



Folsom City Council Staff Report

MEETING DATE:	11/9/2021
AGENDA SECTION:	Consent Calendar
SUBJECT:	Resolution No. 10743 – A Resolution Authorizing the City Manager to Execute an Agreement with Water Systems Optimization, Inc. to Complete the Water Distribution System Leak and Loss Detection Survey
FROM:	Environmental and Water Resources Department

RECOMMENDATION / CITY COUNCIL ACTION

The Environmental and Water Resources Department recommends the City Council pass and adopt Resolution No. 10743 - A Resolution Authorizing the City Manager to Execute an Agreement with Water Systems Optimization, Inc. to Complete the Water Distribution System Leak and Loss Detection Survey.

BACKGROUND / ISSUE

The Environmental and Water Resources (EWR) Department is requesting that Water Systems Optimization, Inc. provide Leak and Loss Detection Surveys of the City’s Water Distribution System, including the Ashland area and the development South of US-50. The City’s water distribution system consists of approximately 400 miles of water pipes and is comprised of transmission mains, distribution mains, service lateral connections (approximately 23,000), blow-offs, fire hydrants, backflow preventors, valves, and other appurtenances. The City’s water pipes range in size from 1-inch service lines to 24-inch transmission mains. The previous comprehensive leak detection survey was performed on the City’s water system in the Spring of 2020.

The work will consist of performing two acoustic leak and loss detection surveys on the City’s water distribution system (including the Ashland area and the area South of US-50) in order to identify leak locations in need of repairs. The first leak and loss detection survey and associated report will be performed during this winter (December 1, 2021 through March 1,

2022). The second leak and loss detection survey and associated report will be performed during the next winter (December 1, 2022 through March 1, 2023).

The City issued a Request for Proposals (RFP) to provide Leak and Loss Detection Surveys of the City's Water Distribution System. Because of their knowledge and experience with Leak and Loss Detection services, Water Systems Optimization, Inc. has proven to be uniquely qualified in having the technical expertise to provide these services. City staff recommends authorizing the City Manager to execute an agreement with Water Systems Optimization, Inc. for professional services for the Leak and Loss Detection of the City's Water Distribution System.

POLICY / RULE

In accordance with Chapter 2.36 of the Folsom Municipal Code, supplies, equipment, services, and construction with a value of \$62,657 or greater shall be awarded by City Council.

ANALYSIS

The two leak and loss detection surveys will include a comprehensive survey of the City's water system. All detected leaks (both city-side leaks and customer-side leaks) will be documented and the leak flow rates will also be estimated. Whenever a leak is found, the field project team will document identifying factors about the leak such as address and location, pressure zone, leak type, estimated volume of leak (gallons per minute), cost of water (dollar per acre feet), priority rating, and other factors associated with record keeping.

At the conclusion of each survey, Water Systems Optimization, Inc. will deliver a final report to the City that details the findings of all the leak locations, loss rates, and any other pertinent information for the City to successfully make the necessary repairs to the water system. The City will be responsible for repairing the leaks that are discovered.

The City issued the RFP on September 16, 2021 for the Water Distribution System Leak and Loss Detection Survey and received five proposals. EWR staff evaluated the proposals based on the consultant's project understanding of the background and requirements of the project, relevant project experience, the qualifications and experience of the consultant's team, and their responses to a supplemental questionnaire. Because of their knowledge, understanding of the project, experience with leak and loss detection services, and total project costs, Water Systems Optimization, Inc. was selected to provide these services.

During the review of the submitted proposals, EWR staff identified Water Systems Optimization, Inc. as being the most qualified, had the most experience, and would provide the best value to the City. American Leak Detection and Consulting Engineering, Inc. did not submit all of the answers to the supplemental questionnaire, which was included in the RFP, and therefore their proposals were considered to be non-responsive. M.E. Simpson, McKim & Creed and Water Systems Optimization, Inc. provided responsive proposals. Below is a ranking of the proposals prior to reviewing costs.

Company	Score (out of 200)
American Leak Detection ¹	68
Consulting Engineering, Inc. ¹	115
M.E. Simpson Co., Inc.	167
McKim & Creed	171
Water Systems Optimization, Inc.	188

Table 1. Consultant ranking prior to reviewing the costs of the proposals.

After reviewing the proposals based on the understanding of the work, experience with similar work, the project team, and answers to the supplemental questionnaire, EWR staff reviewed total project costs. Proposal costs from each consultant were required to be submitted under a separate sealed envelope. A table showing the companies that submitted proposals and their fees is shown below.

