

Legislation Text

File #: 19-4276, **Version:** 1

Authorize the City Manager to finalize and execute a professional engineering services contract with Halff Associates, Inc., for the South Mesquite Slope Stabilization Repairs Design - Pioneer Road and Spring Mills Road in the amount of \$99,100.00.

This contract will provide for the design and preparation of construction documents for the stabilization of approximately 240 feet of creek bank along South Mesquite Creek, located northwest of Pioneer Road and northeast of Spring Mills Road. A gabion retaining wall was constructed in 2003 to protect the homes and utilities behind the homes. However, the heavy rains of past few years has caused undermining of the gabion retaining wall and a slope failure is beginning to develop, endangering the adjacent utilities and potentially the homes. Interim repairs have been made and the area is being monitored by staff. This design contract will provide a more permanent repair to the gabion retaining wall.

The design scope of services includes the following tasks:

- Identify causes/impacts of erosion and failures and identify repair options to prevent future erosion.
- Evaluate channel bottom to minimize further scour and toe of slope erosion.
- Perform a survey of the existing channel, and other nearby drainage improvements as needed for design.
- Perform Geotechnical Investigation including soil borings sufficient to analyze existing subsurface conditions and make stabilization recommendations.
- Utilize the City's hydrologic and hydraulic models to determine stream flows and velocities.
- Confirm that no rise in water surface elevations will occur as a result of proposed project.
- Provide final design with estimate of probable construction cost
- Perform Wetland/Section 404 nationwide permitting requirements
- Perform bidding services

Financial Implications

This design contract will be funded through the Drainage Utility District fund.

Recommended/Desired Action

Staff recommends approval of a contract with Halff Associates, Inc.

Attachment(s)

Location map

Drafter

Steve Glass, P.E.

Head of Department

Matthew Holzapfel, P.E.