

# CSO LTCP Project Fact Sheet



**LTCP Project Number:** L\_OR\_MF\_020\_S\_09B\_B\_A\_8

**Project Name:** Story Avenue and Main Street Storage Basin

**Project Type:** Off-Line Storage

**Receiving Stream:** Ohio River

**Project Description:** This project includes the construction of a 0.13 MG off-line underground covered storage basin for CSO020 to reduce overflows to 8 overflows per year. The facility will require a 0.13 MGD PS the stored flow to the RSPS following the wet weather event.

**Design Parameters / Assumptions:** Basins are designed to the 9th overflow event volume, resulting in 8 CSO overflows/year. The 9th peak flowrate is evaluated to compare gravity vs. pumped conveyance. Design for pump-back is 24 hours. Type of basin based on hydraulics and surroundings.

**Surrounding Area Land Use:** This project is located within an 'Industrial' property, approximately 100' Northeast of Franklin St. and approximately 200' Northwest of CSO020.

**Apparent Utilities Description:** No major utilities conflict relating to the proposed basin

**Capital Projects:** 2008~Middle Fork Rehab Phase 2; Floodwall Closure @ Buchanan; CSO020 and 62 S&F Control - Awaiting Start; 2007~District 4 General Fund DRI - Complete; 2015~Integration of Buchanan PS to RTC - Hidden

**Advanced Site Restoration:** N/A

**Estimated Capital Cost (2008):** \$1,580,000

**Capital Cost / Gallon Overflow Removed:** \$1.10

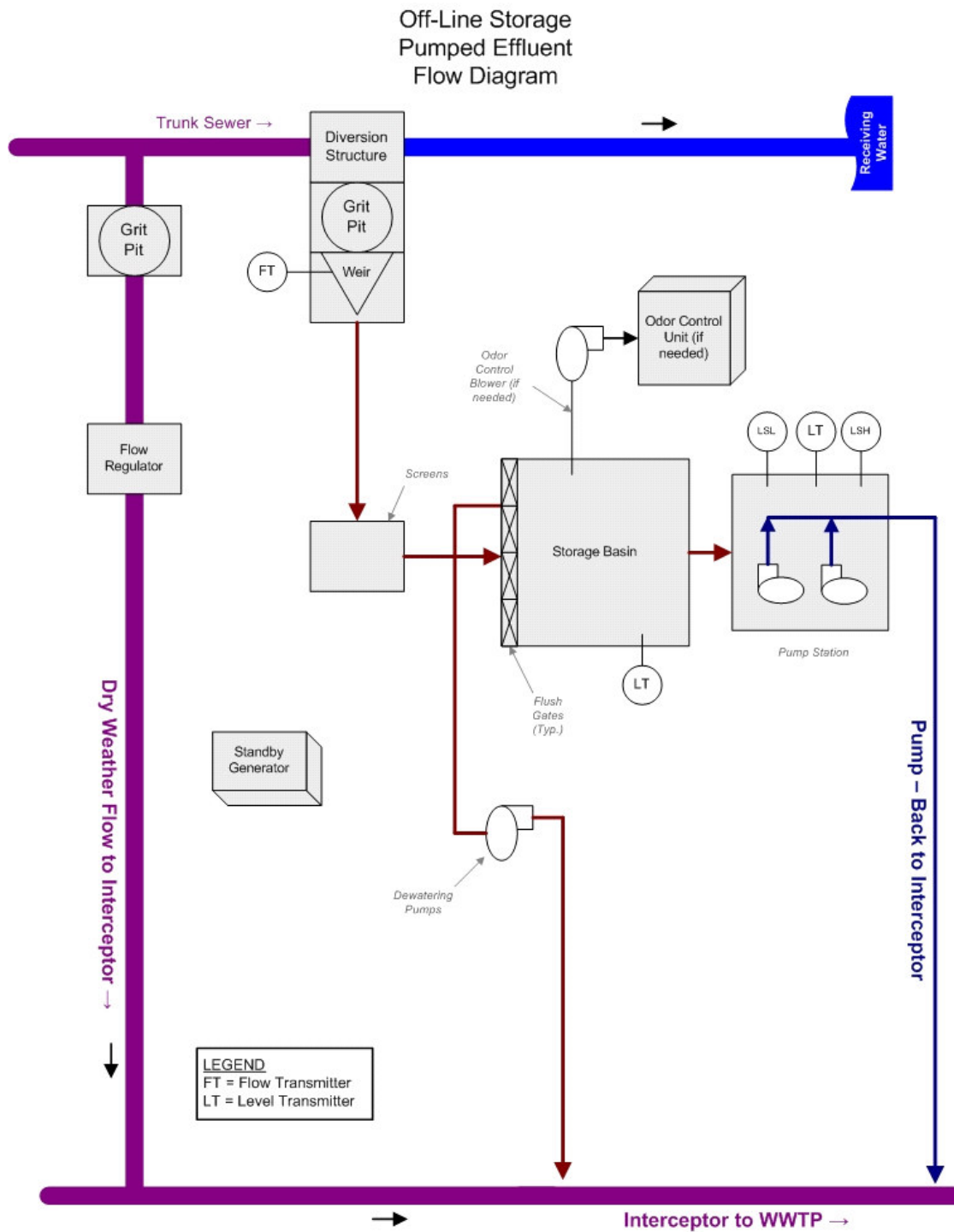
**Weighted Benefit / Cost Ratio (Capital Cost):** 74.25

