

City of Portsmouth
Portsmouth, New Hampshire
Public Works Department
RFQ #26-14
REQUEST FOR QUALIFICATIONS

ENGINEERING SERVICES
WATER SYSTEM WATER QUALITY OPTIMIZATION STUDY

INVITATION:

Sealed Statement of Qualifications (SOQ), plainly marked RFQ #26-14, “Water System Water Quality Optimization Study” on the outside of the mailing envelope, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, NH 03801 will be accepted until **12:00 pm on October 25 , 2013**.

This Request for Qualifications (RFQ) can be found on the City’s website at <http://www.cityofportsmouth.com/finance/purchasing.htm>.

PRE-PROPOSAL MEETING

There will be a non-mandatory **pre-proposal meeting on Friday, October 11, 2013** at 1:00 p.m. at the Madbury Water Treatment Plant, 60 Freshet Road, Madbury, NH. All firms will have an opportunity to ask questions at this meeting.

FUNDING

This effort will be funded by water enterprise revenues.

PROJECT BACKGROUND/PURPOSE

The City of Portsmouth is a regional water supplier, with a service area that includes customers in the City of Portsmouth including the Pease International Tradeport, as well as the Towns of Greenland, Madbury, New Castle, Newington, and Rye.

The City’s water supplies are drawn from a combination of surface and ground waters. Surface water supply consists of the City owned Bellamy Reservoir located in the Town of Madbury, New Hampshire. Treatment of this water supply is performed at the City’s newly constructed Water Treatment Plant in Madbury. This original treatment facility was constructed in the 1950’s with conventional surface water treatment. It was replaced in 2011 by a new Dissolved Air Floatation (DAF) and gravity media filtration treatment facility capable of supplying a maximum day flow of 4.0 million gallons per day. Upgrades to the reservoir were also performed as part of this project and included the installation of a curtain and mixing system near the intake area. Treated water is combined with water from a combination of three wells located adjacent to the water treatment plant. It is then pumped to Portsmouth through a pipeline, which runs through portions of Madbury, Durham and Newington. The water is re-boosted by pumps located at the Newington Booster Tank.

The City's groundwater supply is provided by a total of nine individual wells. Three wells are located at the Madbury Water Treatment Plant site, three are located within the Pease Tradeport, two are east of I-95 in Portsmouth, and one is located in the Town of Greenland.

The City's water distribution system includes approximately 150 miles of pipe in two pressure zones: the Portsmouth zone (serving all areas except Pease) and the Pease zone. The City also owns, operates, and maintains five water distribution storage facilities at the following locations:

- Newington Booster Station Tank
- Spinney Road Elevated Tank
- Osprey Landing Elevated Tank
- Lafayette Road Tank
- Hobbs Hill Tank

In addition, the NH Air National Guard (NHANG) Elevated Tank is connected to the Pease distribution system, but is not maintained by the City.

Average daily system water production normally ranges between 4.0 to 5.5 million gallons per day. An updated Master Plan of the water system was performed in 2012/2013. This plan included updating the demand projections for the system, providing an analysis of system yields, inspections of the elevated storage tanks and an evaluation of the distribution system. A new hydraulic model was developed as part of this evaluation utilizing Infowater Suite 8.5.

Recommendations from the Master Plan have been utilized by the City to revise its long-term Capital Improvement Plan (CIP). Included in this CIP is funding to study and implement projects related to the Stage Two Disinfection By-Product Rule (DBP). The first phase of this work for FY14 (July 2013 to June 2014) will be to obtain the services of an engineering consultant to conduct a more detailed analysis of the water quality related to DBP compliance.

The selected consultant for this project will identify operational improvements and projects to improve DBP related water quality compliance. This will be accomplished through close coordination with the City's water treatment and distribution operations staff and by analyzing existing data. This work will generally include, but not be limited to, the following:

- Optimize the water system's pre-treatment (reservoir operations), treatment and distribution system operations
- Develop standard operating procedures (SOPs) to assist in the operations and management of the system
- Further develop tools to enable staff to better manage the use of surface versus groundwater supplies in an integrated manner
- Recommend new daily, weekly and monthly reporting mechanisms, as well as real time analysis of system operations which incorporate sustainable practices
- Review and recommend distribution system projects to address DBP related water quality in the collection system (e.g. re-chlorination, water age, tank mixing, tank aeration, etc.)
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ENGAGEMENT OF THE ENGINEER**A. Required Contents of the Statement of Qualifications (SOQ)**

A sealed SOQ, plainly marked RFQ #26-14, "Water System Water Quality Optimization Study" on the outside of the envelope, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, NH 03801 will be accepted until 12:00 pm on October 25, 2013. Five (5) copies of the SOQ shall be submitted and include the following information:

1. Firm (team) Experience (for each firm in the team). Describe relevant experience in each of the following primary areas of focus:

- a. Familiarity with the Portsmouth Water Division's operations
- b. Surface water quality assessment experience
- c. Water treatment system assessments and optimization, especially related to DAF technology
- d. Development of Standard Operating Procedures (SOPs)
- e. Distribution System Water Quality Assessments and Modeling
- f. Integrated system management and reporting capabilities

The firm's experience shall be summarized in a matrix format. In addition, detailed project descriptions of no more than five reference projects containing the majority of the focus areas listed above shall be included. The project descriptions shall be current and limited to a maximum of one full page per project, along with client references and up-to-date contact information (name, title, organization, phone, cell and email).

