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



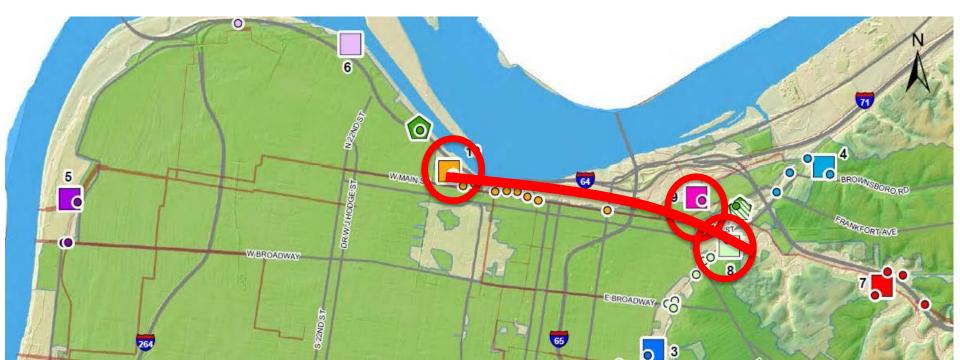


#### **Ohio River Tunnel Overview**

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

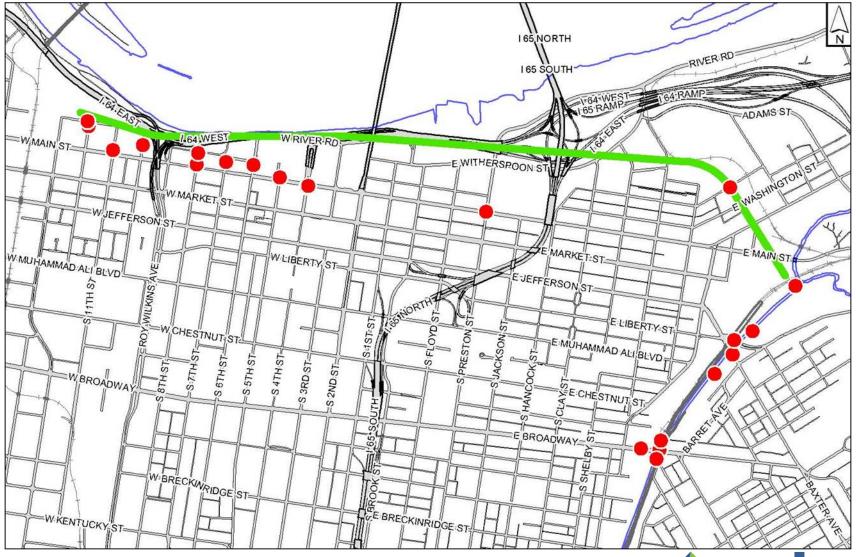


#### **Ohio River Tunnel Facts**

- 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

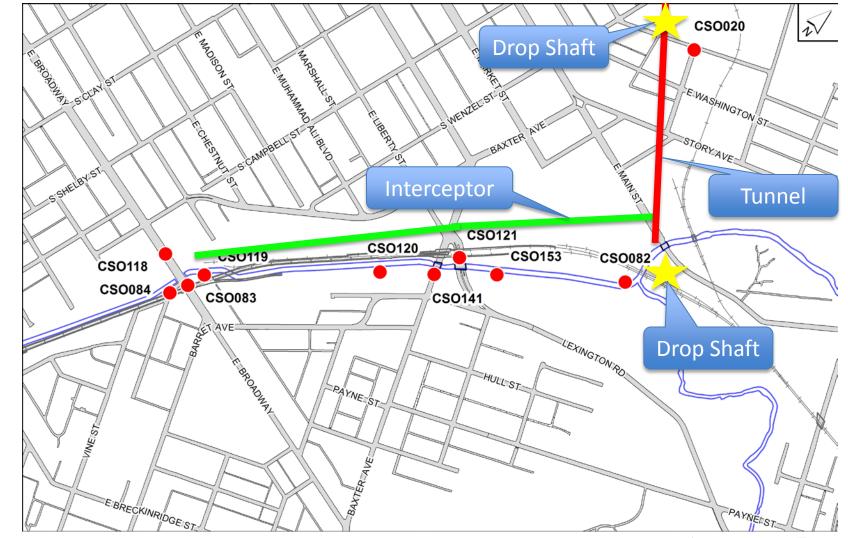


#### Lexington and Payne CSO Interceptor Facts

- 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



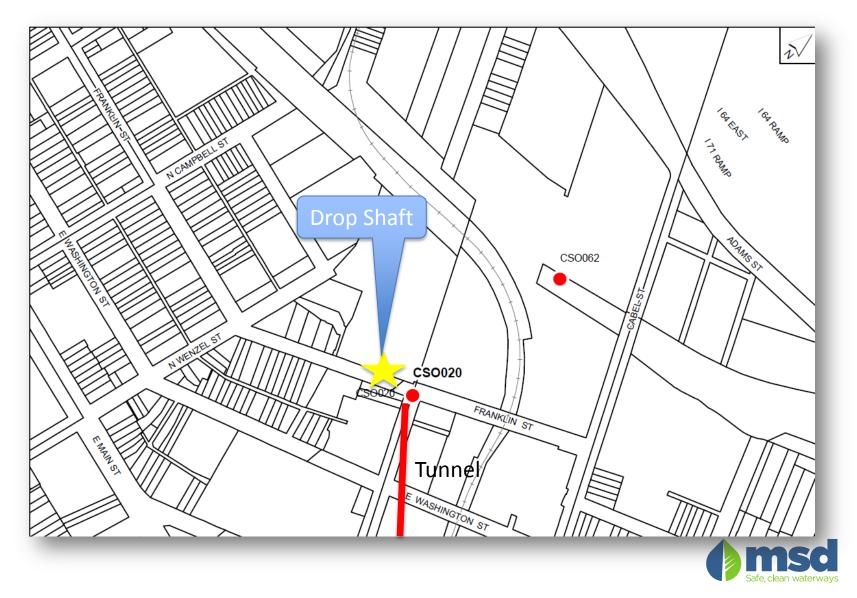


