

**NOTICE OF REGULAR MEETING
OF THE
SOUTH ORANGE COUNTY WASTEWATER AUTHORITY
ENGINEERING COMMITTEE**

Thursday, June 10, 2010

8:30 a.m.

NOTICE IS HEREBY GIVEN that a Regular Meeting of the South Orange County Wastewater Authority (SOCWA) Engineering Committee has been scheduled to be held on **Thursday, June 10, 2010 at 8:30 a.m.** at the SOCWA Administrative Office located at 34156 Del Obispo Street, Dana Point, California.

THE SOCWA MEETING ROOM IS WHEELCHAIR ACCESSIBLE. IF YOU REQUIRE ANY SPECIAL DISABILITY RELATED ACCOMMODATIONS (I.E., ACCESS TO AN AMPLIFIED SOUND SYSTEM, ETC.) PLEASE CONTACT THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY SECRETARY'S OFFICE AT (949) 234-5421 AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING. THIS AGENDA CAN BE OBTAINED IN ALTERNATE FORMAT UPON WRITTEN REQUEST TO THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY'S SECRETARY AT LEAST SEVENTY-TWO (72) HOURS PRIOR TO THE SCHEDULED MEETING.

AGENDA EXHIBITS AND OTHER WRITINGS THAT ARE DISCLOSABLE PUBLIC RECORDS DISTRIBUTED TO ALL, OR A MAJORITY OF, THE MEMBERS OF THE SOUTH ORANGE COUNTY WASTEWATER AUTHORITY ENGINEERING COMMITTEE IN CONNECTION WITH A MATTER SUBJECT TO DISCUSSION OR CONSIDERATION AT AN OPEN MEETING OF THE ENGINEERING COMMITTEE ARE AVAILABLE FOR PUBLIC INSPECTION IN THE AUTHORITY OFFICE, 34156 DEL OBISPO STREET, DANA POINT, CA ("AUTHORITY OFFICE"). IF SUCH WRITINGS ARE DISTRIBUTED TO MEMBERS OF THE ENGINEERING COMMITTEE LESS THAN 72 HOURS PRIOR TO THE MEETING, THEY WILL BE AVAILABLE IN THE RECEPTION AREA OF THE AUTHORITY OFFICE AT THE SAME TIME AS THEY ARE DISTRIBUTED TO THE ENGINEERING COMMITTEE MEMBERS, EXCEPT THAT, IF SUCH WRITINGS ARE DISTRIBUTED IMMEDIATELY PRIOR TO, OR DURING, THE MEETING, THEY WILL BE AVAILABLE IN THE ENGINEERING COMMITTEE MEETING ROOM.

AGENDA

1. Review/Approval of Meeting Minutes (April '10)
2. Coastal Treatment Plant Headworks Upgrade Construction Progress Report (Project Committee 15)
3. Review of Request for Proposals for Coastal Treatment Plant Export Sludge Force Main Preliminary Design (Project Committee 15)
4. Public Comments on Items 1, 2, and 3.

Engineering Committee Agenda Item

Meeting Date: June 10, 2010

Agenda Item No.: 3

Action Required: Yes

TO: SOCWA Engineering Committee, Project Committee 15
FROM: Brian Peck, Director of Engineering
SUBJECT: Coastal Treatment Plant Export Sludge Force Main Preliminary Design Request for Proposals

General

The draft request for proposals (RFP) for the Coastal Treatment Plant Export Sludge Force Main Preliminary Design is attached for review and approval by the Engineering Committee. This RFP has been developed as a follow up action to the May 20 Project Committee 15 staff meeting.

Requested Action

The Engineering Committee will be asked to review and approve the draft Request for Proposals.

REQUEST FOR PROPOSALS

DRAFT

FOR THE COASTAL TREATMENT PLANT EXPORT SLUDGE FORCE MAIN PRELIMINARY DESIGN

GENERAL DESCRIPTION OF SERVICES REQUIRED

The South Orange County Wastewater Authority (SOCWA), a Joint Powers Authority, and several of its Member Agencies intend to retain a qualified FIRM to provide engineering services for the preliminary design of the replacement of the Coastal Treatment Plant Export Sludge Force Mains between the Coastal Plant and Alicia Parkway.

