



*Louisville and Jefferson County Metropolitan Sewer District
700 West Liberty Street
Louisville Kentucky 40203-1911
502-540-6000
www.msdlouky.org*

February 16, 2015

Dennis J. Sayre
NPDES Permitting and Enforcement Branch
U.S. EPA Region 4
61 Forsyth St., SW
Atlanta, Georgia 30303

Jeff Cummins, Director
Division of Enforcement
Department for Environmental Protection
300 Fair Oaks Lane
Frankfort, KY 40601

Subject: Chenoweth Hills WQTC Elimination, Chenoweth Run and Chippewa PS Improvements
Minor Project Modification
IOAP Project No. S_JT_JT_NB01A_M_03_C
DOJ Case No. 90-5-1-1-08254

Attention Dennis and Jeff:

MSD is requesting approval of a proposed minor project modification to the Chenoweth Hills WQTC Elimination & PS Improvements project (IOAP Project No. S_JT_JT_NB01A_M_03_C). This modification is part of an overall adaptive management review of the approved 2012 IOAP Modification.

2009 IOAP Project Description

The Chenoweth Hills WQTC Elimination & PS Improvements project originally involved upsizing the pumps at the Chenoweth Run Pump Station, and upsizing 8,030 LF of force main. Existing sewers were to be upsized and 1,995 LF of new sewer installed to allow diversion of the Chenoweth Hills Water Quality Treatment Center (WQTC) flow. The project also proposed upgrades to the pumps at the Chippewa Pump Station. This project has an IOAP completion date of December 31, 2015.

Project Modification Request

The project modification proposed constructs 2,800 LF of 15-inch and 1,200 LF of 8-inch diameter gravity sewer to allow elimination of the Chenoweth Hills WQTC, and also eliminate (not upsizing) the Chenoweth Run and the Chippewa Pump Stations. This provides the same level of protection as the original project, but at a greatly improved level of reliability since two existing pump stations are eliminated. No change in project schedule is proposed.

Technical Justification

The expansion of the Chenoweth Hills Pump Station was required to eliminate the Chenoweth Hills WQTC and the Chippewa Pump Station required expansion to eliminate an SSO caused by pump station capacity limitations.



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The original Chenoweth Hills WQTC Elimination Project was developed prior to the completion of the final Jeffersontown WQTC elimination plan submitted for regulatory review in March, 2010. It calls for diverting approximately one-third of the Jeffersontown WQTC flow south to the Cedar Creek WQTC, with the remainder of the flow diverted north to the Hikes Lane interceptor. Part of the infrastructure required for the diversion to the Cedar Creek WQTC was the construction of the Billtown Road Interceptor. This interceptor provides an outlet for the gravity sewer elimination of the Chenoweth Hills WQTC and the Chenoweth Hills and Chippewa Pump Stations. This solution provides the same 1.82-inch 3-hour cloudburst level of protection as the original project, but with greatly improved reliability since two pump stations are eliminated. Flows from all three sites will be diverted to the Cedar Creek WQTC.

For your reference, a copy of the current project fact sheet and map from the 2012 IOAP Modification are in Attachment A. A new project fact sheet and map reflecting the location of the new pipeline routes have been provided in Attachment B.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering such information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have questions or need additional information, please contact me at (502) 540-6000.

Sincerely,



Angela L. Akridge, PE
Infrastructure Planning and Environmental Compliance Director

cc: Greg Heitzman Paula Purifoy

Attachments

X:\...Final Chenoweth Hills WQTC Elimination February 2015 Modification.docx

Attachment A



SSO Project Fact Sheet

2012 IOAP Project Modification



Project Name	Chenoweth Hills WQTC Elimination & PS Improvements
Project Number	S_JT_JT_NB01A_M_03_C
Modeled Area	Jeffersontown
Branch or SSO ID	NB01A
Project Type	Pump Station & Force Main Upgrades
Receiving Stream	Chenoweth Run
Project Description	This alternative includes upgrading pumps at Chenoweth Run PS to pump 2.7 MGD and upsizing the entire 8,030 LF of force main to 12". Chenoweth Hills WQTC will be eliminated. Pumps at Chippewa PS upgraded to 0.15 MGD. Install 1,995 LF of new 15" sewer and replace 600 LF of 8" with 18" sewer pipe for Chenoweth Hills WQTC diversion.
Reason for Overflow	System capacity, siphon, and WQTC
Design Parameters	This solution is based on a 1.82 inch cloudburst rain event.
Project Constraints	N/A
Estimated Capital Cost	\$3,140,000
Weighted Benefit/Cost Ratio	20.05

