



Legislation Text

File #: 2022-300, **Version:** 1

Consider a resolution authorizing the Mayor to execute a Contract for Engineering Services with Plummer Associates, Inc. for the Brushy Creek East Regional Wastewater Treatment Plant Tertiary Filters project.

Since the Brushy Creek East Regional Wastewater Treatment Plant (WWTP) upset caused by the winter storm Uri in February of 2021, the East WWTP has experienced treatment process issues. Some have been caused by hydraulic overloading starting in May and June of 2021 while others have been compounded by the large expansion project which began in June 2020, and is still currently underway. There have been impacts to Brushy Creek past the WWTP discharge effluent outfall, and reported permit violations resulting in the WWTP being under evaluation by the Texas Commission on Environmental Quality (TCEQ).

The East WWTP discharge permit with the TCEQ will be expiring in May 2023. The partner Cities that own capacity in the WWTP will be applying for a permit renewal by November of this year. With all of the focus on the East WWTP, there is a possibility that the permit will be renewed with even higher treatment requirements when it is issued by the TCEQ. These parameters will possibly include 5 milligrams per liter (mg/l) Total Suspended Solids (TSS), 5 mg/l Chemical Biological Oxygen Demand (CBOD), 2 mg/l Ammonia Nitrogen, and 0.5 mg/l Phosphorous once the plant receives flows over 25 million gallons per day (MGD) based on its annual average flows. TCEQ rules require that any treatment facility with a 5, 5, 2, 0.5 discharge permit will be required to have sufficient filter capacity up to its permitted amount of flow, or in this case 30 MGD of filtration capacity. The current expansion project will provide seven MGD of filtration capacity that is used to make Type I reuse water for the City of Round Rock's Reuse Water System.

This project includes an engineering analysis to determine how the remaining MGD of filtration capacity will be added, and complete up to 30 percent of final engineering design for the additional filters. Plummer Associates were selected because of their intimate knowledge of the East WWTP after designing and performing construction phase services for the expansion of the WWTP currently underway. The additional filter capacity is estimated to cost approximately \$25 million which will be shared by the partner Cities based on their post expansion project capacity ownership in the WWTP.

Cost: \$506,672

Source of Funds: Regional Wastewater Projects

