

City of Portsmouth
Portsmouth, New Hampshire
Public Works Department
RFP #52-14
REQUEST FOR PROPOSAL

DESIGN ENGINEERING SERVICES
PEASE WASTEWATER TREATMENT FACILITY HEADWORKS UPGRADE

INVITATION

Sealed Proposals, plainly marked “RFP #52-14, Pease Wastewater Treatment Facility Headworks Upgrade – Proposal” 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 2:30 pm on March 6, 2014. In a separate sealed envelope within the proposal envelope, enclose a cost proposal for the proposed scope of work, plainly marked “RFP #52-14, Pease Wastewater Treatment Facility Headworks Upgrade – Cost Proposal”.

MANDATORY PRE-PROPOSAL MEETING

There will be a mandatory pre-proposal meeting on February 21, 2014 at 9:00 a.m. at the Pease WWTF on Corporate Drive. All firms will have an opportunity to ask questions at this meeting.

FUNDING

This effort will be funded by wastewater enterprise revenues and bonds.

PROJECT BACKGROUND/PURPOSE

The City of Portsmouth is a regional provider of wastewater collection and treatment services to the City of Portsmouth, Town of New Castle and portions of the Towns of Greenland and Rye. The City has two wastewater treatment facilities (WWTF), the 4.8 MGD wet weather Peirce Island WWTF and the 1.2 MGD Pease International Tradeport WWTF. The Peirce Island WWTF services downtown Portsmouth and the client communities. The Pease International Tradeport WWTF serves the collection system for the Pease International Tradeport.

The Pease International Tradeport area was at one time the Pease Air Force base. The Air Force base was repurposed for commercial and industrial use in the 1990's. Parts of the original air force base were maintained and are still used by the NH Air National Guard. Zoning on Pease includes airport, airport industrial, industrial, business/industrial, natural resource protection and NH Air National Guard. There are number of large commercial/industrial facilities that contribute significant flow to the WWTF including Lonza Biologics, Inc. and Craft Brew Alliance (Redhook Ale Brewery). The overall make-up of wastewater flow is commercial/industrial in nature.

The Pease WWTF was originally constructed in the 1950's for the Pease Air Force Base. The WWTF was turned over to City ownership and for operation and maintenance through the

authority of the Pease Development Authority in the 1990's. Since then the WWTF has been operated and maintained by the City.

The original WWTF process included preliminary treatment (headworks including screening and aerated grit removal), raw sewage lift pumps, primary clarification, intermediate lift pumps, secondary trickling filters, secondary clarification, disinfection and discharge via an open pipe outfall to the Piscataqua River. The outfall is shared with the Town of Newington WWTF. Sludge management included primary and secondary digestion and sludge drying beds. The WWTF underwent a major upgrade in 1997. Improvements consisted of preliminary treatment headworks modifications including replacement of the bar screen with channel grinder and addition of a headworks superstructure; primary clarifier drive replacement and effluent launder covers; decommissioning of the trickling filters and construction of new sequencing batch reactors for secondary treatment; conversion of the secondary clarifiers to equalization basins; and conversion of one anaerobic digestion tank to a sludge storage tank. This upgrade also included the addition of a new laboratory/administration building, standby generator, gravity belt press for sludge dewatering and other miscellaneous improvements. The outfall was upgraded in 2000 with the addition of multiport diffusers. A septage receiving station including receiving equipment, and storage tanks were added in 2005.

The current WWTF process stream consists of preliminary treatment (headworks including screening and aerated grit removal), raw sewage lift pumps, primary clarification, intermediate lift pumps, secondary treatment and clarification with sequencing batch reactors, equalization, disinfection with chlorine, dechlorination and discharge via the multi-port diffuser outfall to the Piscataqua River. Ammonium hydroxide is added to the secondary effluent prior chlorination as a temporary measure to resolve disinfection interferences. Sludge management includes sludge storage, dewatering by belt filter press and disposal at the Turnkey landfill in Rochester, New Hampshire. The WWTF was designed to handle an average day flow of 1.2 MGD, maximum day flow of 3.345 MGD and peak flow of 4.0 MGD. Daily average flow for the Pease WWTF was 0.6 MGD for 2010 through 2012.

Most of the major components of the original WWTF have been upgraded. However, there remain a number of original systems and components that remain and are in need of repair or replacement. The City of Portsmouth recently completed a Facilities Evaluation of the WWTF, which can be seen on the City's wastewater website at www.portsmouthwastewater.com under the Resources link. The evaluation recommends an upgrade of certain portions of the facility that have not been previously upgraded. In particular, this project will address the headworks, including but not limited to, septage facilities, influent screening, grit removal and handling and raw sewage lift pumps. The conceptual plan includes design and construction of a new headworks building to house a mechanical screen, aerated or other grit removal system, wetwell and raw sewage pumps in the area of the site adjacent to the existing headworks. The final scope of the work will be determined based on the engineering cost estimates and available budget.

