



Agenda # 15
Commission Meeting Date:
June 7, 2016

**CITY OF GREAT FALLS
COMMISSION AGENDA REPORT**

Item: Construction Contract Award: Water Treatment Plant Improvements Phase 1 – UV and Chemical Building, Surge Tank, and Electrical Building, Office File 1519.6

From: Engineering Division

Initiated By: Public Works Department

Presented By: Jim Rearden, Public Works Director

Action Requested: Consider Bids and Award Construction Contract

Suggested Motion:

1. Commissioner _____ moves:

“I move the City Commission (award/not award) a contract in the amount of \$24,860,109.00 to Sletten Construction Company for the Water Treatment Plant Improvements Phase 1 – UV and Chemical Building, Surge Tank, and Electrical Building project, contingent upon Montana Department of Environmental Quality concurrence, and authorize the City Manager to execute the necessary documents.”

2. Mayor Kelly requests a second to the motion, Commission discussion, public comment, and calls for the vote.

Staff Recommendation: Approve construction contract award.

Background:

Significant Impacts

The Phase 1 Improvements to the Water Treatment Plant (WTP) will replace the aging main electrical switchgear with new equipment located in a new extension to the pump house; construct a new building that will house an improved ammonia feed system, an ultraviolet (UV) disinfection process, and will have additional space for chemical processes that may be required in the future; demolish the seasonal clearwell; and install a new 600,000 gallon surge tank. There will also be significant alterations to the large diameter piping onsite to bring the UV system into the existing treatment process. A new access to the WTP, burial of overhead power lines, an emergency generator, and site paving, sidewalk and restoration will also be included in the project.

These improvements will help to meet new permit requirements and replace aging infrastructure at the WTP as well as give the City the ability to quickly adapt to future permit requirements. The new main switchgear at the WTP will have redundant features not currently available with the existing switchgear. This will allow for safer maintenance of the equipment and prevent outages at the WTP if components of the main switchgear were to fail. The new Liquid Ammonium Sulfate feed system will provide a safer work environment for City staff and greater operational flexibility than the current ammonia feed system. The New UV system will ensure that the City is able to comply with the recently implemented Long Term 2 Enhanced Surface Water Treatment Rule (LT2).

Workload Impacts

The City contracted with Black and Veatch to complete the design and construction oversight of the WTP Improvements Project. City Public Works Engineering Staff will provide construction contract oversight and administration. City Water Plant Staff will work closely with the construction contractor to coordinate many of the construction items.

Purpose / Project Work Scope

This phase of the WTP Improvements project was initiated to address issues identified in the 2006 Water Master Plan. The project's initial focus was on replacing the electrical switchgear. Electrical switchgear at the Water Plant is over fifty years old and has outlived its useful life. Replacement parts are difficult to find and must be specially manufactured causing long lead times and allowing for the possibility of extended equipment outages. New electrical switchgear equipment will be installed while the existing equipment remains in operation to allow the plant to run without interruption.

The ammonia feed system at the plant is undersized based on Montana Department of Environmental Quality (MDEQ) standards and needs to be upsized and relocated to an area to better serve the treatment process and provide a more safe work environment. A new Separate Chemical Feed Building was planned to house the ammonia feed system.

During the design process, results from a separate filter study indicated that the City would be required to install UV treatment in order to meet the LT2 Rule. The addition of the requirement for UV treatment necessary to meet the LT2 Rule significantly altered the initial scope of the Phase 1 Improvements project.

Adding the UV Treatment System to the project required the addition of not only the UV reactors, but also the increase in size of the Chemical building to house the UV system, as well as major rerouting of large diameter pipes to allow the UV system to be installed between the Filter Building and the pumps that send water to the distribution system.

With the additional costs of the UV system, the City decided to reduce the initial scope of the improvements project. Only half of the WTP electrical switchgear was included in this phase and the planned new administration building and new Northwestern Energy substation were included as additive alternatives as part of this bid.

Evaluation and Selection Process

The City bid the WTP Improvements Phase 1 as a project with a base bid and two alternative bid items consisting of the new substation and the new administration building. The City received two bids that were opened on May 18th, 2016. Sletten Construction Company provided the low base bid of \$24,860,109.00 and Swank Enterprises provided a base bid of \$29,680,000.00. Sletten's base bid is under the City's planned budget of 25 million dollars for

the project, but does not leave funding for the two alternative bid items. Sletten provided alternate bids of \$510,700.00 for the substation and \$2,011,700.00 for the administration building while Swank provided alternate bids of \$445,000.00 for the substation and \$1,600,000.00 for the administration building. With the City at the upper range of the project budget and the bids from Sletten for the alternates being greater than those provided by Swank, the City has elected to not award either of the bid alternatives at this time and bid these as separate projects in the future.

Conclusion and Staff Recommendation

City staff recommends awarding the base bid construction contract to Sletten Construction Company in the amount of \$24,860,109.00.

Fiscal Impact:

The attached bid tabulation summarizes the bids that were received. The City has been approved for a State Revolving Fund Loan to cover the costs associated with this project. The City Water Fund will repay the loan.

Alternatives:

The City Commission could vote to deny award of the base bid construction contract.

Attachments/Exhibits:

1. Bid tabulation

