



## **Appendix B**

### **CSO Modifications**

#### **Table of Contents**

|            |                                     |
|------------|-------------------------------------|
| Table B1   | Summary of CSO Modifications        |
| Figure B1  | CSO Structure 1004 Location Plan    |
| Figure B2  | CSO Structure 1004 Plan and Section |
| Figure B3  | CSO Structure 1008 Location Plan    |
| Figure B4  | CSO Structure 1008 Plan and Section |
| Figure B5  | CSO Structure 1009 Location Plan    |
| Figure B6  | CSO Structure 1009 Plan and Section |
| Figure B7  | CSO Structure 1012 Location Plan    |
| Figure B8  | CSO Structure 1012 Plan and Section |
| Figure B9  | CSO Structure 1013 Location Plan    |
| Figure B10 | CSO Structure 1013 Plan and Section |
| Figure B11 | CSO Structure 1014 Location Plan    |
| Figure B12 | CSO Structure 1014 Plan and Section |
| Figure B13 | CSO Structure 1019 Location Plan    |
| Figure B14 | CSO Structure 1019 Plan             |
| Figure B15 | CSO Structure 1019 Sections         |
| Figure B16 | CSO Structure 1029 Location Plan    |
| Figure B17 | CSO Structure 1029 Plan and Section |
| Figure B18 | CSO Structure 1033 Location Plan    |
| Figure B19 | CSO Structure 1033 Plan and Section |

**PHASE II LONG TERM CONTROL PLAN**

Appendix B Table of Contents



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Table B1  
City of Lancaster  
Phase II LTCP  
Summary of CSO Modifications

