



Agenda Report

21-762

Agenda Date: 8/24/2021

REPORT TO COUNCIL

SUBJECT

Action on Amendment No. 2 to the Agreement with HSQ Technology for the MISER Supervisory Control and Data Acquisition (SCADA) System

COUNCIL PILLAR

Deliver and Enhance High Quality Efficient Services and Infrastructure

BACKGROUND

On December 3, 2019, City Council approved an agreement with HSQ Technology to upgrade the core hardware and software of the MISER Supervisory Control and Data Acquisition (SCADA) System. The MISER SCADA System is proprietary to HSQ Technology and is used to monitor and control critical operations of the water, sewer, and storm drain systems.

The core system upgrade was completed ahead of schedule in December 2020. It was an essential step to enable reliable and continuous monitoring of field instruments and equipment that collect data from remote sites and perform a variety of tasks. More importantly, the core system upgrade provided the preparatory infrastructure for the next phase of the City's modernization plan to increase the level of automation and expand equipment-monitoring capabilities of the MISER SCADA System.

The next phase of the modernization plan is to connect 34 remote water sites, seven sewer sites, and one storm site to the new fiber optic cable. This phase of the project will consist of:

- First, conducting the necessary site surveys to document equipment requirements, labor requirements, and cost for each remote site. The equipment enabling the communication between each remote site and the master radio located at the Corporation Yard is collectively called a remote terminal unit (RTU).
- Second, performing the actual work, starting with several pilot sites and then based on pilot results, continuing with remaining sites, in a prioritized sequence.

DISCUSSION

Staff is requesting authority to amend the agreement with HSQ Technology to increase compensation by \$76,893 for a revised not-to-exceed maximum compensation of \$574,481. This will enable staff to continue working with HSQ Technology to perform first phase of the project, as described above. HSQ Technology will perform the site surveys for a fixed fee of \$69,902, plus a contingency amount of \$6,991.

Upon completion of the survey, HSQ Technology will deliver an upgrade report covering:

- Each RTU's existing condition
- Each RTU's upgrade requirements
- Fiber termination location and requirements for each site
- RTU upgrade analysis for all sites
- Cost breakout for each site
- Prioritization of several pilot sites and then all remaining sites
- Other recommended improvements to ensure return on investment

The first part of this next phase will provide the roadmap and cost to continue the modernization plan. The remaining work is to connect each remote site to a state of the art, fast, reliable, redundant, and secure, fiber optic ring, while retaining the ability to communicate over the existing radio network, providing for multiple layers of redundancy. Staff will return to City Council with recommendations for this work after HSQ Technology completes the site surveys and provides staff with the upgrade report.

This recommendation meets the single/sole source criteria in Section 2.105.160(b)(2) of the City Code "When required to ensure operation or function to match other products with respect to repair, expansion, or completion of a system, existing structure or program currently in use by the City, including, but not limited to, utility and technology purchases required to achieve interoperability with existing systems or programs."

ENVIRONMENTAL REVIEW

This project being considered is exempt from the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines section 15301, "Existing Facilities," as the activity consists of the repair, maintenance or minor alteration of existing facilities involving no or negligible expansion of the use beyond that presently existing.

FISCAL IMPACT

The Water & Sewer Utilities Department has sufficient budget in the SCADA Replacement and Process Improvement Project in the Water Utility Capital Fund to cover the cost associated with this Amendment.

COORDINATION

This report was coordinated with the Information Technology Department, Silicon Valley Power, the Department of Finance and the City Attorney's Office.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall Council Chambers. A complete agenda packet is available on the City's website and in the City Clerk's Office at least 72 hours prior to a regular meeting and 24 hours prior to a special meeting. A hard copy of any agenda report may be requested by contacting the City Clerk's Office at (408) 615-2220, email clerk@santaclaraca.gov <<mailto:clerk@santaclaraca.gov>> or at the public information desk at any City of Santa Clara public library.

RECOMMENDATION

Authorize the City Manager to execute Amendment No. 2 to the Agreement with HSQ Technology for the MISER Supervisory Control and Data Acquisition (SCADA) System to increase the amount of the

agreement by \$76,893 for a revised not-to-exceed maximum compensation of \$574,481.

Reviewed by: Gary Welling, Director, Water & Sewer Utilities Department

Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. Amendment No. 2 to the Agreement with HSQ Technology