

# **City of Grand Island**

Tuesday, May 14, 2013 Council Session

### Item G-13

#2013-136 - Approving Maintenance Services for Supervisory Control and Data Acquisition (SCADA) Programming at the Wastewater Treatment Plant

Staff Contact: John Collins, P.E. - Public Works Director

## **Council Agenda Memo**

From: Marvin Strong PE, Wastewater Plant Engineer

**Meeting:** May 14, 2013

**Subject:** Approving Maintenance Services for Supervisory Control and

Data Acquisition (SCADA) Programming at the Wastewater

**Treatment Plant** 

**Item #'s:** G-13

**Presenter(s):** John Collins PE, Public Works Director

#### **Background**

On March 14, 2013 notice was published in the Grand Island Independent requesting Statement of Qualifications for the Supervisory Control and Data Acquisition (SCADA) Programming for the Wastewater Division of the Public Works Department. Additionally, six (6) contracting firms and four (4) plan rooms were notified with an advertisement for qualifications submission.

The Wastewater Division of Public Works is currently implementing new plant control philosophies in ongoing operations optimization development. One element in the operations development is the Supervisory Control and Data Acquisition (SCADA) system integral to plant functions. The SCADA system is interactive to nearly every device within the facility. The Plant Operations Engineer is observing the need to develop the programming uniquely to facility functions.

#### **Discussion**

On March 29, 2013 the submitted Statement of Qualifications were received from three (3) firms; Interstate Industrial Instrumentation, Inc. of Omaha, Nebraska, Huffman Engineering, Inc. of Lincoln, Nebraska; and Dakota Hogback Automation of Littleton, Colorado.

This automation, process control, and system integration services maintenance support, at the option of the City, may be renewed annually for a period of five (5) years from the award date.

Upon evaluation of the qualifications submitted Public Works staff is recommending Interstate Industrial Instrumentation, Inc. of Omaha, Nebraska be the first selected firm, with Huffman Engineering, Inc. of Lincoln, Nebraska to be secondary should Interstate Industrial Instrumentation, Inc. not be available to respond in a reasonable time frame. The SCADA system

is a complex network of integrated systems with elements of computer programming, base stations, ethernet, and fiber optic networks, complex databases, and human-machine interface screens. City staff routinely maintains the physical aspects of the system, and relies on outsourced expertise for software and programming interfaces.

The Plant Operations Engineer will evaluate current automation standards, reviewing all aspects of division's current standards for potential improvements, but with a particular focus on the areas of organization, procedure, value rational, reporting, software, modeling, data acquisition, inventory, process, reliability, preventive, predictive, and labor efficiencies. The Plant Operation Engineer will provide recommendation for implementable measures for Wastewater Division to improve and/or streamline Automation.

Both Interstate Industrial Instrumentation, Inc. of Omaha, Nebraska and Huffman Engineering, Inc. of Lincoln, Nebraska will work directly with the operations engineer to configure programming implementation of recommended initiatives; assist in technical questions, provide repair and troubleshooting support. Configuration services shall be negotiated based on time, material, and travel for the specific task(s) defined, and approved by the Public Works Director or Manager of Engineering Services.