RECEIPT OF PROPOSALS

Seven (7) bound copies and one (1) unbound copy of your proposal, signed by an officer of the FIRM who is authorized to execute legally binding agreements shall be delivered to: Brian Peck, SOUTH ORANGE COUNTY WASTEWATER AUTHORITY, 34156 Del Obispo Street, Dana Point, CA 92629 no later than 2:00 p.m. on July 17, 2010. Late proposals will be returned unopened to the respondent.

PROPOSAL AND SITE INQUIRIES

A pre-proposal meeting will be held at the Coastal Treatment Plant at 10:30 a.m. on June 30, 2010. This meeting allows FIRMS to ask questions of staff and to investigate the site firsthand.

Should a FIRM desire additional information prior to submitting a proposal, please contact Brian Peck at (949) 234-5411.

SOCWA will not be held responsible for any verbal instructions or information that may be provided to prospective respondents. All addenda will be in writing and will be sent to all proposers.

BACKGROUND

The expansion of the Coastal Treatment Plant in 1982 included two 4-inch cast iron pipes for the pumping of primary sludge and thickened waste activated sludge (TWAS) to the Regional Treatment Plant for solids processing. These pipelines were installed along the east side of Aliso Creek near the alignment of the Effluent Transmission Main (ETM). This system was termed the Export

Sludge Handling System. The piping experienced problems in the early years of operation through a combination of corrosion and internal deposition. The replacement of the sludge piping has been planned since the early 1990's. The South Coast Water District (SCWD), at that time responsible for the administration of the Export Sludge System, planned a three phase replacement of the Export Sludge piping system. Phase I involved the construction of a new 6-inch pipeline through the County of Orange Laguna Niguel Regional Park; Phase II involved the installation of a new 6-inch pipeline under a new roadway built by the Aliso Viejo Community Association along the west side of Aliso Creek in the Aliso and Wood Canyon Wilderness Park. The construction of both of these pipelines was completed during early 2000. These pipelines have yet to be placed into operation. Phase III of the Export Sludge System was to install the final link of piping along the west side of Aliso Creek in the Wilderness Park in close proximity to the Access (AWMA) Road. A decision was made in 2000 to combine Phase III with the planned Aliso Creek Emergency Sewer (ACES) project. The ACES project was to be constructed by the Moulton Niguel Water District (MNWD). The central feature of this project was a new sewer line replacing the MNWD 18-inch sewer along the east side of Aliso Creek. The 18-inch pipeline is currently used only as an emergency overflow from the MNWD collection system to the CTP. The ACES project proceeded through final design (by Daniel Boyle Engineering) and permitting. However, the project was canceled due to unfavorable economics prior to bidding.

In 2005, SOCWA hired Dudek and Associates to evaluate five alternative sludge pipeline alignments on both the east and west sides of Aliso Creek. The alignment evaluation indicated that the cost for an alignment underneath the AWMA Road on the west side of Aliso Creek was approximately the same as the alignment on east side of the Creek following the existing pipeline easement. SOCWA staff preferred the east side alignment of the sludge pipeline for its shorter route and more uniform slope. However, the Engineering Committee favored the AWMA Road alignment due to its fewer biological, archeological and permitting unknowns. The AWMA Road alignment was also more consistent with the originally planned Phase III of the pipeline upgrade.

The proposed realignment of the Export Sludge Piping system became further sidetracked through two County of Orange ventures:

- Aliso and Wood Canyon Wilderness Park Resources Management Plan: The County of Orange embarked upon this plan to define the long-term development within the Park. This plan impacts SOCWA's utilities within the Park through (i) proposed development of biking trail and hiking path to the Pacific Ocean on the west side of Aliso Creek and (ii) potential opening of the east side of Aliso Creek to Park users. The Resources Management Plan has yet to be completed

- Stabilization, Utility Protection, Environmental Restoration (SUPER) Project: The County of Orange Watersheds group embarked upon this ambitious project for reshaping Aliso Creek through the Wilderness Park. The County has been successful in securing \$5 million in funding from the State of California; the County has been trying to secure additional funding from the Federal government.

