



PROJECT GROUNDWORK
your pipeline to clean water

Lick Run Project

The Lick Run Project – part of the Metropolitan Sewer District of Greater Cincinnati’s (MSD) solution for Lower Mill Creek – will eliminate millions of gallons of combined sewer overflows (CSOs) into the Mill Creek each year. The project will also improve water quality, create new jobs, and provide opportunities for neighborhood revitalization.

Challenge in Lower Mill Creek

During rains, our combined sewer system can overflow into streams and rivers, making Cincinnati among the top five communities in the U.S. for combined sewer overflows (CSOs).

MSD is under a federal Consent Decree to reduce the overflows and has implemented a major public works initiative called “Project Groundwork” to achieve compliance and bring value to the community through this significant investment.

More than half of our 11 billion gallons in annual overflows occur in the Lower Mill Creek watershed, which covers 40,000 acres in the heart of Cincinnati.

As a result, MSD is implementing a near-term solution called the “Lower Mill Creek Partial Remedy (LMCPR)” that seeks to significantly reduce the overflows by 2018. Additional solutions will be implemented after 2018.

Lower Mill Creek Solution

MSD’s Lower Mill Creek solution – which was officially approved by the U.S. EPA in May 2013 – will eliminate 1.78 billion gallons of CSOs annually into the Mill Creek.

The remedy seeks to reduce CSOs by primarily focusing on reducing the amount of stormwater entering combined sewers during heavy rains.

This approach integrates green infrastructure (e.g., stream restoration, wetlands, bioswales, rain gardens and stormwater detention basins) with gray (e.g., new storm sewers) to provide cost-effective solutions with community benefits.

The remedy includes projects in the Lick Run, Kings Run, Bloody Run, and West Fork watersheds. Overall project costs are estimated at \$244 million (in 2006 dollars).

Lick Run Watershed

The Lick Run watershed covers about 2,900 acres on Cincinnati’s west side. It includes Cincinnati’s South Fairmount neighborhood and portions of East and West Price Hill and Westwood.

Every year, about one billion gallons of sewage and stormwater overflow from the Lick Run watershed through the CSO 5 outfall into the Mill Creek. CSO 5 is the largest volume CSO in MSD’s service area.











The Lick Run Project will eliminate millions of gallons of CSOs annually. This project will keep stormwater out of the combined sewer system through a series of gray and green infrastructure projects across the watershed.



Sewer overflow at CSO 5 in South Fairmount

Lick Run Project



-  Watershed Boundary
-  Storm Sewer
-  Urban Waterway
-  Sediment and Debris Separator
-  Detention Feature
-  Natural Conveyance
-  Sanitary Sewer
-  12 Lick Run Project
-  A Early Success Project
-  SMU Project

1 Harrison Avenue, Phase A

New stormwater sewers along Harrison Avenue. Coordinated with Cincinnati Department of Transportation & Engineering (CDOTE) road work. **Completed in Fall 2013.** A curb-side bumpout planter at Tremont was installed in Spring 2014.

2 Rapid Run Park



Bioswale parallel to Rapid Run Pike, two small bioretention basins and new stormwater sewers. MSD partnering with Cincinnati Park Board. **Under Construction: Fall 2013 to Fall 2014.**






3 Queen City Avenue, Phase 1

New stormwater sewers along Queen City Avenue from the Bypass to Sunset Avenue and along Tillie/Champlain. **Under Construction: Fall 2013 to Spring 2015.**

4 Harrison Avenue, Phase B

New stormwater sewers along Harrison Avenue and Moelling Avenue near the Western Hills Viaduct. Construction: Fall 2014 to Spring 2015.

Early Success Projects

-  **A San Antonio Church**
Permeable pavers and four small bioinfiltration basins (rain gardens) were installed in 2011. 
-  **B St. Francis Court Apartments**
Two unused parking lots were converted to bioinfiltration basins (rain gardens) in 2010.
-  **C Immanuel United Church**
A bioinfiltration basin (rain garden) was installed in 2010.
-  **D Roberts Academy**
Retrofit of an existing stormwater detention basin. Partially funded by an Ohio EPA grant. Construction to begin Fall 2014.

Guerley Road Detention Dam

Large stormwater detention dam off Guerley Road. This project will help reduce street flooding and CSOs. Construction: Fall 2013 - Summer 2014.

12 Quebec Road

New stormwater sewers along Quebec Road and side streets. Construction: Summer 2016 - Summer 2017.

11 Wyoming & Minion Avenues

New stormwater sewers along Wyoming Avenue and multiple adjacent streets. Construction: Summer 2016 - Summer 2017.

10 Queen City and Cora Avenues

Restoration of an historical stream that was enclosed in a combined sewer. Closure of inlets and stream channel stabilization. New storm sewers along Fenton Avenue and at bottom of ravine. Improvements to three low-lying areas to hold stormwater. Construction: Summer 2016 - Summer 2017.