Asset ID	SSO Start Date	Volume (Gal)
MSD0263	1/13/2013	26700
MSD0263	1/13/2013	45000
92061	1/13/2013	1300
MSD0263	1/13/2013	600625
MSD0263A-PS	10/23/2007	20000
MSD0263	10/6/2013	596
MSD0263	11/25/2010	77800
64096	11/26/2010	2600
MSD0263	12/1/2008	35333
64096	12/24/2008	6575
92061	12/5/2011	680
MSD0263	12/5/2011	1200
MSD0263	12/5/2011	12000
MSD0263	12/8/2009	67535
MSD0263	2/11/2009	8143
92061	2/15/2001	500
92061	2/25/2011	45
64096	3/19/2008	250
MSD0196-PS	3/19/2008	55350
64096	3/9/2011	31250
MSD1043-PS	3/9/2011	4500
MSD0196-PS	4/12/2011	5
92061	4/12/2011	20300
64096	4/23/2011	182550
64096	4/27/2011	137000
MSD0263A-PS	4/4/2008	306000
MSD0196-PS	4/4/2008	81000

Integrated Overflow Abatement Plan
Vol. 3 - Sanitary Sewer Discharge Plan
Jeffersontown Sewershed

Chenoweth Hills WQTC Elimination, Chenoweth Run and Chippewa PS Improvements

Preliminary - For Budget Development Only

- Documented SSO
- Suspected SSO
- Haulop Locations
- Pump Stations
- Proposed Pipe Solution
- WQTC
- Combined Sewer Pipe
- Force Main
- Collector < 12"
- Interceptor >= 12"
- Streams
- Floodway
- Jefferson County Boundary

