HUMBOLDT BAY MUNICIPAL WATER DISTRICT



Request for Qualifications

Reservoirs Seismic Retrofit Project (3 Tanks) Samoa Peninsula and Korblex, California

Engineering, Design, Environmental Review and Compliance, Permitting, Construction Management and Grant Program Management

A. Invitation

You are invited to submit a Statement of Qualifications (SOQ) and other materials, in accordance with the outline below, to be considered for selection by the Humboldt Bay Municipal Water District (District) to:

- complete a variety of engineering, environmental, and construction management services for the District's Reservoirs Seismic Retrofit Project, and
- 2) assist the District with the administration and management of the FEMA Hazard Mitigation grant which will fund this project.

The deadline to submit a SOQ is 3:00 p.m. on Friday August 28, 2020

B. Categories of Services

The District is seeking a consultant firm or team to provide services necessary to proceed with the seismic retrofit of the District's three reservoir tanks located at the Samoa Peninsula (1) and Korblex Facility (2) near Arcata, California. It is anticipated that a single consultant firm or team will be selected encompassing all the required engineering and environmental disciplines. The disciplines that are required include:

- 1. Project planning and preliminary engineering
- 2. Engineering economic analysis
- 3. Surveying and topographic mapping and engineering
- 4. Geotechnical evaluation and engineering
- 5. Environmental completion of special studies, preparation and circulation of appropriate CEQA document, and support of FEMA's NEPA process
- 6. Permitting preparation of all required permit applications and related work to secure required permits
- 7. Preparation of Plans and Specifications, and cost estimates for project construction
- 8. Engineering and construction management services during bid process and project construction

C. Project Overview

The proposed Project would consist of the design, permitting, bidding and construction oversight for the seismic retrofit of the District's three reservoirs. On Korblex Hill, there are two domestic water (DW) reservoirs, a 1 Million Gallon (MG) capacity, welded steel tank constructed in 1967, and a 2MG welded steel tank constructed in 1996, which is used for disinfection contact time in the treatment process along with storage. The District also has another 1MG welded steel tank also constructed in 1967 located on the Samoa Peninsula and used for storage at that end of the Industrial water (IW) system.

For the 1MG domestic reservoir a follow-up structural inspection was conducted on January 14, 2016. This inspection focused on corrosion, and steel thickness measurements were taken at visibly severe corrosion locations around the roof of the tank. The February 2, 2016 inspection letter reported metal loss on the rafters of up to 50% and stated;

"As discussed in the September report, the current corrosion indicates the tank has reached a critical point in its service life and needs to be addressed soon. Continued corrosion will eventually result in a failure of the roof system."

Given these findings, the District ultimately decided to replace the roof of the reservoir. As part of this roof replacement project, the seismic stability of the reservoir was assessed and structural calculations performed by Paso Robles Tank. It was found that the reservoir did not conform to the new 2016 California Building Code (CBC) seismic requirements and its ability to resist seismic forces was 33% below what would be required for new tank construction. Based on our improved understanding of earthquake forces, the 2016 CBC requires much stricter seismic design requirements based on the anticipated seismic forces at the project location. Humboldt County has some of the largest earthquake risk in California, and correspondingly some of the highest design parameters in the State and the United States. Although formal structural calculations have not been performed on the 1MG Samoa IW reservoir, it was constructed with the same design and at the same time as the Korblex DW reservoir, so the calculations performed on the 1MG Korblex reservoir are directly applicable to the IW Samoa Reservoir.

The roof rafter cross-braces on the 2MG Korblex reservoir will also need to be upgraded to conform to the new seismic code. The cross braces on the 2MG Korblex reservoir are corroding, and the failure of these cross braces greatly affect the seismic stability of this tank. Given the substantial increase in the seismic design parameters in the 2016 CBC update, it is fairly certain the 2MG Korblex DW reservoir will also not resist a design standard earthquake.

D. Funding Sources

Funding for this project will be provided from the Federal Emergency Management Agency (FEMA) and the California Office of Emergency Services (CalOES) via the Robert T. Stafford Emergency Assistance and Disaster Relief Act for a FEMA Hazard Mitigation Program project.

