



20-0017

**TITLE:** Consider/Discuss/Act on a Resolution Authorizing the City Manager to Execute a Contract with HDR Engineering, Inc. for Professional Engineering Services for the Infrastructure Asset Management Planning Project (CO2009)

**COUNCIL GOAL:** Operational Excellence  
(2B: Balance available resources to accommodate the growth and maintenance needs of the city)

**MEETING DATE:** January 7, 2020

**DEPARTMENT:** Development Services / Engineering

**CONTACT:** Nick Ataie, PE, Engineering CIP Manager

**RECOMMENDED CITY COUNCIL ACTION:**

- Approval of Resolution

**ITEM SUMMARY:**

- This Resolution authorizes a contract with HDR Engineering, Inc. to provide consulting engineering services for the Infrastructure Asset Management Planning Project (CO2009) in the amount of \$99,980.

**BACKGROUND INFORMATION:**

- The Capital Improvements Program (CIP) includes annual investments in the replacement of infrastructure throughout the city including streets, water mains, wastewater mains, and drainage systems.
- Currently the Public Works Department oversees the maintenance and operation of approximately 1,600 lane-miles of streets, 940 miles of water mains, 730 miles of wastewater mains, and 612 miles of drainage systems.
- As city-maintained infrastructure reaches the end of its service life, capital projects (street repairs, main replacements, drainage improvements, etc.) are prioritized and funded on an annual basis primarily utilizing utility revenue bonds, voter-authorized general obligation bonds, and the stormwater drainage utility

fund.

- Asset management refers to structured tools, programs, and procedures which minimize the cost of asset ownership, maintain or improve service levels provided, and allows for data-driven decision processes.
- The Engineering Department has reviewed a scope of services with HDR Engineering, Inc. to provide an asset management decision making framework related to future capital improvement infrastructure projects including:
  - Evaluation of level of service goals and objectives, condition assessment standards and practices, risk management of assets, renewal and replacement strategies, preventive and predictive maintenance strategies, project assessment, project prioritization, CIP development, capital investment forecasting, and infrastructure data gap analysis.
  - Development of an assessment summary documenting findings, existing practices, and summary of short and long-term opportunities for improvement based on input from city staff and industry best practices.
  - Preparation of a decision guideline for developing and prioritizing CIP projects which leverages existing data to determine the location, type of work, who should perform the work (in-house versus contracted), the appropriate contracting mechanism, and impact on adjacent projects (current or planned).
  - Preparation of a 5-year slate of prioritized CIP projects and report utilizing the decision guideline and planned financial capacity.
- Upon completion of these services by HDR Engineering, Inc. the City of McKinney will be able to:
  - Establish and/or refine baseline and desired infrastructure levels of service which can be used to emphasize/report priorities and financially plan future projects in the Capital Improvement Program.
  - Better utilize and grow internal staff expertise, technologies, and tools to improve assessments of existing infrastructure using nationally recognized best practices.
  - More efficiently prioritize, plan, and execute capital infrastructure projects utilizing a data-driven decision guideline.
  - Provide improved transparency to the public regarding continued initiatives which focus on improving the service levels of streets, utilities, and drainage infrastructure.
  - Act on short-term opportunities and beginning planning of long-term opportunities which support an ongoing focus on infrastructure asset management.
- HDR Engineering, Inc. submitted a response to 18-46RFQ for On-Call Utility Design Services which includes infrastructure planning services. They were one

of eleven firms shortlisted by City Council on October 2, 2018.

- HDR Engineering, Inc. submitted a proposal for this project in the amount of \$99,980 which has been reviewed by the Engineering Department.
- The anticipated project notice to proceed, pending approval of this item, is January 2020 and services by HDR Engineering Inc. are expected to be completed in August 2020.

**FINANCIAL SUMMARY:**

- This Resolution authorizes a design contract with HDR Engineering, Inc. in the amount of \$99,980.
- With the approval of this item, \$20 will remain in project CO2009.

**BOARD OR COMMISSION RECOMMENDATION:**

- N/A

**SUPPORTING MATERIALS:**

[Asset Management Overview Resolution](#)