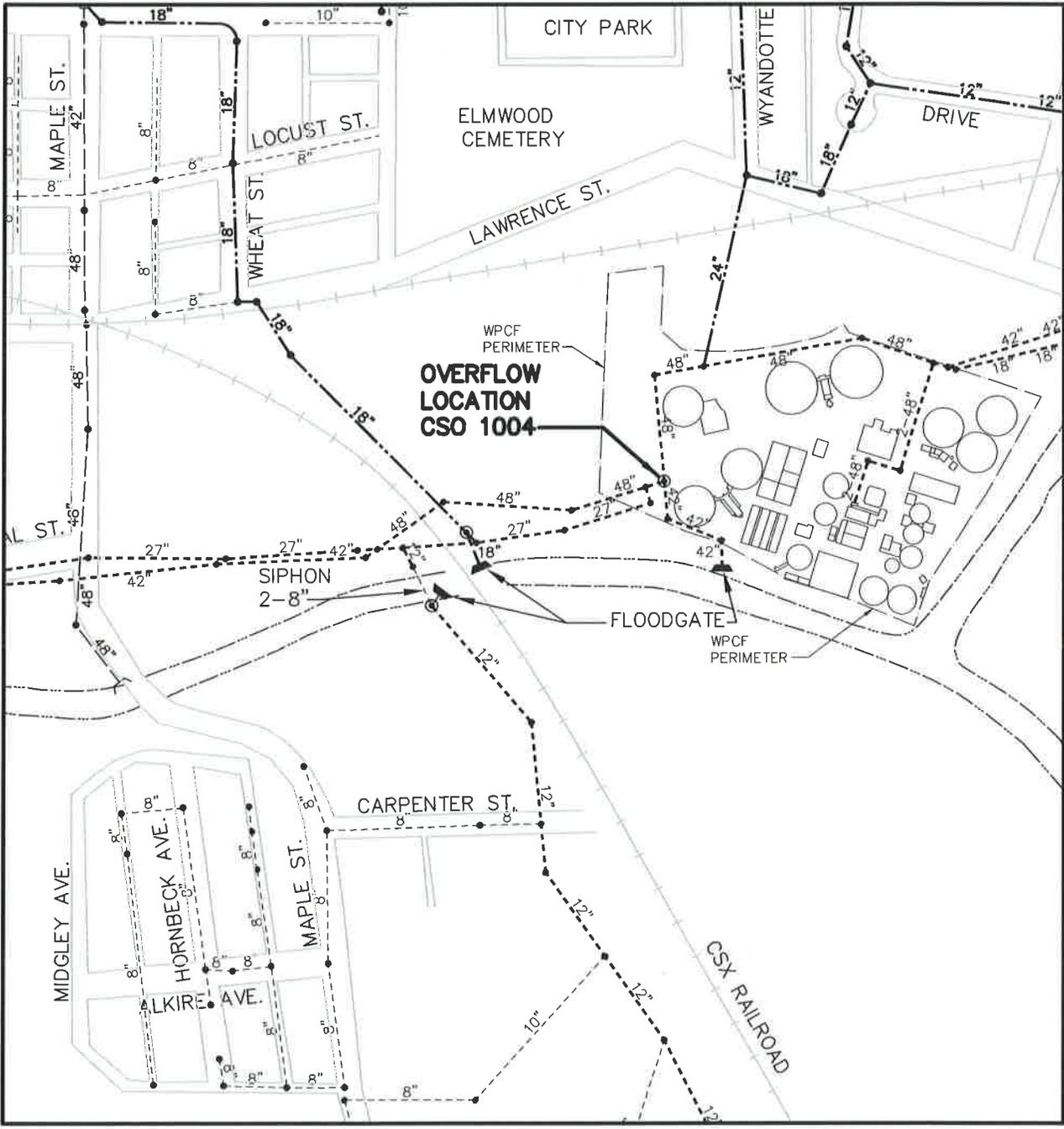
| CSO   | Location                                    | Official Closure Date | Overflow Information       |                                  |                         |             | Notes   | Costs             |
|-------|---|-----------------------|----------------------------|----------------------------------|-------------------------|-------------|---|-------------------|
|       |   |                       | Overflow Type <sup>1</sup> | 1997 Elevation (ft) <sup>1</sup> | Existing Elevation (ft) | Length (ft) |   |                   |
| 1004  | West Perimeter of WPCF                      |                       | weir                       | 804.50                           | 804.50                  | 6.00        |   |                   |
| 1005  | CSX RR and Hocking R., N. Bank              | 1999                  | leaping weir               | 803.26                           | CLOSED                  |             | Abandoned 1999  |                   |
| 1006  | CSX RR and Hocking R., S. Bank              | April 2007            | weir                       | 804.77                           | CLOSED                  |             | Closed April 2007   | \$300             |
| 1007A | S. Broad Street Chestnut - S. Columbus      | 2002                  | overflow pipe              | 828.93                           | CLOSED                  |             | Closed as part of the S. Broad St. Sewer CIP.   | Included in a CIP |
| 1007B |   |                       | overflow pipe              | 822.12                           | CLOSED                  |             | Closed as part of the S. Broad St. Sewer CIP.   | Included in a CIP |
| 1007C |   |                       | overflow pipe              | 820.15                           | CLOSED                  |             | Closed as part of the S. Broad St. Sewer CIP.   | Included in a CIP |
| 1007D |   |                       | overflow pipe              | 817.50                           | CLOSED                  |             | Closed as part of the S. Broad St. Sewer CIP.   | Included in a CIP |
| 1008  | Lincoln Avenue and Hocking River            |                       | weir                       | 808.60                           | 808.60                  | 2 ft        | Installed Tideflex 6-21-07 to eliminate inflow, 3' rise in river elevation caused inflow.   | \$8,603           |
| 1009  | Mulberry Street and Memorial Drive          |                       | overflow pipe              | 816.61                           | 816.61                  | 24-in dia.  |   |                   |
| 1010  | Mulberry Street and Hocking Street          | February 2002         | overflow pipe              | 807.90                           | CLOSED                  |             | Abandoned 1998, officially closed february 2002.  | \$1,130           |
| 1011  | Union Street and Memorial Drive             | September 3, 2013     | weir                       | 817.30                           | CLOSED                  |             | City closed in May of 2013, and Officially Closed the CSO on September 3, 2013 as part of the Forest Rose Sewer Separation CIP.         | Included in a CIP |
| 1012  | Fifth Avenue and Memorial Drive             |                       | overflow pipe              | 815.62                           | 815.62                  | 36-in dia.  |   |                   |
| 1013  | Sixth Avenue and Memorial Drive             |                       | weir                       | 817.25                           | 817.25                  | 5.83 ft     | July 2007, air gap/leaping weir increased to max opening.   | \$160             |
| 1014  | Allen Street and Memorial Drive             |                       | leaping weir               | 808.90                           | 809.98                  | 2.08 ft     | January 2005, installed flap gate and raised weir elevation.  | \$1,978           |
| 1015  | North Broad Street and Fair Avenue          | December 2007         | weir                       | 826.85                           | CLOSED                  |             | December 2007, 20-inch outlet was bulkheaded to force excess flows to the Broad Street storm line.                                      | \$35,740          |
| 1016  | Sixth Avenue and North Broad Street         | May 2010              | leaping weir               | 829.01                           | CLOSED                  |             | May 2010, Encase the 15-inch combined line, 3 catch basins were re-routed to the storm sewer system.                                    | \$16,323          |
| 1017  | Fifth Avenue and North Broad Street         | April 2007            | overflow pipe              | 831.35                           | CLOSED                  | 18-in dia.  | Closed April 2007, bricked up the overflow between the combined and the storm sewer system.   | \$632             |
| 1018  | North Broad Street and Mulberry Street      | May 2008              | overflow pipe              | 837.93                           | CLOSED                  | 12-in dia.  | May 2008, bricked the 12-inch storm cross connection.   | \$300             |
| 1019  | SE Corner of Mary Burnham Park              |                       | leaping-weir weir          | 806.0                            | 807.50                  | 4 ft        | November 2007, built 24-inch weir wall in 60-in overflow pipe. IN 2013, the overflow opening was upsized from 10" X 10" to a 12" X 36". | \$4,820           |
| 1020  | Chestnut Street and Brooks Avenue           | May 2003              | weir                       | 809.90                           | CLOSED                  |             | May 2003, cemented shut outlet. August 2007, several upstream catchbasins were re-routed into the storm sewer system.                   | \$19,795          |
| 1021  | Union Street and Garfield Avenue            | June 2007             | overflow pipe              | 817.70                           | CLOSED                  | 24-in dia.  | June 2007, bricked up the cross connection between the storm and sanitary sewer systems.  | \$400             |
| 1022  | Columbus Street and Wilson Avenue           | June 2007             | overflow pipe              | 843.85                           | CLOSED                  | 18-in dia.  | June 2007, re-routed the catch basin to the storm system.   | \$18,000          |
| 1023  | High Street North of Fair Avenue            | August 2007           | leaping weir               | 850.7                            | CLOSED                  |             | Closed August 2007 as part of the Lake/Allen Sewer Separation CIP.  | Included in a CIP |
| 1024  | Wheeling Street and Livingston Avenue       | April 2007            | overflow pipe              | 831.0                            | CLOSED                  |             | Closed April 2007, bricked up cross connection between the combined sewer system and the storm sewer system.                            | \$160             |
| 1025  | Fetters Run North of Frederick              | 1965                  | NA                         | NA                               | CLOSED                  |             | Abandoned in 1965. In June 2006 old pipe was removed.   | \$1,165           |
| 1026  | NE Corner of Mary Burnham Park              | September 24, 2013    | overflow pipe              | 807.5                            | CLOSED                  | 48-in dia.  | Closed September 24, 2013. CSO 1019 was upsized to close this CSO as part of the Mary Burnham Park Relief Sewer CIP.                    | Included in a CIP |
| 1027  | Walnut Street and Whiley Avenue             | August 16, 2013       | weir                       | 810.33                           | CLOSED                  |             | Closed August 16, 2013 as part of the Walnut/Whiley Sewer Separation CIP.   | Included in a CIP |
| 1028  | Sixth Avenue and Pierce Avenue              | April 2007            | overflow pipe              | 821.0                            | CLOSED                  | 15-in dia.  | Closed April 2007, bulkheaded the cross connection.   |                   |
| 1029  | Sixth Avenue and Boyd Avenue                |                       | overflow pipe              | 817.50                           | 817.50                  | 48-in dia.  |   |                   |
| 1030  | Walnut Street and Maple                     | November 2006         | leaping weir               | 816.30                           | CLOSED                  |             | Closed November 2006 as part of the Lake/Allen Sewer Separation CIP.  | Included in a CIP |
| 1031  | Wheeling Street and Maple Street            | May 2008              | overflow pipe              | 817.90                           | CLOSED                  | 42-in dia.  | Closed May 2008 as part of the Lake/Allen Sewer Separation CIP.   | Included in a CIP |
| 1032  | Alley North of Main Street and Maple Street | January 2007          | leaping weir               | 823.00                           | CLOSED                  |             | Closed January 2007 as part of the Lake/Allen Sewer Separation CIP.   | Included in a CIP |

