



City Council Report

City Council Meeting: September 24, 2013

Agenda Item: 3H

To: Mayor and City Council
From: Martin Pastucha, Director of Public Works
Subject: Modify Agreement with Beavens Systems Incorporated for Water and Wastewater Supervisory Control and Data Acquisition (SCADA) System Upgrade, Installation, and Maintenance

Recommended Action

Staff recommends that the City Council authorize the City Manager to negotiate and execute a first modification to Professional Services Agreement #9246 (CCS) in the amount of \$331,785 with Beavens Systems Incorporated, a California-based company, to provide additional upgrades, installation, software maintenance, and training on the Supervisory Control and Data Acquisition (SCADA) system for water and wastewater facilities. This will result in a 5 year amended agreement with a new total amount not to exceed \$1,137,573, with future year funding contingent on Council budget approval.

Executive Summary

The City has used the services of Beavens Systems Incorporated for the past three years to provide upgrades, installation, maintenance, and training to its SCADA system for water and wastewater facilities. SCADA is an automated computer control system that allows remote operation and control of system equipment and facilities.

A first modification to Professional Services Agreement #9246 (CCS) is proposed to further upgrade and continue maintenance that is required to fully integrate all SCADA systems that exist at water and wastewater facilities. A first modification to this agreement in the amount of \$331,785 would extend the term by two years and increase the total contract amount from \$805,788 to \$1,137,573.

Background

On February 25, 2008 the City entered into Agreement No. 1583 with Beavens Systems Incorporated to provide SCADA system design and improvements for the Moss Avenue Pumping Station (MAPS) and Santa Monica Urban Runoff and Recycling Facility (SMURRF) facilities to enhance operation efficiencies for these two sites.

On September 16, 2008, Council approved an amendment to Agreement No. 1583 to include the purchase of the required hardware and software for SCADA implementation at these two facilities.

On July 27, 2010, Council approved the selection of Beavens Systems Incorporated to upgrade, install, maintain, and provide training on the SCADA system for water and wastewater facilities. Beavens Systems was selected following the issuance of a Request for Qualifications for professional services in May 2010. Five responses were received and Beavens was selected based on its technical competence, staffing capability, project timeliness, price, quality control, and cost control and reporting. Beavens Systems is also located nearest to Santa Monica among the responding vendors, reducing response time and cost for emergencies. Professional Service Agreement #9246 (CCS) was executed in the amount of \$805,758 for upgrades to the SCADA system in fiscal year 2010-11, and maintenance of the system in fiscal years 2011-12 and 2012-13.

Discussion

With the success of the SCADA system implemented at MAPS and SMURRF, staff developed a master plan to upgrade the remaining water and wastewater facilities to a SCADA system. A critical part of this plan was to integrate all existing SCADA components onto the same operating system platform for improved communication. The plant operators at the Arcadia Water Treatment Plant now have the ability to control some remote sites with "real-time" remote monitoring and 24-hour surveillance.

In continuation of the upgrades provided to date, tasks to be performed by Beavens Systems under this agreement modification at a cost of \$131,785 include:

- Procurement and upgrading the SCADA software to the latest version for Water Treatment facility, MAPS, SMURRF, and all remote sites.
- Design and installation of additional SCADA screens for overrides at all locations.
- Installation of additional sensors and controls for new and upgraded Water Treatment equipment at Arcadia facility, San Vicente Generator, and at Charnock Well Field.

- Design and installation of monitors and controls for finished water pumps and Zenon Microfiltration system at SMURRF.
- Design and installation of additional alarms and SCADA screens for MAPS.
- Design and installation of Wonderware screen at MAPS.
- Installation of a terminal server to provide full integration of all water and wastewater facilities which includes creating of user accounts and Historian Database setup.

Additionally, Beavens Systems would provide ongoing software maintenance for the SCADA system at water and wastewater facilities at a cost of \$100,000 per year, including software patches, service packs, system customizations, and technical support. The requested maintenance budget is appropriate based on past years' experience. Although the system resides on City servers, it is not supported by the City's Information Systems Department (ISD). Given the wide array of remote sites and locations controlled through this SCADA system, as well as the critically important need to maintain communications and control functions of the water and wastewater systems, Beavens' capability to enter the system remotely and effect repairs expeditiously has proven very beneficial in the past.

Given the project-specific knowledge and experience obtained by Beavens Systems Incorporated during the past three years, staff recommends a first modification to the agreement for continued maintenance and upgrades to water and wastewater's SCADA system be awarded to Beavens Systems Incorporated.

Financial Impacts & Budget Actions

The first agreement modification to be awarded to Beavens Systems Incorporated is \$331,785, for an amended agreement total not to exceed \$1,137,573. Funds in the amount of \$131,785 are available for upgrades in the FY 2013-14 Capital Improvement Program budget in the following accounts:

C259015.589000	\$ 72,225
C314022.589000	<u>\$ 59,560</u>
TOTAL	\$131,785

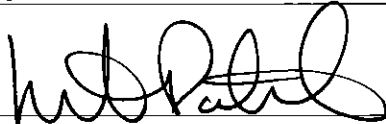
The remaining \$200,000 is to provide ongoing software maintenance of the SCADA system at a cost of \$100,000 per fiscal year. Funds in the amount of \$100,000 are available in the FY 2013-14 operating budget in the 25671 (Water) and 31661 (Wastewater) divisions. The modification will be charged to the following accounts:

25671.560010	\$ 50,000
31661.560010	<u>\$ 50,000</u>
TOTAL	\$100,000

Budget authority for subsequent budget years will be requested in each budget for Council approval. Future funding is contingent upon Council approval and budget adoption.

Prepared by: Gil Borboa, P.E., Water Resources Manager

Approved:



Martin Pastucha
Director of Public Works

Forwarded to Council:



Rod Gould
City Manager