



Department Source: City Utilities - Sewer/Stormwater

To: City Council

From: City Manager & Staff

Council Meeting Date: February 15, 2016

Re: Bid Call Ordinance for the Flat Branch Watershed Relief Sewer Project No. 3 (Elm Street-Providence to Hitt Street, and Sixth Street-Elm Street to one half block south of Broadway), the Ninth and Elm Storm Drain Replacement Project, and the Ninth and Elm Pedestrian Scramble Project

Executive Summary

Staff has prepared for Council consideration an ordinance authorizing a call for bids through the Purchasing Division for the construction of the Flat Branch Watershed Relief Sewer Project No. 3 (Elm Street-Providence to Hitt Street, and Sixth Street-Elm Street to one half block south of Broadway), the Ninth and Elm Storm Drain Replacement Project, and the Ninth and Elm Pedestrian Scramble Projects. An IP meeting for all three projects was held on February 5, 2015 with ten people attending. The project "walk through" for City Council members was held on March 26, 2015. The Public Hearing was held on July 6, 2015.

Discussion

The design of the Flat Branch Watershed Relief Sewer Project No. 3, the Ninth and Elm Storm Drain Replacement Project, the Hitt & Elm Storm Drain Replacement (previous bid authorization), the Sixth Street Water Main Relocation (previous bid authorization), the Ninth and Elm Pedestrian Scramble Project, and the University of Missouri Chilled Water and Steam Tunnel Rehabilitation (by separate agreement) are all being coordinated in order to allow the projects to be bid and constructed together under a single contract. All projects are shown on the attached map. Coordination will reduce the overall cost of the six projects by completing the pavement repair work only once as well as minimize the duration in which construction activities are taking place within Elm, Sixth, Seventh and Ninth Streets Rights-of-Way.

The Flat Branch Watershed Relief Sewer, the Ninth and Elm Storm Drain Replacement and the Ninth and Elm Pedestrian Scramble projects are being designed by Engineering Surveys and Services. The Hitt and Elm Storm Drain Replacement Project and the Sixth Street Water Main Relocation projects are being designed by City staff. The University of Missouri design plans for the Chilled Water Lines and Steam Tunnel Rehabilitation will be provided by the University. Staff anticipates bidding the work and construction to begin in Spring/Summer 2016.

Flat Branch Watershed Relief Sewer Project No. 3:

This project is anticipated to consist of approximately 3,120 linear feet of gravity sewer ranging in size from 18-inch to 8-inch in diameter. The work will be located along Elm Street from Providence Road to Hitt Street, and along Sixth Street from Elm Street to one half block south of Broadway, as shown on the attached diagram. The proposed project will provide



City of Columbia

701 East Broadway, Columbia, Missouri 65201

increased sewer capacity for the downtown area and the upper northeast portion of the Flat Branch Watershed.

The project is being designed, and will be bid, to allow both open cut and trenchless (pipe bursting or boring) construction methods. It is anticipated that the base bid for the project will be to utilize open cut construction methods and associated pavement repairs for the entire length of the project. Trenchless construction methods will be bid as an alternate for the installation of new pipe between manhole locations. After the City receives construction bids, staff will determine which construction methods are most cost effective and least disruptive for this project. This project will be paid for from Sanitary Sewer Utility Funds.

Ninth and Elm Storm Drain Replacement:

This project includes the replacement of a failing storm box and inlets at the intersection of Ninth and Elm. Staff believes the existing storm structure was constructed in the early 1900's and consists of stacked rock walls and a concrete top. The structure is under the building corner, at the southeast corner of Ninth and Elm, and extends west under Ninth Street. A new 54' storm drain will be constructed on Elm Street with new inlets and junction boxes, and will connect to an existing 60" storm drain on the University property west of Ninth Street. See the Flat Branch Watershed Relief Sewer Diagram for the location of this work. This work will be paid for from Storm Water Utility Funds.

Hitt & Elm Storm Drain replacement: (previously authorized to bid)

This project includes the replacement of a failing storm sewer pipe on Elm Street and Hitt Street. This work will be paid for from Storm Water Utility Funds.

Sixth Street Water Main Relocation: (previously authorized to bid)

Water & Light Staff has identified the need to upgrade approximately 1245 feet of water distribution infrastructure along Sixth Street from Elm Street to Broadway. The existing water mains through the project corridor consist mostly of 4-inch cast iron. These aging water mains are showing increased need for maintenance and are nearing the end of their useful service life. The new main will be constructed of 8-inch PVC piping materials. The new main will provide greater reliability for customer's water supply as well as increase available flow to the area for fire protection purposes. This work will be paid for from Water Utility Funds.