Table B1  
City of Lancaster  
Phase II LTCP  
Summary of CSO Modifications

| CSO  | Location                        | Official Closure Date | Overflow Information |                                  |                         |             | Notes  | Costs            |
|------|---------------------------------|-----------------------|----------------------|----------------------------------|-------------------------|-------------|--|------------------|
|      |                                 |                       | Overflow Type        | 1997 Elevation (ft) <sup>1</sup> | Existing Elevation (ft) | Length (ft) |  |                  |
| 1033 | Park Street and Memorial Drive  |                       | overflow pipe        | 809.30                           | 816.25                  | 30-in dia.  | January 2005 installed a flap gate. October 2009 raised the weir wall. May 2008 removed catch basin from the upstream CAS and rerouted to STS. | \$2,719          |
| 1034 | Baldwin Run and Lawrence Street | July 2008             | overflow pipe        | 805.50                           | CLOSED                  | 42-in dia.  | Closed July 2008.  | \$2,748          |
| 1035 | E. of Park and Columbus         | April 2007            | overflow pipe        | 825.00                           | CLOSED                  | 18-in dia.  | Closed April 2007.   | \$400            |
|      |                                 |                       |                      |                                  |                         |             | <b>Total</b>   | <b>\$115,373</b> |

1. Information from the June 2000, Combined Sewer System Long-Term Control Plan
2. Manhour costs were estimated at \$40/hr
3. CSO 1026, 1027, and 1028 were originally pump station overflows that were removed, and the numbers were reused for the above locations.
4. CSO 1025 is not included in Figure 1-1 Collection System Schematic as it was closed in 1985.

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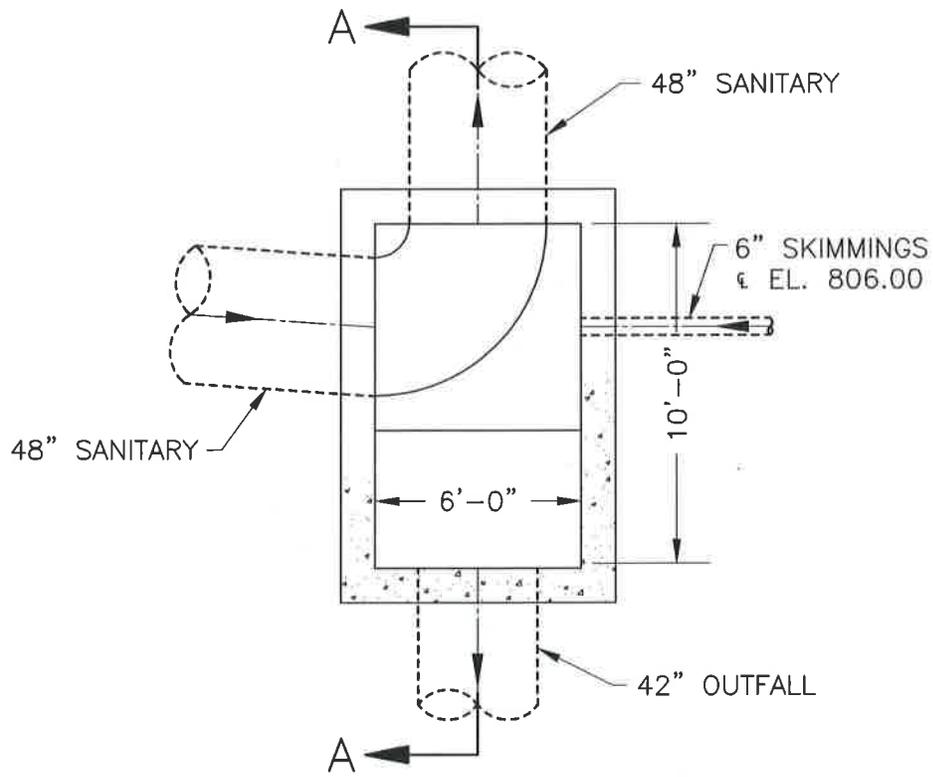
CITY OF LANCASTER  
 WATER POLLUTION CONTROL DEPARTMENT  
 WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
 STRUCTURE 1004  
 LOCATION PLAN

