



Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: February 5, 2018

Re: Professional Engineering Services Agreement with TREKK Design Group LLC for Inflow and Infiltration Study of Flat Branch Basins C and I

Executive Summary

Staff has prepared for Council consideration a resolution authorizing an agreement with TREKK Design Group LLC for a not to exceed amount of \$99,408 to provide professional engineering services related to the Inflow and Infiltration (I&I) Studies of Flat Branch Basins C and I. TREKK was selected for this project in accordance with the City's professional consultant procurement guidelines.

Discussion

In 2010, the Sanitary Sewer Utility embarked on a succession of Sanitary Sewer Evaluation Studies (SSES), starting in the Flat Branch and County House Branch basins. This study will conclude the initial study phase for all the Flat Branch basins. The scope of work for this project includes smoke testing approximately 125,000 feet of sewer main and performing more than 700 manhole inspections and a subsequent report identifying all observed defects. The scope of services for the SSES of Flat Branch Basins C and I is attached.

This is part of an ongoing process to identify and reduce sources of I&I in the sanitary sewer system. Since Flat Branch and County House Branch are the older areas of town with more evidence of I&I based on flow monitoring, studies have concentrated in those two basins. Flat Branch Basins C and I are generally located in the downtown and University of Missouri areas, see the attached diagram. Communication to businesses and the University are a major consideration for this project.

TREKK Design Group, LLC 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 in the area. The total not to exceed contract amount of \$99,408 is within the usual and customary guidelines for this type of project.

Fiscal Impact

Short-Term Impact: The engineering contract is for a not to exceed amount of \$99,408 and will be paid from the Sanitary Sewer Line Maintenance Operating account budgeted for this project.

Long-Term Impact: The long term impact is not known at this time. This study will identify sections of sewer main and manholes in need of rehabilitation. The actual rehabilitation will be included with the annual sewer main and manhole rehabilitation projects.

Strategic & Comprehensive Plan Impact



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701 East Broadway, Columbia, Missouri 65201

Strategic Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Secondary, Tertiary Impact: Tertiary

Comprehensive Plan Impacts:

Primary Impact: Infrastructure, Secondary Impact: Environmental Management, Tertiary Impact: Tertiary

Legislative History

Date	Action
12/19/2017	Res. 2-18; Setting a public hearing: proposed construction of the FY 2018 sanitary sewer main and manhole rehabilitation project.
05/15/2017	REP 38-17 Update on sewer system inflow and infiltration reduction efforts and impact on the reduction of overflows and sewer backups into buildings
04/06/2017	Res 50-17; Setting a public hearing: proposed construction of the FY 2017 sanitary sewer main and manhole rehabilitation project.
07/05/2016	Public Hearing for the sanitary sewer main and manhole rehabilitation project.
06/09/2016	Res 61-16; Setting a public hearing: construction of the sanitary sewer main and manhole rehabilitation project.
09/08/2015	Res. 140-15; Authorizing an agreement with TREKK Design Group, LLC for post-rehabilitation flow data analysis for the Flat Branch-A, Flat Branch-B and Site 12 basin areas (September 9, 2015)
09/08/2015	Res. 141-15; Authorizing an agreement with TREKK Design Group, LLC for an Inflow and Infiltration (I/I) study of the County House Branch-D and Flat Branch-G basin areas (September 9, 2015)
05/18/2015	Public Hearing for the sanitary sewer main and manhole rehabilitation project.
04/20/2015	(R66-15) Setting a public hearing for construction of the FY 2015 sanitary sewer main and manhole rehabilitation project.
01/08/2015	Res. 4 -15 ; Authorizing an agreement with TREKK Design Group for the development of a hydraulic model of the proposed Lower Southwest Outfall Relief Sewer as it relates to sanitary sewer



