

# AGENDA MEMORANDUM

Future Item for the City Council Meeting of December 20, 2016 Action Item for the City Council Meeting of January 10, 2017

- DATE: December 5, 2016
- TO: Margie C. Rose, City Manager
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FROM: Dan Grimsbo, Interim Director of Water and Utilities DanG@cctexas.com (361) 826-1718

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> > Engineering Construction Contract O.N. Stevens Water Treatment Plant Fluoride Feed System Improvements (Capital Improvement Program)

# CAPTION:

Motion authorizing the City Manager, or designee, to execute a construction contract with J.S. Haren Company of Athens, Tennessee in the amount of \$1,073,000 for the O.N. Stevens Water Treatment Plant Fluoride Feed System Improvements for the Total Base Bid, Additive Alternate No.1, and Allowance. (Capital Improvement Program)

# PURPOSE:

The purpose of this agenda item is to obtain authority to execute a construction contract for the O.N. Stevens Water Treatment Plant Fluoride Feed System Improvements for the Total Base Bid, Additive Alternate No. 1 and Allowance.

**<u>CIP Description</u>**: O.N. Stevens Water Treatment Plant Fluoride Feed System Improvements

The existing Fluoride feed system at O.N. Stevens Water Treatment Plant consists of three outdoor doubled-walled polyethylene bulk storage tanks and two polyethylene day tanks and pumps. The fluoride feed system has experienced failures of the various feed system components. This project provides for replacement of existing equipment with two new bulk

storage tanks, a new exterior day tank and new peristaltic pumps mounted on skids and a new steel pre-engineered building to house pump skids. Additional work will include rehabilitation of injection points for Clearwell No. 1 and Clearwell No. 2 and modernization of the plant fluoride injection control and monitoring system to improve the optimization and control of fluoride addition with flow-paced control.

## **BACKGROUND AND FINDINGS:**

The O.N. Steven Water Treatment Plant (ONSWTP) feeds hydrofluosilicic acid (fluoride) into the finished water upstream of the clearwells to help prevent tooth decay for the customers. The existing fluoride system consists of three outdoor double-walled polyethylene bulk storage tanks, and two polyethylene day tanks and pumps located in a fiber reinforced polymer (FRP) enclosure. This system was recommended by the Texas Department of State Health Services. However, the fluoride feed system is currently inoperable due to the failure of various feed system components such as the metering pumps, day tank scales, and instrumentation, and a temporary fluoride feed system has been installed to feed fluoride in water treatment.

This project is intended to replace the existing system with a new updated system to improve the system reliability, operator safety and access for proper operation and maintenance. In order to maximize the value of existing assets, the project involves re-using the existing concrete containment area and replacing the aged mechanical components with new equipment.

The project was developed with a Base Bid and one (1) Additive Alternative as follows:

**Base Bid:** consists of improvements to fluoride treatment facilities including the containment and storage structures, chemical feed and injection equipment, instrumentation and controls, supervisory control and data acquisition (SCADA) and the electrical service.

Additive Alternate: provides a new concrete injection vault for water treatment train 2. As a costsaving measure, the Contractor will first attempt to repair and re-use the existing injection point. If, after excavation and inspection, it is concluded that the injection point cannot be re-used, a new concrete injection vault will have to be constructed.

On November 9, 2016, the City received proposals from three (3) bidders and the respective bids were as follows:

CONTRACTOR	TOTAL BASE BID	ADDITIVE ALTERNATE NO. 1	ALLOWANCE*	TOTAL BASE BID, ADD ALT NO. 1, & ALLOWANCE
J.S. Haren Company Athens, TN	\$933,000	\$110,000	\$30,000	\$1,073,000
Pepper Lawson Waterworks, LLC The Woodlands, TX	958,000	110,000	30,000	1,098,000
Associated Construction Partners, Ltd. Boerne, TX	1,255,000	30,000	30,000	1,315,000
Engineer's Opinion of Proba Allowance)	916,000			

\*Includes an allowance of \$30,000 for all bidders for unanticipated utility repair/relocation

The City's consultant, LNV, Inc. analyzed J.S Haren's proposal and recommended the project be awarded to J.S. Haren Company. Based on a review of J.S. Haren's experience and resources, J.S Haren Company is qualified to provide the construction services for the project.

### ALTERNATIVES:

- 1. Authorize the execution of the construction contract.
- 2. Do not authorize the execution of the construction contract. (Not Recommended)

#### **OTHER CONSIDERATIONS:**

The City's construction engineer and the consultant engineer will determine whether or not the Additive Alternate No.1 and Allowance are needed during the course of construction.

#### **CONFORMITY TO CITY POLICY:**

Conforms to City Fiscal Policy.

#### **EMERGENCY / NON-EMERGENCY:**

Non-Emergency

### **DEPARTMENTAL CLEARANCES**:

Utilities Department

### FINANCIAL IMPACT:

Operating Revenue		Capital	Not applicable	
Fiscal Year 2016-2017	Project to Date Expenditures	Current Year	Future Years	TOTALS
Line Item Budget (CIP)		\$1,100,000		\$1,100,000
Future CIP		200,000		200,000
Encumbered / Expended Amount				
This Item		1,073,000		1,073,000
Future Anticipated Expenditures This Project		225,800		225,800
BALANCE		\$1,200		\$1,200
BALANCE		φ1,200		φ1,200

Fund(s): Water CIP #14

Comments: This project requires approximately 210 days for construction with anticipated completion in August 2017. The construction contract will result in the expenditure of an amount not to exceed \$1,073,000.

### **RECOMMENDATION:**

City Staff recommends approval of a construction contract with J.S. Haren Company of Athens, Tennessee in the amount of \$1,073,000 for the O.N. Stevens Water Treatment Plant Fluoride Feed System Improvements for the Total Base Bid, Additive Alternate No.1, and Allowance.

# LIST OF SUPPORTING DOCUMENTS:

Project Budget Location Map Presentation Form 1295