



CITY OF EAST PROVIDENCE
DIVISION OF WATER UTILITIES
SPECIFICATIONS
PROFESSIONAL LEAK DETECTION SERVICES
REQUEST FOR PROPOSALS
RFP EP21/22-09

BID OPENING ON TUESDAY, APRIL 26, 2022 AT 11:00 AM

I. INTRODUCTION AND BACKGROUND

The City of East Providence (City) requests proposals from qualified Vendors (Contractors) for Professional Leak Detection Services to be performed in accordance with Section II of this document. The survey will cover the entirety of the City's distribution system consisting of approximately 200 miles of water distribution mains. The intent of this survey is to reduce unaccounted for water by pinpointing leaks in the distribution system, reporting leaks, and working with City personnel to confirm leaks have been resolved after repair efforts have been performed.

WATER SYSTEM DESCRIPTION

The entire City is served by the City's water distribution system. The City purchases all of its water from the Providence Water Supply Board (PWSB) whose source is the Scituate Reservoir. As such, the City does not own or operate a water supply source or treatment facility.

The City's distribution system consists of approximately 200 miles of transmission and distribution water mains, with pipe sizes ranging from 2-inch in low density roads to a 42-inch transmission main which transports water from the PWSB. The system is divided into a high and low service area. The system is supported by a pumping station, a 6-million gallon storage tank, and a 1-million gallon elevated storage tank, located in an area of the City known as Kent Heights. The low service area includes the 6-million gallon storage tank. The high service area is supported by the 1-million gallon elevated tank. The pumping station boosts the pressure of water from the Low Service System to the High Service System. Both tanks are used to provide equalization storage for periods of peak demand, to provide flow for fires, and to provide an emergency supply of water.

II. SCOPE OF SERVICES

The Scope of Work outlined within this request for proposals calls attention to certain objectives and general work items anticipated. However, the City recognizes the competence of qualified professional firms and encourages them to utilize their professional judgment and expertise in defining their approach and comprehensive Scope of Work. As such the Contractors are encouraged to review the Scope of Services and to make independent suggestions and recommendations in their proposal if it is felt that it will best meet the objectives of this RFP and best serve the City's needs.

1. General
 - a. Contractor will be required to provide at least one leak detection specialist with a thorough understanding of water system leak detection, leak detection technology, and reporting. All required leak detection equipment, manpower, tools, and vehicles required to perform the Correlation Leak Detection survey shall be provided by the Contractor.
 - i. The City will provide one staff member to operate water system infrastructure and assist with leak detection.
2. Leak Detection Correlation Survey General Procedures
 - a. Shall be performed during normal business hours beginning at 7:30 AM and ending at 2:30 PM Monday through Friday (excluding City holidays).
 - b. Use sound intensifying equipment capable of detection small amounts of leakage.
 - c. Correlating accelerometers shall be placed directly on every hydrant, accessible main line valves and select curb valves to perform a correlation between the points of contact for leak location. The maximum interval between points of contact shall not exceed 500 feet. The Contractor shall then select if needed additional mainline valves, hydrant valves, service connections or hydrant ports to accurately pinpoint the location of every leak found.
 - d. Every correlation performed (not just those that indicate a potential leak) must be saved and submitted to the Town of Stoughton Superintendent Water Department to review the data at a later time.
 - e. All leak site pinpointing shall be performed with a correlation system utilizing 2 or more sensors and verified with a sonic ground sounding technique.
 - f. The leak shall be classified as to estimate water loss and severity. Located leaks shall be marked with paint at the site of the leakage and classify the leakage by the following classifications:
 - i. (A) Low Less than 5 gallons per minute.
 - ii. (B) Medium 5 to 15 gallons per minute.
 - iii. (C) High Greater than 15 gallons per minute
 - g. The Contractor shall be required to maintain records for a period of not less than seven (7) years.
3. Leak Detection Equipment
 - a. The Contractor at minimum shall provide the following equipment for

duration of the leak detection correlation survey.

- i. Portable Electro-Sonic leak detector capable of detecting, centering and pinpointing water leak sources. (Provide equipment Manufacturer & Model Number(s) used.)
- ii. An electric pipe locator to be used for determining the location of services, to be used when conditions require, pinpointing leak sources.
- iii. A Ferro-Magnetic valve box locator to be used to locate buried and/or paved-over main line valve covers and service taps.
- iv. Leak Noise Correlator: Each proposer shall make available a Leak Noise Correlator to be used to aid in pinpointing of leak sources where Electro-Sonic pinpointing may be inhibited due to unusual conditions. (Provide the equipment Manufacturer & model Number(s)).