**Overflow Points Addressed:**

<u>CSO Number</u>	<u>CSO Name</u>	<u>CSO Area (Acres)</u>	<u>2008 AAOV (MG / Yr)</u>	<u># of Overflows / Yr</u>	<u>Post LTCP AAOV (MG/Yr)</u>	<u>Post LTCP # Overflows / Year</u>
CSO020	Buchanan Pump Station	86.59	6.29	11	4.21	8

*NOTE: CSO hydraulic statistics are predicted based on InfoWorks model results.*

**LTCP Project Number:** L\_OR\_MF\_020\_S\_09B\_B\_A\_8



# Integrated Overflow Abatement Plan

## Volume 2 - Final CSO Long-Term Control Plan

Ohio River  
 Solution ID # L\_OR\_MF\_020\_S\_09B\_B\_A\_8  
 Story Avenue and Main Street Storage Basin

**Preliminary - For Budget Development Only**

### Legend

- Active CSO
- Eliminated CSO
- PS Proposed Pump Station Solution
- PS Pump Station
- Proposed Pipe Solution
- Force Main
- Collector < 12"
- Interceptor => 12"
- Combined Sewer Pipe
- Flood Wall
- Proposed Storage Solution
- Floodway
- Metro Parks
- Streams

General representation of overflow abatement solutions are for preliminary planning purposes. Alignments and locations may be altered during design.

1 inch = 100 feet  
 Scaleable when printed on 11"x17" paper



Some boundaries are uniquely symbolized within the map.  
 Map Revision  
 Mar 13, 2009  
 Aerial Date: 2006



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# CSO LTCP Project Fact Sheet



**LTCP Project Number:** L\_OR\_MF\_015\_M\_13\_B\_B\_8

**Project Name:** Paddy's Run Wet Weather Treatment Facility

**Project Type:** RTC with Treatment

**Receiving Stream:** Ohio River

**Project Description:** This project is to provide a 50 MGD RTB High Rate Treatment Facility and ILS for CSO015 and 191 to reduce overflows to eight overflows per year. The basin is located in the vicinity of the Paddy's Run FPS adjacent to the outfall.

**Design Parameters / Assumptions:** The HRT is started at the beginning of the event and RTC is used to store 9.6 MG in the outfall during the peak of the event. The basin is located in the vicinity of the Paddy's Run FPS adjacent to the outfall.

**Surrounding Area Land Use:** Project is located within 'Industrial' & 'Vacant and Undeveloped' property, which includes the MSD flood protection system and Paddys' Run Creek.

**Apparent Utilities Description:** Prim. OH elec. In. passes through the proposed basin

**Capital Projects:** 2009~FY08/09 CD-1 Drainage Improvement - Awaiting Start; 2013~ Campground Rd. @ Cane Run Rd.; RTC @ Southwestern Outfall (SWOR1)

