



Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: May 20, 2024

Re: Authorizing an agreement for professional engineering services with TREKK Design Group LLC. to complete a field study to evaluate the remaining useful life and consequence of failure for more than 800 existing stormwater assets.

Executive Summary

Staff has prepared for Council consideration a resolution authorizing the City Manager to execute an agreement with TREKK Design Group LLC. in an amount not to exceed \$136,674.00 to provide professional engineering services to conduct a field study to evaluate the remaining useful life and consequence of failure for more than 800 existing stormwater assets that are currently identified as "unknown" in the City geographic information system database.

Discussion

TREKK Design Group, LLC (TREKK) will conduct a field study on behalf of the Storm Water Utility with the goal of mapping storm water assets currently categorized as "unknown" in the City's geographical information system (GIS) database for storm water. In 2022 and 2023 TREKK completed a field survey of all corrugated metal storm pipes (CMP) that were identified as 36 inches or greater and evaluated their condition. The City is currently performing significant maintenance on some of the pipes identified in that study using Missouri Department of Natural Resources American Rescue Plan Act funds.

This field survey will address the GIS storm water dataset labeled as "unknown" and encompasses more than 800 pipe segments. The primary objective is to identify size and material of these existing assets within the City GIS storm water database and evaluate their condition. The observational data regarding the condition of these assets will aid in estimating their Remaining Useful Life. The remaining useful life is a critical metric when prioritizing maintenance and replacement work for the utility. Enhanced field location data, including proximity to roads and critical infrastructure, will also facilitate prioritizing pipe maintenance and replacement based on the Consequence of Failure with regard to flooding or road failure.

The field survey project is a continuation of efforts to establish a condition assessment program for corrugated metal storm pipe as part of the Wastewater and Stormwater Integrated Management Plan. The Columbia Wastewater and Stormwater Integrated Management Plan (IMP), dated September 28, 2018, was adopted by City Council on December 3, 2018, and acknowledged by the Missouri Department of Natural Resources (MDNR) on March 21, 2019. The IMP outlines anticipated schedules for following long-range management actions and investments with regard to wastewater and storm water management. The condition assessment goal in the 5-year action plan is to establish and



City of Columbia

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begin a condition assessment of storm water CMP throughout the City. This project is the next phase in a multi-year initiative aimed at developing baseline condition assessments of storm water assets owned by the City of Columbia. Following data collection, this information will serve as a tool for staff to prioritize maintenance activities and capital improvement projects in the Storm Water Utility. TREKK has been selected for this project in accordance with the City's professional consultant procurement guidelines based upon their understanding of the project requirements and their experience with the previous field studies of storm water assets. The contractual agreement with TREKK Design Group LLC includes a not-to-exceed amount of \$136,674.00, to be paid from the Stormwater Utility operating budget.

Fiscal Impact

Short-Term Impact: \$136,674.00 from the Stormwater Utility operating budget.

Long-Term Impact: By evaluating existing assets the City can develop a reasonable and affordable plan to maintain and replace existing storm water infrastructure.

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

Primary Impact: Reliable Infrastructure, Secondary Impact: Organizational Excellence, Tertiary Impact: Not Applicable

Comprehensive Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Environmental Management, Tertiary Impact: Not Applicable

Legislative History

Date	Action
None	None

Suggested Council Action

Approve the resolution.