

# **REQUEST FOR PROPOSALS FOR PROFESSIONAL SERVICES FOR THE DIVISION OF WATER SECURITY ENHANCEMENTS**

The City of Columbus, Ohio has solicited statements of professional qualifications, and is now soliciting proposals from experienced professional consulting/engineering firms to provide full-service assistance to the City for the design and preparation of construction documents for Security Enhancements for the Department of Public Utilities, Division of Water (DOW).

As noted in the Request for Statements of Qualifications, the Columbus Division of Water generally consists of: three surface water sources; four collector wells; one supplemental supply quarry; one raw water pumping station and pipeline; three water plants; a utilities complex with distribution control center; 25 pressure regulating valve sites; 23 booster stations; 37 finished water tanks; and approximately 3, 500 miles of distribution piping. Pre-submittal tours of the plants and control center will not be conducted at the RFP stage. Potential submitters will not be granted access to these sites.

Project security and confidentiality with respect to Division of Water records is a critical component of this work. All relevant information shall be considered as “Official Use Only (OUO)” and shall be appropriately secured.

The professional Engineering Consulting firm selected to perform this work is expected to provide as a minimum, but not limited to, the following scope of services:

1. Prepare a Master Plan document which will prioritize work to be performed in multiple phases, following the recommendations identified in the Division of Water System Vulnerability Assessment report, prepared in March 2003. As part of the Master Planning process, identify project scope and estimated construction costs for recommended work. Preliminary and detailed design work will be completed in phases based on the prioritization identified in the Master Plan, and upon approval by the City. The extent of detailed design work to be completed as part of this contract is to be as determined by the City. Potential submitters will not be granted access to the Vulnerability Assessment report. Final selected consultant will be granted limited access to the report contents.
2. Develop DOW system-wide security management plan that covers normal operations and various states of emergency alerts that are consistent with the national threat warning system in a graded manner
3. An appropriate level of security shall be identified for each DOW facility, based on its criticality.
4. Review and provide assistance in updating the DOW contractor/vendor visitor policy regarding access to sites and control of information
5. Review and provide assistance in updating the Emergency Contingency Plan (ECP)

6. Evaluate the need for a Central Alarm Station (CAS) and make recommendation for implementation of CAS.
7. Evaluate the need for Water Distribution monitoring and make recommendations for implementation of same
8. Evaluate DOW needs regarding Cyber Security and make recommendations for implementation of same
9. Provide an initial security survey to identify needed maintenance actions to ensure system functionality, and make recommendations on a schedule for future security surveys
10. For any proposed improvements, make recommendations on method of bidding in a secure manner. Note that the initial Request for Statement of Qualifications did not advertise “Design-Build” consulting services, and it is not the City’s intent to utilize this procurement method.
11. Review security related training for employees, make recommendations and provide training as appropriate. Assume that 200 DOW staff members will require overall security training and that 50 DOW staff members will require more detailed security training.
12. Evaluate Security needs for Division of Water GIS Data, which will include coordination with the Consultant performing the GIS Data Conversion Services project. Make recommendations regarding GIS digital information accessibility, including pass codes and restrictive measures. Assist in drafting a policy for GIS Data and provide training for DOW personnel on implementation of this policy.

## **DETAILED DESIGN SERVICE**

The basic services to be provided in the detailed design phase are engineering services necessary to prepare Contract Documents which shall define the construction work identified through the master plan phase of the project. The tasks to be performed in this phase of the project include the following:

1. Prepare Detailed Design Drawings: Detailed design drawings shall be prepared for use in bidding and constructing the proposed improvements and facilities. Drawings shall be prepared using a 24” x 36” format and AutoCAD Version 14, utilizing standard fonts, line types, symbols, shading, cross-hatching, etc. If “custom” formats are utilized, they shall be included on the electronic version of the record drawings.
2. Prepare Project Manual: A project manual shall be prepared to supplement the detailed design drawings. The project manual shall include the notice to bidders, proposal forms, contract forms, proposal and contract bonds, general contract provisions, special contract provisions and affidavits required for Columbus Division of Water construction projects and technical specifications. The technical specifications shall be prepared using the Construction Specifications

Institute standard format.

3. Prepare Construction Cost Estimate: An estimate of probable cost and quantities for construction of the work shall be prepared for each of the four (4) interim reviews stated in item 5. below, and for the final Contract Documents .
4. Assemble and Submit Contract Documents: The detailed design drawings and project manual shall be submitted to the City and Ohio EPA (if applicable) for review and approval. It is anticipated that a maximum of ten (10) copies of Contract Documents will be required for review and approval purposes.
5. Conduct Project Initiation and Review Meetings: An initiation meeting shall be held with the Division of Water's Supply Group and appropriate Division of Water staff to review the project schedule, responsibilities, communications, project understanding, requirements and goals. Four (4) interim review meetings shall be held with the City at the 25, 50, 75 and 99 percent completion stage. The purpose of these interim meetings will be to review the status and results of the engineering work completed to date and to identify and resolve any potential conflicts or problems. Additional meetings shall be held periodically with the City and regulatory agencies as necessary to supplement the scheduled review meetings. A final project meeting shall be held with the City to present the Contract Documents and to review and discuss the final results of the detailed design work.
6. Submittal Review (Civil/Sanitary, Structural, HVAC, Equipment, Electrical, Mechanical and Instrumentation): Shop drawings, diagrams, illustrations, catalog data, schedules, samples and test results which the Contractor is required to submit shall be checked for conformance with the design concept of the project and compliance with the information given in the Contract Documents. Other data and certificates as required by the Contract Documents such as operation and maintenance instructions, schedules, guarantees, bonds and certificates of inspection shall also be reviewed. Such reviews or other actions by the Engineer shall not extend to the means, methods, techniques, sequences or procedures of construction or to safety precautions and programs incident thereto.
7. Chair and Conduct Project Meetings: The pre-construction conference, progress meetings and other job conferences shall be chaired and conducted by the Engineer in company with the City. The schedule and agenda for such meetings and the minutes of the meeting, shall be prepared and distributed by the Engineer.
8. Project Representation: A minimum of one full-time resident project representative shall be furnished to observe the performance of the construction work. The resident project representative shall conduct on-site observations of the construction work, verify performance of test procedures and equipment start-up, maintain job files, prepare daily inspection reports, maintain a set of Contract Drawings with changes noted, review applications for payment with the Contractor and conduct a final inspection of the work in company with the City.
9. Record Drawings: The original Contract Drawings shall be revised based upon information furnished by the Contractor which shall indicate the changes to the

original Drawings. Field orders and change orders, which occur during the construction of the project, shall be noted by the Engineer. After noting the construction changes and field conditions on the Drawings, one set of reproducible mylars and an AutoCAD Version 14 CD-Rom of the revised Drawings shall be provided to the City.