



Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: February 5, 2018

Re: Public Hearing - FY2018 Sanitary Sewer Main and Manhole Rehabilitation Project

Executive Summary

The proposed sanitary sewer system improvements will consist of rehabilitation of approximately 55,000 linear feet of sewer line, 275 manholes and 300 lateral connections. The estimated cost of the project is \$2,700,000 and will be paid from Sanitary Sewer Utility bond funds approved in the 2013 ballot.

Discussion

This proposed sanitary sewer system improvement project consists of rehabilitating sewer pipe, manholes, and lateral connections to the main. Approximately 15,000 feet of sewer will be rehabilitated specifically for inflow and infiltration reduction in the Flat Branch basin. Approximately 40,000 linear feet of sewer main throughout the City will be rehabilitated due to both structural deficiencies and I and I reduction. The project is anticipated to begin in the summer of 2018.

Sanitary Sewer Main and Manhole Rehabilitation for I and I Reduction

Inflow and Infiltration reduction work will consist of rehabilitating approximately 15,000 linear feet of sewer line, 275 manholes and 300 lateral connection repairs. This portion of the project is part of the ongoing effort to reduce the amount of inflow and infiltration in the Flat Branch and County House drainage basins. Reducing inflow and infiltration that enters the sanitary sewer system can reduce wet weather sanitary overflows and wet weather backups into buildings. This rehabilitation and repair work for inflow and infiltration reduction will be focused in the Flat Branch I and C sub-basins. See attached diagram.

City staff and TREKK Design Group have been working together for the past several years to identify inflow and infiltration sources and sewer infrastructure rehabilitation needs within the County House and Flat Branch watershed basins. The specific scope of the rehabilitation work will be identified by closed circuit TV inspections and GIS data.

Structural Repairs

There is approximately 40,000 linear feet of structurally deficient sewer mains that will be rehabilitated as part of this project. Structurally deficient sewer mains are pipes that are cracked or broken almost to the point of failure and have been identified by Sewer Utility staff during the performance of routine operation and maintenance activities. The structurally deficient lines included as part of this project have been identified as priority lines that need to be repaired in order to keep the sewer collection system functioning properly. Rehabilitation of these lines will also reduce inflow and infiltration and the occurrence of



City of Columbia

701 East Broadway, Columbia, Missouri 65201

stoppages. These sewer mains are located in various areas throughout Columbia, with several mains located within the Strategic Plan East Neighborhood of Indian Hills.

An Interested Parties (IP) meeting was held on December 28, 2017.

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 impact the Sewer Utility's annual maintenance and operation costs.

Strategic & Comprehensive Plan Impacts

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
01/02/2018	Setting a public hearing for February 5, 2018 for the construction of the FY2018 sanitary sewer main and manhole rehabilitation project.
05/15/2017	Public Hearing
04/17/2017	(R50-17) Setting a public hearing for May 15, 2017 for the construction of the FY2017 sanitary sewer main and manhole rehabilitation project.
07/05/2016	Public Hearing
06/16/2016	(R61-16) Setting a public hearing for July 5, 2016 for the construction of the FY2016 sanitary sewer main and manhole rehabilitation project.
05/18/2015	Public Hearing
04/20/2015	(R66-15) Setting a public hearing for May 18, 2015 for the construction of the FY2015 sanitary sewer main and manhole rehabilitation project.
04/07/2014	Public Hearing
03/03/2014	(R31-14) Setting a public hearing for April 7, 2014 for the construction of the FY2014 sanitary sewer main and manhole



City of Columbia

701 East Broadway, Columbia, Missouri 65201

04/02/2012 03/19/2012	rehabilitation project. Public Hearing (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 the Public Hearing and Council discussion direct staff to proceed with the FY2018 Sanitary Sewer Main and Manhole Rehabilitation Project.