

REQUEST FOR PROPOSALS

to prepare a

RECYCLED WATER PRELIMINARY DESIGN REPORT AND 30% DESIGN



Montecito Water District
583 San Ysidro Road
Santa Barbara, CA 93108



Montecito Sanitary District
1042 Monte Cristo Lane
Montecito, CA 93108

November 2020

I. STATEMENT OF PURPOSE

Montecito Water District (MWD) and the Montecito Sanitary District (MSD), collectively referred to as “Districts” are inviting Requests for Proposals (RFP) from interested engineering consultants to provide Preliminary Design Services for a recycled water project in Montecito, California.

II. BACKGROUND

MSD is a special district that collects, treats and disposes of wastewater from the unincorporated community of Montecito. Located in southern Santa Barbara County and adjacent (south of) to the City of Santa Barbara, the community is primarily residential with a small commercial center. No industrial users are located within the wastewater collection system. The MSD’s mission is to protect public health and safety and to preserve the natural environment through the collection, treatment and disposal of wastewater in the most cost-effective way possible. The MSD’s Wastewater Treatment Plant (WWTP) was originally constructed in 1961 with a treatment plant expansion in 1983 and a few process upgrades in recent years. Currently the MSD Wastewater Treatment Plant discharges approximately 550,000 gallons per day (GPD) of disinfected secondary effluent to the ocean through its permitted outfall located off the coast.

MWD is a separate special district formed as a County Water District in November 1921 with the purpose of providing reliable and cost-effective potable water to its customers. The District encompasses an area of approximately 9,900 acres and serves a population of approximately 11,400 residents. MSD’s service area falls entirely within MWD’s service area. The District’s service area consists primarily of single-family residential homes located in the unincorporated communities of Montecito and Summerland. The MWD’s mission is to provide an adequate and reliable supply of high-quality water to the residents of Montecito and Summerland, at the most reasonable cost. Consistent with its mission, the MWD is focused on improving the reliability of its water supplies through the acquisition of new local, drought proof water sources including recycled water.

In 2018, MWD completed a *Montecito Recycled Water Facilities Plan* (RWFP) which considered possible sources of and demands for recycled water in the MWD service area. The RWFP resulted in four top alternatives of which included a small and large non-potable reuse (NPR) project, an indirect potable reuse (IPR) project, and consideration of a partnership with Carpinteria Valley Water District (CVWD) on a regional IPR project. Of the top alternatives, the RWFP ultimately recommended pursuit of a large NPR project. The Districts have agreed to pursue a phased NPR project, with the “Small NPR” project being implemented near term and the “Large NPR” project being considered in the future. The “Small NPR” project, referred to in this RFP as “Phase 1” would provide tertiary treated recycled water to the Santa Barbara Cemetery, at a minimum. The “Large NPR” project would build on Phase 1 and provide tertiary treated recycled water to two golf courses and other users along the route. The IPR project and regional partnership with CVWD alternatives remain options to be considered further by MWD but are outside this scope of work. The RWFP can be downloaded here:

<https://www.montecitowater.com/doc/5346/>.

MSD is currently operating a recycled water pilot treatment project which utilizes ultra-filtration, 'pulse-flow' reverse osmosis, and sodium hypochlorite disinfection. The purpose of the project is to evaluate the new reverse osmosis technology, the recycled water quality and quantity produced, the RO concentrate discharge, electrical and chemical usage, backwash time, and maintenance time. This pilot project data and lessons learned by our Operators will be provided to the firm selected.

It is anticipated that the secondary clarifier effluent will be intercepted prior to disinfection and will be the source of water for the Title 22 recycled water treatment system. Due to high levels of total dissolved solids (approximately 1,750 mg/L and chlorides (approximately 570 mg/L) in the secondary clarifier effluent, it is anticipated that ultrafiltration and partial reverse osmosis would be used to reduce these constituents to a suitable level for landscape irrigation. In addition, pretreatment will be necessary to remove the oil and grease in the secondary clarifier effluent from an average of 4 mg/L and a high of 12 mg/L down to the recycled water treatment processes requirements.

III. SCOPE OF WORK

The purpose of the following scope of work is to further develop the conceptual design and confirm the assumptions provided in the 2018 RWFP for the recommended Large NPR project including developing detailed layouts for all new facilities and to provide revised capital and operations/maintenance cost estimates. In addition, an analysis on project phasing will be performed such that a Phase 1 project capable of supplying recycled water sufficient to meet the needs of the Santa Barbara Cemetery, at a minimum, can be implemented initially with subsequent phasing to achieve the Large NPR project being pursued in the future.

The consultant shall perform the following tasks for preparing a Preliminary Design Report (PDR) and 30% Design. The design shall conform to all guidelines and standards for recycled water projects.

