



Department Source: City Utilities - Water and Light

To: City Council

From: City Manager & Staff

Council Meeting Date: December 16, 2019

Re: Amendment to Agreement for Professional Engineering Services with Carollo Engineers, Inc.

Executive Summary

Staff has prepared for Council consideration a resolution authorizing the City Manager to execute a first amendment to the Water Quality and Antidegradation Study of Water Treatment Residual Discharges at the McBaine Water Treatment Plant with Carollo Engineers, Inc. This amendment is necessary to comply with requirements of United States Army Corps of Engineers (USACE) and the Missouri Department of Natural Resources (DNR). The cost for this amendment is not to exceed \$72,350.00 and is to be paid for by funds appropriated in Capital Project W0234.

Discussion

Carollo Engineers, Inc. is currently under contract with the City for engineering services for the Water Quality and Antidegradation Study of Water Treatment Residual Discharges at the McBaine Water Treatment Plant. The purpose of this study is to determine the best management practices for the disposal of lime sludge residuals generated during the water treatment process.

This amendment will address additional regulatory requirements and developments associated with the Water Treatment Residuals Best Professional Judgement Study Project. The USACE and Missouri DNR have requested additional analysis to be incorporated in the Study. This additional analysis includes:

- Determine conformance of proposed diffuser configuration to previous permitted diffusers for the Missouri River
 - Review of river dilution factors at proposed diffuser location
 - Update of BPJ cost opinions to include particulars of river diffuser requirements.
 - Confirmation of river discharge modeling with new USACE approved diffuser configuration
- Perform additional alternatives analysis to compare the following antidegradation review options with a diffuser
 - River discharge of full lime solids production
 - River discharge of lime solids with Best Management Practices in place to reduce solids production
 - River discharge of lime solids with full acidification to minimize discharge
- Update Median Household Income (MHI) analysis to include affordability analysis utilized in the 2018 Columbia Wastewater and Stormwater Integrated Management Plan



City of Columbia

701 East Broadway, Columbia, Missouri 65201

The Water & Light Department is requesting that Carollo Engineers, Inc. provide the services for executing these next steps in completing the Best Professional Judgement Study. The cost for this amendment is not to exceed \$72,350.00 and is to be paid for by funds appropriated in Capital Project W0234.

Fiscal Impact

Short-Term Impact: The cost for this addendum is not to exceed \$72,350.00.

Long-Term Impact: None

Strategic & Comprehensive Plan Impact

Strategic Plan Impacts:

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

Comprehensive Plan Impacts:

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

Legislative History

Date	Action
11/16/15	R182-15 Authorizing an agreement for professional engineering services with Carollo Engineers, Inc. for a water quality and antidegradation study of water treatment residual discharges at the McBaine Water Treatment Plant.

Suggested Council Action

Approve the resolution authorizing the City Manager to execute a first amendment to a Professional Engineering Services Agreement with Carollo Engineers, Inc. for the Water Quality and Antidegradation Study of Water Treatment Residual Discharges at the McBaine Water Treatment Plant