
Meeting Date

January 17, 2023

New Business Item #2

Subject

Water Treatment Plant Emergency Backup Generator
High Service Pump Station (HSPS) Design & Construction Phase Services
Project No. 2020-114 - Amendment No. 1

Recommendation

Staff recommends the Board of Directors approve Amendment No. 1 to the Standard Agreement for Professional Engineering Services with Kennedy Jenks as presented.

Background/Analysis

In May of 2020, pursuant to the recommendations of the 2016 Water Master Plan and Capital Improvements Plan updates, BWA approved a Standard Agreement for Professional Engineering Services (SAPES) with Kennedy Jenks for engineering services required to expand pumping capacity at the Water Treatment Plant and rehabilitate some plant yard piping. Soon after the design was commenced in the summer of 2020, the project was temporarily suspended by BWA due to the following considerations:

- During the design phase a previously undetermined, but significant and potentially costly upgrade to the WTP electrical system was identified to be required to power the larger pumps needed for the 3 MGD pumping capacity expansion originally planned with this project.
- At the time the project was suspended, it had become apparent the timing of the additional 3 MGD of pumping capacity was not as imminent as originally indicated in the 2016 Master Plan. Expansion of pumping capacity was subsequently postponed in accordance with the 2021 Master Plan update.
- Electrical upgrades for additional pumping capacity could be combined with the future plant expansion yielding greater cost efficiencies.

In accordance with the requirements of Senate Bill 3 (Texas 87th Legislative Session, 2021), in 2022, BWA prepared and submitted to TCEQ an Emergency Preparedness Plan which proposed the addition of a new emergency standby generator at the Water Treatment Plant by late 2025. Given the Engineer’s ongoing efforts related to yard piping, pump sizing and electrical improvements required at the plant in conjunction with the HSPS design and the need to account for future electrical loads when sizing the generator, BWA determined that a significant modification to the scope of services—i.e., addressing the more immediate need for backup power supplies while accommodating the eventual expanded pumping facilities--to be warranted.

This amendment adjusts the project scope, removing the remaining effort associated with final design of the pumping improvements, while recommencing the project to provide services required for the preselection of a new backup generator, as well as bid and construction phase engineering services associated with these improvements.

Financial Impact

The change in scope proposed for this project would reduce the effort and associated fees required under the Agreement, resulting in a revised total not-to-exceed fee of \$286,870 (a reduction of \$108,237). Funds for engineering and construction of the backup generator are available from the 2022 Bond Series.