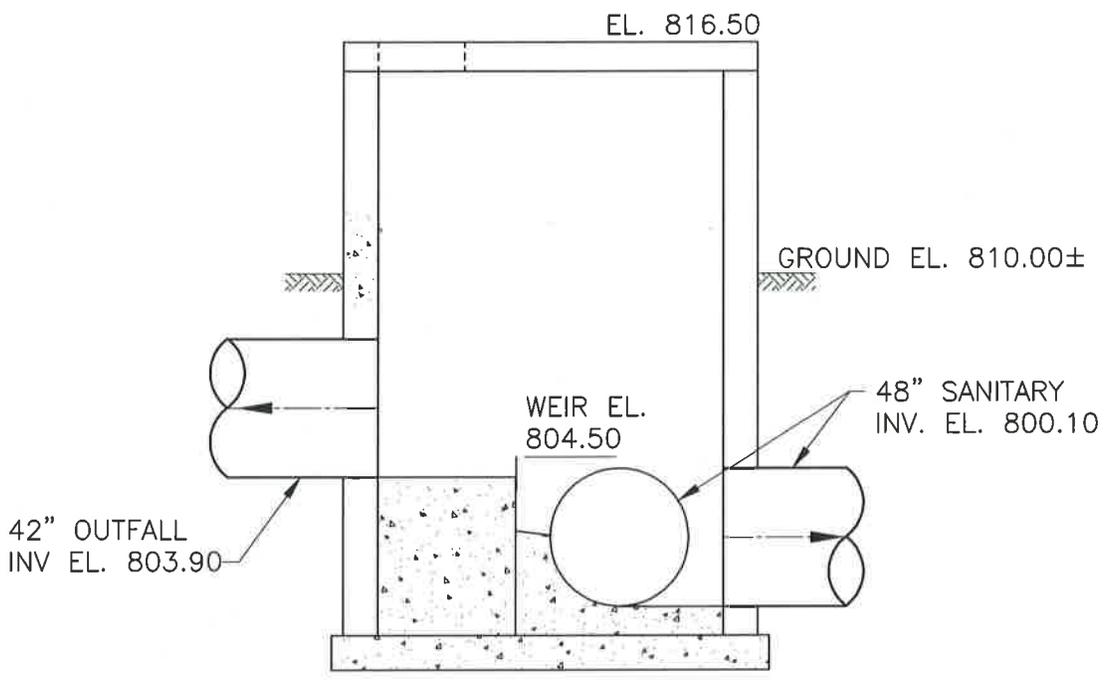
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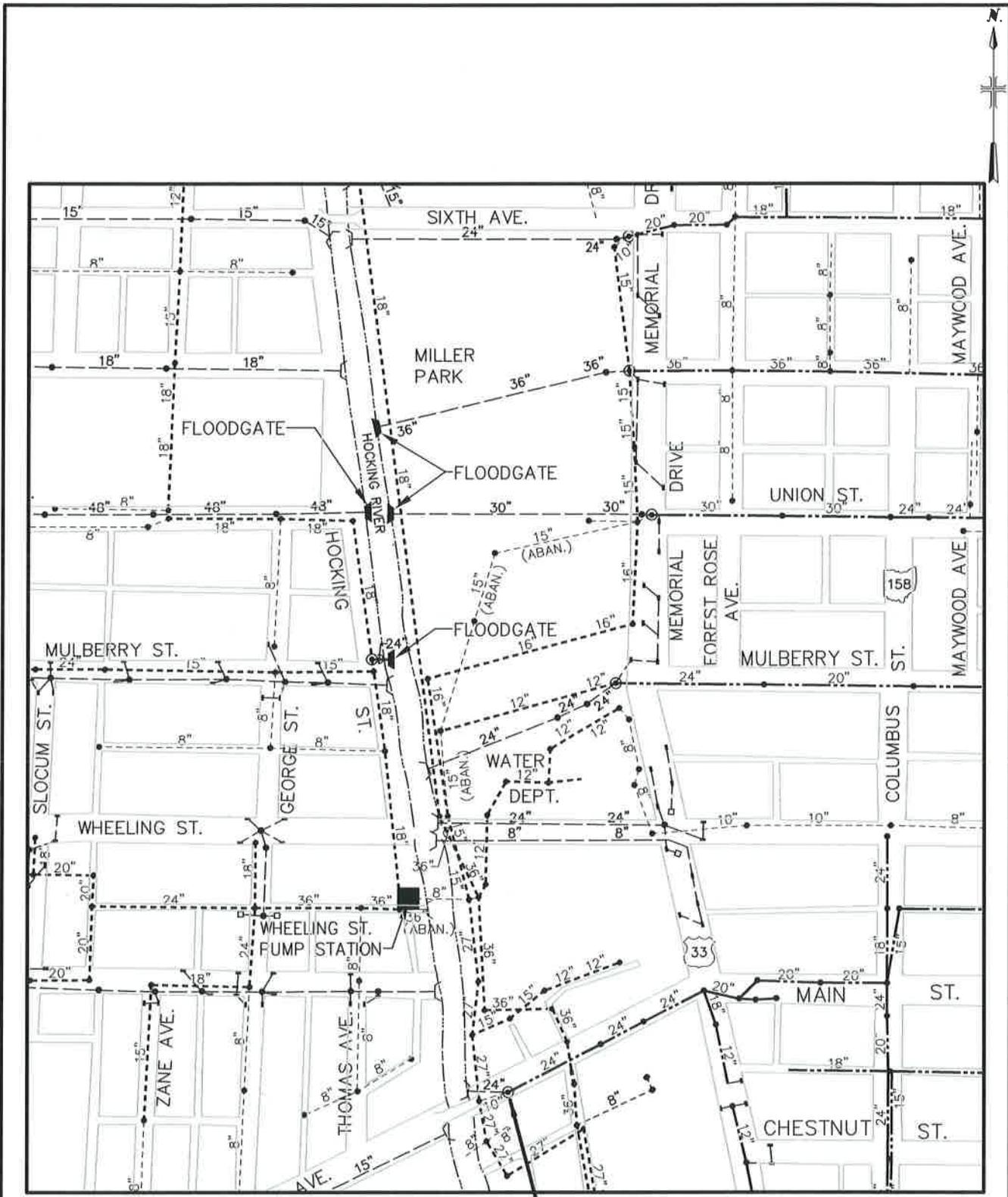
CITY OF LANCASTER  
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WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
STRUCTURE 1004  
PLAN AND SECTION

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FIGURE NO. B2



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**OVERFLOW  
LOCATION  
CSO 1008**

