Ohio River Tunnel: An innovative alternative to 3 CSO Basins

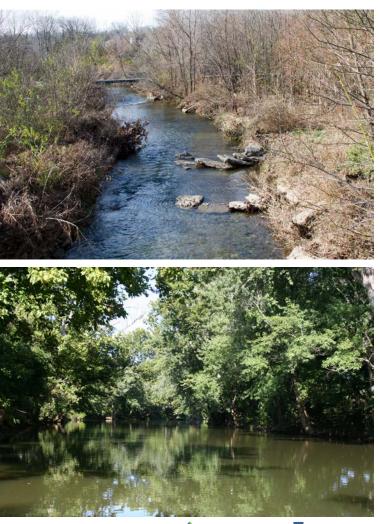
Project Update Meeting

10.11.2016



Discussion topics for this evening

- Overview
- Ohio River Tunnel Project
 Conceptual layout
- Next Steps



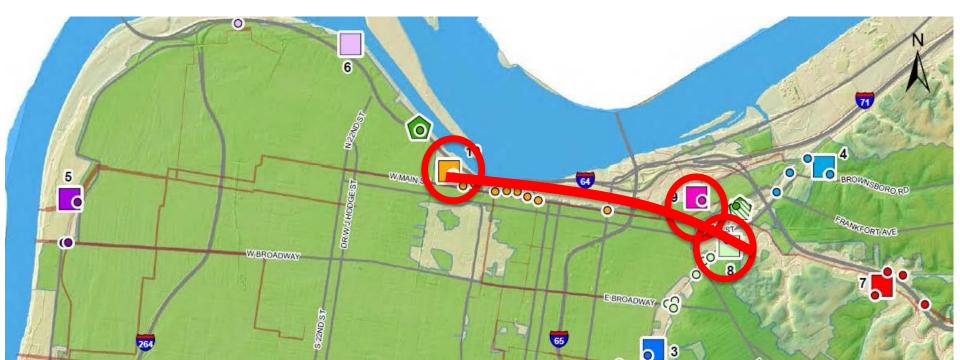


Ohio River Tunnel Overview

A project to combine the volume of 3 individual Combined Sewer Overflow (CSO) basins into a single deep rock tunnel

September 30, 2016 approval by MSD's Board to move forward with design

Three basins will be eliminated by the consolidated tunnel solution



Careful consideration resulted in the new solution

Variety of factors considered:

- Discussions with Community leaders
- Input from public meetings
- Traffic disruptions along key commercial corridor
- Economic impacts to downtown businesses and the emerging Butchertown district
- Consent Decree mandates for completion by December 2020
- Technological advances of deep tunnel construction over the last decade have reduced costs
- Eliminates challenges of construction and final land use planning on a brownfield site



Community meetings to date

	Story & Main	Lexington & Payne
Orientation	June 16, 2015	January 19, 2016
Conceptual	February 10, 2016	April 26, 2016



Ohio River Tunnel Conceptual Layout

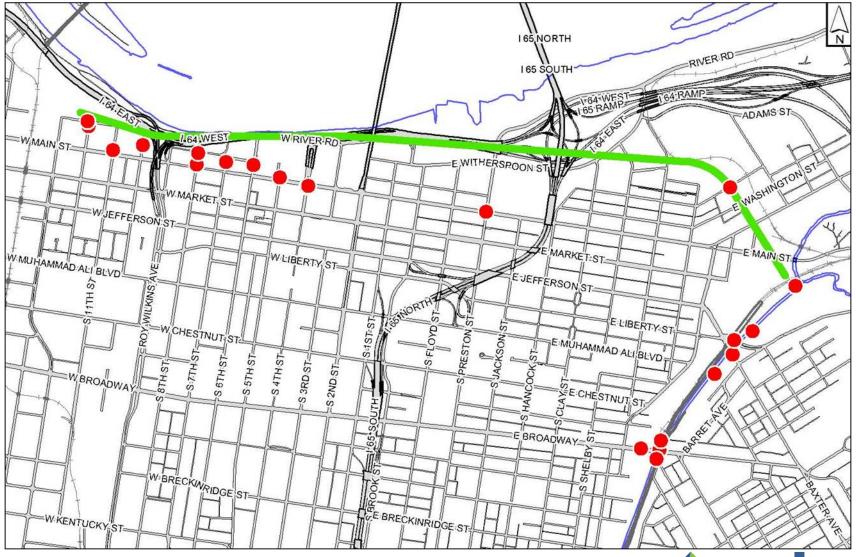


Ohio River Tunnel Facts

- Temporary storage of sewer diluted with rain water during wet weather events
- Approximately 13,200 linear feet in length
- Approximately 175-feet to 200-feet below ground
- Minimum internal diameter of 20 feet
- Minimum storage volume of 31.8 million gallons



