



City of Woodland

REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: December 1, 2009

SUBJECT: SCADA System Implementation, Project No 06-09; Adopt Findings for Designated Materials

Report in Brief

Kennedy Jenks was selected by the City to prepare plans and specification for the installation of a Supervisory Control and Data Acquisition (SCADA) System on existing City wells. This will enable City staff to utilize the wells more efficiently while maximizing production from the wells with better water quality.

Pursuant to Section 3400(b) of the Public Contract Code, City staff requests that the City Council make findings that specify a designated flow meter, pressure transmitters, level transmitters, nitrate analyzer, power monitor, computer interface, radio system, programmable logical controller (PLC, solid state electronic chips) and electrical panels as indicated in exhibit "A". This will establish uniform, complete, and compatible SCADA specifications City-wide which will facilitate the use of consistently reliable, dependable, cost efficient and feasible products throughout the City.

Staff recommends that the City Council adopt findings pursuant to Public Contract Code Section 3400(b) set forth in the attached Resolution to authorize the City to specify the designated SCADA equipment listed in Exhibit "A."

Background

In 2006, Westin Engineering Inc prepared a SCADA Master plan for the City. This plan includes a description of the existing system and a strategy to achieve a fully modernized SCADA water distribution system. The SCADA system will help improve the operation of the water distribution system and enhance regulatory compliance, capacity management, and security maintenance of the system. The main focus of the SCADA Master Plan was to define how to integrate the City's entire system, capture process data for analysis, increase system efficiency, reduce personnel labor costs, improve alarm notification to operations personnel and increase response time efficiency.

On September 1, 2009, the City Council authorized bid advertisement and approved the plans and specifications for the SCADA Project. In order for bidders to complete their bid documents, the City needs to define if there are any specific requirements that are necessary so they are all bidding on the same scope and specifications. This adoption of findings is required by the Public Contract Code before the bid can be advertised. The intent of these findings is to provide for standardizing of equipment, supplies, and parts, and for the reduction of maintenance costs, training, and inventory requirements. By standardizing products, the City ends up with a higher quality and easier to maintain system with a lower lifetime cost.

Discussion

The new SCADA System will include selection menus which will be used to manage well controls. Such features would include time schedule, water quality, energy management, well alternation, well drawdown monitoring and well efficiencies. It will consist of a control system, an antenna, a radio transceiver, wiring conduits, power monitor and a computer interface on each well. The system will also include a trouble shooting structure for diagnosing future problems, including the capacity for the system to be expanded in the future to incorporate additional utilities as necessary. The proposed SCADA System can also be used to monitor actual water-production costs with additional equipment that can be added as needed.

Over time, some of the City's SCADA products have proven to be more desirable than others. The most desirable products with the highest quality and reliability have, in practice, become standards. Standardizing certain equipment and materials simplifies operator control, increases repair efficiency and generally reduces costs.

Public Contract Code Section 3400 prohibits the designation of any specific brand or trade name without allowance for substitution of an "or equal". The Public Contract Code does, however, provide for an exception if the local agency makes findings that the designation was made in order to match other products in use on particular completed public improvements.

Pursuant to Public Contract Code Section 3400, staff offers the following findings in support of the recommendation to pre-designate the specific brand or trade name of the select items included on the attached Exhibit "A":

- Experience has shown those items listed on Exhibit "A" provide superior quality and increased reliability by withstanding normal wear and tear and occasional adverse conditions.
- Uniformity of supplies and equipment provides for ease of installation, operation, and maintenance by reducing work effort and cost.
- Standardizing supplies and equipment, particularly those publicly visible, provide aesthetic appeal and positive city image.
- Standardizing equipment simplifies and reduces parts inventories. Reducing inventory parts reduces cost and saves time in maintaining the inventory.
- Standardized equipment promotes continuity of service by providing operators familiarity with use and operation of the item.

Fiscal Impact

This project is fully funded by the Water Enterprise Fund; the total estimated cost of construction is approximately \$1.6 million. The budgeted amount for construction as approved in the Capital Budget on June 10, 2008 is \$1,675,000.

Public Contact

An issue of the “Woodland Water News” prepared by the Utility Engineering Division has been a source of public communication; it discusses on-going and future projects. This is being distributed to City water customers in their utility bills. The City Council agenda was posted.

Alternative Courses of Action

1. Adopt findings pursuant to Public Contract Code Section 3400(b) set forth in the attached Resolution to authorize the City to specify the designated SCADA equipment listed in Exhibit “A.”
2. Give staff direction to compile additional supporting materials and return information to Council at a later date.

Recommendation for Action

Staff recommends City Council approve Alternative No. 1.

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Reviewed by: Doug Baxter
Principal Civil Engineer

Reviewed by: Greg Meyer
Director of Public Works

Mark G. Deven
City Manager

Attachments: Exhibit A