



Legislation Text

File #: 13-0420, **Version:** 1

TO:

Honorable Mayor and Members of the City Council

THROUGH:

David N. Carmany, City Manager

FROM:

Vince Mastrosimone, Interim Director of Public Works
Raul Saenz, Utilities Manager

SUBJECT:

Professional Services Agreement with Control Automation Design, Inc. in the amount of \$79,750 for Computer Programming Services for the Water Division's Supervisory Control And Data Acquisition System.

WAIVE FORMAL BIDDING, APPROVE

RECOMMENDATION:

Staff recommends that the City Council:

- a) Waive formal bidding per Manhattan Beach Municipal Code 2.36.130 - Professional Services; and
- b) Approve a Professional Services Agreement with Control Automation Design, Inc. in the amount of \$79,750 to perform computer programming services necessary to upgrade the City's Supervisory Control and Data Acquisition system (SCADA).

FISCAL IMPLICATIONS:

Funds are budgeted in the FY2013-2014 Public Works Department's Capital Improvement Project (CIP) budget as follows: Wastewater Fund in the amount of \$122,700 and Water Fund in the amount of \$338,200. Expenditures related to this Professional Services Agreement do not reflect the full budgeted cost for this Capital Improvement Project. Remaining funds will be used to cover installation of Ethernet/IP radios at the eighteen potable water, wastewater and stormwater facilities to transmit data from these sites to the two central Supervisory Control and Data Acquisition system computers.

BACKGROUND:

The SCADA system operates on a centralized computer platform that monitors and controls the City's nine potable water, seven wastewater and two stormwater facilities through Programmable Logic Controllers (PLC) located at each facility. The central computer monitors the Programmable Logic Controllers in real-time, and automatically sends commands that activate, modulate and deactivate equipment at each of the facilities, thus allowing the facilities to meet the demands of potable water, wastewater and stormwater management. The central computer also gathers data on overall system operations, allowing the Plant Operator to monitor and control facility operating processes.

DISCUSSION:

The current Supervisory Control and Data Acquisition software operating systems, operating logic and computer hardware were installed in 2005. Since that time, operating and Supervisory Control and Data Acquisition related software updates and improvements have evolved to the point where the current software no longer being supported by the manufacturers. All of the central computers have exceeded their useful life and are incapable of supporting the latest computer software developments. Project related computer hardware and software specifications and costs will be determined in the preliminary stages of the project. Additionally, significant “bugs” from the original design will be addressed as part of the operating logic upgrade in order to assure system operating reliability.

Control Automation and Design, Inc. will perform all computer programming necessary to upgrade the Supervisory Control and Data Acquisition system. The central computers will be updated to the City standard operating computer system. Additionally, updated Supervisory Control and Data Acquisition system Interface software will be installed to take advantage of programming improvements, including remote access which will allow Plant Operators to monitor and control the system from anywhere, thus allowing for improved routine and after-hours emergency responses.

Control Automation Design, Inc. has an established record of contracted programming services, general maintenance, and repairs of the City’s Supervisory Control and Data Acquisition system. Consequently, Control Automation Design, Inc. has developed a full operating and programming knowledge of the computer programs and computer Operating Systems that uniquely define the City’s Supervisory Control and Data Acquisition system. In addition, they have an intimate understanding of how the eighteen potable water, wastewater and stormwater facilities operate on a day to day basis. This knowledge and understanding of the City’s Supervisory Control and Data Acquisition system and field operations eliminates all of the preliminary design work, effectively reducing the time required to perform the programming needed to upgrade the system by at least one third of the time over a competitor with no previous institutional knowledge. Given Control Automation Design, Inc.’s unique qualifications with respect to the City’s Supervisory Control and Data Acquisition system, and consistent with Manhattan Beach Municipal Code 2.36.130 - Professional Services, Staff is recommending that this Professional Services Agreement be exempt from formal bidding.

All of the Supervisory Control and Data Acquisition system related computer software and hardware (computers, monitors, alarms, printers, modems and keyboards) needed to upgrade the central operating systems located at the Public Works Yard and Block 35 Reservoir, in addition to that needed to gain remote access to the Supervisory Control and Data Acquisition system, will be purchased by the City for installation by Control Automation Design, Inc.

CONCLUSION:

Staff recommends that the City Council:

- a) Waive formal bidding per Manhattan Beach Municipal Code 2.36.130 - Professional Services; and
- b) Approve a Professional Services Agreement with Control Automation Design, Inc. in the amount of \$79,750 to perform computer programming services necessary to upgrade the City’s Supervisory Control and Data Acquisition system.

Attachment:

1. Agreement for Professional Services Control Automation Design Inc.