Ohio River Tunnel Preliminary Alignment





Individual projects make up the Ohio River Tunnel Project

- Project Components:
 - Ohio River Tunnel
 - Lexington & Payne CSO Interceptor
 - Story and Main Connector
 - Downtown CSO Interceptor
 - Rowan Pump Station & Force Main
- The Consent Decree Deadline of December 31, 2020 remains unchanged

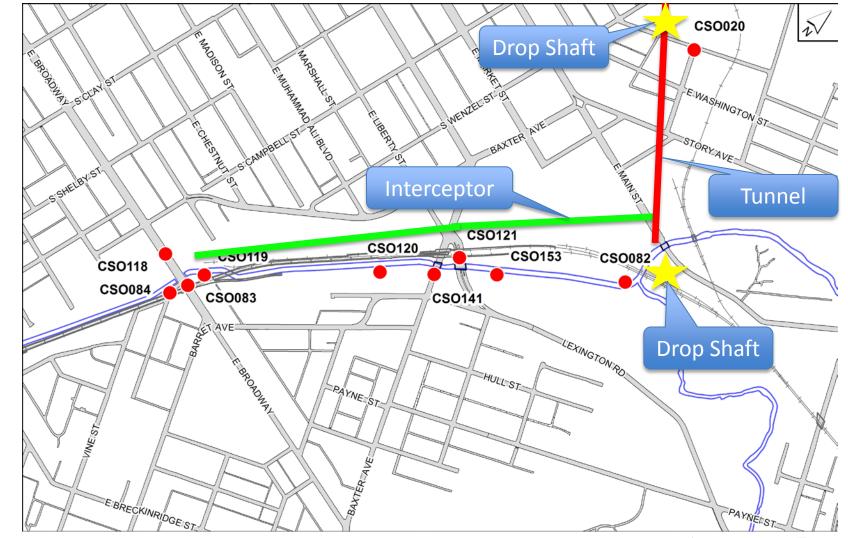


Lexington and Payne CSO Interceptor Facts

- Sewer line to capture overflows from the 9 existing CSOs and convey that flow to the tunnel
- Interceptor will be below the concrete channel of South Fork Beargrass Creek
- Approximately 5,000 liner feet in length
 - From E Broadway to E Main Street
 - Pipe size ranging from 36-inch to 102-inch



Lexington and Payne CSO Interceptor



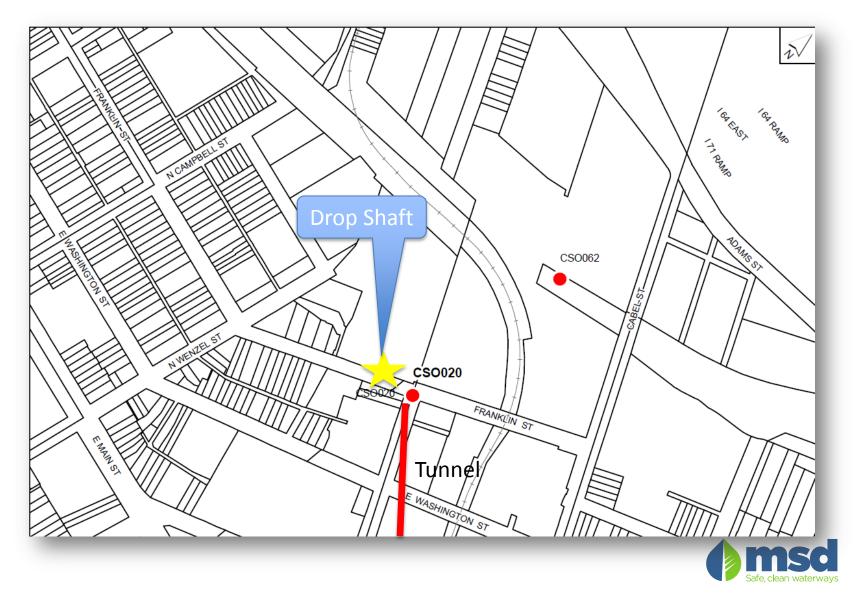


Story and Main Connector Facts

- Sewer line to capture overflows from the 2 existing CSOs and convey that flow to the tunnel
- Approximately 200 liner feet in length
 - On Franklin Street and Buchanan Street
 - Pipe size 36-inch