2. Project Team:

List each member of the proposed Project Team along with their:

- a. Firm affiliation
- b. Area of specialty
- c. Office location and distance to Portsmouth DPW
- d. Total years of experience
- e. Years with current firm
- f. Specific involvement/role in projects used as references

One member of the Project Team must be assigned as the Project Manager that will act as the primary client contact and who shall be involved in day to day management of the Project. All resumes shall be included and limited to a maximum of two pages per team member.

3. The entire submittal, including SOQ, text, charts, diagrams, tables, and resumes shall be **NO MORE THAN 25 PAGES** long (double-sided). The submittals must be submitted only on typed 8½" x 11" paper with a font size no smaller than 12-point.

B. Ranking of Qualifications

Each SOQ will be reviewed and ranked according to the following criteria:

Firm's experience successfully completing similar projects and individual Project Team member experience	Maximum of 15 points
Project Team member experience, location and commitment to project	Maximum of 15 points
References indicating successful projects of this type	Maximum of 20 points
Surface water, water treatment and distribution system assessments and modeling together with integrated management and SOP preparation experience	Maximum of 40 points
Quality of SOQ package	Maximum of 10 points

SCHEDULE AND BUDGET

The project is anticipated to start in November 2013 with the initial analysis to take place during the first three months of the project and a final report due within three months. Level of effort and final schedule will vary based on the negotiated scope and work tasks. The City has a budget of \$50,000 in FY14 funding for this project with additional money available in subsequent years for additional study and implementation.

CITY ROLE

City staff will be responsible for administering the project. Representatives of the City's Public Works Department will provide input and assistance with any necessary field work and review all deliverables from the effort.

SELECTION AND CONTRACT DOCUMENT

Upon review of all responsive SOQs using the criteria outlined above, the City may select up to three (3) firms to submit proposals and interview. Upon selection, the highest ranking firm will be invited to negotiate a Scope of Services and fee with the City. When the contract is executed by both parties, the Consultant will be instructed to commence providing the work outlined in the contract. All information, data, documents, photos, computer records, and other materials of any kind acquired or developed by the consultant pursuant to this project shall be the property of the City of Portsmouth. If the City is unable to reach agreement with the highest ranking firm, the City will enter into negotiations with the next highest ranking firm. The City reserves the right to negotiate directly with the firm(s) selected for additional project work.

RESERVATION OF RIGHTS

The City reserves the right to undertake such investigation as it deems necessary to evaluate the qualifications of the firm and to evaluate the qualifications submitted. Firms may be requested to

execute releases for information. Failure to provide a release upon request will result in disqualification.

The City of Portsmouth reserves the right to reject any or all proposals, to waive technical or legal deficiencies, and to accept any proposal that it may deem to be in the best interest of the City and to negotiate the terms and conditions of any proposal leading to execution of a contract.

ADDITIONAL INFORMATION

Requests for additional information should be directed to Terry Desmarais, City Engineer at (603) 766-1421 or Peter Rice at (603) 766-1416. Purchasing questions shall be directed to Lori MacGinnis at (603) 610-7227.

Electronic copies of the recent Water Supply Master Plan Update are available on the City of Portsmouth website at <http://www.cityofportsmouth.com/publicworks/WaterSystemPlan.pdf>. Electronic copies of pertinent treatment and distribution data is available upon request by emailing Terry Desmarais, City Engineer at tldesmarais@cityofportsmouth.com. Requests for additional information should be directed to Terry Desmarais, City Engineer at (603) 766-1421 or Brian Goetz, Deputy Director of Public Works at (603) 766-1420. All questions shall be submitted by 4:30 PM on Friday, October 18, 2013.

Addenda to this request for qualifications, if any, including written answers to questions, will be posted on the City of Portsmouth website at the City's web site at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to firms. Firms submitting qualifications should check the web site daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification.

INDEMNIFICATION AND INSURANCE REQUIREMENTS

The Contract will require the Consultant to agree to pay on behalf of and hold harmless the City of Portsmouth for all claims arising in whole or in part from its work on behalf of the City. Consultant will be required to maintain insurance in such form as will protect the Consultant from claims and liabilities for damages for bodily injury, including accidental death, and for property damage, which may arise from operations under this contract. Consultant shall also be required to maintain professional liability insurance. Amounts and coverages shall be subject to contract negotiations