



City of Pflugerville

Legislation Text

File #: 2020-8545, **Version:** 1

Discussion regarding the Water Treatment Plant Expansion Alternatives Analysis.

The 2020 Water Master Plan was adopted by City Council on April 14, 2020 and outlines the necessity of expanding the City's Surface Water Treatment Plant (WTP) from approximately 17 MGD to 30 MGD by 2022. In March 2020, the City retained Garver as the owner's representative for the expansion of water treatment plant to assist the City with the successful delivery of the project. The services included an initial planning phase, in which Garver engaged with City Engineering and Operations staff to assess the suitability of the current treatment process technology, and performed a comparative analysis to determine the best path forward for the future expansion.

In accordance with their scope, a treatment alternatives evaluation for the plant expansion was performed prior to commencement of final design including the comparison of three filtration alternatives. In addition, a high-level alternatives analysis was included for the associated plant improvements necessary for expansion of the WTP to 30 MGD, including raw water pumping capacity, flocculation, sedimentation, disinfection, solids handling, high service pumping capacity, and SCADA improvements. As a component of the analysis, schematics depicting the proposed plant layout at full buildout for each of the filtration alternatives were developed, in order to demonstrate each alternative's footprint at 75 MGD. Garver will provide a presentation summarizing their analysis and recommendations for the proposed treatment plant expansion per collaboration and direction from Staff.

In addition to the treatment alternatives evaluation, Garver provided an evaluation of water supply alternatives to keep pace with future demands. The 2020 Water Master Plan concluded that by 2029 the City will be required to have additional water sources online in order to meet anticipated demands. The attached technical memorandum expands upon the water supply assessment outlined within the 2020 Water Master Plan and outlines conceptual water supply alternatives which will allow the City to proactively plan for the future and meet all anticipated water demands. Garver will provide a summary of their analysis and proposed alternatives per collaboration and direction from staff.

Garver's role as Owner's Representative is to assist the City in the overall implementation of the Water Plant Expansion projects. As a next step, staff plans to issue a request for qualifications in August 2020 for the design of the Water Treatment Plant expansion to 30 MGD. A supplemental agreement will be brought forward for City Council Consideration in August 2020 for owner representative services for the design and bid phase of the water treatment plant expansion project. The scope and fee for construction phased services will be negotiated with Garver prior to construction and brought forward at that time for City Council consideration.

Prior City Council Action

City Council approved a professional services agreement with Garver in the amount of \$199,820.00 to provide owner representative services associated with the Surface Water Treatment Plant

Expansion Project at the March 10, 2020 meeting.

Deadline for City Council Action

None.

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: _____

Supporting documents attached:

Evaluation of Treatment Alternatives

Pflugerville Water Supply Alternatives Evaluation

Presentation Slides

Recommended Action

None.