



Department of Utilities Water Treatment Facility 2281 Manitowoc Rd. Menasha, WI 54952 920-997-4200 tel. 920-997-3240 fax

To: Chairperson Kathy Plank and Members of the Finance Committee

From: Utilities Director Chris Shaw

cc: Chairperson Joe Martin and Members of the Utilities Committee

Enterprise Accounts Manager Kelli Rindt

Date: December 26, 2013

Re: Approval of Contract to Staab Construction Corporation for Regulatory Upgrades and Process Improvements to the Appleton Water Treatment Facility in the amount of \$4,857,000 with a 15% contingency of \$728,550 and a project total not to exceed \$5,585,550

Approve Budget adjustment of \$361,923; \$250,000 from positive budget variance from Water Distribution Capital Improvements and \$111,923 from fund balance.

Background

In early 2012, a Technical Advisory Group (TAG) completed an evaluation of new State and Federal water regulations. Under the new compliance rules the Appleton Water Treatment Facility (AWTF) will improve processes to create a greater removal value for Cryptosporidium and Giardia. The TAG recommended an Ultraviolet (UV) light process in conjunction with modifications to the existing carbon contactors to achieve these objectives.

Prior, individually planned, capital and process projects were also combined into this project for 2013. The combination of projects resulted in the project name, Regulatory Upgrade and Process Improvement Project (RUPIP). Packaging these projects is projected to reduce overall costs in both engineering and construction phases.

In November 2012, the Utilities Committee approved an engineering contract with CH2M HILL to complete professional services for the project. A Predesign Report which provided the basis for engineering project upgrades was completed in June 2012. CH2M HILL subsequently provided the plans and specifications for the construction contract. In addition, CH2M HILL is under contract to perform construction management and contract administration services.

Construction Project

The project can be categorized into process improvements, demonstration testing, and technology integration. A summary of the project includes:

- 1. Improve filtered water quality with the addition of a polymer feed equipment.
- 2. Expand the chlorine contact basins to achieve Giardia and Virus reductions at maximum design hydraulic conditions.
- 3. Upgrade the existing Granular Activated Carbon (GAC) and sand contactors into regulatory approved filters.
- 4. Install an ultraviolet light disinfection process for inactivation of Cryptosporidium and Giardia.
- 5. Integrate process equipment into the Supervisory Control and Data Acquisition (SCADA) System.
- 6. Replace four lime slakers and modify with high density make down units and provide metered feed delivery capabilities.
- 7. Replace ammonia process equipment and incorporate engineered improvements.

Bidding Process

The project was put out to bid on October 17. A mandatory prebid meeting was conducted at the AWTF on November 6 and the bid opening occurred on November 20, 2013. Due to discrepancies with the bidders proof of responsibility all were rejected and the project was rebid. The second bid opening occurred on December 19, 2013. The three bids that were received were considered responsive and met the bidding requirements. The table below summarizes the bidding results.

Company	Construction Bid
Staab Construction Corporation	\$4,857,000
J.F. Ahern Company	\$4,945,000
August Winter & Sons, Inc.	\$4,905,500

Based on the bids and submitted bidding documents along with reference checks, CH2M HILL has recommended Staab Construction Corporation for the construction phase of the RUPIP.

<u>Budget Adjustment:</u> Since the initial project budget the following changes were made to the project thus requiring the additional funding:

- 1. Add a new polymer chemical feed system to the project.
- 2. The ammonia system requires replacement; the initial project was for repair.
- 3. WDNR has required additional CT Basin upgrades from the initial project.

Recommendation:

I recommend the approval of a construction contract to Staab Construction Corporation for Regulatory Upgrades and Process Improvements to the Appleton Water Treatment Facility in the amount of \$4,857,000 with a 15% contingency of \$728,550 and the project total not to exceed \$5,585,550.

If you have any questions, regarding the project please contact me at ph: 832-5945.