

AGENDA ITEM #: _____

DATE: September 28, 2020

CAR #: 2020-7035



CITY COUNCIL ACTION REPORT

SUBJECT: Approve expenditure of \$1,502,000 for the Water and Wastewater SCADA Development Project and related budget transfers.

STAFF PRESENTER(S): Barbara Chappell, Deputy Public Works Director
Justin Fair, Chief Information Officer

OTHER PRESENTER(S): N/A

Summary: Request City Council approval of the expenditure of FY2021 funds for the new Water and Wastewater SCADA Development Project and related budget transfers to provide funding from the Surface Water Treatment project and Wastewater Fund balance.

Recommendation: Approve expenditure of funds in the amount of \$1,502,000 for the Water and Wastewater SCADA Development Project and related budget transfers.

Fiscal Impact: This is an unbudgeted project recommended for funding from the Surface Water Treatment Facility project budget in the amount of \$751,000 and \$751,000 from the Wastewater Fund balance for a total project budget of \$1,502,000. This amount represents the cost related to the non-Surface Water specific requirements to update the SCADA system.

The Surface Water project budget can be reduced due to savings in the electrical contractor's work. The FY2021 budgeted Wastewater ending fund balance is \$7.6 million and can absorb this project. Due to the system-wide nature of the improvements, a new capital project is recommended to properly account for these as separate assets.

If not addressed in this manner, a separate project to relocate and update the existing SCADA system would be requested and require both water and wastewater funding.

Background and Previous Actions

Per City of Goodyear Resolution 08-1255, all expenditures of budgeted funds in excess of \$500,000 must obtain Council approval.

The City's existing water and wastewater SCADA (supervisory control and data acquisition) system lacks the technology necessary for connectivity to support reliable and effective operations and further expansion of the system, including integration with the Surface Water Treatment

Facility. In 2018, the City contracted with CH2M Hill Engineers, Inc. (CH2M) as the design-builder for the city's Surface Water Treatment Facility. During the course of reviewing SCADA needs for the Surface Water Treatment Facility, it was determined by city staff and CH2M that upgrades and improvements were necessary within a short time-frame to run the current SCADA system on a single functioning server, on the same operating system and providing for back-ups and ongoing support prior to the completion of the Surface Water Treatment Facility. Failure to finalize the upgrades and improvements would impact the functionality of the Surface Water Treatment Facility.

Staff Analysis

The critical stability, integration and operational support of the existing water distribution system operated by the existing SCADA environment will have a direct impact on the successful operations of the new water treatment facility. Considering this impact, the SCADA system must be improved to work effectively prior to the Surface Water Treatment Facility being brought online in December 2021. As such, CH2M, during the design and construction of the SCADA system for the Surface Water Treatment Facility, will design and construct the SCADA network components needed to update and integrate the existing systems with the Surface Water Treatment Facility. The needed upgrades are to be completed by December 31, 2021.

This project will consolidate planned efforts to improve the SCADA network which is the backbone of the system. Additional SCADA improvement projects will follow in the future to improve site functionality which will be supported by a robust new network.

In addition to this recommendation, staff considered a separate project to relocate the existing water and wastewater SCADA operations to another location and continuing with the plan to build only the Surface Water related components in that project. However, it was determined that the city could cost effectively expand the planned facility at the Surface Water project to combine the citywide SCADA operations in one location.

Attachments

N/A