



City of Pflugerville

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Discussion regarding the Central Wastewater Treatment Plant Expansion Phase 1 Project.

This agenda item is presented for the purpose to provide an update to City Council related to the Central Wastewater Treatment Plant Phase 1 Expansion project. City Staff has two agenda items for consideration of City Council approval to extend time and increase cost to complete the project for the General Contractor and the Owner's Representative.

The Construction Contract with BAR Constructors, Inc., associated with the Central Wastewater Treatment Plant Phase 1 Expansion project and Plus Six Engineering is the Owner's Representative.

The original Construction Contract period, 11/19/2019 to 10/12/2021 (substantial completion) and 12/22/2021(final completion), nor the previously approved time extension for current substantial completion 12/28/2021 or current final completion 2/26/2022 are not attainable by BAR mainly due to extenuating circumstances related to pandemic COVID-19 impacts. Therefore, additional time will be necessary to complete project.

Completion time for construction of Central Wastewater Treatment Plant Expansion, Phase 1 has been increased due to various increased scope items, COVID-19 related delays and other delays beyond contractor control. The proposed request is to extend the construction schedule, as BAR has committed to achieve Substantial Completion on April 20, 2022 and Final Completion on June 19, 2022.

The Central Wastewater Treatment Plant (CWWTP) Phase 1 Expansion construction has been underway since December 2019 and is progressing. Since that time, varying field conditions, required design changes, added construction needs and pandemic COVID-19 impacts have been encountered causing delays and the Owner's Representative has determined necessary request for extension of time and cost, Change Order No. 5, to achieve project completion.

The Change Order includes an additional \$125,009.25 and the addition 113 days to the construction contract. It is necessary to be added for work required in accommodating the necessary items as

discussed below. The categories for added work items include:

- 1) Added Scope of Work - Items added due to varying field conditions and including items not included in the original scope in the amount of \$132,491.43 and 30 days
- 2) COVID-19 Related Impacts - Delays caused by pandemic requires the need to add bypass pumping for Central Wastewater Treatment Plant to meet current demands in the amount of \$25,974.22 and 53 days
- 3) Other Delays - Experienced delays from Oncor Utility provider to provide electric in the amount of 30 days
- 4) Bypass Pumping Contingencies - Actions to increase reliability of Plant to remain compliant with the Texas Commission on Environmental Quality (TCEQ) in the amount of \$128,143.60

Credits for items of work which were completed under the original contract quantities allows a credit in the amount of \$161,600.00, which reduces \$286,609.25 amount originally requested by BAR to \$125,009.25 as proposed for approval. The total added cost is an increase of approximately 0.3 percent (%) to the overall cost of the project.

The current contract price is \$42,374,315.24 and the revised total not to exceed contract price, including this change order, will be \$42,499,324.49. Approval of the proposed Change Order will also increase the contract time by 113 days, which modifies the previously approved substantial (12/26/2021) and final completion (2/26/2021) dates to 04/20/2022 and 06/19/2022 respectively.

The compensation in this proposed Change Order is the full, complete and final compensation for all costs BAR Constructors may incur as a result of or relating to the proposed changes at this time. The changes in Contract Times are the complete and final adjustments for direct impacts to the ability of BAR Constructors to complete the Work within the Contract Times and are the only adjustments to which will be entitled to BAR Constructors.

Project Background

Competitive sealed proposals were received from three (3) Offerors on September 26, 2019 for the referenced project.

November 12, 2019, City Council approved the Staff recommendation for a construction contract awarded to BAR Constructors, Inc., in the amount of \$41,863,737.95 to construct the Central Wastewater Treatment Plant Expansion, Phase 1 project.

The City of Pflugerville is in the process of expanding the Central Wastewater Treatment Plant from its current permitted capacity of 5.3 MGD to 10.0 MGD (35 MGD peak two-hour flow) to meet the City's needs based on historical trends and projected population growth. In addition, the treatment processes are being upgraded to provide biological nutrient removal (BNR) of phosphorous to replace the existing chemical phosphorous precipitation process. Plus Six Engineering, LLC (PSE) serves as Owner's Representative for the Central Wastewater Treatment Plant Expansion. Freese and Nichols, Inc. (FNI) serves as Engineer of Record for planning, design and construction phase engineering services for the improvements.

The plant expansion will be implemented in three (3) construction phases with Phase 1 expanding capacity to 7.25 MGD, Phase 2 to upgrade treatment processes in existing units and Phase 3 to expand capacity to 10 MGD.

The Phase 1 construction project will provide a new influent pump station, headworks, biological nutrient removal treatment system, clarifier, filters, UV disinfection system, non-potable water, and chemical feed systems. The construction will include three (3) new electrical buildings, two (2) diesel stand-by generators, improvements to the flood protection berm, general site civil improvements, electrical/communications upgrades, and improvements to site security and surveillance. Phase 1 when completed will bring the capacity of the treatment plant to 7.25 MGD, matching the TPDES Permit Phase 1.

The Phase 2 construction project will replace the equipment in the existing biological treatment basins and add basin volume and equipment to upgrade the units to achieve biological nutrient removal and rehabilitate the two (2) existing clarifiers. Phase 2 will also construct a new intermittent use effluent pump station which will enable the plant to discharge under high water level conditions in the receiving stream. It is anticipated that construction for Phase 2 will commence shortly after completion of Phase 1.

A future Phase 3 project will be required to complete the expansion to 10 MGD and will involve construction of a new clarifier and expansion or replacement of the solids dewatering process. The timing of Phase 3 will depend on the actual rate of population growth and corresponding increase in flow to the plant.

Prior City Council Action

N/A

Deadline for City Council Action

Action is requested on November 30, 2021.

Funding Expected: Revenue Expenditure N/A

Budgeted Item: Yes No N/A

Amount: N/A

1295 Form Required? Yes No

Legal Review Required: N/A Required Date Completed: N/A

Supporting documents attached:

PowerPoint Presentation

Recommended Action

Discuss Only