SOCWA's General Manager met with County of Orange Parks staff in December, 2007, to discuss the possibility of proceeding with the pipeline realignment. At that point, County staff proposed a project wherein the Access (AWMA) Road would be shifted to the east side of Aliso Creek along with the alignment for the new sludge pipeline. This option would allow the County to use the existing AWMA Road as part of its proposed bike path connection to the Pacific Ocean. A route analysis for the proposed road realignment was conducted for SOCWA by TetraTech in 2009.

The SUPER has evolved into the Environmental Restoration Project (ERP). The County of Orange is currently working with the Corps of Engineers to develop the ERP. The timeline for the funding, design and construction of ERP is uncertain. It is extremely unlikely that this project will be constructed within next five years.

The potential replacement of the Export Sludge system was considered to be an element of the larger ERP project to minimize the number of construction projects within the Wilderness Park. SOCWA staff is concerned whether the existing Export Sludge system can provide reliable service over a minimum five year period in order to link replacement of the pipelines with the ERP project. SOCWA is therefore embarking on a design process to replace the existing force mains at the earliest possible date.

PROJECT GOALS

The overall goal of the preliminary design is to define the project in sufficient detail to support the CEQA documentation for the project. The preliminary design is based on the assumption that the pipeline will be installed in the existing pipeline easement on the east side of Aliso Creek from the Coastal Treatment Plant to Alicia Parkway. The new pipeline will connect to the existing but unused pipeline constructed as part of the Phase I project completed in 2000.

The preliminary design will also consider the possibility of a pipe bridge crossing to allow utilization of the pipeline that was installed as part of the Phase II construction in 2000.

The preliminary design will be developed based on the assumption that two new pipelines are to be installed. The operation will be similar to the current mode where only one pipeline is in operation at any time; the second pipeline will be used as back-up.

The preliminary design will also evaluate the feasibility of pipe bursting the existing 4-inch mains as an alternative to open trench construction for the new force main(s).

The completion of the preliminary design will be assumed to be at a level equivalent to a 30% design with the routing of the pipeline(s) finalized for the final design phase.

SCOPE OF SERVICES

The following shall be considered to be a preliminary scope of services; your proposal may include those modifications to this scope of services that you deem desirable or necessary based upon your experience or expertise.

Tasks are to include the following:

I. Meetings

FIRM shall attend and lead four progress meetings with the client. One meeting shall include a presentation to the Engineering Committee on the findings of the study.

II. Geotechnical Review

FIRM shall review existing geotechnical studies to determine the impact of site geology on the preliminary design.

III. Alignment

FIRM will set the alignment of the pipeline(s) on 1" = 40' scale drawings provided by SOCWA. Alignment shall follow existing easement along east site of Aliso Creek from the Coastal Plant to new pipeline (Phase I) at Alicia Parkway.

Background drawings in AutoCAD will be provided by SOCWA.

FIRM shall provide rough profile of pipeline showing the high points of the pipeline.

IV. Alternative Pipe Bridge Alignment

FIRM will set the alignment of the pipeline(s) on 1" = 40' scale drawings provided by SOCWA extending the alignment for the layout identified in Task III to a proposed pipe bridge to connect with the new pipeline (Phase II) in the AVCA Road.

FIRM shall provide rough profile of pipeline showing the high points of the pipeline.

V. Pipeline Hydraulics

SOCWA shall provide FIRM with data regarding quantity and solids concentration of sludge flows. FIRM shall calculate hydraulics from Coastal Treatment Plant to Regional Treatment Plant. FIRM shall use hydraulic calculations to determine appropriate sizing of pipeline. Pipeline size will be selected to minimize amount of deposition with the pipeline and the amount of energy needed to pump the sludge.

FIRM shall prepare hydraulic calculations as part of an EXCEL model. Electronic version of spreadsheet will be provided to SOCWA at the end of the project.