SCOPE OF WORK

The City anticipates the scope of work will be comprehensive and include all tasks necessary to develop preliminary and final designs and document for construction. The scope of work is anticipated to include, but not be limited to, the following:

- Project kickoff meeting with the City of Portsmouth for proper identification of project scope and alignment of expectations.
- Prepare preliminary design report with selected design alternative and preliminary drawings. Consultant shall present up to three alternative layouts/configurations of the proposed Headworks for the City's consideration.
- Prepare plans and specifications, including design review meetings at 60 percent and 90 percent plans completion.
- Prepare and update project cost estimates at preliminary design report, 60, 90 and 100 percent milestones.
- Provide all field data collection services including survey, geotechnical, permitting, etc. as required for design.
- Obtain plans and specification approval from the Department of Environmental Services and any other necessary entities.
- Prepare, submit and obtain approval for all permits.
- Prepare and forward 25 copies of bidding documents including plans and Project Manual including front end contractual documents and technical specifications for the City's distribution.
- Provide bidding and award related engineering services including conducting a pre-bid meeting, preparing addenda, reviewing bids and making a recommendation for award.
- Construction administration and oversight services may be requested by the City but are not part of this SOQ.

The final scope of work will be negotiated with the selected consultant prior to execution of a contract.

AVAILABLE INFORMATION

The following information will be made available to the consultant(s), at the pre-proposal meeting, for the purpose of developing the proposal:

- "Pease Wastewater Treatment Facility Evaluation", Underwood Engineers, Inc., January 2014.
- Drawings entitled "Pease Development Authority, Pease International Tradeport, Portsmouth, NH, Record Drawings, Wastewater Treatment Plant Improvement Program", Underwood Engineers, Inc., Portsmouth, NH, November 20, 1997
- Selected drawings from plan set entitled "City of Portsmouth, New Hampshire, Record Drawings, Portsmouth Wastewater Facilities Upgrade", Underwood Engineers, Inc., Portsmouth, NH, November 25, 2005

ENGAGEMENT OF THE ENGINEER**A. Required Contents of the Proposal**

A sealed proposal, plainly marked “RFP #52-14, Pease Wastewater Treatment Facility Headworks Upgrade – Proposal” on the outside of the envelope, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, NH 03801 will be accepted until 2:30 pm on March 6, 2014. Five (5) copies of the proposal 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 City of Portsmouth Wastewater Division’s design and operations
- b. Headworks assessment with focus on selection of most appropriate equipment
- c. WWTF upgrade design and construction with emphasis on Headworks improvements

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
- 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. Project Understanding and Approach:

The Consultant(s) shall state in succinct terms their understanding of what is required by this proposal. Describe in narrative or outline form the consultant’s approach and technical plan for accomplishing the work of this RFP including the following:

- Describe the sequential tasks to be used to accomplish this project
- Indicate all key deliverables
- Describe the responsibilities of each person on the project team
- List the portion of the work to be subcontracted
- Include a list of information required or tasks to be completed by City staff.

Project Schedule: Provide a schedule for completing each task in the Scope of Work, including deadlines for preparing project deliverables.

4. Man-Hour Level of Effort:

Provide a proposed man-hour level of effort in table format coordinated with the anticipated list of tasks to complete the work. The man-hour level of effort shall be comprehensive and inclusive of the total man-hours to complete the project. Do not include any fee associated with the level of effort in the proposal.

In a separate sealed envelope within the proposal envelope, enclose a cost proposal for the proposed scope of work, plainly marked “RFP #52-14, Pease Wastewater Treatment Facility Headworks Upgrade – Cost Proposal”.

B. Ranking of Proposal

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

- | | |
|---|----------------------|
| a. Firm’s experience successfully completing similar projects and individual Project Team member experience | Maximum of 30 points |
| b. References indicating successful projects of this type | Maximum of 20 points |
| c. Understanding and approach to project | Maximum of 40 points |
| d. Quality of proposal package | Maximum of 10 points |

SCHEDULE

The project is anticipated to start in March 2014 with the design to be completed by the end of August 2014. Final schedule will vary based on the negotiated scope and work tasks.

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. The primary contact at the City will be Terry Desmarais, City Engineer Water and Sewer Divisions.

SELECTION AND CONTRACT DOCUMENT

Upon review of all responsive proposals using the criteria outlined above, the City may select up to three (3) firms to interview. Following interviews, the Cost Proposal of the highest ranking firm will be opened and the firm will be invited to negotiate a final 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 proposal of the firm and to evaluate the proposal 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 negotiate additional work including, but not limited to, preliminary design, final design and construction engineering services.

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 by phone at (603) 766-1421 or by email at tldesmarais@cityofportsmouth.com or Paula Anania, Chief Plant Operator at (603) 427-1553. Addenda to this request for proposal, 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 proposals 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 coverage shall be subject to contract negotiations