City of Columbia

701 East Broadway, Columbia, Missouri 65201

	overflows along the County House Branch watershed (January 8, 2015)
09/02/2014	REP 84-14 Evaluation of Inflow and Infiltration Reduction in Flat Branch Basin D
04/07/2014	Public Hearing for the sanitary sewer main and manhole rehabilitation project.
03/03/2014	(R31-14) Setting a public hearing for construction of the FY 2014 sanitary sewer main and manhole rehabilitation project.
02/17/2014	REP 17-14 Evaluation of I&I Program
11/18/2013	(B329-13) Appropriating funds for the improvement and rehabilitation of sanitary sewer pipes and manholes in the Bear Creek and Flat Branch Creek watersheds.
10/17/2013	(R204-13) Transferring funds for the improvement and rehabilitation of sanitary sewer pipes and manholes in the Bear Creek and Flat Branch Creek watersheds.
08/05/2013	(B194-13) Calling a special election relation to the issuance of Sewer System Revenue Bonds. I&I work funding from the ballot issue was specifically discussed during the public hearing.
07/01/2013	Pre-Council – Infrastructure presentation by Public Works staff.
05/2020/13	Pre-Council – Sewer Utility Ballot presentation by Public Works staff.
08/06/2012	Res.130-12; Authorizing an agreement for engineering services with TREKK Design Group, LLC for completion of the FY 2012 inflow and infiltration study of the sewer collection system (August 7, 2012)
04/16/2012	Determining it is in the public interest to construct the sanitary sewer main and manhole rehabilitation project.
04/02/2012	Public Hearing for the Sanitary Sewer Main and Manhole Rehabilitation Project.
03/19/2012	(R40-12) Setting a Public Hearing for FY 2012 Sanitary Sewer Main and Manhole Rehabilitation Project.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

11/21/2011	Pre-Council – Abatement Order on Consent presentation by Public Works staff.
08/01/2011	Res. 132-11; Authorizing an agreement for engineering services with TREKK Design Group, LLC for completion of the FY 2011 inflow and infiltration study of the sewer collection system (August 2, 2011)
03/07/2011	(B54-11) Amending Chapter 22 of the City Code to establish and I&I Reduction Program.
03/07/2011	(REP 45-11) Sanitary Sewer Evaluation Study Defect Summary
11/01/2010	Res. 228-10; Authorizing an agreement for engineering services with TREKK Design Group, Inc. for completion of an inflow and infiltration study of the sewer collection system (November 2, 2010)
03/16/2010	Res. 58-10; Authorizing an agreement with TREKK Design Group, Inc. for engineering services relating to sanitary sewer manhole inspections and rehabilitation recommendations (March 16, 2010)
12/12/2009	Winter council Retreat – Inflow and Infiltration presentation by staff.
07/22/2009	Council Work Session – Inflow and Infiltration presentation by staff and TREKK consultants
12/16/2008	Res. 288-08; Authorizing Amendment No. 1 to the agreement with TREKK Design Group, Inc. for engineering services relating to an inflow and infiltration study of the sewer collection system (December 16, 2008)
12/02/2008	Res. 273-08; Authorizing an agreement with TREKK Design Group, Inc. for engineering services relating to sanitary sewer manhole inspections and rehabilitation recommendations (December 2, 2008)
08/19/2008	Res. 191-08; Authorizing an agreement with TREKK Design Group, Inc. for engineering services relating to an inflow and infiltration study of the sewer collection system (August 19, 2008)
08/05/2008	Res. 178-08; Authorizing Amendment No. 1 to the agreement with TREKK Design Group, LLC for engineering services relating to



City of Columbia

701 East Broadway, Columbia, Missouri 65201

10/16/2007	sanitary sewer manhole inspections and rehabilitation recommendations (August 5, 2008) Res. 242-07; Authorizing an agreement with TREKK Design Group, LLC for engineering services relating to sanitary sewer manhole inspections and rehabilitation recommendations (October 16, 2007)
02/06/2007	Res. 30-07; Authorizing an agreement with TREKK Design Group, Inc. for engineering services relating to sanitary sewer manhole inspections and rehabilitation recommendations (February 6, 2007)
01/02/2007	Public Hearing for Sewer Utility Master Plan. Public Works staff made a presentation to Council (I&I issues were discussed). Council adopted the Sewer Utility Master Plan.
01/18/2006	Council Mini Retreat – Sewer Utility Master Plan presentation by Public Works staff.

Suggested Council Action

Authorize the City Manager to execute and agreement with TREKK Design Group, LLC to provide professional engineering services for Inflow and Infiltration Studies of Flat Branch C and I Basins