#### **Story and Main Connector Facts**

- 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**

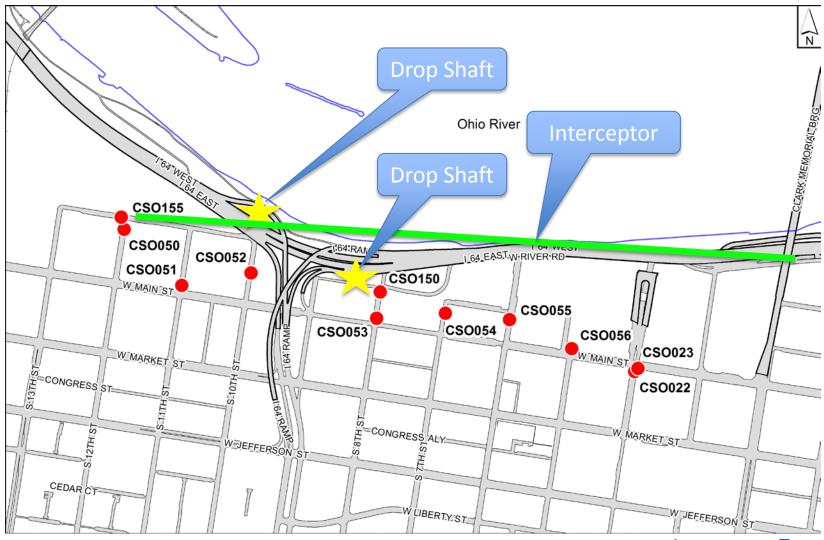


#### **Downtown CSO Interceptor Facts**

- 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**



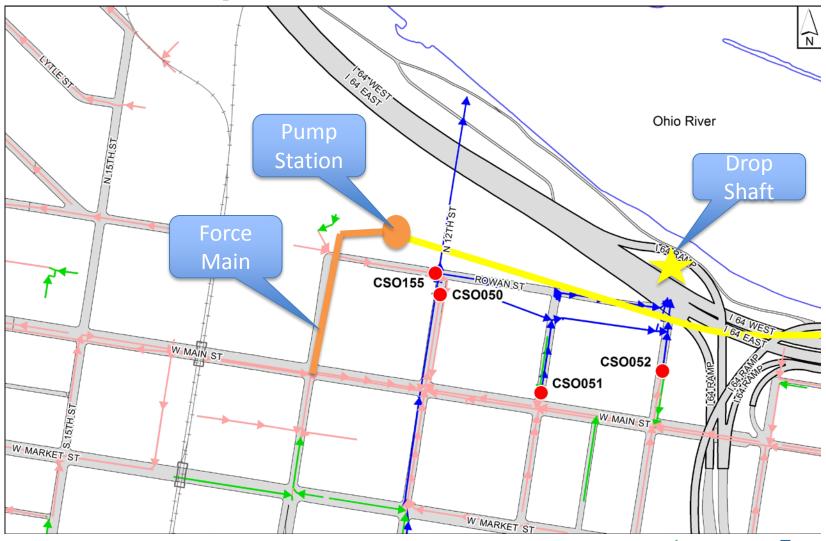


#### **Rowan Pump Station & Force Main Facts**

- A pump station to return combined sewer flows to the existing system for treatment
- Control buildings will be constructed on northwest corner of 13<sup>th</sup> 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

