

City of Columbia

701 East Broadway, Columbia, Missouri 65201

Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: July 5, 2016

Re: Public Hearing – FY 2016 Sanitary Sewer Main and Manhole Rehabilitation Project

Executive Summary

Public Hearing for the FY 2016 Sanitary Sewer Main and Manhole Rehabilitation Project. The proposed sanitary sewer system improvement will consist of rehabilitation for approximately 48,000 linear feet of sewer line, 215 manholes, and 415 lateral connections. The estimated cost of the project is \$2,700,000 and will be paid from Sanitary Sewer Utility funds.

Discussion

The scope of this proposed sanitary sewer system improvement project consists of rehabilitating sewer pipe, manholes, and lateral connections to the main. The project will focus on inflow and infiltration (I&I) reduction and repairing structurally deficient sewer lines. Upon approval by City Council, the project is anticipated to begin in the summer of 2016.

Sanitary Sewer Main and Manhole Rehabilitation for I&I Reduction

Inflow and Infiltration (I&I) reduction work will consist of rehabilitating approximately 25,000 linear feet of sewer line, 215 manholes and 415 lateral connection repairs. This portion of the project is part of the ongoing effort to reduce the amount of I&I that enters the sanitary sewer system in order to reduce the wet weather sanitary overflows and wet weather backups into buildings. The rehabilitation and repair work for I&I reduction will be focused in the County House Branch watershed and a small portion of the Flat Branch watershed as shown on the attached diagram in blue and red.

City staff and TREKK Design Group have been working in these areas over the past several years to identify I&I sources and sewer infrastructure rehabilitation needs. The scope of the rehabilitation work for this project was identified by smoke testing, closed circuit TV inspections and GIS data. A list of sewer mains anticipated for this I&I work is attached.

Structural Repairs

Along with the I&I rehabilitation needs there are approximately 23,000 linear feet of structurally deficient sewer mains. Structurally deficient sewer mains are pipes that are cracked or broken almost to the point of failure. These sewer mains have been identified by sewer utility staff during the performance of routine operation and maintenance activities. The structurally deficient lines are located in various areas throughout Columbia and need to be repaired in order to keep the sewer collection system functioning properly. A list of sewer mains anticipated for rehabilitation work is attached.



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Fiscal Impact

Short-Term Impact: The total project cost, including construction, is estimated at \$2,700,000 and will be paid from Sanitary Sewer Utility funds that were provided as part of the 2013 ballot.

Long-Term Impact: Staff anticipates this project will not change the sewer utility's annual maintenance and operation costs.

Vision & Strategic Plan Impact

<u>Vision</u> Impacts:

Primary Impact: Environment, Secondary Impact: Development, Tertiary Impact: Community Facilities and Services

Strategic Plan Impacts:

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

Comprehensive Plan Impacts:

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

Legislative History

Date	Action
06/06/2016	(R61-16) Setting a public hearing for July 5, 2016 for the FY 2016
04/20/2015	sanitary sewer main and manhole rehabilitation project. (R66-15) Setting a public hearing for May 18, 2015 for the
04,20,2010	construction of the FY2015 sanitary sewer main and manhole rehabilitation project.
03/03/2014	(R31-14) Setting a public hearing for April 7, 2014 for the
	construction of the FY2014 sanitary sewer main and manhole rehabilitation project
04/19/2012	(R40-12) Setting a public hearing for April 2, 2012 for the construction of the sanitary sewer main and manhole rehabilitation project.
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Suggested Council Action

Following public input and Council discussion at the public hearing, Council should make a motion directing staff to proceed with construction of the FY2016 Sanitary Sewer Main and Manhole Rehabilitation Project.