9 Valley Conveyance System (VCS)

Stormwater conveyance system with a naturalized waterway and underground stormwater conveyance box. Construction: Winter (Jan.) 2016 - Summer 2018. **See back page for more details.**

8 Queen City Avenue, Phase 2

New stormwater sewers along Queen City Avenue from Sunset to apartment complex off East Tower Drive. Construction: Winter (Dec.) 2015 - Winter (Dec.) 2017.


5 White Street

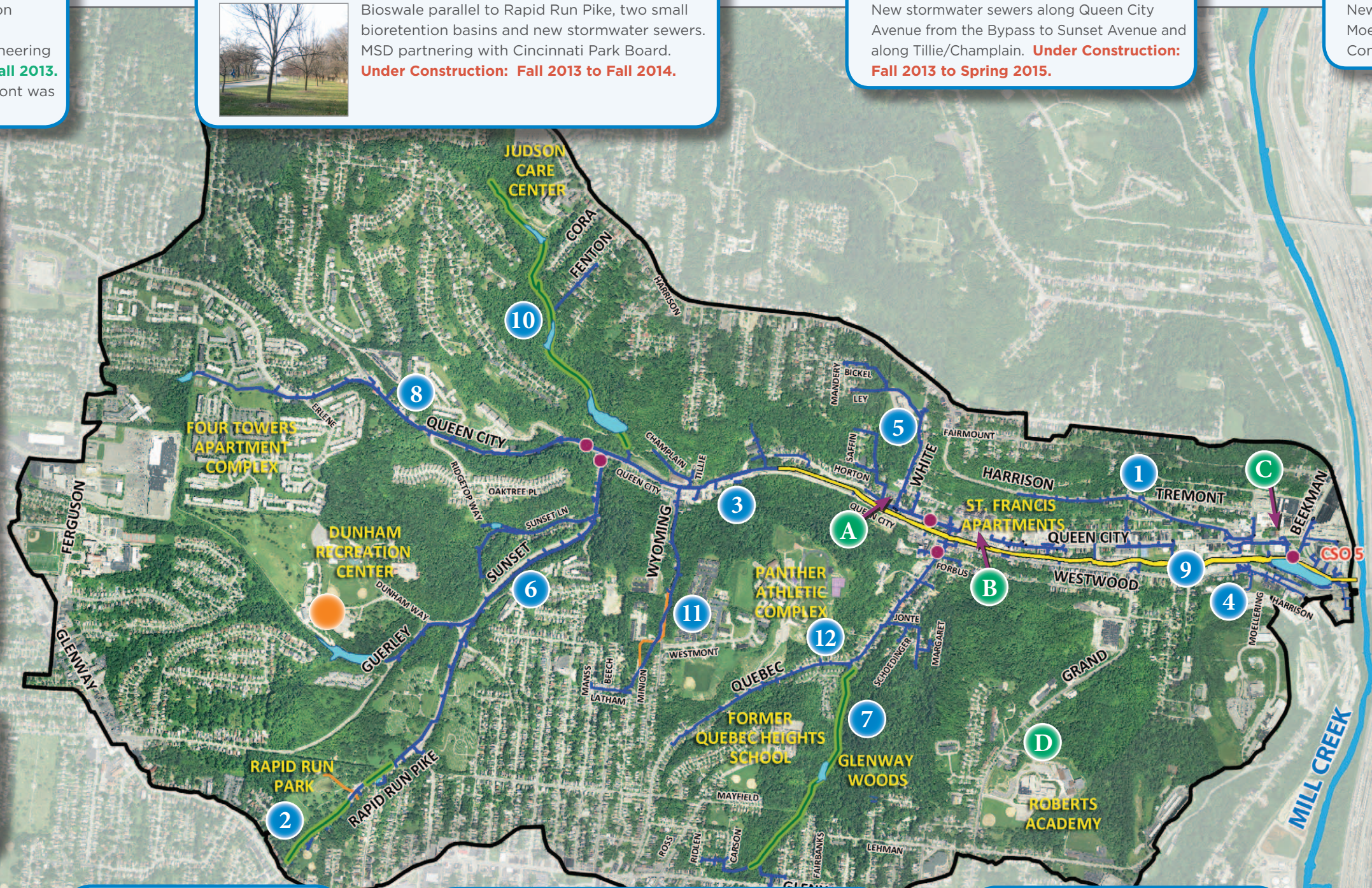
New stormwater sewers along White Street and multiple adjacent streets. Construction: Spring 2015 - Spring 2016.

6 Sunset Avenue

New stormwater sewers along Sunset Avenue, Sunset Lane, Guerley Road and Rapid Run Pike. Construction: Spring 2015 - Summer 2016.

