



STAFF REPORT

AGENDA NO: 8j

MEETING DATE: November 4, 2019

To: Honorable Mayor and City Council

Date: November 4, 2019

From: Syed Murtuza, Director of Public Works – (650) 558-7230

Subject: Adoption of Resolutions Authorizing Professional Services Agreements with The EDCCO Group and Telstar Instruments for the Supervisory Control and Data Acquisition (SCADA) System Services Related to the City's Utility Infrastructure System for \$375,000

RECOMMENDATION

Staff recommends that the City Council adopt the attached resolutions authorizing professional services agreements with The EDCCO Group, Inc. (EDCCO) and Telstar Instruments, Inc. (Telstar) for the maintenance of the City's SCADA System in a cumulative amount of \$375,000.

BACKGROUND

The Public Works Department's SCADA System was commissioned in 2003 and has been in service for over 15 years, continually operating, 24 hours per day. The only upgrade during this time period was to the systems central computer system or Human Machine Interface (HMI), which is located at the Public Works Corporation Yard. The SCADA system provides operations' staff with the ability to remotely monitor and control the City's potable water, wastewater collections, and stormwater facilities. The potable water pump stations are equipped with local intelligence to operate the pumps based on the corresponding reservoir levels. The wastewater and stormwater pump stations are controlled based on their local wet well levels. While the pump stations operate independently, the SCADA system utilizes the HMI to monitor the 21 sites throughout the city and sends alarms to operators when conditions are outside of pre-arranged set points.

Burlingame's Mission Control SCADA System operates on a 24/7/365 basis. Maintaining an efficient SCADA system is critical and requires specialized skills in programmable logic controls (PLCs), plus hardware and software diagnostics. Although the City has an Instrumentation Mechanic position within the department, this position is mainly utilized for oversight of the central computer system (HMI) and maintenance of the pump stations. The technician coordinates with the department's Maintenance Electrician, Automotive Mechanics, and consultants appropriately, after executing trouble-shooting techniques within the scope of knowledge. However, for extensive and in-depth programming, system integration, and industrial level instrumentation work, the City utilizes outside consultant expertise.

DISCUSSION

The City currently utilizes two vendors who specialize in providing SCADA services and have in-depth knowledge in programmable logic and the software (Wonderware) that operates the City's SCADA System. Each of these vendors has a team of staff, including system integrators, computer programmers, radio technicians, and industrial control electricians with years of industry specific knowledge related to their field. Additionally, both companies have a long track record of providing successful SCADA services to the City and other municipalities, which allows them to efficiently troubleshoot and recommend improvements to Burlingame's system. EDCCO has provided services to the City since 2012, and Telstar since 2013. Both vendors play an intricate role in the maintenance and operation of the City's system.

The current agreements with the vendors will be expiring in the near future, and the department would like to establish three-year agreements, with two additional one-year terms, based on the following scope of work:

- **EDCCO SCADA Services:**
 - 24-Hour emergency response to communication failures, historian data loss, and hardware failures.
- **Telstar SCADA Services:**
 - Scheduled service calls, hardware and software upgrades, server maintenance, communication failure investigations, historian data loss recoveries, and hardware failures analysis. In addition, ongoing system analysis in order to recommend, design, and implement system-wide upgrades and improvements.

Staff has negotiated a three-year service agreement with EDCCO Group in an amount not to exceed \$75,000 and similarly negotiated a service agreement with Telstar Instruments for three years in an amount not to exceed \$300,000. Below are the cost breakdowns year by year for both vendors.

Vendor	Year 1	Year 2	Year 3	Totals (not to exceed)
The EDCCO Group	\$25,000	\$25,000	\$25,000	\$75,000
Telstar Instruments	\$100,000	\$100,000	\$100,000	\$300,000

FISCAL IMPACT

The total combined estimated cost for both service agreements for a period of three years is \$375,000. There are adequate funds available in the FY 2019-20 Water, Sewer, and Stormwater Operation budgets to cover the costs for the first year. Funding for future years will be included in future budgets.

Exhibits:

- Resolution for EDCCO Service Agreement
- Resolution for Telstar Service Agreement

- EDCCO Professional Services Agreement
- Telstar Professional Services Agreement