall be removed and disconnected, and finally reinstalled, connected and confirmed signal to SCADA to confirm a complete and serviceable installation.
 7. Develop specifications in conformance with EVMWD's equipment and materials requirements. Coordinate specifications for site security, site access, and camera monitoring systems and security alarming and notification protocols provided by District's vendor.
- D. Wellhead Building & sound attenuation with the following requirements:
Consultant shall evaluate the site for enclosures that adhere to building, noise, environmental, and other permit requirements, but are aesthetically appropriate for their respective locations. For purposes of the proposal, Consultant shall assume a concrete masonry unit enclosure. However, more cost-effective alternatives may be explored during the design. The Building will house the well head, and the disinfection (sodium hypochlorite tank, ammonia tank, and related components), electrical, and control system facilities. The Building will be completely enclosed with climate control and leak detection for chemicals. The building should include a roll-apart component (or other more effective component) to allow for removal and/or installation of pump equipment. Final enclosure design to be reviewed with the EVMWD Staff and any other stakeholders.
- E. Electrical Cabinet: A thermal calculation may be needed to determine the best environment to house the electrical equipment inside the electrical cabinet.
- F. Tie into existing distribution and transmission pipe system. As part of the pipeline drawings, Consultant shall develop piping details for the point-of-connection from Well to the existing raw water transmission system and the distribution system. Tie in details shall clearly depict the method for attaching the new Well pipeline to the existing distribution main.

7.3 **SCADA Design**

- A. Consultant shall be responsible for coordinating the design of the control strategy, process control loops, and instrumentation for the new well. The PLC, SCADA, and Operator Interface Terminal (OIT) programming shall be provided by the District's SCADA Integrator. The Telemetry Control Panels (TCP with internal PLC) and radio antenna will be provided by the District's TCP supplier. The SCADA system shall cover all the control loops and monitoring for the site, including, but not limited to:
 - 1. All site Input/Output (I/O) assignments and instrumentation requirements necessary for the District's TCP supplier to size and configure the PLC/TCP cabinet dimension for the final design.
 - 2. All site processes and how they work together for plant functionality.
 - 3. All site alarms for operator notification.
 - 4. All site shutdowns that will send the Well to bypass and shutdown.
 - 5. The pump shall be controlled by a VFD via operator-entered flow set point
 - 6. Alarm for enclosure door, telemetry cabinet, and MCC cabinet
- B. The SCADA system shall have the capability to be controlled remotely.
- C. The SCADA system shall have the capability to be locally monitored with an OIT mounted on a dead-front on the new TCP cabinets.
- D. The SCADA design will be reviewed by the District for compatibility with EVMWD's SCADA system.
- E. Consultant shall create a complete Control Strategy for the operation of the well and all equipment and instruments. Consultant shall reference specification section 17100, Control Strategies used for the Districts Back Basin Groundwater Treatment Plant Lift Station (BBWTPLS) as an example in style and level of detail required for the control strategies (Attachment D). The control strategy is an example and final details for each process and equipment will be updated during design.
- F. Consultant shall prepare process and instrumentation diagrams (P&IDs) for the station using the District's P&ID conventions. The P&ID's shall depict all existing and new equipment, instruments, signals and, interlocks to the PLC and SCADA system. The P&ID's shall show all I/O types (Digital Input (DI), Digital Output (DO), Analog Input (AI), Analog Output (AO), Ethernet), instrument voltages, field panels and their voltages.
- G. Consultant shall prepare a separate Communication Block Diagram illustrating all Ethernet and communication network connections, including but not limited to the PLC, OIT/HMI, radio, managed Ethernet switches, Variable Frequency Drives (VFDs), soft starters, analyzers, instrumentation, and other networked field devices. The diagram shall identify communication media, protocols, and the overall network architecture required for integration with the District's SCADA system.

7.4 Topographic Survey

- A. Consultant shall provide a topographic survey. The topographic survey shall be signed and stamped by a registered licensed Professional Land Surveyor. The topographic map shall be produced showing the ground features at the site including trees, landscaping, existing man-made facilities, and other structures at the Project site. The topographic mapping shall include underground piping based on research of all utility providers (gas, electric, etc.) and any drawings provided by EVMWD.
- B. The extents of the survey shall include the area surrounding the construction easements for the Well and the pathways for the pipeline tying locations.
- C. The Consultant shall research property, right-of-way, and easement limits to include in the topographic mapping.
- D. The Consultant shall provide the Benchmark and Basis of Bearing in table format on the maps produced.
- E. The topographic survey mapping is to be provided in AutoCAD.
- F. Consultant shall take all reasonable precautions to prevent damage to public and private property within and adjacent to the site and shall restore the site to its original condition. All work shall be conducted using equipment, personnel, and procedures that will ensure compliance with the accuracy standards as defined below. All work shall comply with all State and local regulations.
- G. The ground surface elevation shall be established to the nearest 0.1 foot. One foot contour intervals shall be provided and be derived from a digital surface, such as a triangular irregular network (TIN). The Consultant shall identify the benchmark utilized to establish elevations.
- H. Consultant shall provide or verify Horizontal and Vertical controls for the site. Accuracy of the controls shall be Third Order, Class I (Horizontal), and Third Order (Vertical), as outlined in the Federal Geographic Data Committee (FGDC) Geospatial Positioning Accuracy Standards, Part 4; Standards for Architecture, Engineering, Construction (A/E/C) and Facility Management. The Consultant shall provide all Control Network coordinates of all site boundary location points X, Y, to the nearest 0.01 foot. Coordinates shall conform to NAD 83 (latest adjustment) and NAVD 88 with ties to the California State Plan Coordinate System 5-0405.
- I. Daily information shall be recorded in field book format and any data collector information shall be provided to EVMWD. All level and horizontal traverse networks shall be closed to the starting point and the errors recorded. If the errors are above the standards outlined above, the survey shall re-run the horizontal and vertical traverses until the errors are eliminated within the acceptable range. Field notes shall include: the date, names of the crew, weather conditions, barometric pressure, and all collected survey data information.