The Project funding is being approved in two phases. Phase I funding is already approved and covers professional costs related to NEPA. Phase II funding covers activities such as permitting, contractor selection and construction. Phase II activities cannot be initiated until Phase II is awarded. This will be done when FEMA provides written notification that the review process is completed, including compliance with the NEPA laws and regulations.

E. Selection Process

The District will establish a Selection Committee to review the SOQ submittals received. The Selection Committee will request a price proposal from the most qualified firm/team that is subject to negotiation of a fair and reasonable price. The District's Board of Directors will approve the final proposal.

F. Work to be Completed

The Consultant shall develop the design, plans, specifications, and cost estimates for this project. Required tasks include:

PHASE I Preliminary Analysis and Investigations

1. Project Management

- 1.1 Attend and document design meetings
- 1.2 Draft correspondence
- 1.3 Manage subcontractors
- 1.4 Maintain project files
- 1.5 Manage and direct overall design and environmental teams

2. Quality Control and Quality Assurance of all work products

3. Grant Administration

- 3.1 Coordinate the FEMA Hazard Mitigation grant administration with FEMA and/or CalOES and District staff
- 3.2 Ensure scope of the project is consistent with scope defined in the grant applications and/or agreements
- 3.3 Ensure compliance with the grant program requirements and funding agreements
- 3.4 Completion of Quarterly Status Reports for submittal to CalOES documenting progress of the project

4. Geotechnical Investigation

- 4.1 Investigation of any necessary borings required to properly design the foundation for the reservoir retrofit
- 4.2 Preparation of geotechnical report detailing the findings of the investigation

5. Preliminary Engineering Design

- 5.1 Prepare preliminary design documents to provide information needed for completion of the NEPA/CEQA process
- 5.2 Propose initial structural analysis of each reservoir, determining the current seismic requirements for each
- 5.3 Design new foundations and the seismic hold down anchors
- 5.4 Analyze the structural stability and design any other retrofits required to resist seismic forces
- 5.5 Create the 60% plans and specifications for the project

6. Environmental

Special Studies - Conduct site specific biological survey, wetlands survey, and sensitive habitat survey, as required for NEPA and CEQA and other necessary permits. It is anticipated that biological, archaeological, and cultural resources studies will be required for both project sites

- 6.2 Cultural Resources Investigation Conduct cultural resources investigation to identify any cultural resources located in or adjacent to the project area
- 6.3 Phase I Investigation Complete a limited Phase I investigation to assess whether it is likely that any hazardous materials or impacted soil or groundwater will be encountered during the construction of the proposed project
- 6.4 CEQA Documentation Prepare the California Environmental Quality Act documentation including an Initial Study, the appropriate CEQA document (which will likely be a Mitigated Negative Declaration), a Mitigation Monitoring Program, and required notices
- 6.5 Studies required by the Coastal Commission, FEMA or CalOES

PHASE II - Final Analyses, Design, and Construction

7. Project Management

- 7.1 Attend and document design meetings
- 7.2 Draft correspondence
- 7.3 Manage subcontractors
- 7.4 Maintain project files
- 7.5 Manage and direct overall design and environmental teams

8. Quality Control and Quality Assurance of all work products

9. Grant Administration

- 9.1 Coordinate the FEMA Hazard Mitigation grant administration with FEMA and/or CalOES and District staff
- 9.2 Ensure scope of the project is consistent with scope defined in the grant applications and/or agreements
- 9.3 Ensure compliance with the grant program requirements and funding agreements
- 9.4 Completion of Quarterly Status Reports for submittal to CalOES documenting progress of the project

10. Permitting

- 10.1 Prepare permit applications, coordinate with and respond to requests of the permitting or regulatory agencies, and acquire all necessary permits
- 10.2 The following permits may be required, as well as others, depending on the final design and regulatory jurisdiction:
 - NPDES Construction permits All reservoirs
 - Coastal Development Permit IW Reservoir

11. Final Project Design

- 11.1 Review utility records or surveys, geotechnical data, and relevant reports to support project scoping and preliminary engineering
- 11.2 Complete necessary surveying
- 11.3 Conduct necessary geotechnical investigations
- 11.4 Develop design documents including plans, specifications, other necessary bid and contract documents & cost estimates at three stages of completion 90% and 100%
- 11.5 Document basis of design