Company	Fee for First Leak and Loss Survey	Fee for Second Leak and Loss Survey	Total Fee
American Leak Detection ¹	\$82,140	\$88,300	\$170,440
Consulting Engineering, Inc. ¹	\$104,800	\$112,500	\$217,300
Water Systems Optimization, Inc.	\$123,422	\$132,188	\$255,610
McKim & Creed	\$148,800	\$168,000	\$316,800
M.E. Simpson Co., Inc.	\$371,700	\$401,200	\$772,900

Table 2. Consultant project costs associated with the RFP.

Based on the consultant’s understanding of the background and requirements of the project, relevant project experience, the qualifications and experience of the consultant’s team, their responses to a supplemental questionnaire, proposal costs, and overall best value to the City, EWR staff proposes to utilize Water Systems Optimization, Inc. for these services for a not-to-exceed amount of \$255,610.

FINANCIAL IMPACT

Sufficient funds have been budgeted in the Water Operating Fund (520) for this agreement in the FY 2021-22 budget. The second survey will be included in the Water Operating Fund (Fund 520) during the budget process for FY 2022-23. The Environmental and Water Resources Department recommends that the contract be awarded to Water Systems Optimization, Inc. for a not-to-exceed amount \$255,610.

¹ Proposals were deemed non-responsive because they did not answer each of the questions in the supplemental questionnaire.

The Regional Water Authority (RWA) applied for, and received, a Regional Leak Detection and Repair Project grant through the California Department of Water Resources. Participating RWA member agencies include the City of Sacramento, the City of Folsom, Sacramento Suburban Water District, and Placer County Water Agency. The total grant amount is for \$1,000,000 with each participating agency receiving up to \$250,000. The total City cost share is \$224,864 for a total project cost of \$474,864, which includes the grant amount. The local cost share may include eligible project costs incurred after January 1, 2015. Since 2015, but not including this contract, the City has spent approximately \$604,000 related to leak and loss detection.

ENVIRONMENTAL REVIEW

This project is exempt from environmental review under the California Environmental Quality Act, Section 15301 "Existing Facilities."

ATTACHMENT

Resolution No. 10743 - A Resolution Authorizing the City Manager to Execute an Agreement with Water Systems Optimization, Inc. to Complete the Water Distribution System Leak and Loss Detection Survey

Submitted,

Marcus Yasutake, Director
ENVIRONMENTAL AND WATER RESOURCES DEPARTMENT

RESOLUTION NO. 10743

A RESOLUTION AUTHORIZING THE CITY MANAGER TO EXECUTE AN AGREEMENT WITH WATER SYSTEMS OPTIMIZATION, INC. TO COMPLETE THE WATER DISTRIBUTION SYSTEM LEAK AND LOSS DETECTION SURVEY

WHEREAS, the City has identified this project as a priority to maintain integrity and operation of the water distribution system; and

WHEREAS, this project consists of two Leak and Loss Detection Surveys of the City's Water Distribution System, including the Ashland area and the development South of US-50.

WHEREAS, the Environmental and Water Resources Department issued a Request for Proposals on September 16, 2021 for the Water Distribution System Leak and Loss Detection Survey; and

WHEREAS, Water Systems Optimization, Inc. by reason of their past experience, abilities for performing these types of services, and overall best value for these services, is qualified to perform the required water distribution system leak and loss detection survey; and

WHEREAS, the Water Distribution System Leak and Loss Detection Survey was included in the Water Operating Fund (Fund 520) for FY 2021-22, in the amount of \$123,422; and

WHEREAS, sufficient funds are budgeted and available in the FY 2021-22 Water Operating Fund (Fund 520); and

WHEREAS, the second survey of the Water Distribution System Leak and Loss Detection Survey will be included in the Water Operating Fund (Fund 520) during the FY 2022-23 budget process; and

WHEREAS, the agreement will be in a form acceptable to the City Attorney:

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Folsom authorizes the City Manager to execute an agreement with Water Systems Optimization, Inc. to complete the water distribution system leak and loss detection survey for a not-to-exceed amount of \$255,610; and,

PASSED AND ADOPTED this 9th day of November, 2021, by the following roll-call vote:

AYES: Councilmember(s):
NOES: Councilmember(s):
ABSENT: Councilmember(s):
ABSTAIN: Councilmember(s):

Michael D. Kozlowski, MAYOR

ATTEST:

Christa Freemantle, CITY CLERK