#### **Alternatives**

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

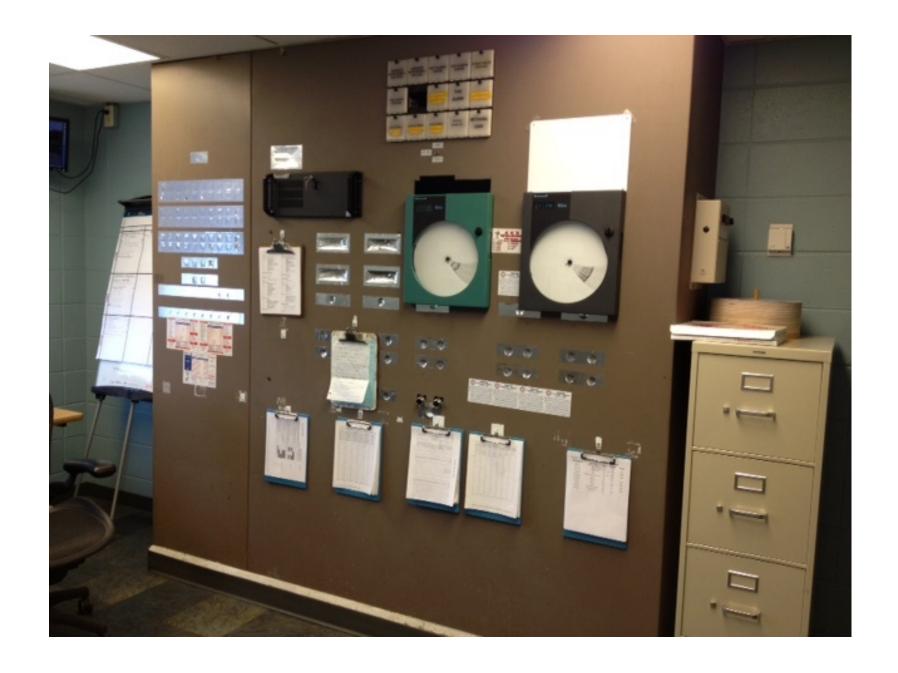
- 1. Move to approve a resolution
- 2. Refer the issue to a Committee.
- 3. Postpone the issue to future date.
- 4. Take no action on the issue.

