



SASM

Sewerage Agency Southern Marin

REQUEST FOR PROPOSAL (RFP)

ENGINEERING SERVICES

**WASTEWATER TREATMENT PLANT MASTER
PLAN**

CITY PROJECT NO. _____

**450 Sycamore AVE
Mill Valley
CA 94941**

Proposals due: JULY 31, 2013

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I. Introduction

City of Mill Valley (City) invites qualified consulting firms to submit a proposal to provide engineering services for the 2013 Wastewater Treatment Plant Master Plan. The wastewater treatment plant is a part of the Sewerage Agency of Southern Marin (SASM) which collects and treats wastewater from the six contributing member agencies.

The selected Engineering Consultant must have experience in providing complete planning and design services for wastewater treatment plants including: analysis of existing conditions and capacity, making recommendations for improvements to the plant, project administration, and preparation of cost estimates.

II. Description of SASM

SASM is a Joint Powers Agency (JPA) that was formed in 1979 to consolidate the wastewater collection, treatment, reclamation and disposal interests of approximately 25,000 residents of Southern Marin County. SASM's six member agencies are the City of Mill Valley (City), Almonte Sanitary District, Alto Sanitary District, Homestead Valley Sanitary District, Richardson Bay Sanitary District, and the Kay Park Area of the Tamalpais Community Sanitary District. Each Member Agency owns, operates, and maintains a sanitary sewer collection.

The SASM JPA owns and operates the wastewater treatment plant (Plant), located in at 450 Sycamore Avenue in the City of Mill Valley. The Plant provides secondary treatment of domestic wastewater for its six member agencies. Each member agency owns and operates its respective collection system.

The Plant has a dry weather design capacity of 3.6 million gallons per day (MGD) and can treat up to 24.7 MGD during wet weather. The current average daily flow rate is approximately 3.3 MGD. The Plant's treatment process consists of screening, grit removal, flow equalization, primary sedimentation, biological treatment (trickling filters), secondary clarification, disinfection (chlorination), and dechlorination. Chlorine contact time is accomplished in the effluent force main, and dechlorination is accomplished by sodium bisulfite addition at Sanitary District No. 5 of Marin County (Tiburon) prior to discharge. Treated, disinfected effluent is discharged to Raccoon Strait in the San Francisco Bay via a submerged outfall approximately 850 feet offshore at a depth of about 84 feet below mean sea level. The Discharger shares the outfall with Sanitary District No. 5 of Marin County's Wastewater Treatment Plant at Tiburon.

Biosolids removed from the wastewater stream are treated by gravity thickening, primary and secondary digestion and dewatering by belt filter press. During the winter, the dewatered biosolids are hauled to the Redwood Sanitary Landfill in Novato to be used as daily cover material. In the

summer, the biosolids are hauled to a land application site in Sonoma County at the intersection of Lakeville Highway and Highway 37.

SASM currently reclaims a small portion of its wastewater effluent to unrestricted reuse standards via sand filtration and chlorine disinfection. Recycled water demand is intermittent with an average of approximately 0.038 mgd provided for landscape irrigation. The recycled water is used by the City to irrigate Hauke Park, Bay Front Park, and the Mill Valley Dog Run. SASM's second largest agency, the Richardson Bay Sanitary District, also uses the recycled water to irrigate McKegney Green and South of the Knoll Park on the Tiburon peninsula.

III. Description of Project

SASM's collection system, wastewater treatment facilities, and effluent outfall were constructed in 1984. The conveyance system includes trunk lines, force mains, and eight satellite pump stations. The wastewater treatment plant has a dry weather capacity of 3.6 mgd and a wet weather capacity of 24.7 mgd. The wastewater treatment process consists of screening, grit removal, primary sedimentation, secondary treatment using trickling filters, secondary clarification, disinfection, and dechlorination. Treated effluent is pumped through a 6 mile effluent pipeline to the Raccoon Strait in San Francisco Bay.

The wastewater treatment plant has undergone numerous capital replacement projects over the years, including recent upgrades to recirculation pumps, effluent pumps, and the belt filter press as a result of a condition assessment prepared by SASM staff. However, a planning study is needed to develop a comprehensive, long term plan for SASM's wastewater treatment facilities.