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

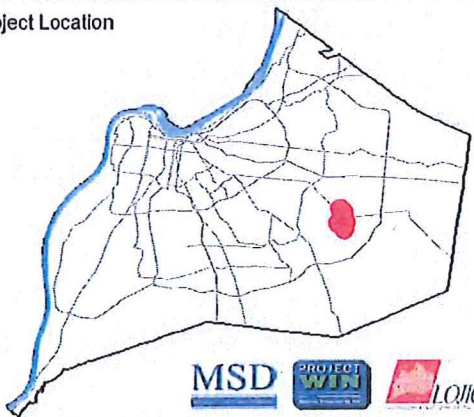
1 inch = 800 feet



Aerial Date:
2009

Map Revision:
April 9, 2012

Project Location

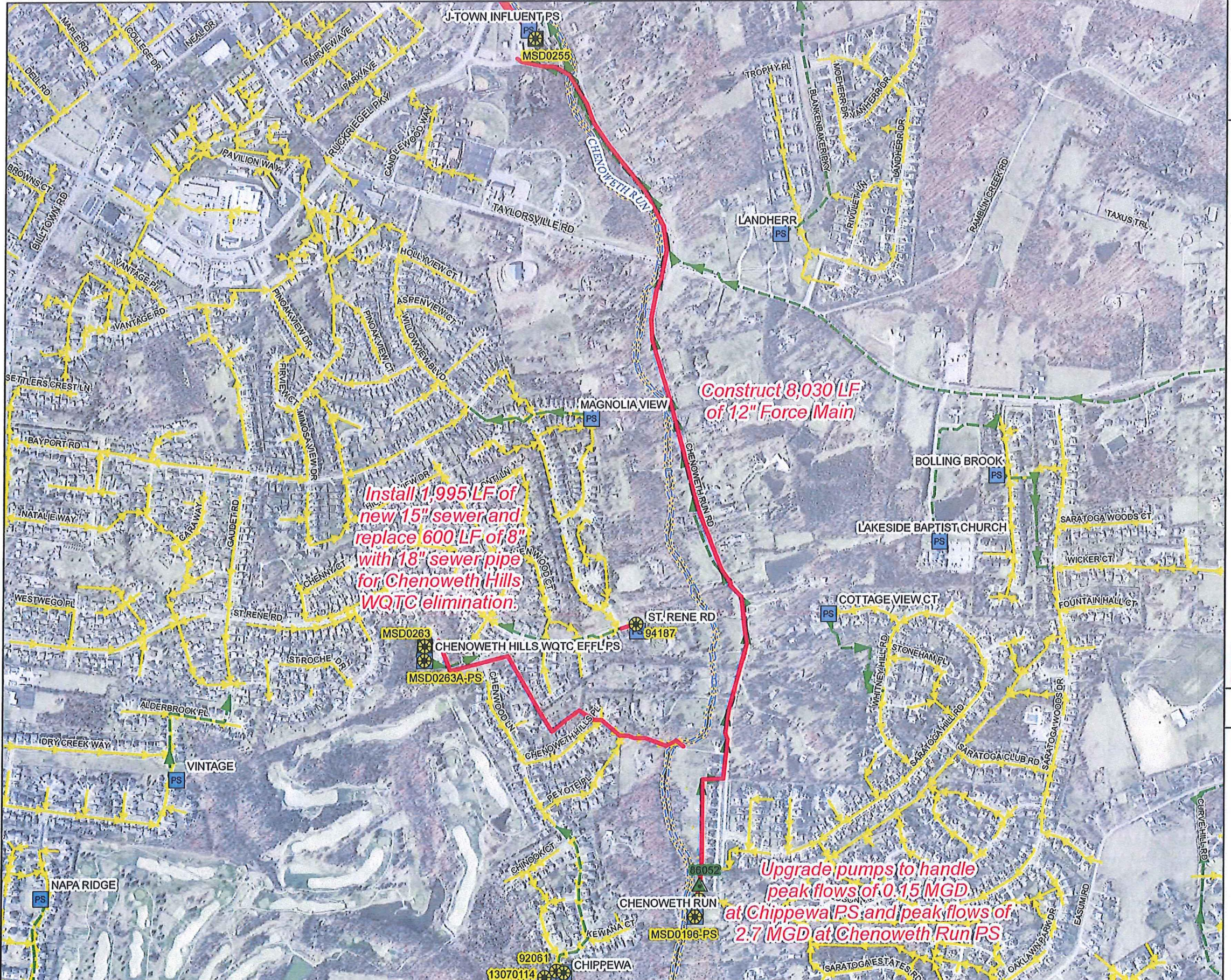


MSD

PROJECT WIN

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Attachment B

Project Name Elimination of Chenoweth Hills WQTC, Chenoweth Run PS, and Chippewa PS

Modeled Area Jeffersontown

Branch or SSO ID NB01A

Project Type Inline Storage & Pipe Upgrades

Receiving Stream Chenoweth Run

Project Description This alternative includes eliminating Chenoweth Hills WQTC, Chenoweth Hills PS, and Chippewa PS. Install 18,300 LF of new 36" sewer, 2800 LF of new 15" sewer for Chenoweth Hills WQTC diversion, and 1200 LF of new 8" gravity sewer to eliminate Chippewa pump station.

Reason for Overflow System capacity, siphon, and WQTC

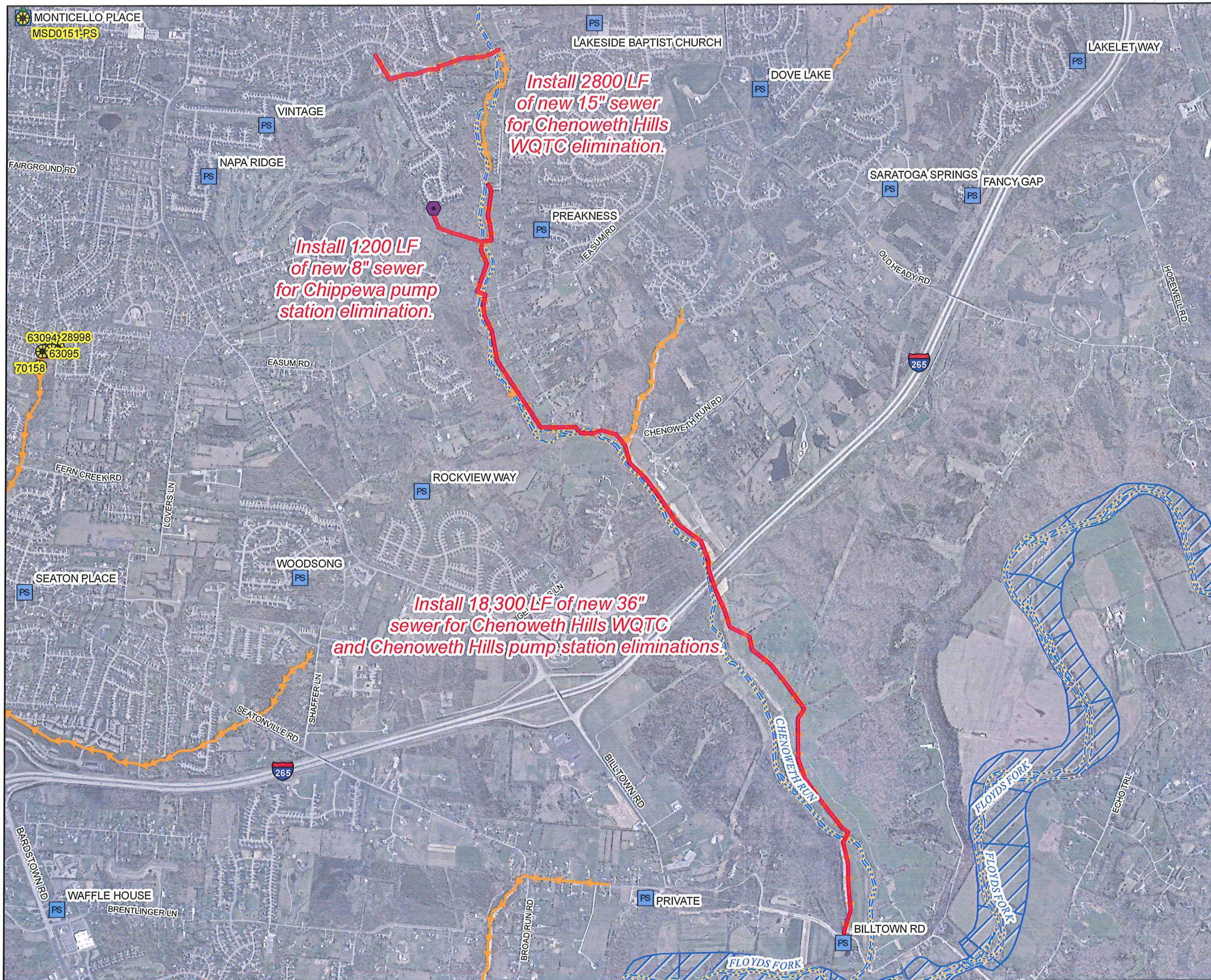
Design Parameters This solution is based on a 1.82 inch cloudburst rain event.