**Advanced Site Restoration:** N/A

**Estimated Capital Cost (2008):** \$24,940,000

**Capital Cost / Gallon Overflow Removed:** \$0.24

**Weighted Benefit / Cost Ratio (Capital Cost):** 8.05

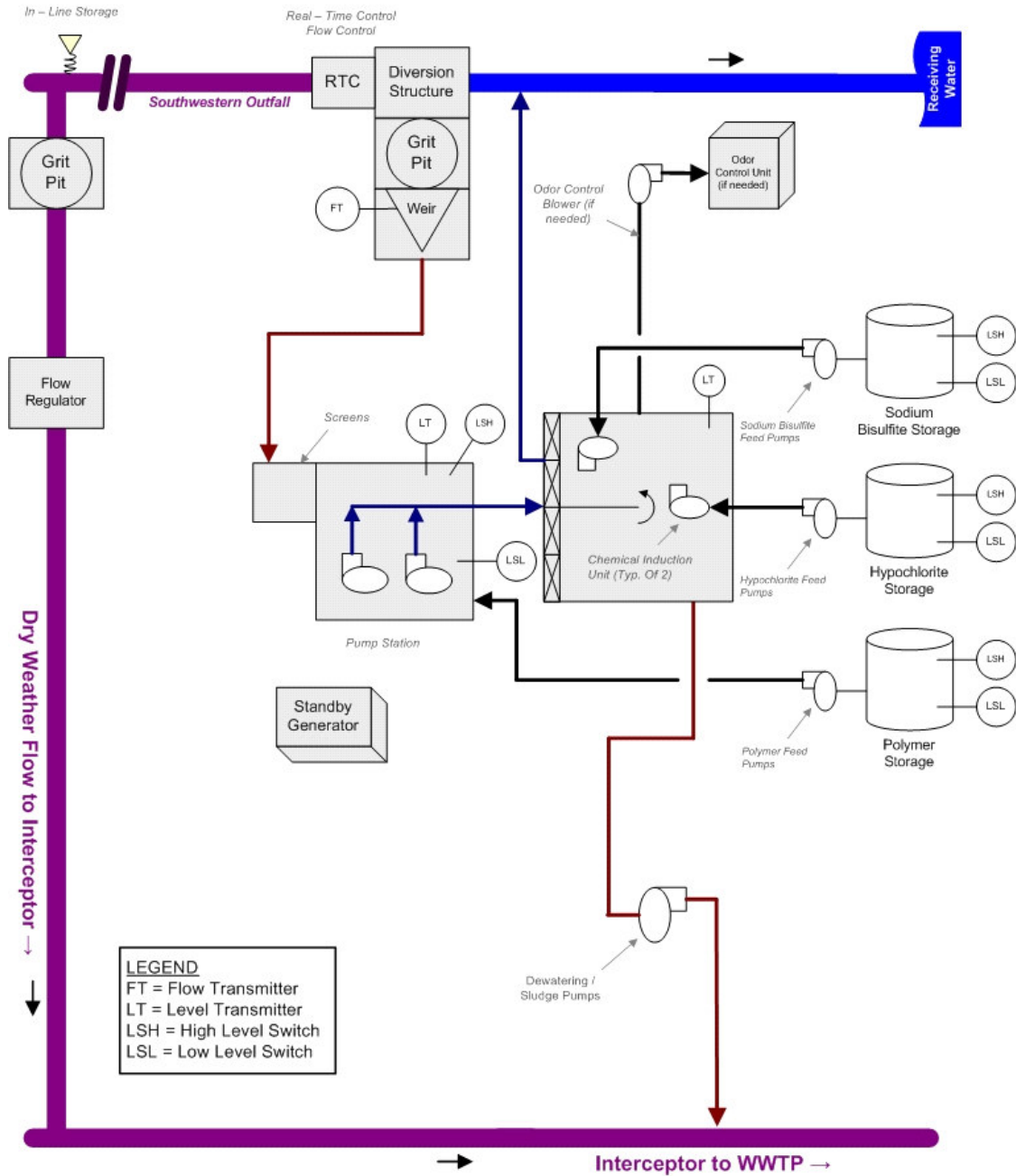
**Overflow Points Addressed:**

<u>CSO Number</u>	<u>CSO Name</u>	<u>CSO Area (Acres)</u>	<u>2008 AAOV (MG / Yr)</u>	<u># of Overflows / Yr</u>	<u>Post LTCP AAOV (MG/Yr)</u>	<u>Post LTCP # Overflows / Year</u>
CSO015	Southwestern Pump Station	7,496.70	494.56	61	290.82	8
CSO191	Algonquin Parkway Sanitary Diversion	339.75	32.42	19	22.96	8

*NOTE: CSO hydraulic statistics are predicted based on InfoWorks model results.*

**LTCP Project Number:** L\_OR\_MF\_015\_M\_13\_B\_B\_8

**Hybrid Technology:  
Retention Treatment Basin with Real-Time Control  
Process Flow Diagram**


















# Integrated Overflow Abatement Plan

Volume 2 - Final CSO Long-Term Control Plan

Ohio River  
Solution ID #L\_OR\_MF\_015\_M\_13\_B\_B\_8  
Paddy's Run Wet Weather Treatment Facility

