

CSO LTCP Project Fact Sheet



LTCP Project Number: L_MI_MF_206_S_08_A_A_0

Project Name: CSO206 Sewer Separation

Project Type: Sewer Separation

Receiving Stream: Middle Fork Beargrass Creek

Project Description: This project is to complete sewer separation by disconnecting downspouts from approximately 931 properties.

Design Parameters / Assumptions: Existing system consists of both storm and sanitary sewers with common manholes. CSO discharges in Cherokee Park.

Surrounding Area Land Use: PROJECT IN PROGRESS

Apparent Utilities Description: PROJECT IN PROGRESS

Capital Projects: PROJECT IN PROGRESS

Advanced Site Restoration: N/A

Estimated Capital Cost (2008): \$3,842,000

Capital Cost / Gallon Overflow Removed: N/A

Weighted Benefit / Cost Ratio (Capital Cost): N/A

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>
CSO206	Cherokee Park @ Spring Drive	464.64	19.91	52	0	0

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

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

Middle Fork Beargrass Creek
Solution ID # L_MI_MF_206_S_08_A_A_0
CSO206 Sewer Separation

Preliminary - For Budget Development Only

Legend

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

Project in Progress to Separate Sewers in Areas 13 - 15

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

1 inch equals 1,000 feet
Scalable when printed on 11" X 17" paper

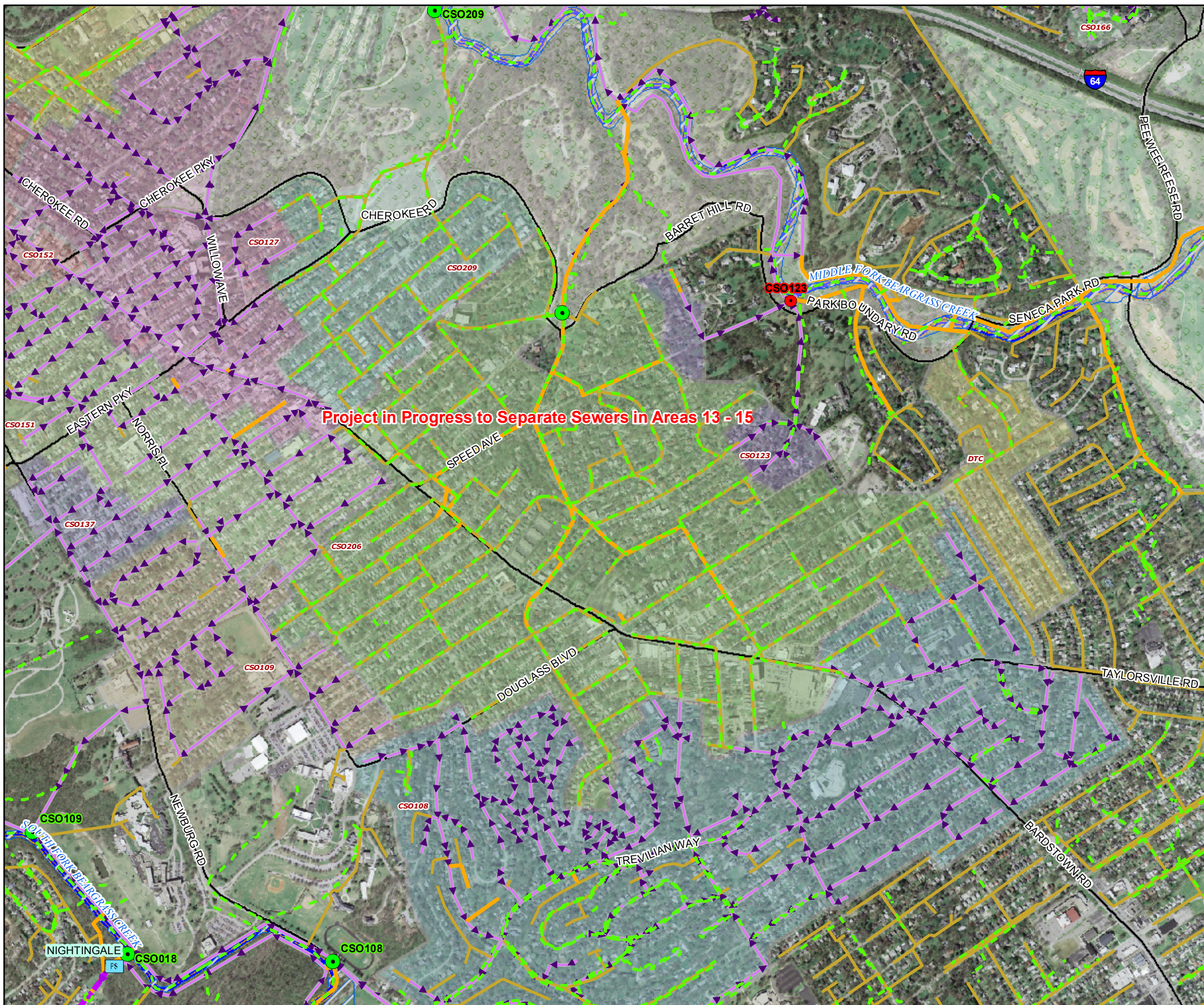


Some boundaries are uniquely symbolized within the map.

Map Revision
December 3, 2008
Aerial Date: 2006



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CSO LTCP Project Fact Sheet



