



16-1194

TITLE: Consider/Discuss/Act on a Resolution Authorizing the City Manager to Execute a Contract and All Necessary Supplemental Agreements with HDR Engineering, Inc., to Design Improvements Needed to Address Erosion in an Unnamed Tributary of Jean's Creek Through the Westwood Park Addition

COUNCIL GOAL: Enhance the Quality of Life in McKinney and Operational Excellence

MEETING DATE: December 6, 2016

DEPARTMENT: Development Services / Engineering

CONTACT: Mark Hines, PE, Director of Engineering

RECOMMENDED CITY COUNCIL ACTION:

- Approval of the Resolution.

ITEM SUMMARY:

- This Resolution authorizes the City Manager to execute a contract in the amount of \$93,964, and all necessary supplemental agreements thereto, with HDR Engineering, Inc., to design improvements needed to address erosion in an unnamed tributary of Jean's Creek through the Westwood Park Addition for an amount not to exceed \$105,000.

BACKGROUND INFORMATION:

- Residents of the Westwood Park Addition contacted the City about various erosion issues in this creek in June of this year.
- After various site visits, conversations, and meetings with residents, it was decided at a City Council Work Session on 9/19/16 to do the following:
 - Make improvements to address scour that is threatening the existing stepped concrete retaining wall structure located behind 114 Poppy Lane and 112 Poppy Lane.
 - Install energy dissipators and riprap to the existing 60" storm sewer outfall behind 219 Westpark Drive South and 115 Poppy Lane.

- o Install additional grade control structure(s) as necessary to protect the creek bottom from additional erosion.
- It became apparent after the 9/19/16 City Council Work Session that City staff does not have the capacity to do the design work and plan preparation in-house.
- At a City Council meeting on March 3, 2014, HDR Engineering, Inc., was one of six firms deemed qualified for this type of work based on their response to 15-03RFQ for Miscellaneous Drainage and Floodplain Management Services. HDR was selected for this particular project based on their experience and knowledge of creek erosion issues.

FINANCIAL SUMMARY:

- This Resolution authorizes a contract for \$93,964 and all necessary supplemental agreements with HDR Engineering, Inc., for an amount not to exceed \$105,000.
- There is a concurrent item on the agenda for a budget amendment to provide the necessary funding for this contract. This item is contingent on the approval of funding by that budget amendment. The current construction cost estimate is \$193,050. The budget amendment is for \$330,000 because it includes funding for both design (not to exceed \$105,000) and construction (not to exceed \$225,000).
- Engineering design contracts for CIP roadway and utility projects are typically 10% to 15% of the estimated construction cost. This design contract is approximately 50% of the estimated construction cost for several reasons, including:
 - o Construction activities will be relatively limited yet the project still requires usual services typical of larger projects.
 - o This project requires additional services such as hydraulic analysis, stream stability calculations, and environmental analysis and permitting.
 - o The survey will be more time consuming because of the difficult access to the site and the dense tree canopy.

BOARD OR COMMISSION RECOMMENDATION:

- N/A

SUPPORTING MATERIALS:

[Resolution](#)

[Location Map](#)

[Engineering Services Proposal](#)