City of Mesquite, Texas



Legislation Text

File #: 19-4387, Version: 1

Authorize the City Manager to finalize and execute a Professional Engineering Services Contract with Pipeline Analysis, LLC, for the inspection and condition assessment of high-risk reinforced concrete pipe (RCP) sanitary sewer mains in the amount of \$347,535.00.

This contract will provide engineering services to assess the existing condition of a portion of the City's reinforced concrete pipe large diameter sanitary sewer mains. The project will determine if repairs are warranted, prioritize repairs and estimate the probable cost of recommended repairs. These sewer interceptors are critical components of the Mesquite sanitary sewer system and due to the pipe material, have proven to be highly susceptible to corrosion, making them a high-risk asset. Maintaining the condition of these gravity pipelines is imperative to providing sewer service for a large portion of the Mesquite service area and to prevent potential environmental impacts if a failure occurs.

This contract will conduct a condition assessment of the sanitary sewer interceptors through a combination of Light Detection and Ranging (LIDAR) profiling, sonar technology and high-resolution camera imaging. A floating unit with multiple sensors and cameras specifically designed to inspect pipes will be used for this evaluation. The unit will use sonar to 'see' below the flow. For pipe erosion measurements and visual wall inspections, the unit will use LIDAR profiling and measurement system and a high-resolution digital video camera. Detailed data about the pipeline condition will be gathered without the need of multiple individual surveys and without dewatering or bypassing the existing flow.

This contract will allow staff to accurately prioritize future repairs on these mains.

Financial Implications

Funding is allocated from water/sewer funds under the Utility Assessment project.

Recommended/Desired Action

Staff recommends approval of a contract with Pipeline Analysis, LLC.

Drafter Christina Hickey, P.E.

Head of Department

Matthew Holzapfel, P.E.