Task 1: Document Review

- 1.1 Consultant shall review the following existing documents to be provided by the Districts: Most Current Design Standards; 2018 MWD Recycled Water Facilities Plan (RWFP); 2019 MSD Title 22 Engineering Report; MSD National Pollutant Discharge Elimination System Permit; MSD Pilot Project Data; MSD Pilot Project Lessons Learned Memo.
- 1.2 Kick-off Meeting. Attend a virtual meeting with staff from both MWD and MSD (collectively "Districts Staff") to review the scope of work, develop a detailed work plan and schedule, identify initial data needed to begin work and methods to obtain data, and establish schedule for biweekly check-in meetings (virtual).
- 1.3 Kick-off Meeting with Joint Committee. Attend a virtual meeting with District staff and Joint Committee to review the scope of services and project schedule.

Task 2: Preliminary Design Report

- 2.1 Consultant shall prepare a PDR for the Large NPR project as described in the 2018 RWFP. The Large NPR project volume shall be refined by the Consultant based on the latest wastewater supplies and customer demands, as well as the non-potable Birnam Wood wells and any possible impacts from the Sustainable Groundwater Management Act. The PDR shall include an analysis and recommendations for how to appropriately phase the project, considering operational, constructability, and economic factors such that the Phase 1 (Small NPR) project can be implemented initially, with subsequent phasing to achieve the Large NPR project being pursued in the future. The Large NPR project shall be the basis for the PDR and should ensure the Phase 1 design adequately considers future expansion(s) including project components, sizing, spacing, capacities for future phases. The Phase 1 design should consider how common facilities such as vaults, pipelines, electrical, and others should be accounted for in the Phase 1 project.
- 2.1.1 The PDR shall include an executive summary, background, overall project descriptions for all proposed project phases, and the results of any field investigations to fully describe the project setting.
- 2.1.2 The PDR shall include a basis of design for the following components all proposed project phases: (1) Treatment Processes (2) Pumping (3) Storage (4) Distribution and (5) Electrical. The basis of design should include analysis and consideration of hydraulics, capacities, chemicals, alignments, locations, sizes, easements, materials, soil conditions, construction methods, and any other considerations and criteria relevant to the project design.
- 2.1.2.1 **Treatment Processes** – the PDR shall analyze and recommend the design of upgrades to the existing MSD WWTP, if necessary and construction of new tertiary treatment processes including pretreatment to meet tertiary treated recycled water demand and quality standards. The design should incorporate all results from the MSD recycled water pilot project. The Consultant shall meet with the Districts Staff and representatives from the golf courses, cemetery and other users to discuss water quality, estimate seasonal demands, and any other relevant topic(s). The Consultant shall discuss how the treatment process will account for seasonal fluctuations, specifically during winter months when there is little to no recycled water demand.
- 2.1.2.2 **Pumping** – the PDR shall analyze and recommend the design of pumps to meet irrigation demands for customers. The PDR should consider seasonal and peak supply and demands including information gathered from end users during Task 2.1.2.1.
- 2.1.2.3 **Storage** – the PDR shall analyze and recommend the design of storage system(s) to buffer the difference in supply and demand patterns throughout all times of the year. The discussion and analysis should include the advantages and disadvantages of on-site and off-site storage and information gathered from end users during Task 2.1.2.1.

- 2.1.2.4 **Distribution** – the PDR shall analyze and recommend the design of distribution pipelines including alignments, sizing, materials, etc. The distribution system analysis should account for special crossings at railroads, creeks, and highways and should also account for retrofits or improvements required on the customer properties.
- 2.1.2.5 **Electrical** – the PDR shall analyze and recommend the design of electrical components to support the recycled water projects. This includes any required upgrades to existing electrical infrastructure at the MSD site.
- 2.1.3 The PDR shall provide an estimate of probable construction costs for all proposed project phases. This shall include capital and operation and maintenance costs. The Consultant shall also review and recommend grant opportunities available for the project.
- 2.1.4 The PDR shall provide an overview of institutional requirements for the project including required inter-agency or customer agreements, applicable permits, right-of-way acquisition, California Environmental Quality Act (CEQA), and any other required permits.
- 2.1.5 The PDR shall include an implementation schedule and next steps for the Phase 1 project.
- 2.1.6 The Consultant shall provide a description of the impacts to WWTP operations, additional studies required, design considerations, footprint considerations, and any other relevant analysis regarding possible future regulations requiring maximizing wastewater reuse.
- 2.1.7 Consultant shall include operational and maintenance expectations and requirements for the proposed treatment processes, pumping, storage, and distribution system.
- 2.1.8 The Consultant should submit a draft of the PDR to the Districts and attend one meeting with Districts Staff and one meeting with the Joint Committee to review the draft PDR. Any comments from Districts Staff and Joint Committee shall be incorporated into the final PDR.

Task 3: 30% Design

- 3.1 The Consultant shall develop 30% design plans for the Phase 1 Recycled Water Project. The design plans should build on the design elements of the PDR to develop a drawing package that reflects a 30% design. The design plans shall incorporate the design standards of both Districts.
- 3.2 The Consultant should submit a draft of the 30% design to the Districts and attend one meeting with Districts Staff and one meeting with the Joint Committee to review the draft design. Any comments from Districts Staff and Joint Committee shall be incorporated into the final 30% design plans.
- 3.3 The Consultant shall submit the final 30% design plans to the Districts.