Project Constraints N/A

Estimated Capital Cost \$3,140,000

Weighted Benefit/Cost Ratio 20.05

Asset-ID	SSO Start Date	Volume (Gal)
	No Data	No Data
64096	12/24/2008	6575
64096	6/23/2011	70000
64096	4/23/2011	182550
64096	3/9/2011	31250
64096	5/3/2011	235000
64096	11/26/2010	2600
64096	9/25/2006	0
64096	4/27/2011	137000
64096	7/29/2009	37500
64096	3/19/2008	250
92061	8/30/2005	300
92061	7/4/2008	6000
92061	5/2/2010	90750
92061	2/25/2011	45
92061	4/12/2011	20300
92061	12/5/2011	680
92061	5/13/2012	16750
92061	5/16/2008	5450
92061	2/15/2001	500
92061	1/13/2013	1300
MSD0196-PS	3/19/2008	55350
MSD0196-PS	4/12/2011	5
MSD0196-PS	4/4/2008	81000
MSD0263	11/25/2010	77800
MSD0263	12/5/2011	1200
MSD0263	12/5/2011	12000
MSD0263	1/13/2013	26700
MSD0263	10/6/2013	596



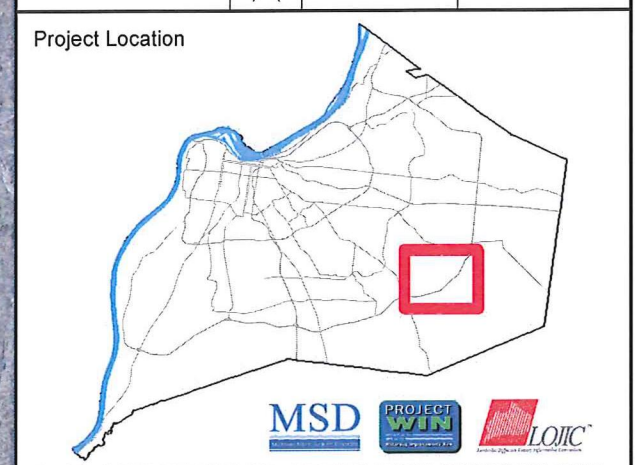
Integrated Overflow Abatement Plan
Vol. 3 - Sanitary Sewer Discharge Plan
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Chenoweth Hills WQTC, Chenoweth Run and Chippewa PS Eliminations

Preliminary - For Budget Development Only

- Documented SSO
- Suspected SSO
- Haulop Locations
- Pump Stations
- Proposed Pipe Solution
- WQTC
- Interceptor >= 12"
- Streams
- Floodway
- Jefferson County Boundary

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

1 inch = 1,847 feet Aerial Date: 2009 Map Revision: 11/17/2014



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