Preliminary - For Budget Development Only

## Legend

-  Active CSO
-  Eliminated CSO
-  Proposed Flow Control Solution
-  Proposed Pump Station Solution
-  Pump Station
-  Proposed Pipe Solution
-  Force Main
-  Collector < 12"
-  Interceptor => 12"
-  Combined Sewer Pipe
-  Flood Wall
-  Proposed Storage Solution
-  Floodway
-  Metro Parks
-  Streams

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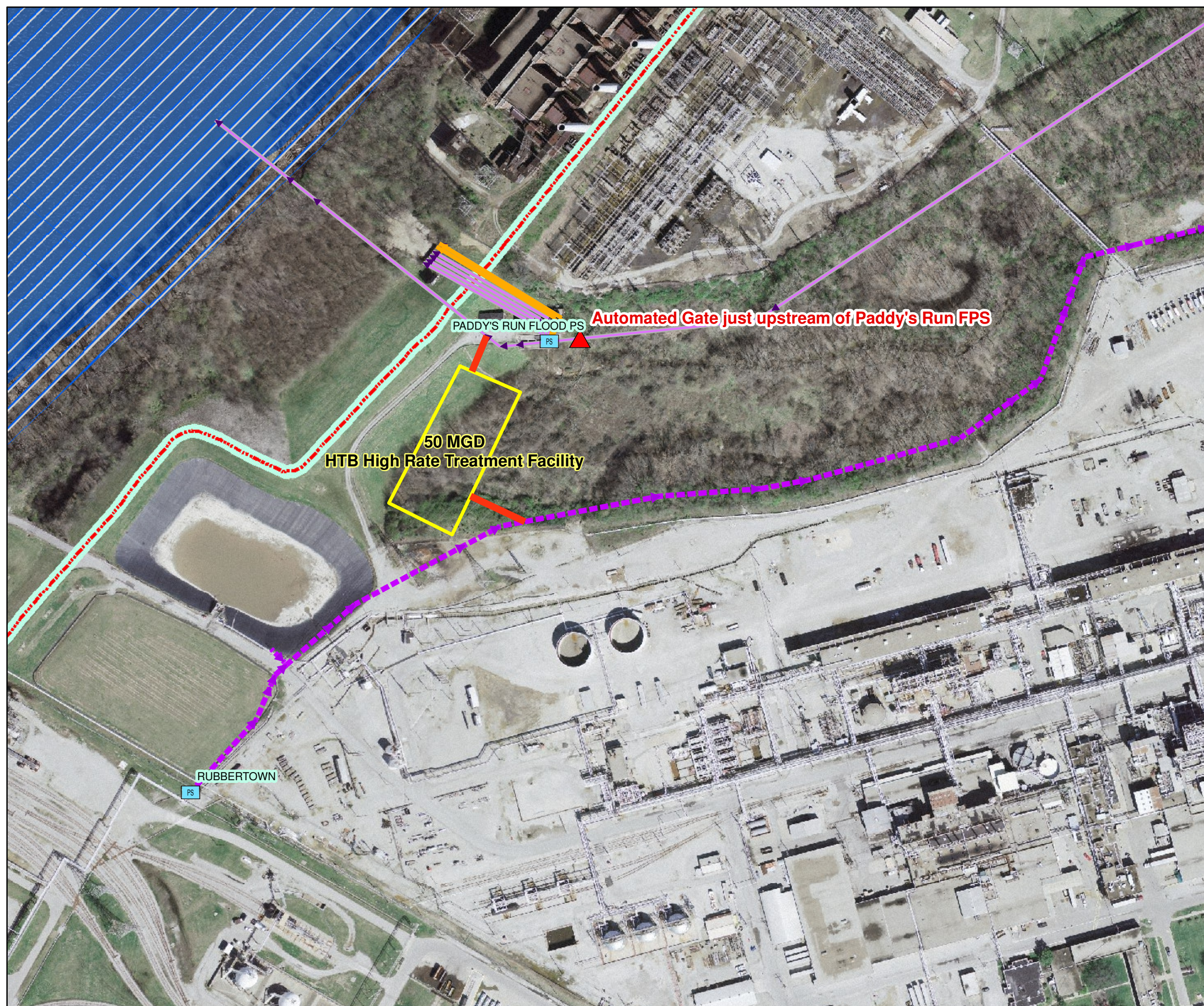
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# CSO LTCP Project Fact Sheet



**LTCP Project Number:** L\_OR\_MF\_058\_S\_08\_A\_A\_0

**Project Name:** CSO058 Sewer Separation

**Project Type:** Sewer Separation

**Receiving Stream:** Ohio River

**Project Description:** This project includes the construction of a new storm system consisting of 785 LF of 15" pipe in street and 1010 LF of 15" pipe out of street. It also includes 220 LF of 18" pipe in street.