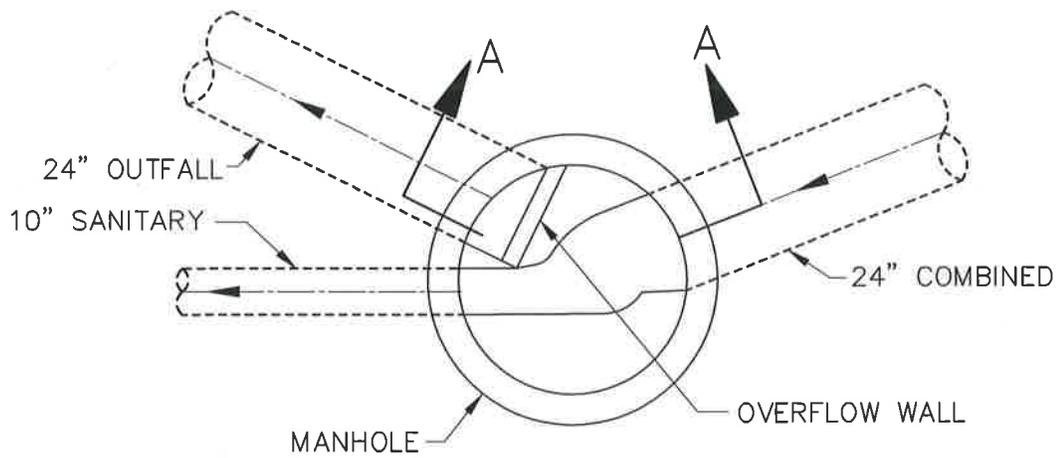
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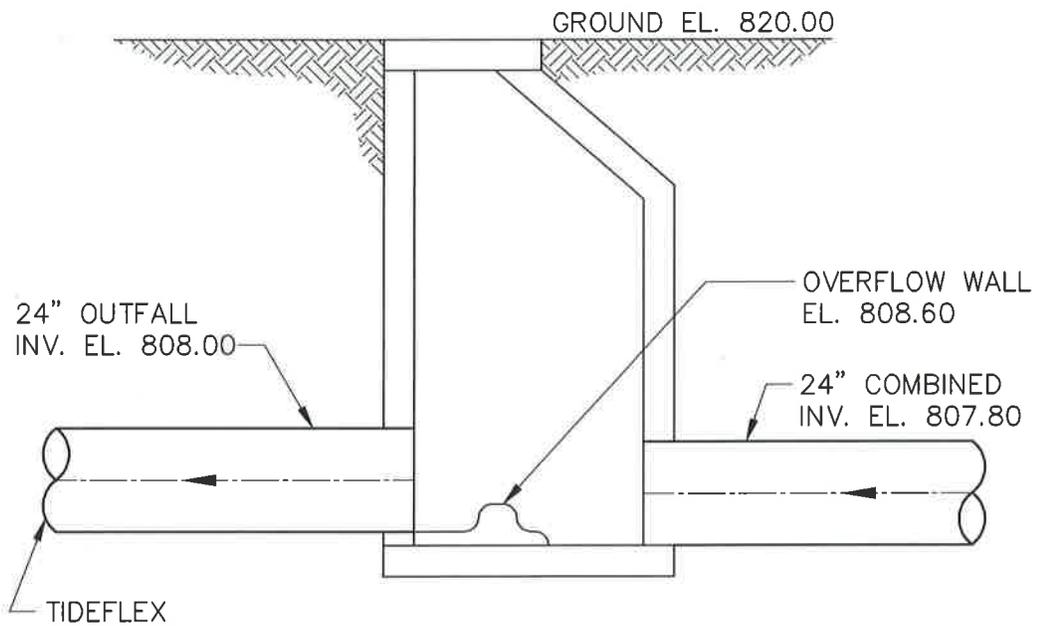
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CITY OF LANCASTER  
WATER POLLUTION CONTROL DEPARTMENT  
WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
STRUCTURE 1008  
LOCATION PLAN



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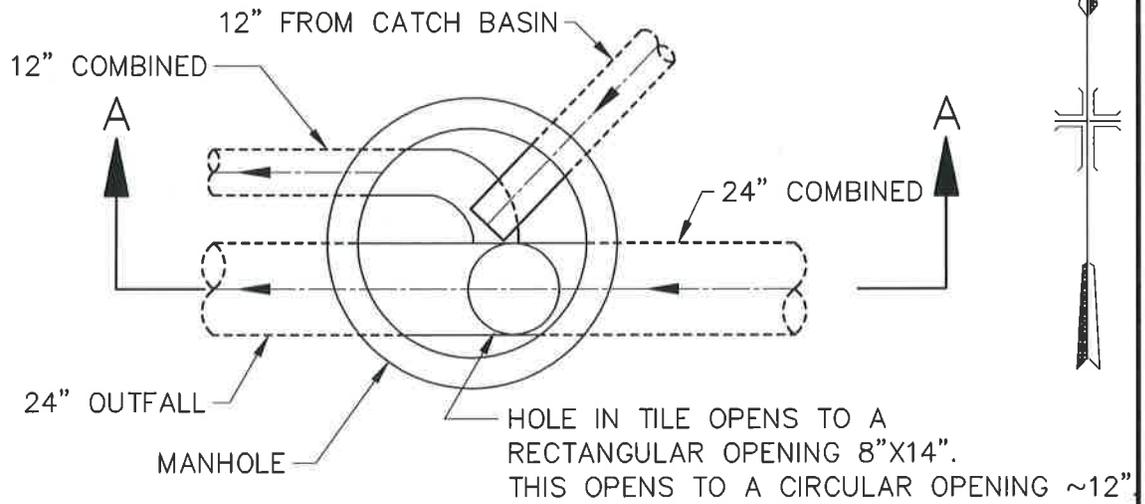


