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Department of Utilities
Wastewater Treatment Plant
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TO: Chairperson Greg Dannecker and Members of the Utilities Committee

FROM: Utilities Director Chris Shaw

DATE: June 26, 2017

RE: *Award engineering contract for AWTF Chemical Systems Rehabilitation Project to McMahon in the Amount of \$39,200 with a 10% Contingency of \$3920 for a Project Total not to exceed \$43,120*

BACKGROUND:

The Appleton Water Treatment Facility (AWTF) utilizes a group of specifically approved chemicals as part of the drinking water treatment process. Each chemical is intended to perform a unique purpose within the treatment "train". All eleven of the AWTF existing chemical delivery systems were designed as part of the original plant construction in 2000. Evidence of chemical deterioration is being observed as the AWTF has aged. This deterioration is expected with the most aggressive chemicals (i.e., acidic, corrosive) such as sodium hypochlorite and fluoride.

A conditions assessment of the chemical systems was completed in March of this year. Five of the chemical systems were identified and prioritized as needing improvements in the near term. The chemicals listed below are the processes that are being targeted for 2017.

- Sodium Hypochlorite
- Fluoride
- Ferric Sulfate
- Anionic Polymer
- Carbon Dioxide

Evidence of chemical deterioration was observed in these systems including some of the critical storage (e.g. fiberglass tanks) and conveyance components (e.g. PVC pipe).

The intent of this CIP is to obtain professional engineering services to perform an overall assessment of the existing chemical storage room. This includes a conditions assessment

of chemical storage, pumping, and conveyance systems. Repair and/or replacement recommendations based on the conditions assessment will be provided with a focus on future needs following membrane decommissioning. A construction project will then be developed and implemented based on the engineering findings and recommendations.

The RFP was distributed to four engineering firms with previous water treatment plant chemical systems experience. Representatives from the firms attended a pre-proposal meeting where the project scope was defined. All five firms provided proposals in accordance with the RFP. The following table identifies the invited engineering firms along with their proposal scores and pricing.

COMPANY	Proposal Score	Value Score	Cost
Donohue	548	168	\$89,670
Strand	411	120	\$62,896
McMahon	339	119	\$39,200
Robert E Lee	428	162	\$49,848

The evaluation team found that McMAHON had scored the highest based on a proposal characteristics which best met the City's needs. McMAHON also provided the best overall project pricing and value based on their sealed proposal fee.

The McMAHON team is experienced with municipal projects of similar size and complexity. Their proposal demonstrated a comprehensive approach that delivered construction improvement alternatives that addressed aggressive chemicals.

RECOMMENDATION:

I recommend awarding the engineering contract for AWTF Chemical Systems Rehabilitation Project to McMahon in the Amount of \$39,200 with a 10% Contingency of \$3920 for a Project Total not to exceed \$43,120. Should you have any questions regarding this project please contact me at ph: 832-5945.