VI. Pipeline Material Evaluation

FIRM shall evaluate and identify the preferred material of construction for the project. Recommendation shall be based on life, ease of cleaning, ease of installation, resistance to abrasive and corrosive materials and strength. FIRM shall consider the impact of a future overhead roadway.

VII. Pipe Bursting

FIRM shall evaluate the applicability of pipe bursting to the project.

VIII. Pipeline Maintenance

FIRM shall develop maintenance and monitoring methodology for force main including but not limited to pigging, flushing and chemical additional. Maintenance methodology is to be compared with a survey of at least five similar installations. FIRM shall identify piping appurtenances needed for maintenance program. FIRM shall develop details for piping appurtenances.

IX. Coordination with Biological Consultant

FIRM shall work with biological consultant to evaluated impact of proposed project on the local habitat.

X. Alignment Refinement

FIRM shall refine alignment for one alternative (from either Task II or Task III as identified by SOCWA. Alignment shall be modified to (i) minimize

biological impacts (see Task IX); (ii) show location of maintenance appurtenances (see Task VIII); (iii) maximize distance from eroding banks; and (iv) address other issues identified in the study.

FIRM shall identify locations where modification of the existing easement is needed.

XI. Budgetary Cost Estimates

FIRM shall provide budgetary estimates for construction of the pipeline.

XII. Report

FIRM shall summarize results of Tasks I through XI in a preliminary design report. Five copies of the draft report shall be submitted to SOCWA for review and comment. The FIRM shall respond to all review comments. Ten copies of the finalized report shall be submitted to SOCWA.

QUALITY ASSURANCE

The FIRM shall administer a program of QA procedures for producing quality work. Specific procedures shall cover, but not be limited to, planning, checking, reviewing and scheduling the work.

All documents prepared by the FIRM shall be subject to the FIRM's in-house procedures prior to submittal to SOCWA for review. Each submittal shall be accompanied by a written statement from the principal-in-charge of the project stating that documents being submitted have been checked.

Discipline checks shall be made of all design calculations, drawings, specifications, construction cost estimates, and reports. An integrated design review shall be performed for multidisciplinary documents to provide coordination and to avoid conflicts in the documents. Checking shall be performed by qualified individuals who are not directly involved in the design or supervision of the work.

PROPOSAL CONTENTS

SOCWA does not require a specific format for proposals. FIRMS may prepare their proposals in a manner most suited to their particular organization. However, all requirements set forth in the Request for Proposals must be addressed. Proposals shall be concise and shall not exceed eight (8) pages, excluding covers, tabs, and resumes. Preprinted and prepared general company advertising literature such as color brochures are discouraged unless they are specifically related to the services requested and referenced as such.

FIRM proposals shall include, at a minimum, the following information:

1. Indication that the FIRM has a clear understanding of each project. This should include a description of the work to be performed, how the project tasks will be accomplished and the problems that may be encountered.
2. Descriptions of previous projects of similar type, scope, and size that the FIRM has completed. The description shall include project name, client, and client references (including telephone numbers).
3. Name, project responsibilities, and experience of designated personnel that will be assigned to work on SOCWA's projects with emphasis on the Project Manager.
4. Resumes of designated personnel, where appropriate.
5. Current workload and future anticipated work of key staff to be assigned to the project.
6. List of all subconsultants proposed to be used by the FIRM.
7. A preliminary project schedule incorporating the milestone dates identified in this RFP. The FIRM should indicate whether or not the milestone dates are feasible.
8. A table of effort is to be included in the Proposal that includes the FIRM hours by classification and the total hours for each subconsultant. This breakout is to be provided for each work item shown in the scope of services.
9. A proposed fee and schedule of hourly rates, provided in a separate sealed envelope marked "Estimate Fee – Design Services Proposal" and indicating the FIRM'S name. An electronic copy of this table shall also be provided.
10. A copy of the SOCWA's standard engineering contract is attached as Exhibit 'A'. The Proposal is to verify that the submitting firm will maintain the required insurance levels. The Proposal should identify whether or not the submitting firm agrees to the contract language. Any discrepancies should be identified.