**Design Parameters / Assumptions:** There are approx. 297 properties impacted by this project. The design flow would be developed in accordance with the MSD Design Manual.

**Surrounding Area Land Use:** This project includes properties with varying landuses including 'General Comm. & Office', 'Industrial', 'Public and Semi-Public', 'Multi-Family Residential' & 'Vacant and Undeveloped'.

**Apparent Utilities Description:** Sec. OH Elec. Ln. 18.7 ft. E, Ex. Gas Main 21 ft. NE, Water Main 6.42 ft. E; proposed piping passes over gas, electric, and water lines

**Capital Projects:** 2007~ORI Flow Installation Project - Under Construction 2012~Solids & Floatables CSO197 & CSO058 - Hidden

**Advanced Site Restoration:** N/A

**Estimated Capital Cost (2008):** \$1,361,100

**Capital Cost / Gallon Overflow Removed:** \$0.02

**Weighted Benefit / Cost Ratio (Capital Cost):** 68.85

**Overflow Points Addressed:**

<u>CSO Number</u>	<u>CSO Name</u>	<u>CSO Area (Acres)</u>	<u>2008 AAOV (MG / Yr)</u>	<u># of Overflows / Yr</u>	<u>Post LTCP AAOV (MG/Yr)</u>	<u>Post LTCP # Overflows / Year</u>
CSO058	Preston Street Overflow Weir	105.41	116.64	50	0	0

*NOTE: CSO hydraulic statistics are predicted based on InfoWorks model results.*

**Integrated Overflow Abatement Plan**  
**Volume 2 - Final CSO Long-Term Control Plan**

Ohio River  
 Solution ID #L\_OR\_MF\_058\_S\_08\_A\_A  
 CSO058 Sewer Separation

**Preliminary - For Budget Development Only**

**Legend**

- Active CSO
- Eliminated CSO
- Proposed Storm Catch Basin
- Proposed Storm Manhole
- Existing Catch Basin
- PS Pump Station
- Proposed Storm Pipe Solution
- Force Main
- Existing Drainage Line
- Collector < 12"
- Interceptor => 12"
- Combined Sewer Pipe
- Flood Wall
- Floodway
- Metro Parks
- Streams

