



Legislation Text

File #: 2019-0433, **Version:** 1

Consider a resolution authorizing the Mayor to execute a Contract for Engineering Services with Plummer Associates, Inc. for the Brushy Creek Regional Wastewater System East Wastewater Treatment Plant SCADA and HMI Programming Services Project.

This project is a part of the overall 10 million gallon per day (MGD) expansion of the Brushy Creek Regional Wastewater System (BCRWWS) East Wastewater Treatment Plant (WWTP). The expansion project is being completed by the four cities of Round Rock, Austin, Cedar Park and Leander. It will add a 10 MGD treatment train to the existing East WWTP.

Supervisory Control and Data Acquisition (SCADA) is a control system architecture that uses computers, networked data communications and graphical user interfaces shown on computer monitors to provide process control and management. It uses other hardware like programmable logic controller (PLC) to interface with the process plant or machinery. The entirety of the system is to provide a Human/Machine Interface (HMI) which allows operators to easily and precisely control the plant processes over a secure system. This SCADA and HMI Programming Services project replaces the existing SCADA and HMI system.

The decision was made to pull part of this project out of the overall expansion project for several reasons. The main reason being that much of the currently used plant system control hardware is out-of-date and has already had failures occur as a result. In addition, the SCADA software being used now, was scheduled to be replaced with the expansion project. Therefore, the decision was made to go ahead and replace the equipment and software now to the WWTP expansion. This will allow plant staff to become accustomed to the new software and reduce the chance of hardware failure because of out-of-date equipment, while not increasing the overall cost of the improvements to the overall expansion project.

This contract with PLUMMER provides the design and integration of the new system in two phases. The first phase puts into place the new hardware and software to support the existing facilities. The second phase will provide any new hardware and controls to accommodate the equipment added by the expansion project. This contract also provides construction phase services for the SCADA/HMI system installation including factory testing of equipment and testing of the installed equipment before going live to make sure the system is installed as it was designed.

The City of Round Rock portion of the \$1,005,580 contract is 12%, which is \$120,669.60.

Cost: \$1,005,580

Source of Funds: Regional Wastewater Projects