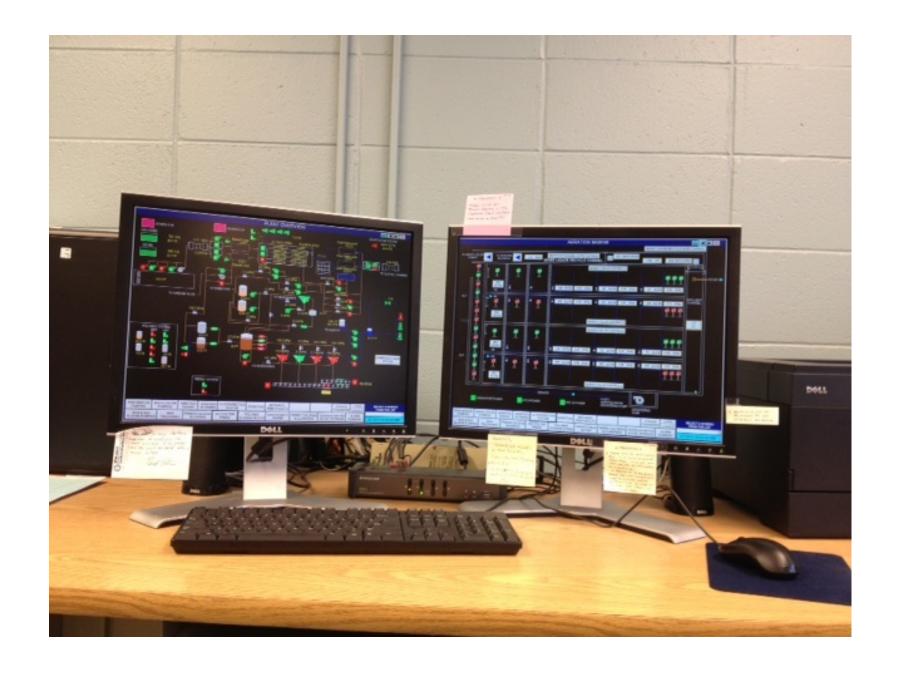
#### Recommendation

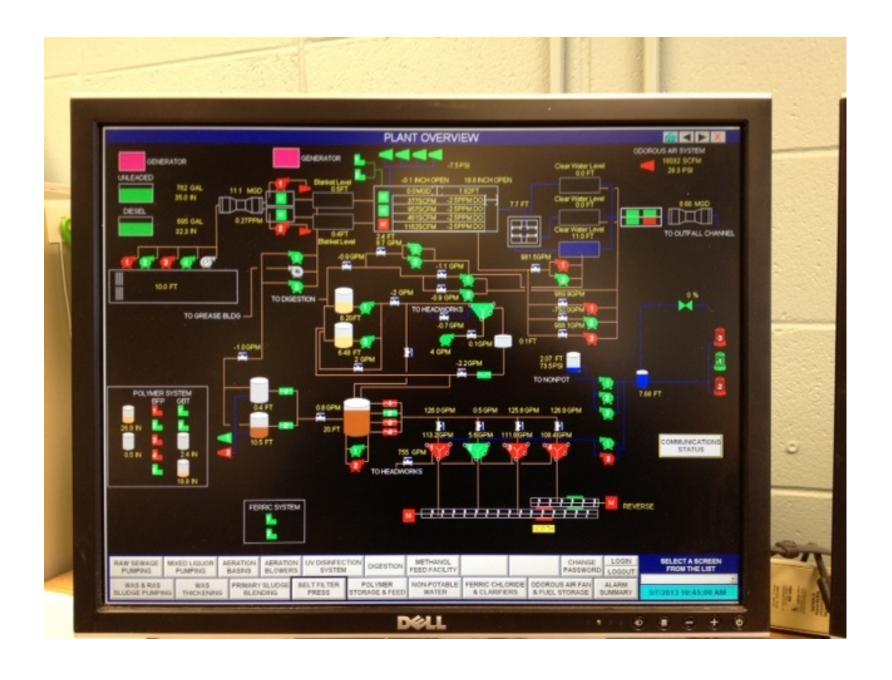
City staff is recommending the programming, and interface development is awarded to Interstate Industrial Instrumentation, Inc. of Omaha, Nebraska as first selected firm, with Huffman Engineering, Inc. of Lincoln, Nebraska as secondary selected firm, during the operations development of the plant improvement projects.

#### **Sample Motion**

Move to approve authorizing maintenance service for SCADA system programming, and interface development for up to five (5) years, renewed on an annual basis to Interstate Industrial Instrumentation, Inc. of Omaha, Nebraska as first selected firm, with Huffman Engineering, Inc. of Lincoln, Nebraska as secondary selected firm.







#### RESOLUTION 2013-136

WHEREAS, on March 14, 2013 notice was published in the Grand Island Independent requesting Statement of Qualifications for the Supervisory Control and Data Acquisition (SCADA) Programming for the Wastewater Division of the Public Works Department; and

WHEREAS, the Wastewater Division of Public Works is currently implementing new plant control philosophies in ongoing operations optimization development; and

WHEREAS, the Plant Operations Engineer is observing the need to develop the programming uniquely to facility functions; and

WHEREAS, the Wastewater Division is requesting up to five (5) years, renewed annually at City's option in maintenance service for the SCADA systems programming, and interface development; and

WHEREAS, the maintenance service will provide programming configuration, assist in technical question, provide repair and troubleshooting support; and

WHEREAS, Interstate Industrial Instrumentation, Inc. of Omaha, Nebraska will be the first selected firm, with Huffman Engineering, Inc. of Lincoln, Nebraska to be secondary should Interstate Industrial Instrumentation, Inc. not be available to respond in a reasonable time frame.; and

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that such maintenance service with Interstate Industrial Instrumentation, Inc. of Omaha, Nebraska will be the first selected firm, with Huffman Engineering, Inc. of Lincoln, Nebraska to be secondary should Interstate Industrial Instrumentation, Inc. not be available to respond in a reasonable time frame is hereby approved.

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Adopted by the City Council of the City of Grand Island, Nebraska, May 14, 2013.

	Jay Vavricek, Mayor	
Attest:		
RaNae Edwards, City Clerk		

Approved as to Form 

Ebruary 12, 2013 

City Attorney