- J. As a minimum, Consultant shall provide the following items to EVMWD:
1. All coordinate printout of all requested information, as listed in description of work above, with all coordinates listed in accordance with the specifications and standards referred to above. The file shall be in Microsoft Excel format and shall contain the horizontal and vertical coordinate information.
 2. Consultant shall provide one hard copy of the site topographic map drawing and electronic copy in AutoCAD format.
 3. Consultant shall submit electronic copies of all record drawings, photos, and other information collected for the topographic survey effort.

7.5 Site Geotechnical Investigation / Utility Investigations / Potholing

- A. Consultant shall perform a site geotechnical investigation for the design of the Well site facilities. The geotechnical investigation will classify the site soils to establish foundation criteria for the design of the equipment foundation and seismic design criteria for building and enclosure structures.
- B. The geotechnical investigation shall include the drilling of two borings. Laboratory testing shall be performed to determine the physical characteristics of the soils at the Project site. Engineering analyses shall be performed to determine the subsoil conditions, and provide foundation recommendations for the foundation pad, excavation and shoring, lateral earth pressure, wall backfill, waterproofing, uplift, differential settlement, pipe bedding, dewatering, soil corrosively and drainage site seismicity, corrosivity and expansion potential.
- C. Consultant shall perform potholing in the field as required to determine exact locations and elevations of existing underground utilities, improvements, and related facilities. The equipment for potholing as well as the equipment operator shall be provided by the Consultant.
- D. Consultant shall deliver the results of the potholing, soil sampling and geotechnical investigation listed above in the form of a technical memorandum.

7.6 90% Design Submittals

- A. Consultant shall address all EVMWD comments on the 60% design submittal and provide a written response matrix documenting the disposition of each comment. The Consultant shall incorporate the accepted comments into the 90% design documents.
- B. The 90% design submittal for the wellhead facilities shall include, at a minimum, electronic copies of the following documents: updated plans and technical specifications, updated calculations, updated permit status, updated engineer's opinion of probable construction cost, operations plan, complete bid schedule, written response to all 60% review comments.
- C. EVMWD will review the 90% Design submittal in a time as specified in Task 1.D.

7.7 Final (100%) Design Submittal

- A. Consultant shall address all EVMWD comments on the 90% design submittal and provide a written response matrix documenting the disposition of each comment. The Consultant shall incorporate the accepted comments into the 100% design documents.
- B. The Final (100%) design submittal for the wellhead facilities shall include, at a minimum, the following final electronic (PDF, and native where applicable) documents: signed and stamped plans and technical specifications, calculations, permit completion, operations plan incorporating DDW's comments, engineer's opinion of probable construction cost, complete bid schedule, written response to all 90% review comments.
- C. Consultant shall prepare construction specifications and other contract documents for competitive bidding for the proposed construction work and for the materials and equipment required for the bid package. Technical specification sections specific to wellhead facilities shall be developed by Consultant to match EVMWD's standard specification formats and cross references.
- D. Consultant's Project manager, Project engineer and QA/QC coordinator shall perform routine and final review prior to signing the plans to ensure accuracy, conformance, and integrity of all plans and specifications.
- E. Consultant shall attend a final plan check meeting to review the construction documents with EVMWD.
- F. EVMWD will review the Final (100%) Design submittal in a time as specified in Task 1.D.

Task 8. Bid Phase Support– Wellhead Facilities

- A. Prepare and issue addenda or interpretation to the bid documents when required.
- B. Prepared conformed set of technical specifications and drawings that incorporates all addenda, revisions, and clarifications made during the bidding process.

Task 9. Engineering Services During Construction– Wellhead Facilities

- A. Attend preconstruction meetings with Contractor, Construction Manager and EVMWD.
- B. Review and respond to all Requests for Information (RFIs) and Requests for Clarification (RFCs) submitted by the construction contractors. For this RFP, assume 100 total RFI/RFCs.
- C. The Consultant shall be responsible for the review and evaluation of proposed construction change orders arising from field conditions, design modifications, regulatory requirements, unforeseen conditions, owner-requested changes, or contractor requests. The Consultant shall provide technical analyses and recommendations regarding the necessity and appropriateness of the proposed changes, and shall prepare supporting technical documentation, including revised calculations, exhibits, specifications, and drawings as necessary. For this RFP, please assume 20 change orders for the project.

- D. Review shop drawing and material submittals for the well head facilities project. For the purposes of this RFP, assume 200 submittals including resubmittals
- E. Assist as needed with start-up, commissioning, and operator training of the new well equipment.
- F. Consultant shall assist in completing the Domestic Water Supply Permit Amendment such that the new Well can be permitted for operation.
- G. Develop Record Drawing to reflect changes that occurred in the field during construction. It should be assumed that the selected contractor will be responsible for redlining drawings in the field.

End of Scope of Work