7 Quebec Heights

Restoration of an historical stream in Glenway Woods that was enclosed in a combined sewer. Closure of inlets and stream channel stabilization. Improvements to one low-lying area to hold stormwater. Partnering with Cincinnati Parks. Construction: Summer 2015 - Fall 2016. 



Project Details

Overview of the Lick Run Project

The Lick Run Project is comprised of 12 individual projects that will be constructed between 2012 and 2018. The central element is an urban waterway or Valley Conveyance System (VCS) in the heart of South Fairmount that will carry or convey stormwater and natural drainage to the Mill Creek. The other 11 projects will convey stormwater and natural drainage to the urban waterway.

The projects — described in detail in the map on the inside spread — include (in order of anticipated construction starts):

- Harrison Avenue, Phase A (**completed**)
- Rapid Run Park (**under construction**)
- Queen City Avenue, Phase 1 (**under construction**)
- Harrison Avenue, Phase B (anticipated construction start in fall 2014)
- White Street (in design)
- Sunset Avenue, Sunset Lane and Rapid Run Pike (in design)
- Quebec Heights (in design)
- Queen City Avenue, Phase 2 (in design)
- Valley Conveyance System/Urban Waterway (in design)
- Queen City and Cora Avenues (in design)
- Wyoming & Minion Avenues (in design)
- Quebec Road (in design)

The map also includes initiatives in the Lick Run watershed that are associated with (but separate from) the Lick Run Project, including MSD demonstration-type projects (Early Success Projects) to showcase green/sustainable ways to manage stormwater and a City of Cincinnati Stormwater Management Utility (SMU) project to reduce street flooding along Guerley Road.

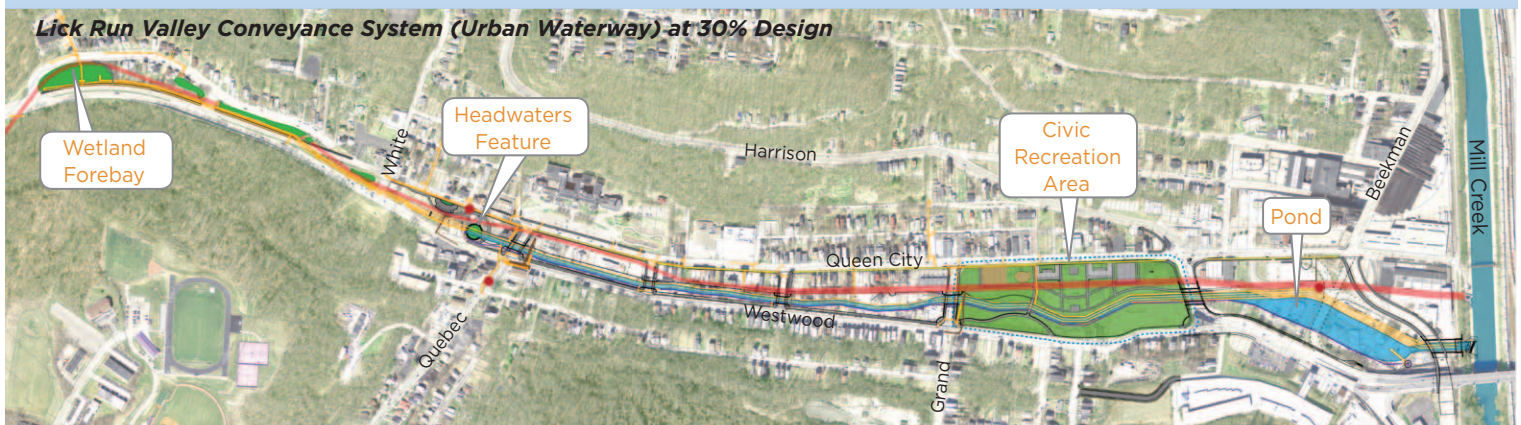
Urban Waterway in South Fairmount

The VCS or urban waterway (see map below) will be located in South Fairmount from Old Queen City Avenue to the Mill Creek between Queen City and Westwood avenues. This area is a gateway to the west side of Cincinnati from I-75 and downtown Cincinnati.

The VCS will include a naturalized waterway with an aboveground meandering stream channel with natural stone, pools and riffles and a riparian edge planted with native plants and trees. An underground stormwater conveyance box will be constructed beneath the system to handle flows from large rain events. The VCS will also include a wetland forebay, headwaters area and a pond.

A number of community amenities are included, such as a multi-use path, lighting, safety railing, retaining walls, an improved civic recreation space, parking, and bridges.

The project is currently in design with construction anticipated to begin in January 2016.



For more information:

Visit www.projectgroundwork.org/lickrun or

Contact MSD Engineering Customer Service at (513) 557-3594 or MSD.Communications@cincinnati-oh.gov