MSD’s Waterway Protection Tunnel to extend and capture more wastewater overflow

Eliminates need for planned basin project at Lexington Road and Grinstead Drive

LOUISVILLE, KY – MSD’s project to build a massive tunnel 18 stories underground to help keep millions of gallons of sewage out of the Ohio River and Beargrass Creek will be expanded to capture even more wastewater and stormwater overflow – and eliminate the need for a planned storage basin project.

The Waterway Protection Tunnel was initially planned to be 2.5 miles long, beginning at 12th and Rowan streets just west of downtown, and stretching east to East Main Street near the Home of the Innocents. On July 23, the MSD Board of Directors approved a change order to the project, which will extend the tunnel to about four miles total, continuing the route southeast to near Lexington Road and Grinstead Drive. The total storage capacity of the underground tunnel will increase from 37 million gallons to 55 million gallons.

The extension of the tunnel will replace the planned storage basin project at the site of the former Jim Porter’s Goodtime Emporium near Lexington and Grinstead. Additionally, when the underground tunnel project is complete, the above-ground site at that location will gain a new public green space to serve as a trailhead for the Beargrass Creek Trail, complete with parking, paths, trails, a rain garden and a wetland preservation area.

“Extending the tunnel creates the opportunity to meet our goal of safer, cleaner waterways and environment for our community with less above-ground construction impacts,” said MSD Executive Director Tony Parrott.

Work began on the Waterway Protection Tunnel January 2018, with the construction of the pump station, working and retrieval shafts, and other connectors required to start the excavation of the tunnel itself – which will be more than 200-feet below the surface and 20-feet in diameter. Over the lifecycle of the Waterway Protection Tunnel, MSD also will realize cost savings through lower operations and maintenance costs of the tunnel compared to a storage basin.

In total, the Waterway Protection Tunnel will capture 25 combined sewer overflow points that discharge 439 million gallons of wastewater and rainwater in a typical rainfall year that flow into Beargrass Creek and the Ohio River. The tunnel will allow capture of 98 percent of these overflows and store the mixtures until the rain subsides and sewer system capacity is available. The mixture will then be pumped back into the sewer system and conveyed to MSD’s Morris Forman Water Quality Treatment Center, where it is treated before release into the Ohio River.

“Unlike a new highway or a new bridge, Louisville residents may never see this major infrastructure project because it will be 18 stories underground. But the benefits are real in terms of keeping hundreds of millions of gallons of wastewater from overflowing every year, which has direct impacts on quality of life and economic development opportunities in our community,” Parrott said.
The Waterway Protection Tunnel is part of MSD’s Consent Decree work that also includes building storage basins across the community to help reduce sewer overflows. While the extension of the tunnel eliminates the need for the planned basin at Lexington and Grinstead, the original length of the tunnel also eliminates three other planned basin projects planned for Lexington Road and Payne Street; Story Avenue and Main Street; and, 13th and Rowan streets.

Even with the extension, the tunnel project is still scheduled to be in service on time – by the end of 2020, meeting all requirements for certification with the U.S. Environmental Protection Agency for MSD’s Consent Decree.

MSD will hold an informational meeting for stakeholders in the area of I-64 and Grinstead Drive/Lexington Road to review the change from a basin to the tunnel for that site. The meeting is scheduled for August 28, 6:30 PM, at Girl Scouts of Kentuckiana Building, 2115 Lexington Road. Area residents will receive notification from MSD by postal mail.

For more information visit LouisvilleMSD.org/Tunnel or follow #MSDtunnel on social media.