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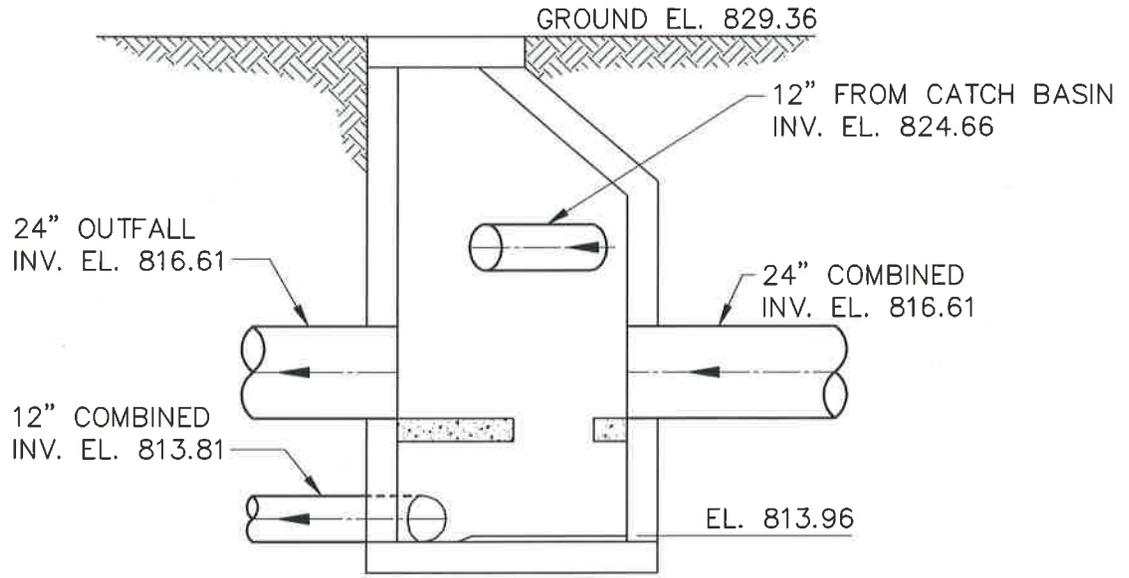
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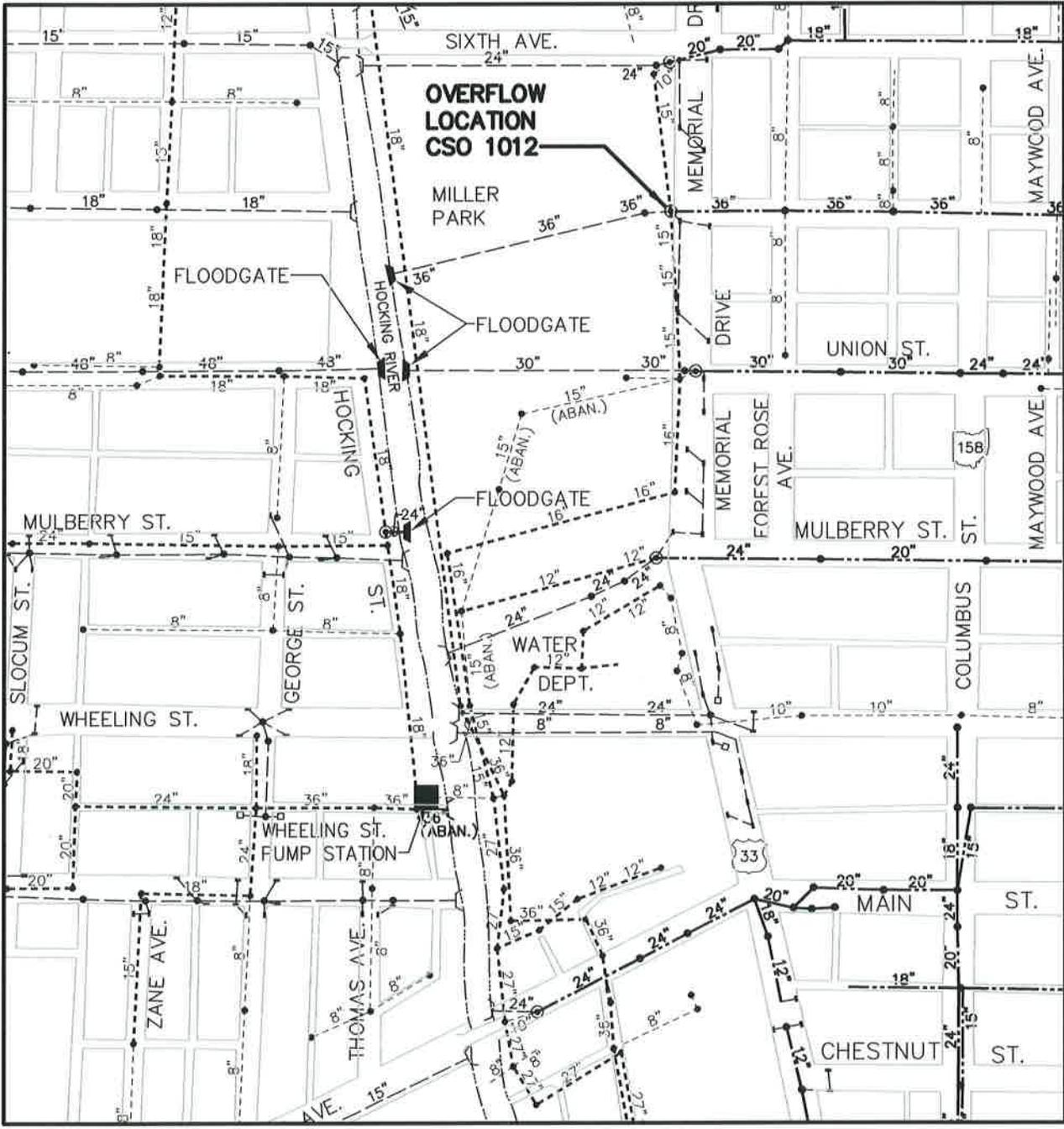