LEGAL REQUIREMENTS AND GENERAL CONDITIONS

Interpretation of Documents

A FIRM contemplating submitting a proposal for this proposed contract who is in doubt as to the true meaning of any part of this Request for Proposal or finds

discrepancies in or omissions from this Request for Proposal, may submit to SOCWA a verbal or written request for interpretation or correction thereof. Any interpretation or correction of the documents will be made only by addendum duly issued. A copy of such an addendum will be mailed or delivered to each FIRM receiving this Request for Proposal. SOCWA will not be responsible for any explanations or interpretations of the documents other than written addenda.

Submission of a proposal shall be evidence that the FIRM did, in fact, conduct all necessary inspections and is aware of and acknowledges all conditions, restrictions and limitations affecting performance and cost.

Addenda

All addenda issued during the proposal period shall be noted in the FIRM's proposal.

Rejection of Proposal

SOCWA reserves the right to reject any and all proposals, to negotiate with one or more FIRMS, to waive any informality in a proposal, to delete or add items of work prior to award, and to make an award in the best interest of SOCWA.

Contract Award

The selected FIRM shall enter into a written contract with SOCWA binding all terms, conditions, and provisions of the proposal, and other terms, conditions, and provisions negotiated prior to award of the contract. The contract period will be for the duration of the project. A copy of the standard engineering services contract that SOCWA utilizes is attached with this Request for Proposals.

SOCWA's Use of Proposal Material

All material submitted in or with the proposal shall become the property of SOCWA, unless it is clearly marked as proprietary information. SOCWA reserves the right to use any ideas presented in the proposals, without compensation paid to the FIRM. Selection or rejection of the proposal shall not affect this right.

Proposal Development

The cost for developing and submitting the proposal shall be entirely the responsibility of the FIRM.

SELECTION CRITERIA

Proposals will be evaluated on the basis of their response to all provisions of this RFP. The Agency may use some or all of the following criteria in its evaluation and comparison of proposals submitted. The following list of criteria is not intended to be all inclusive and the order is not intended to indicate their relative importance:

- The experience, qualifications and availability of the Proposer's consultant team and, in particular, the Project Manager assigned to the project.
- The experience of the Proposer's team with respect to wastewater piping systems with an emphasis on sludge force mains.
- The Proposer's technical approach and methodology to performing the scope of services will be evaluated based upon completeness, demonstrated capability, responsiveness to the Agency's needs and demonstrated understanding of the work requirements.
- Successful completion of previous work for SOCWA and its member agencies.
- The evaluation will consider the respondent's proposed mechanism for quality control, meeting schedules, method of coordination and cost control and a demonstrated ability to respond rapidly to changes in project requirements. The proposal should identify the individual who will lead QA/QC review teams.
- The organizational structure of the proposed project team.
- Recent references from local clients on similar type work performed by Proposer.
- The proposed effort and fee for completing the scope of services.
- The Proposer's demonstrated ability to meet all of the SOCWA's administrative requirements including insurance, liability, equal opportunity practices and any exceptions taken to the SOCWA's Professional Services Contract.

SELECTION PROCEDURES

Proposals received by SOCWA will be reviewed on the basis of the proposal contents. It is the intent of SOCWA to select the firm based on the proposals. However, SOCWA reserves the right to conduct interviews with one or more firms prior to final selection.

If agreement cannot be reached with the selected FIRM, SOCWA will terminate negotiations with that FIRM and open negotiations with the next ranked FIRM. The compensation discussed with one FIRM will not be disclosed or discussed with another FIRM.

When a final selection and negotiated fee and terms for the contract have been reached, a recommendation for award will be made to the SOCWA Project Committee for approval.

SCHEDULE

- Preproposal Meeting: June 30, 2010
- Final Date for Proposal Submittal: July 14, 2010
- Engineering Committee Review: July 22, 2010
- Approval of Award by Board: August 5, 2010
- Preliminary Design Completion: December 24, 2010