Ninth and Elm Pedestrian Scramble:

A pedestrian scramble crossing is a 3-phase intersection, with the 1st phase being movement of north/south vehicle traffic, 2nd phase being movement of east/west vehicle traffic, and 3rd phase being movement of pedestrians only. The pedestrian scramble allows pedestrians to cross in any direction as no vehicles are moving at the same time.

This project will include the re-construction of sidewalk ramps to meet federal ADA standards, and the 9th and Elm Street intersection, which will be constructed in concrete to facilitate meeting the federal ADA standards. The equipment for the traffic and pedestrian signals, as well as the signals themselves, will need to be upgraded to allow the pedestrian scramble phasing.



This project will replace outdated signal equipment that is already in need of replacement, and implement the pedestrian scramble crossing option as a pilot to test its effectiveness at a reduced cost. The possibility of the pedestrian scramble was included in the Interested Parties (IP) meeting for the sewer project, and the council walk-through for the sewer project. The signal equipment parts and scramble pedestrian features would be paid for from the Annual Streets fund.

UMC Chilled Water Extension and Steam Tunnel Repair work:

This project will also include coordination with the University of Missouri for a chilled water system extension and steam tunnel rehabilitation work in the Elm and Seventh Street rights of way. This chilled water and steam tunnel work along Elm between Sixth Street and Seventh Street is to be paid for by the University.

Fiscal Impact

Short-Term Impact: The total estimated cost for construction of all five projects is \$3,034,000 (\$2,300,000 for Flat Branch Watershed Sewer Project No. 3, \$193,000 for the Ninth and Elm Storm Drain Replacement Project, \$115,000 for the Hitt and Elm Storm Drain Replacement, \$294,000 for the Sixth Street Water Main Relocation and \$132,000 for the Ninth and Elm Pedestrian Scramble Project). UMC is to pay all costs for their chilled water and steam tunnel work per agreement.

Long-Term Impact: None. (All systems currently exist and are being maintained)

Vision & Strategic Plan Impact

Vision Impacts:

Primary Impact: Downtown, Secondary Impact: Economic Development, Tertiary Impact: Health, Social Services and Affordable Housing

Strategic Plan Impacts:

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

Comprehensive Plan Impacts:

Primary Impact: Economic Development, Secondary Impact: Land Use & Growth Management, Tertiary Impact: Infrastructure

Legislative History

Date	Action
11/18/2015	Determining it is in the public interest to replace and upgrade water mains along a portion of Sixth Street between Elm Street and Broadway.



City of Columbia

701 East Broadway, Columbia, Missouri 65201

11/03/2015	Declaring the necessity for the replacement and upgrade of water mains along a portion of Sixth Street, and transferring all fire hydrants and customer services along a portion of Broadway ; setting a public hearing
10/21/2015	Declaring the need to acquire easements for construction of the Flat Branch Watershed Relief Sewer Project No. 3.
10/06/2015	Authorizing an agreement with Engineering Surveys and Services for the Ninth and Elm Pedestrian Scramble project
07/07/2015	Declaring the necessity for construction of Flat Branch Watershed Relief Sewer Project No. 3; setting a public hearing.
07/07/2015	Declaring the necessity for the Ninth and Elm Pedestrian Scramble Project; setting a public hearing.
06/15/2015	Bid Call Ordinance for Hitt & Elm Storm Drain Replacement Project
09/16/2014	Authorizing an agreement with Engineering Surveys and Services for surveying and design of the Flat Branch Watershed Relief Sewer Project No. 3 (Elm Street and Sixth Street).
07/22/2014	Appropriating funds for Flat Branch watershed relief sewer projects.
06/06/2014	Report on Downtown sewer funding strategies.
07/16/2012	Public Hearing for Hitt & Elm Storm Drain Replacement Project

Suggested Council Action

Authorizing a call for bids through the Purchasing Division for the Flat Branch Watershed Relief Sewer Project No. 3 (Elm Street-Providence to Hitt Street, and Sixth Street-Elm Street to one half block south of Broadway), the Ninth and Elm Storm Drain Replacement Project, Sixth Street Waterline Replacement and the Ninth and Elm Pedestrian Scramble Project.