4. Reports

- a. The City will require daily, weekly, and a final leak detection report and the preparation of a leakage progression map. The leakage progression map shall plot each leak on a map of the distribution system by color code for severity and number to match individual leak reports.
- b. Daily
 - i. Contractor will submit a diagrammatic site leakage report for each suspected leak in given day. Each leakage report shall include a copy of the leak correlation graph, estimated leakage amount, and estimated leak type.
 - ii. Leak repairs will be initiated while the survey is in progress – if requested by the City, the contractor will re-check repaired leaks to confirm the leak repair.
- c. Weekly
 - i. At the end of each week the Contractor will submit a Weekly Summary which includes the following information:
 - Number of miles of Mains surveyed.
 - Number and classification of leaks detected and pinpointed that week.
 - All progress totals to date – miles of main surveyed, number and classification of leaks detected and pinpointed and an estimate of water loss to date.
 - Miles of Survey remaining (adjusted weekly)
 - Estimated completion date (adjusted weekly)
- d. Final Report
 - i. At the completion of the survey work, the Contractor will submit the completed progression map of the portions of the water distribution system that have been surveyed throughout the entire project.
 - ii. The Contractor shall prepare a Final Report that will contain legible copies of the Leak Reports of all the leaks that were detected and pinpointed for the duration of the leak detection and pinpointing survey.

- iii. The Final Report shall include a breakdown of the sources of leakage (i.e., number of leaks on the mains, main line valves, services, hydrants, blowoffs, etc.), cumulative total of estimated leakage for each leak source, and a total estimated water loss identified during these efforts.

IV. RESPONSE TO RFP

Four (4) written proposals shall be submitted to the City of East Providence, Room 103, Attn: Luis A. Olmo, Acting Procurement Specialist, 145 Taunton Avenue, East Providence, RI 02914 no later than **TUESDAY, APRIL 26, 2022 AT 11:00AM.**

Proposals shall contain the following as a minimum.

1. Approach and methodology to institute the project as outlined within this RFP.
2. Past Experience and References for Similar Projects: Provide references (including name and contact information for the client) and summaries for five (5) similar projects.
3. Project Team: The members of the Contractor's project team shall be recognized leaders in their field. The Contractor's Project Manager shall be identified by name, and the proposal will clearly outline the Contractor's intentions regarding the Project Manager's availability for all required on-site work and for any review and coordination meetings that will be necessary to successfully complete the project. Each proposal will include a list of the proposed project team members, including sub-Contractors, and clearly identify their respective roles on the project and their anticipated level of effort (as percent of total project effort) and the hourly billing rate. Each proposal shall include resumes of key team members with their home office locations.
4. Detailed schedule for each task proposed in order to satisfy each element of the project. The scheduling shall allow for City staff review at distinct intervals.
5. The respondent shall include a total, not to exceed fee for the services proposed for each element to successfully complete this project. Fee proposals shall also include fees associated with work for subcontractors. All printing, travel, and other miscellaneous costs shall be included in the total not to exceed fee.

V. SELECTION PROCESS AND CRITERIA

Proposals will be reviewed by City staff from the Division of Water Utilities. This is a RFP; responses will be evaluated on the basis of the relative merits of the proposal. The City reserves the right to schedule interviews following the submission of the proposals. The selected firm shall be chosen based on its qualifications, strength of its proposal, and associated fees. The following criteria will be used to evaluate the responses:

1. Company Qualifications and Experience

Specialized experience is required in a series of work areas. Proposals must clearly demonstrate full knowledge, understanding, and experience in the methods, techniques and guidelines required for the performance of the required work. All elements within this factor are of equal importance. The CONTRACTOR must indicate specific experience in the required area.

2. Personnel Qualifications, Availability, and Level of Effort

Specialized experience is required of the project personnel proposed to undertake the work assignments. Proposals must clearly demonstrate the capability, academic background, training, certifications and experience of the proposed personnel. The availability and level of effort (including hourly rate) of the proposed staff is also of critical importance and must be demonstrated. Specific project experience relevant to this scope of work must be demonstrated, as well as specific company experience.

3. Performance Record of Firm

A list of references of at least three (3) recent contracting officers on projects of a similar magnitude and complexity; references must include telephone number and affiliation.

4. Project Understanding and Approach

The CONTRACTOR must demonstrate a comprehension of the role and function of this project in meeting the current and future needs of the CITY.

In addition to the understanding of the scope and approach, the CONTRACTOR must demonstrate the following which will be considered in the selection:

- a. Knowledge of current issues and state of the art in the relevant technical areas.
- b. Experience demonstrated on similar projects.
- c. Working knowledge of the geographic area as evidenced by prior work experience in the region.
- d. A demonstrated expertise and ability for rapid turn-around and flexibility on short-term projects.

- e. The capability to effectively direct multiple simultaneous work assignments.
- f. An ability to integrate and utilize interdisciplinary teams effectively on assignments requiring a variety of skills and expertise from in-house resources.
- g. The ability to provide the necessary skills and expertise from in-house resources.
- h. Methods for assuring product quality, cost control, delivery schedule and project oversight.

VI. GENERAL CONDITIONS

1. The City reserves the right to reject any and all proposals, to waive any informality, to request interviews of Contractors prior to award and to select and negotiate the Contractor services in the best interest of the City.
2. The City reserves the right to accept all or part of any proposal and to negotiate a contract for services and cost with the selected Contractor.
3. The Contractor shall provide all necessary personnel, sub-contractors, materials and equipment to perform and complete all work under this proposal.
4. All original documents and drawings shall become the property of the City after completion of the Contractor's work.
5. The Contractor shall be prepared to commence work immediately upon execution of a contract with the City.

Any questions regarding the RFP may be directed in writing to Jim Marvel, Superintendent of Water Utilities Division jmarvel@eastprovidenceri.gov no later than **TUESDAY, APRIL 12, 2022 AT 4:00PM.**