LTCP Project Number: L_MI_MF_127_M_09B_B_A_8

Project Name: I-64 and Grinstead Drive Storage Basin

Project Type: Off-Line Storage

Receiving Stream: Middle Fork Beargrass Creek

Project Description: This project is to provide a 2.74 MG off-line storage facility consisting of a covered concrete basin for CSO125, 126, 127 & 166 to reduced overflows to 8 overflows per year. The facility will be a gravity in-gravity out operation.

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: Project is located within 'Vacant and Undeveloped' property, close to the I-64 right of way and pedestrian bike route. Nearby land use includes commercial properties. Project is located North of a parking lot off of Lexington Rd.

Apparent Utilities Description: Prim. OH elec. In. passes through the SW corner of the proposed basin, secondary OH elec. In. < 60 ft. W of proposed basin

Capital Projects: 2007~Central Region Automation FY05-06 - In progress; 2007~Central Region PS Modification - Under Construction; 2007~Middle Fork Rehab Phase 2 & 2013~RTC @ CSO125, 126, 127, & 140 - Awaiting Start

Advanced Site Restoration: The area of the proposed tank is undeveloped green space. Current and previous public use or development proposals for these areas have identified potential environmental mitigations. The project budget includes a site restoration allowance.

Estimated Capital Cost (2008): \$12,950,000

Capital Cost / Gallon Overflow Removed: \$0.24

Weighted Benefit / Cost Ratio (Capital Cost): 36.26

Overflow Points Addressed:

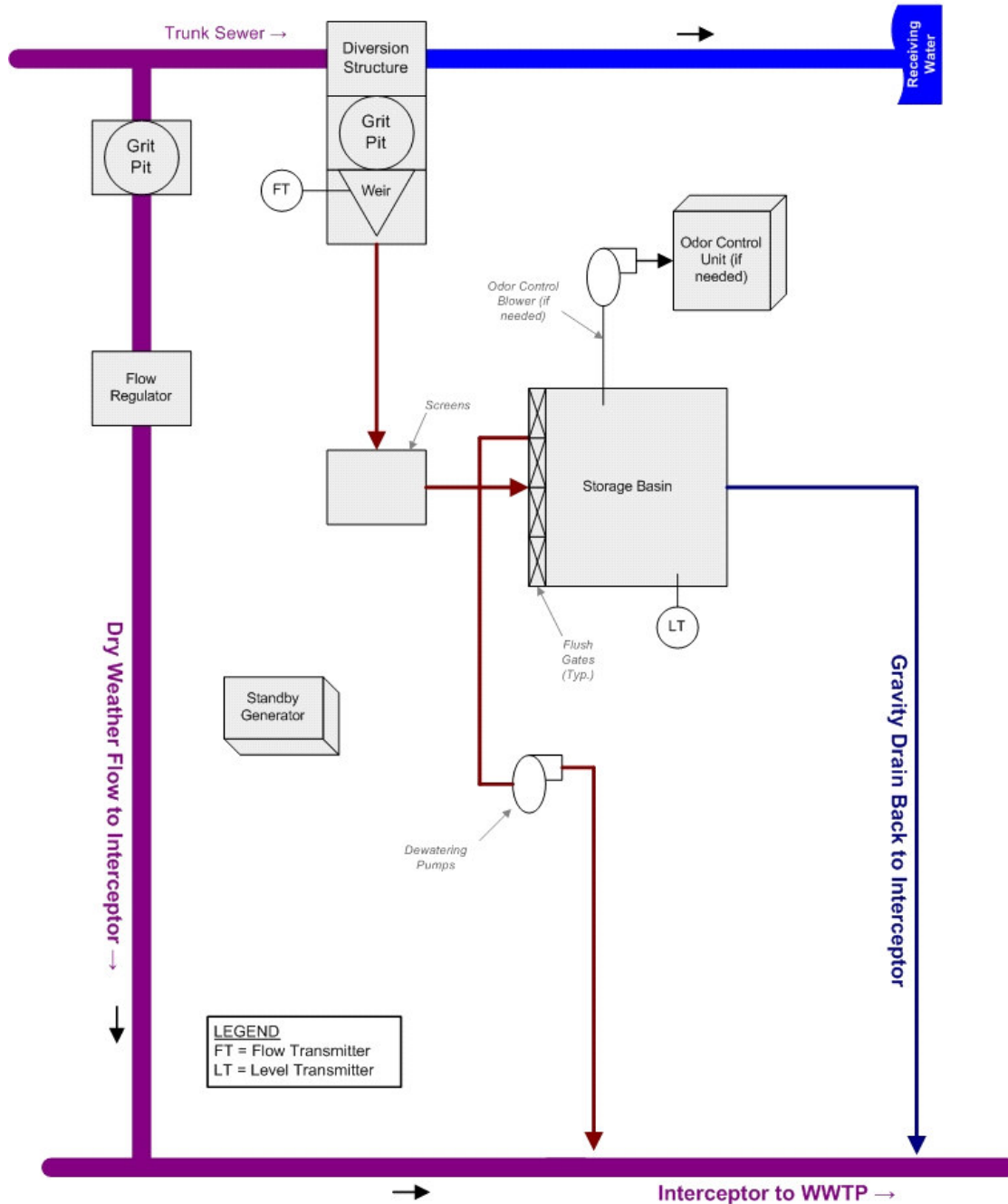
<u>CSO Number</u>	<u>CSO Name</u>	<u>CSO Area (Acres)</u>	<u>2008 AAOV (MG / Yr)</u>	<u># of Overflows / Yr</u>	<u>Post LTCP AAOV (MG/Yr)</u>	<u>Post LTCP # Overflows / Year</u>
CSO125	Regulator Number 24 - Grinstead Drive	391.03	48.38	54	7.63	8
CSO126	Regulator Number 26 - Raymod Avenue	35.29	0.58	13	0.56	8
CSO127	Etley Avenue	192.26	4.62	21	1.07	8
CSO166	Beals Branch Sanitary Diversion	696.65	10.12	19	3.32	8

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

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LTCP Project Number: L_MI_MF_127_M_09B_B_A_8

Off-Line Storage
Gravity Effluent
Flow Diagram



Integrated Overflow Abatement Plan
Vol. 2 - Final CSO Long Term Control Plan
 Middle Fork Beargrass Creek
 SolutionID # L_MI_MF_127_M_09B_B_A_8
 I-64 and Grinstead Drive Storage Basin