- 3.4 The Consultant shall update the estimate of probable construction costs to account for any changes made during the preparation of the drawings or comments from the Districts Staff or Joint Committee.

Task 4: Project Management

- 4.1 The Consultant shall provide project management services, including project team assignment, meeting preparation and attendance, maintenance and monitoring of the budget and schedule, and quality assurance and quality control of deliverables.

IV. SUBMITTAL REQUIREMENTS AND PROPOSAL FORMAT

Submittals shall conform to the requirements described herein.

Proposers shall submit an electronic copy (PDF) of the Proposal via email to akanold@montecitowater.com and cpoytress@montsan.org by **5:00 PM on Friday December 11, 2020**. Proposals shall be clearly labeled **Proposal for Recycled Water Preliminary Design Report and 30% Design**. The Fee Proposal shall be submitted in a separate PDF labeled **Fee Proposal for Recycled Water Preliminary Design Report and 30% Design**.

Proposals shall be emailed to both Districts:

Montecito Water District
Attn: Adam Kanold, PE
akanold@montecitowater.com
583 San Ysidro Road
Santa Barbara, CA 93108

Montecito Sanitary District
Attn: Carrie Poytress
cpoytress@montsan.org
1042 Monte Cristo Lane
Santa Barbara, CA 93108

The minimum information required for inclusion in the Proposal shall be as listed below. The Proposer may submit additional information if needed.

1. Table of Contents
2. Background of Firm
3. Proposer's qualifications and experience within the last ten (10) years as the prime consultant of record, and descriptions of representative projects similar in nature and scope that include owner name and references that can be contacted by District.
4. Subconsultant's (if any) qualifications and experience within the last ten (10) years and descriptions of representative projects similar in nature and scope that include owner name and references that can be contacted by District.

5. Proposer's understanding of the project and a description of how the Proposer will approach the project with specific milestones and deliverables for each task.
6. Detailed description of the Scope of Services to be provided with a breakdown of different tasks. Proposer may revise the scope of services in this RFP and should call out the proposed revisions in their proposal.
7. Organization chart of key personnel and resumes for project team, including name of Project Manager, key staff members, and any subconsultants to be retained by Proposer.
8. Proposed project schedule provided by Proposer shall include time for review of deliverables by District staff and include any meetings.
9. Confirmation of Receipt of all related addenda (if any).
10. Proposer's fee for the project, broken down separately for each of the tasks. The fee shall be based on the Proposer's employee rate schedule with a not to exceed amount, including the estimated costs for mileage, reimbursable and reproduction costs. Please submit employee rate schedule with the proposal. Fee Proposal shall be submitted separately and marked **Fee Proposal for Recycled Water Preliminary Design Report and 30% Design**.

V. EVALUATION OF PROPOSALS AND SELECTION PROCESS

Proposer submittals will be evaluated as described below. Submittals which do not comply with all submittal requirements as stipulated herein may be considered non-responsive by the Districts and may not be considered for selection. Proposals deemed responsive will be evaluated based on the following.

1. Qualification of Firm and Key Personnel including any Subconsultants
2. Experience and qualifications of the project team with similar projects
3. Understanding of project goals
4. Quality and completeness of the proposal
5. Proposed Scope of Work

The Districts may elect to conduct interviews of some or all Proposers. The above items will be used in combination with the interview to evaluate and select a qualified firm to complete the project. The Districts will evaluate the submittals and create a ranking of the consultants. Selection of the consultant who is deemed to be the most qualified among those submitting will be made on the basis of the experience of the firm and proposed project team, and expertise and success with similar projects.

VI. SCHEDULE

The consultant shall develop a detailed schedule for the project.

- November 4, 2020 – Issue RFP
- November 19, 2020 – Pre-proposal Meeting (non-mandatory)
- December 7, 2020 – Final day for questions
- December 11, 2020 – Proposals Due
- Interview Period (if needed)
- +/- 60 Calendar Days from Proposal Due Date – Notice of Award
- +/- 180 Calendar Days from Notice of Award – Project Completion (estimated)

VII. RESERVATION OF RIGHTS

The Districts reserve the rights to reject any and all Proposals. This Request for Proposals is a solicitation, not an offer to contract. The Districts reserve the right to issue clarifications and other directives regarding this RFP, to require further clarification or information with respect to any Proposal submitted, and to determine the final terms and conditions of any contract. Any and all costs associated with the preparation and response to this RFP shall be borne solely by the Proposer and at no cost to the Districts.

VIII. QUESTIONS

Questions regarding this Request for Proposal (RFP) shall be emailed to both Districts:

Montecito Water District
Attn: Adam Kanold, PE
akanold@montecitowater.com
583 San Ysidro Road
Santa Barbara, CA 93108

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Attn: Carrie Poytress
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Questions submitted after 5:00 PM on Monday, December 7, 2020 will not be answered.