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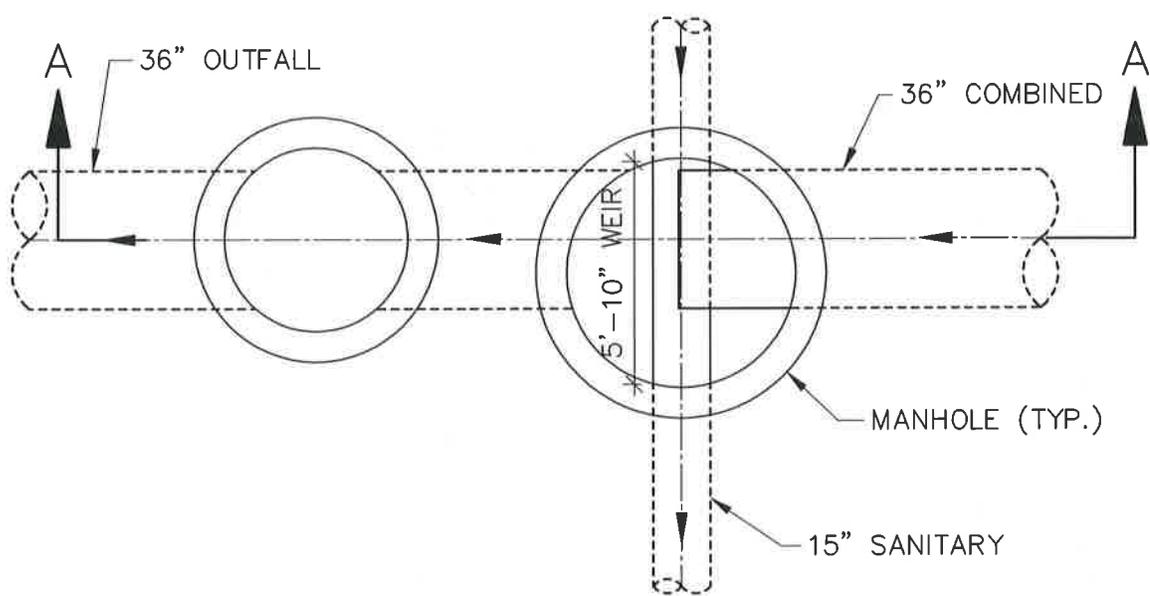


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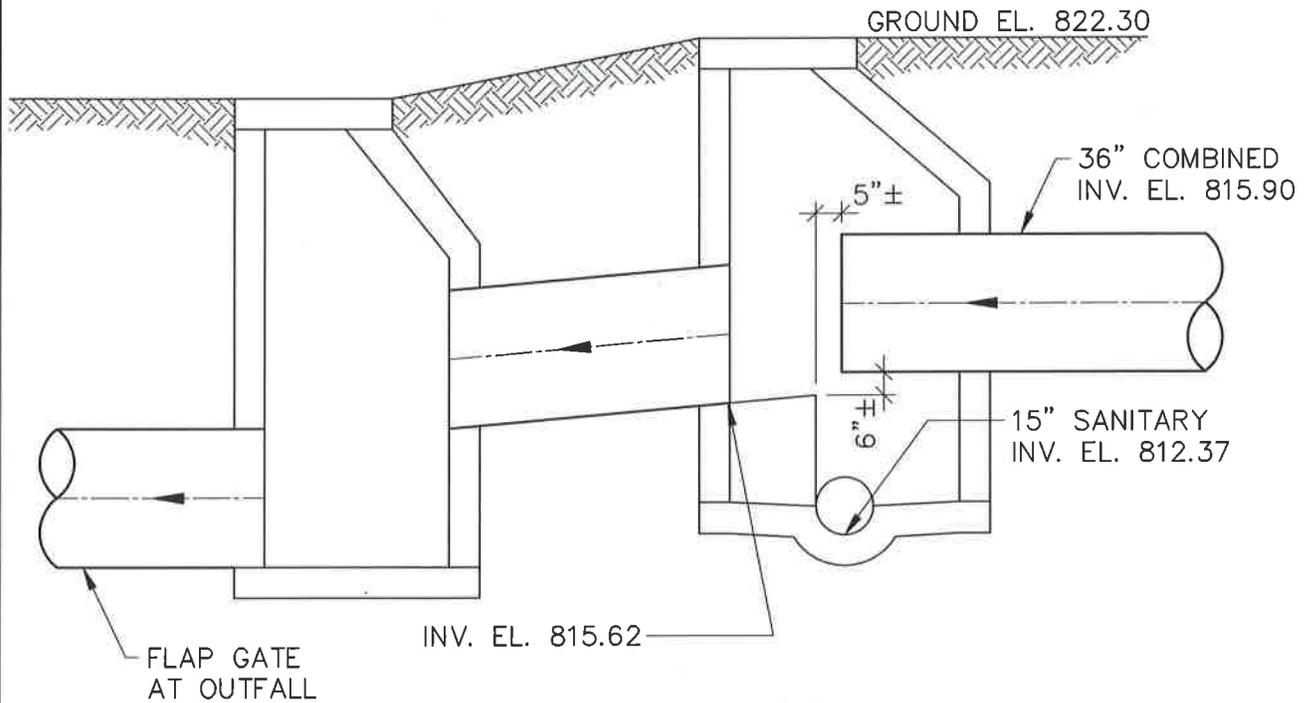
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 WATER POLLUTION CONTROL DEPARTMENT  
 WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
 STRUCTURE 1012  
 LOCATION PLAN