Preliminary - For Budget Development Only
Legend

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

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

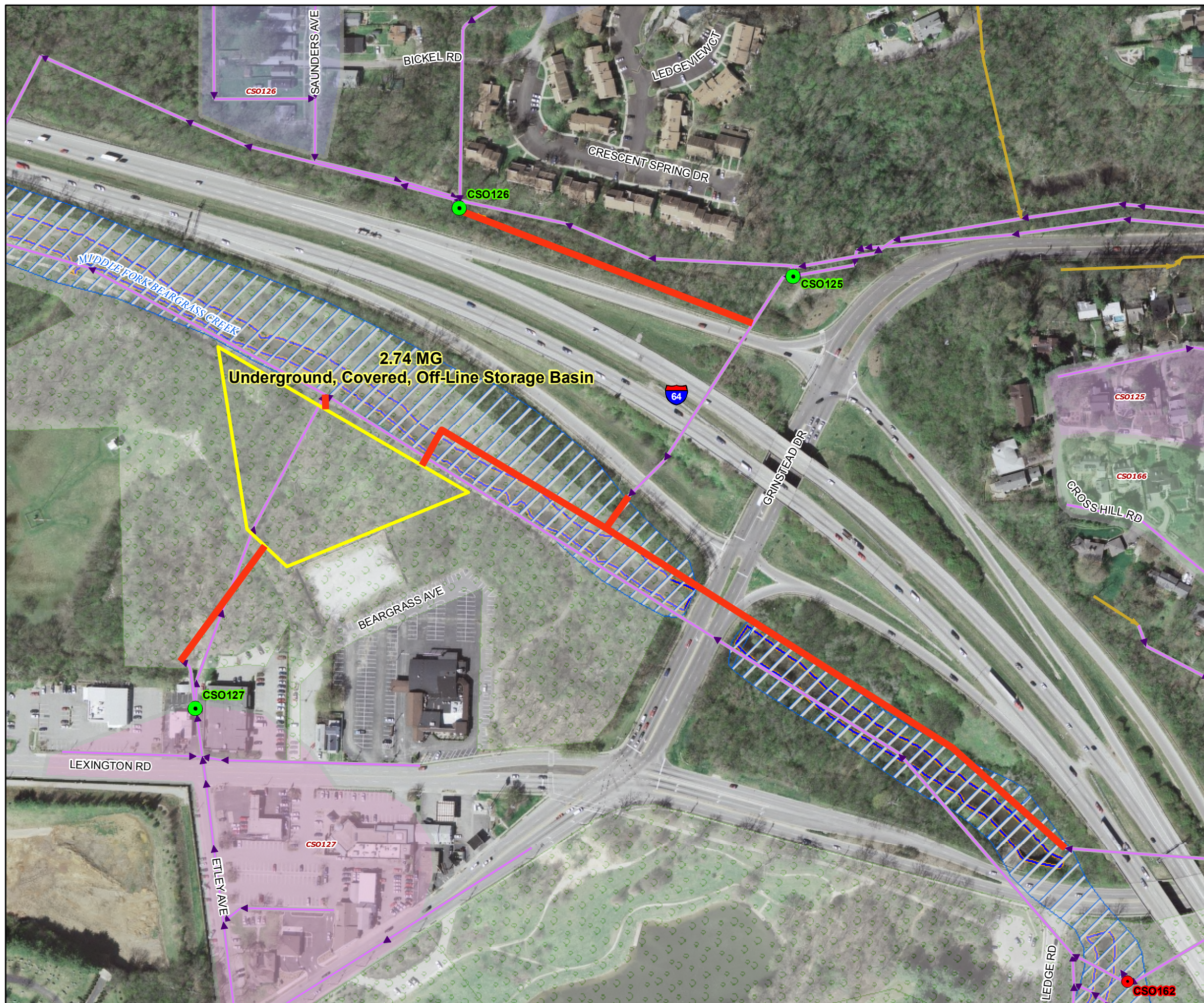
1 inch equals 200 feet
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CSO LTCP Project Fact Sheet



LTCP Project Number: L_MI_MF_140_S_08_A_A_0

Project Name: CSO140 Sewer Separation

Project Type: Sewer Separation

Receiving Stream: Middle Fork Beargrass Creek

Project Description: This project includes construction of a storm water system consisting of installing 4,630 lf of piep in street and 6,130 lf of pie out of street.

Design Parameters / Assumptions: There are approx. 552 properties impacted by this project. The design flow would be developed in accordance with the MSD Design Manual.

Surrounding Area Land Use: Project is located within 'Vacant & Undeveloped', 'Single Family Residential' and 'Multi Family Residential' property east of I-65 at S. Charlton and Pope St. Adjacent property includes 'Public and Semi-Public' and 'Parks, Cemeteries, etc.'.

Apparent Utilities Description: Water Main appr. 14.5 ft. SE, Scondary OH Elec. In. appr. 17 ft. SE, Existing Gas Main appr. 22 ft. NNW, proposed piping passes over gas, electric, and water lines

Capital Projects: 2011~Solids & Floatables @ CSO86 & 140, 2007~Middle Fork Rehab Phase 2, & 2013~RTC @ CSO125, 126, 127, & 140 - Awaiting Start

Advanced Site Restoration: The stormwater outfall to Beargrass Creek will include design of flow control measures to minimize or prevent erosion impact to the receiving stream.

Estimated Capital Cost (2008): \$3,150,000

Capital Cost / Gallon Overflow Removed: \$0.29

Weighted Benefit / Cost Ratio (Capital Cost): 21.00

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>
CSO140	Locust Street	75.54	17.00	54	0	0

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

Integrated Overflow Abatement Plan
Vol. 2 - Final CSO Long Term Control Plan
 Middle Fork Beargrass Creek
 Solution ID # L_MI_MF_140_S_08_A_A_0
 CSO140 Sewer Separation

Preliminary - For Budget Development Only
Legend

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

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