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Wastewater Treatment Plant
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To: Chairperson Greg Dannecker and Members of the Finance Committee
Chairperson Kathy Plank and Members of the Finance Committee

From: Utilities Deputy Director, Chris Stempa

Date: January 22, 2016

Re: Utilities Committee Action: Award Digester Improvements Project Base Bid and Alternate Bids #1 and #2 to August Winter Construction in the amount of \$363,658 with contingency of \$38,000 for a project total not to exceed \$418,008

Finance Committee Action: Approve positive fund balance transfer of \$114,972 from the Bar Screen Project to Digester Improvements Project

Finance Committee Action: Approve special consideration of 2015 positive budget transfer of \$43,842 to fund O&M painting repairs as part of Digester Improvements Project

BACKGROUND:

The Digester Improvements Project is made up of O&M and Capital Improvement Project (CIP) budgeted tasks. The O&M tasks include exterior anaerobic digester fabric repair and steel coating work identified by the 2010-2012 anaerobic digester conditions assessments. The CIP elements involve optimizing the exiting gas (methane or "biogas") mixing system, installing modern gas metering technology, and introducing process instruments and SCADA improvements for improved process control. The digester gas piping system modifications and process control improvements are projected to reduce energy consumption by up to \$34,000 per year. The gas mix system modifications are also designed to improve contact stabilization and thus treatment. By proxy, biogas production is anticipated to increase over the existing systems capabilities. The additional gas production could create future biogas utilization opportunities that expand upon successful sustainability investments like the 2010 AWWTP boiler project. Since the biogas fired boilers were installed in 2010, the AWWTP has offset natural gas consumption on average by over \$150,000 per year.

The gas pipe cleaning and inspection work completed in mid-2015 was the first phase of the maintenance tasks completed under the umbrella of the Digester Improvements Project. The work plan for these tasks are complex because of the need to maintain continuity of treatment

operation and regulatory compliance coupled with care needed to mitigate dangers associated with explosive gas environment which occurs naturally as part of the anaerobic digestion process. Focus on Energy has approved the AWWTP for a \$22,695 project because of the electrical and natural gas reduction potential. The grant award is predicated on final project completion by August 1, 2016.

BIDS:

On January 14, 2016 the City reviewed the contractor quote and verified that that it met submittal requirements. August Winter was the only contractor that provided a bid response. August Winter has successfully completed project work for the AWWTP in the past and is familiar with the anaerobic digester gas system. Firms who attended the pre-bid meeting in a follow-up conversation were asked why a bid was not provided. Answers included workload, projected schedule, and the blend of mechanical and exterior coating tasks.

The August Winter bid is summarized in the table below. The base bid includes biogas system improvements, digester cover repair, and recoating of upper level digester metal cladding. Alternate Bid #1 includes the costs to recoat the exterior metal cladding at the base of each anaerobic digester. Alternate Bid #2 facilitates the upgrades of existing programmable logic controllers (PLCs) which have reached their useful life. These costs were not envisioned when the CIP was originally developed. BID #2 replaces the existing Modicon Quantum Processor and Ethernet Module with an updated Modicon Unity Processor. It also includes the conversion of the existing Concept program to Unity Pro XL which is being phased out.

Company	Base Bid	Alt. Bid #1	Alt. Bid #2	Total Bid Price
August Winter	\$334,808	\$16,350	\$28,850	\$418,008

The Utility requests the transfer of \$114,972 in remaining funds from the AWWTP Bar Screen Project and the transfer of \$43,842 from the 2015 positive O&M budget variance to cover the shortfall between the total bid price and the remaining original project budget. The Finance Department was consulted and provided this recommendation.

RECOMMENDATION:

I am requesting an award of the Digester Improvements Project Base Bid and Alternate Bids #1 and #2 to August Winter Construction in the amount of \$363,658 with contingency of \$38,000 for a project total not to exceed \$418,008

If you have any questions or require additional information regarding this project please contact Chris Stempa at 920-832-5945.