IV. Scope of Work

- Consultant shall lead a kickoff meeting with SASM staff to confirm the project goals.
- Consultant shall estimate future increases in wastewater flows and loadings based on California Department of Finance population growth estimates.
- Consultant shall assess the performance of each process within the wastewater treatment plant based on the last 24 months of operational data to confirm capacity and ability to meet permit compliance. Consultant shall evaluate the treatment processes, with regard to growth and regulatory requirements and identify needed plant expansions and improvements. The evaluation shall include an investigation of alternative treatment technologies such as:
 - Membrane Filtration
 - High rate flocculation/sedimentation treatment of wet weather flows
 - Nutrient Removal
 - Ultra-violet disinfection of dry weather flows

- Consultant shall develop recommendations to modernize and optimize the treatment plant where the capacity analysis and evaluation of alternative treatment technologies indicate improvements may be necessary.
- Consultant shall evaluate biosolids and biogas management alternatives, including thermal drying, which may reduce and/or eliminate SASM's dependence on landfills and land application of biosolids while maximizing the beneficial uses of the biosolids. In addition, include an evaluation of the advantages and disadvantages of using biogas in a Class A biosolids treatment process versus using the biogas for cogeneration.
- Consultant shall incorporate the results of SASM's proposed recycled water feasibility study into the wastewater treatment master plan. This includes showing any future facilities on site layout plan and incorporating the future recycled water treatment facilities into other analyses (e.g. electrical load study).
- SASM has already performed a condition assessment of the mechanical components of the wastewater treatment plant. Another condition assessment of the mechanical components of the plant is not required. However, an assessment of the electrical system is required. Consultant shall identify associated electrical, communications, and instrumentation and control (I&C) improvements to modernize existing equipment and accommodate recommended treatment plant improvements. Consultant shall evaluate and make recommendations regarding upgrades to the SCADA system. Consultant shall also incorporate the findings of the mechanical condition assessment into the master plan.
- The most recent revision to the draft FEMA Flood Insurance Rate Maps (FIRMs) resulted in changes to the flood zone designation for portions of the wastewater treatment plant site. Consultant shall consult with James Reilly, PE of the Water Resource firm of Stetson Engineers to interpret the revised, draft FIRM maps and to evaluate whether the existing wastewater treatment plant facilities are vulnerable to flooding. If facilities are found to be vulnerable, Consultant shall recommend and provide costs for improvements to protect the facility from the flood water elevations shown on the draft FIRM maps. Refer to the attached draft FEMA FIRM and the preliminary FEMA San Francisco Bay Coastal Flood Study. Any improvements that the Consultant develops to protect the facility from flooding should consider any regional coastal flood protection plans that Mill Valley and Marin County may be developing under the Southern Marin Watershed Program.

According to the draft FEMA Flood Insurance Rate Maps, portions of the SASM Treatment Plant parcel are located in the AE/100 Year Flood Zone with a Base Flood Elevation of 10 ft. NAVD88.

- Determine the carbon footprint for the existing wastewater treatment plant. The carbon footprint analysis shall be performed according to industry guidelines. The analysis shall include methane emissions, nitrous oxide emissions, and the consumption of non-renewable fossil fuels. For any preferred upgrades or improvements that are recommended by the

Master Plan, the consultant shall provide the relative impact of these improvements on the plant's existing carbon footprint.

- Consultant shall work with SASM staff to identify sustainable design elements and strategies to further SASM's aims to be a leader in environmental stewardship. Potential improvements for evaluation may include renewable energy alternatives, improvements to the efficiency of existing equipment, and lighting improvements.
- Review SASM's Sanitary Sewer Spill Reduction Action Plan and WWIP (Wet Weather Improvement Plan (pending). Incorporate the findings of these studies into the Master Plan (as appropriate).
- Consultant shall prepare initial construction cost estimates for the improvements and upgrades recommended by the master plan.
- Consultant shall attend two progress meetings with SASM Staff to review and discuss the findings. Consultant shall incorporate comments and recommendations of SASM staff in a master plan report.
- Consultant shall prepare a master plan report summarizing the project findings and recommendations and assist SASM staff in presenting the report, findings, and recommendations to the SASM Board.
- Deliverables:
 - Draft Master Plan in pdf format and 5 hard copies
 - The draft master plan chapters shall be delivered as they are completed, in groups of two or three chapters at a time.
 - Final Master Plan in pdf format and 5 hard copies
 - Meeting and workshop agendas and minutes
 - Monthly progress reports

V. General Terms and Conditions

The City reserves the right, at its sole discretion, to determine whether or not any aspect of a proposal satisfactorily meets the criteria established in this RFP. The City reserves the right to seek additional clarification or information from the consultant, to confer with any consultant, and to reject any or all proposals with or without cause. In the event that the RFP is withdrawn by the City, the City shall have no liability to any consultant for any costs or expenses incurred with the preparation of a proposal or related work. The cost of preparing, submitting, and presenting a proposal is at the sole cost and expense of the Consultant.