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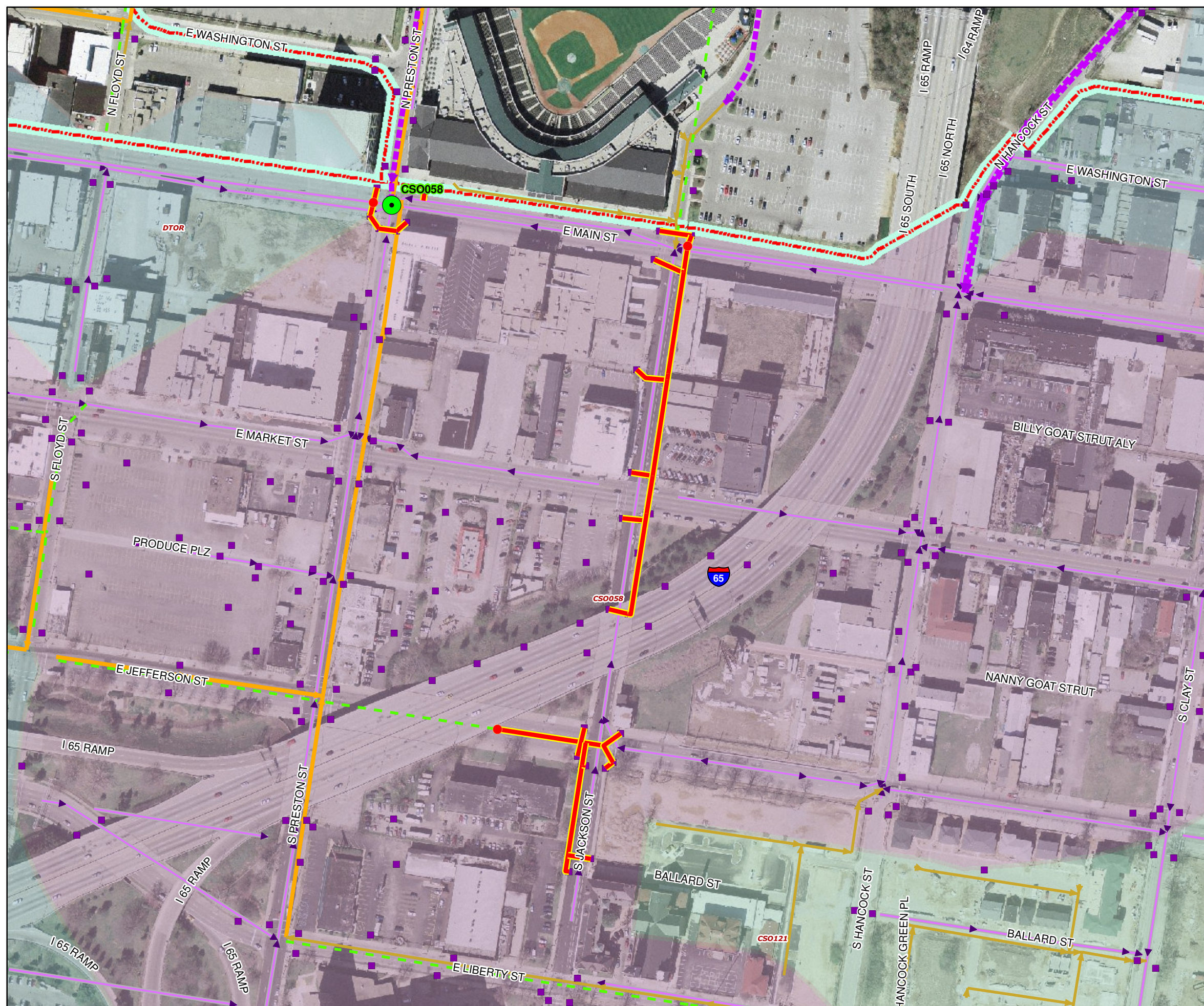
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# CSO LTCP Project Fact Sheet



**LTCP Project Number:** L\_OR\_MF\_160\_S\_08\_A\_A\_0

**Project Name:** CSO160 Sewer Separation

**Project Type:** Sewer Separation

**Receiving Stream:** Ohio River

**Project Description:** This project includes the construction of a new storm water system consisting of 425 LF of 15" pipe in street.

**Design Parameters / Assumptions:** There's approx. 15 properties impacted by this project. The design flow would be developed in accordance with the MSD Design Manual.

**Surrounding Area Land Use:** This project is located within 'General Comm. and Office' property at CSO160 in the alley behind the White Castle at 1st and Market St. Adjacent land is 'Industrial'

**Apparent Utilities Description:** Proposed piping passes over gas, electric, and water lines

**Capital Projects:** 2007~ORI Flow Meter Installation Project - Under Construction

**Advanced Site Restoration:** N/A

**Estimated Capital Cost (2008):** \$237,000

**Capital Cost / Gallon Overflow Removed:** \$1.19

**Weighted Benefit / Cost Ratio (Capital Cost):** -246.15

**Overflow Points Addressed:**

<u>CSO Number</u>	<u>CSO Name</u>	<u>CSO Area (Acres)</u>	<u>2008 AAOV (MG / Yr)</u>	<u># of Overflows / Yr</u>	<u>Post LTCP AAOV (MG/Yr)</u>	<u>Post LTCP # Overflows / Year</u>
CSO160	Sewer in Alley Sanitary Diversion	1.98	0.28	28	0	0

NOTE: CSO hydraulic statistics are predicted based on InfoWorks model results.

**Integrated Overflow Abatement Plan**  
**Volume 2 - Final CSO Long-Term Control Plan**

Ohio River  
 Solution ID #L\_OR\_MF\_160\_S\_08\_A\_A  
 CSO160 Sewer Separation

**Preliminary - For Budget Development Only**

**Legend**

- Active CSO
- Eliminated CSO
- Proposed Storm Catch Basin
- Proposed Storm Manhole
- Existing Catch Basin
- PS Pump Station
- Proposed Storm Pipe Solution
- Force Main
- Existing Drainage Line
- Collector < 12"
- Interceptor => 12"
- Combined Sewer Pipe
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