12. Bid Assistance

- 12.1 Distribute and advertise Plans and Specifications for a competitive sealed bid process for project construction
- 12.2 Review and evaluate construction bids for compliance with project specifications. Ensure the low-cost bidder is responsible and responsive (per CA state law), meets the project bond requirements, holds a valid contractor license, is

- registered with the California Department of Industrial Relations, and is not ineligible for participation in federal assistance programs.
- 12.3 Following review, recommend award to District staff and Board of Directors

13. Inspection and Construction Management Services

- 13.1 Provide inspection and construction observation services to ensure contractor meets obligations of the specifications
- 13.2 Develop agendas and minutes for project construction coordination meetings
- 13.3 Respond to Contractor's Requests for Information
- 13.4 Review and assist District with processing legitimate Change Orders
- 13.5 Review and assist the District with processing Pay Requests
- 13.6 Ensure contractor provides as-built drawings and review for adequacy
- 13.7 Prepare contract closeout documents and file Notice of Completion

G. Consultant Selection Schedule

Issue Request for Qualifications:
 SOQ Submittal Deadline:
 Selection Committee review:
 Request proposal from most qualified firm/team:

August 7, 2020
August 28, 2020
September 2, 2020
September 9, 2020

5. District Board approves award: TBD

H. Statement of Qualifications

Firms or teams who are interested in providing the consultant services described above are to submit a Statement of Qualifications (SOQ) **not exceeding 30 pages in length** (not including cover letter and table of contents) that includes the following:

- Identification of prime and sub consultants: Include key personnel (those who will
 provide the majority of the labor hours) and lead persons to be assigned to the project.
 Please be specific about education and background of the key staff as well as current
 and past participation directly with the primary applicant. Short resumes of key
 participants must be included.
- 2. Demonstration of firm/team technical competency and firm/team capacity to complete the required work.
- 3. Provide a minimum of two project descriptions of projects that were completed within the last ten years similar to the Reservoirs Seismic Retrofit Project. Please provide a reference name and contact information for the project owner.
- 4. Demonstration of knowledge of Federal, State and local laws, rules, regulations or ordinances relevant for this project.
- 5. Demonstration of knowledge of FEMA's Hazard Mitigation Grant program as it relates to this project. Identification of CalOES or FEMA grant administration staff with whom firm/team has worked.
- 6. A written description of projects recently completed. Be specific regarding projects that are the same, or similar in nature to what is described in this SOQ. Provide contact data for references. Please cross reference key team members to the listed projects.
- 7. Conceptual approach, and schedule for services requested.
- 8. Present workload and staff availability.
- 9. List any potential conflicts of interest and a strategy for negating them.
- 10. SOQ should be separated and responsive independently to Phase 1 and Phase 2 tasks respectively.

Applicants shall submit five bound copies of their SOQ, one unbound copy, and one electronic pdf copy on a CD or flash drive.

I. Selection Criteria

The District's Selection Committee will evaluate all submitted SOQs in accordance with the criteria stated below. The District reserves the right to request interviews of the top ranked firms. The Selection Committee will decide which applicant will be invited to submit a proposal. The Selection Committee may also elect to select a consultant team based upon the SOQ submittals. Evaluation and selection criteria will include the following:

- 1. Consultant firm or team's qualifications and experience on similar projects, including transmission-level water infrastructure, design of industrial pressure relief appurtenances and demolition of industrial steel structures 20 points
- 2. Qualifications and experience of the project manager and key personnel 20 points
- 3. Consultant's understanding of the project and conceptual approach 20 points
- 4. Consultant's experience with FEMA Hazard Mitigation Grant Program, including working successfully with grant administration staff 20 points
- 5. Consultant Team's present workload and staff availability 5 points
- 6. Consultant Team's ability to meet established project schedule 5 points
- 7. References for prime and key sub consultants 5 points
- 8. Consultant Team's ability to negate any identified conflicts of interest 5 points

J. Submittal Deadline

Applicants who are interested in providing the services for this project are required to submit a Statement of Qualifications no later than **3:00 pm on Friday August 28, 2020**. All SOQs and materials submitted in response to this RFQ will become the property of the District and will not be returned. The District is not responsible for any costs incurred in the preparation of a response to this RFQ. Please submit the SOQ to:

John Friedenbach General Manager Humboldt Bay Municipal Water District 828 7th Street Eureka. CA 95501-1114

Receipt in the above office must be by the deadline regardless of postmark.