The City reserves the right to approve all key personnel, individually, for work on this contract. All key staff shall be named in the contract. After the contract is signed, the proposer may not replace key staff unless their employment is terminated or the replacement is agreed upon by the City. The City must approve replacement staff before substitute person is assigned to the Project. The City reserves the right to request that the proposer replace a staff person assigned to the contract, should the City consider such a replacement to be for the good of the project.

For inquiries regarding this RFP, contact: Mark Grushayev, WWT Manager.

All contact should be via e-mail addressed to mgrushayev@cityofmillvalley.org. The subject line should read "QUESTIONS REGARDING WASTEWATER TREATMENT PLANT MASTER PLAN"

Please provide five (5) copies of proposals to City of Mill Valley, no later than **2:00 PM on July 31, 2013**. Late submittals will not be accepted and will be returned unopened to sender.

Please submit cost proposal in the RFP along with proposers name and address. Cost proposal and hourly rates shall be included at the end of the proposal. The City may elect to provide payment for consulting services only after receipt of the draft and final master plan project deliverables.

Proposals should be addressed to: SASM/City of Mill Valley
Attn: Mark Grushayev
26 Corte Madera Ave.
Mill Valley, CA 94941

VI. Proposal Format

The proposal, excluding cover letter, should not exceed 20 single sided 8-1/2" X 11". A few 11x17 sheets can be Z-folded and included in the proposal. The proposal shall be bound, with tabs separating sections. Tabs, table of contents, and resumes do not count against the page limit. .

1. **Cover Letter:** Identify the prime consultant and describe any subcontract arrangements. Clearly identify the name of the individual authorized to negotiate the contract on behalf of the consulting firm. This person should also sign the cover letter.
2. **Project Understanding and Scope of Work:** Describe your understanding of the project and describe your scope of work to meeting the task objectives outlined in this RFP. Include a description of the work tasks and any additional information that may be deemed appropriate to complete the services. Within each task description, describe any key issues and recommended measures to mitigate these issues.

3. **Organization Chart:** Describe your team organization, including the qualifications of the prime consultant and any sub-consultants included in the team.
4. **Staffing Plan:** Identify key team members and their relevant experience. This section should present staff that will actively participate in the project. Include a statement that these key team members will not be removed or reassigned without prior approval of the City or SASM. Staff must have professional registrations and certifications for engineers. Provide a resume for each team member to be included in the Appendix.
5. **Project Descriptions/References:** Provide evidence of your team's experience in each of the areas identified in this proposal, with emphasis on those relating to similar projects. Provide a minimum of three project descriptions, with references, for similar projects within the last five (5) years. References must include name, affiliation, and current phone number.
6. **Schedule:** Provide a schedule/workplan for the project:
 - a. Identification of major tasks or range of tasks anticipated to complete design.
 - b. A schedule of expected start dates, milestones, and completion dates for each task.
7. **Project Cost Proposal:** Provide a project cost table showing the cost for each task, as outlined in this RFP. Include level of effort (hours) and billing rate for each person. Provide the project cost proposal in a separate, sealed envelope.
8. **Professional Services Contract:** indicate your willingness to accept the terms and conditions in the Sample of Agreement for Consultant Services (appendix A). List any exceptions or recommended changes to the City's Agreement for Consultant Services in the appendix of the proposal.

VII. Method and Criteria for Selection

The City will award Architectural and Engineering (A&E) contracts on the basis of fair and open competitive negotiations, demonstrated competence, and professional qualifications per the provisions of the Brooks Act (40 USC 544) and 23 CFR, Section 172.

Based on the evaluation of submitted proposals, a list of the top qualified Consultants will be established. Consultants may be requested to participate in an oral presentation. Upon completion of the proposal evaluations and interviews (if requested), the Consultants will be ranked and the top-ranked firm will be identified. If for any reason an acceptable contract cannot be negotiated with the top ranked Consultant, negotiations will commence with the next ranked Consultant.

The City reserves the right to select the top-ranked consultant solely based on the written proposal.

The following technical criteria and their relative weights will be used to evaluate and rank the consultant proposals:

Understanding of the work to be done	25%
Experience with similar kinds of work	25%
Consistency of cost proposal with scope of work	15%
Quality of assigned staff for work to be done	15%
Demonstrated technical ability	20%
Total	100%