Story and Main Connector

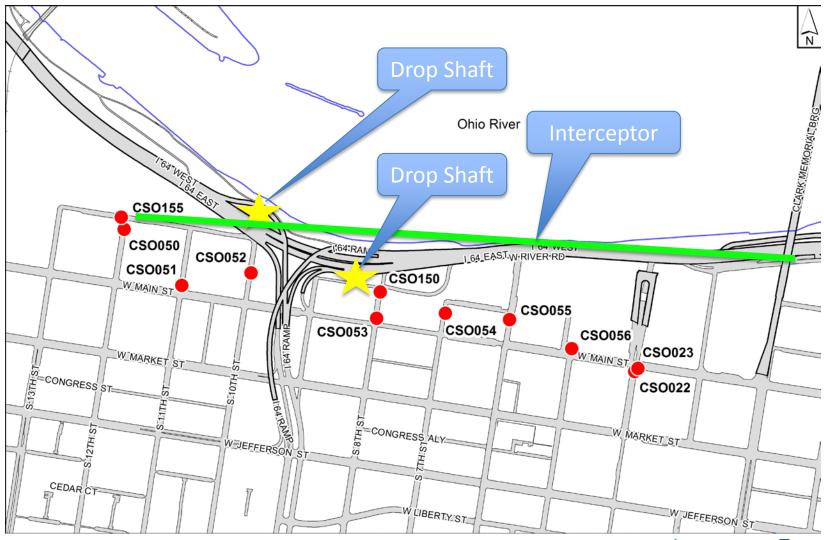


Downtown CSO Interceptor Facts

- Sewer line to captures overflows from 12 CSOs and convey that flow to the tunnel
- Approximately 2,000 linear feet in length
 - Mainly north-south streets between Main Street and River Road
 - Pipe size ranging from 12-inch to 48-inch



Downtown CSO Interceptor



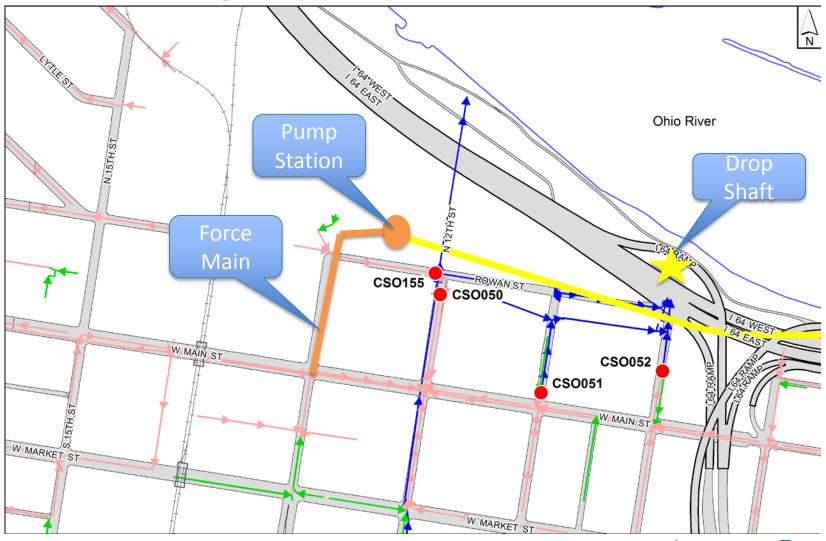


Rowan Pump Station & Force Main Facts

- A pump station to return combined sewer flows to the existing system for treatment
- Control buildings will be constructed on northwest corner of 13th Street and Rowan Street intersection



Rowan Pump Station





Next Steps



Next Steps

- Project modification request currently under EPA review
- Begin conceptual designs
- Continue coordination with project partners
- Conduct public update meetings as project progresses
- Consent Decree Deadline to remain December 31, 2020



Schedule

Project	Construction Start	Construction Completion
Ohio River Tunnel	Summer 2017	Spring 2020
Lexington & Payne CSO Interceptor	Summer 2017	Fall 2019
Story & Main Connector	Spring 2018	Winter 2019
Downtown CSO Interceptor	Spring 2018	Winter 2019
Rowan Pump Station & Forcemain	Spring 2018	Summer 2020



Questions you may have

- Will MSD purchase the River Metals Recycling (1371 Lexington Rd) property or be performing any construction activities on the River Metals Recycling property associated with this project?
- What will be the impact to neighbors of the project during construction?
- Will there be any visible above ground structures?
- Will there be odors associated with the tunnel?



Discussion



For general information or emergencies regarding the MSD system, call:

502-587-0603

Your call will be answered

- By an MSD staff member
- Around the clock
- Every day of the year

