

MEMORANDUM

To: Mayor and City Council
From: Kumar Gali, P.E., Assistant Director of Public Works Kent Collins, P.E., Director of Public Works
Date: December 13, 2022
Reference: Consider approval to enter into professional engineering services agreement with Plummer Associates, Inc. for programming and configuration services of Supervisory Control and Data Acquisition system and Programming Logic Controls at City's water and wastewater facilities, as budgeted through Water and Sewer undesignated retained earnings, in the amount of \$108,100.00; and authorizing the City Manager to sign all necessary documents.

2040: Sustainable Government

Introduction:

The purpose of this agenda item is to seek approval from City Council for professional engineering services agreement with Plummer Associates, Inc for programming and configuration of Supervisory Control and Data Acquisition (SCADA) system and Programming Logic Controls (PLC) at various City's water and wastewater facilities.

Background:

Public Works uses SCADA system daily for operations of water and wastewater facilities. The system is also used for monitoring and collecting the performance data from pumps, motors, level detectors, chemical analyzers, and standby generators. This performance data will be used for scheduling annual maintenance or for replacement of the equipment. SCADA system also sends out alerts and warnings to operations staff regarding any equipment malfunction.

As part of the existing Sandy Lake Lift Station reconstruction project, Felix Construction is installing new SCADA system and PLC equipment at various City's water and wastewater facilities. Plummer Associates will program and configure the PLC equipment at various City's water and wastewater facilities per daily operations and monitoring requirements. Plummer Associates will also perform PLC data mapping to support SCADA monitoring and alarming. The system will be developed to comply with Texas Commission on Environmental Quality (TCEQ) requirements for alarming and remote notifications, to assist in reduction of possible violations.

Benefit to the Community:

The community expects safe and efficient water supply and sewer collection services through application of "Smart City" resource management. The services in this contract will allow Public Works staff to make proactive decisions on maintenance and replacement schedules and address equipment malfunctions immediately. Historical data collection will allow for documenting key measurements and will also allow for improved forecasting.

Legal Review:

The City Attorney has reviewed and approved the standard professional services contract.

Fiscal Impact:

The fiscal impact of this agenda item is \$108,100.00, funded through Water and Sewer undesignated retained earnings.

Recommendation:

The Public Works Department recommends approval of this contract.