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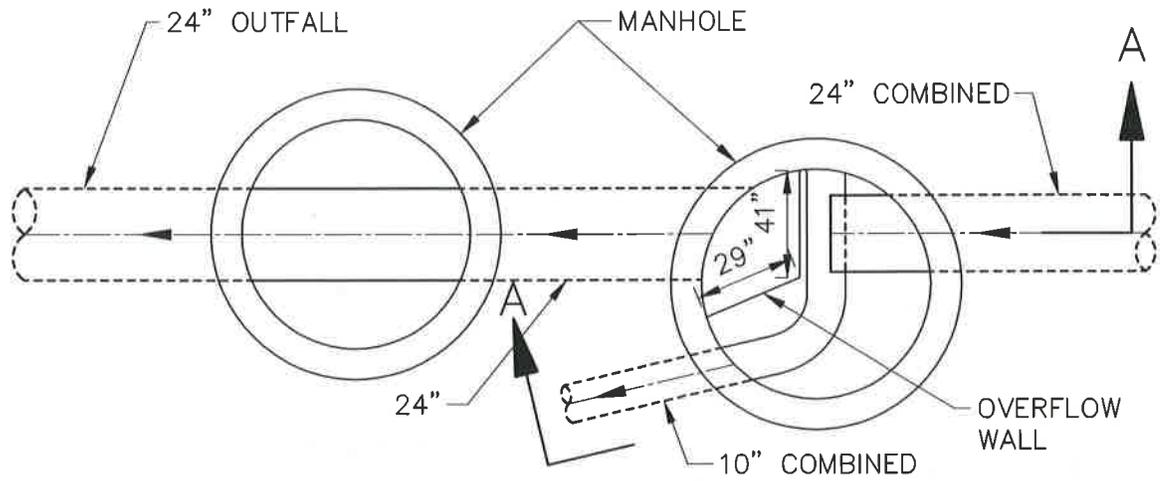
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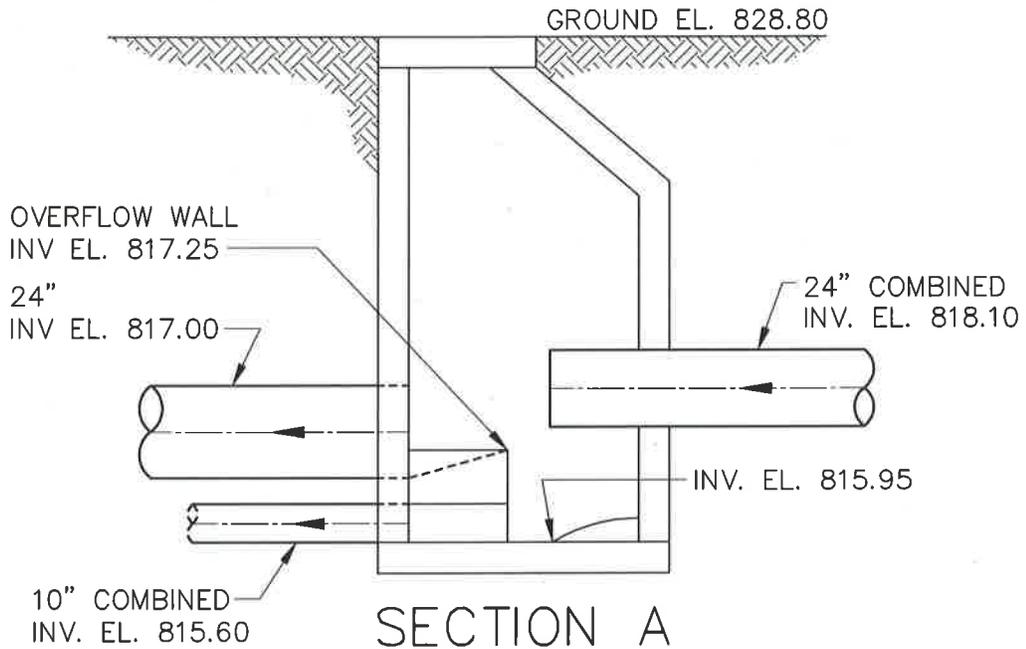
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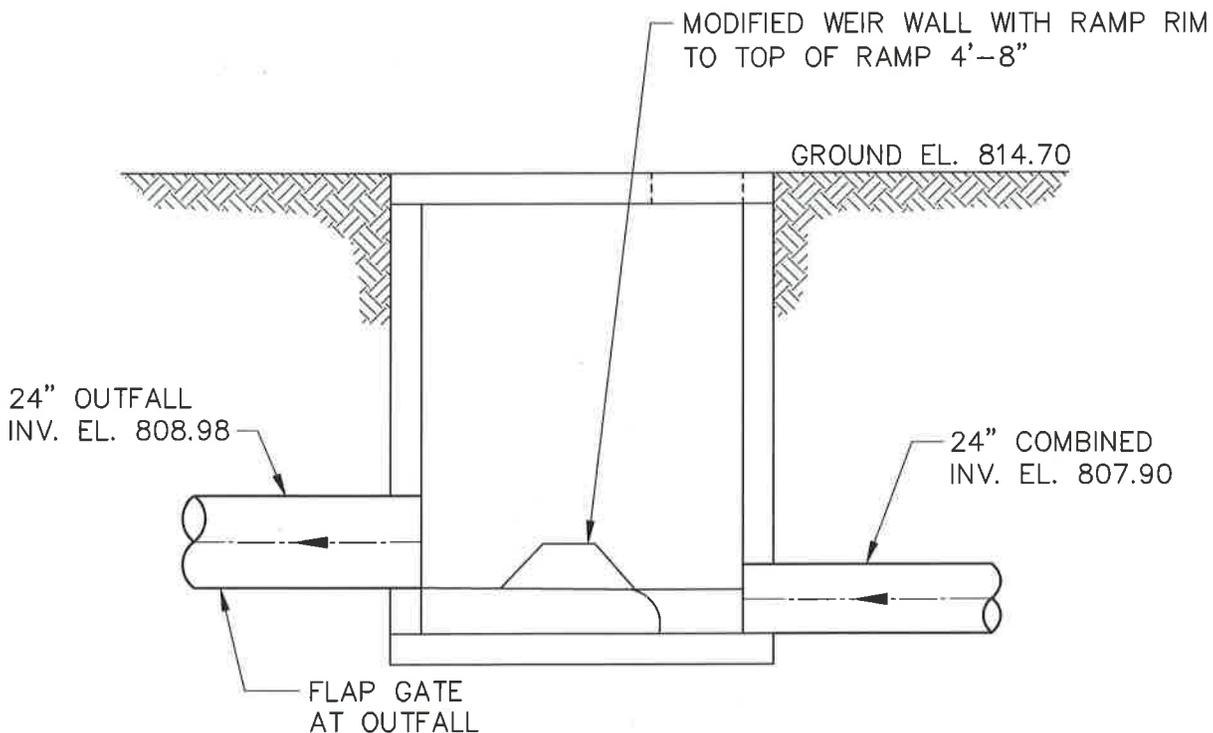
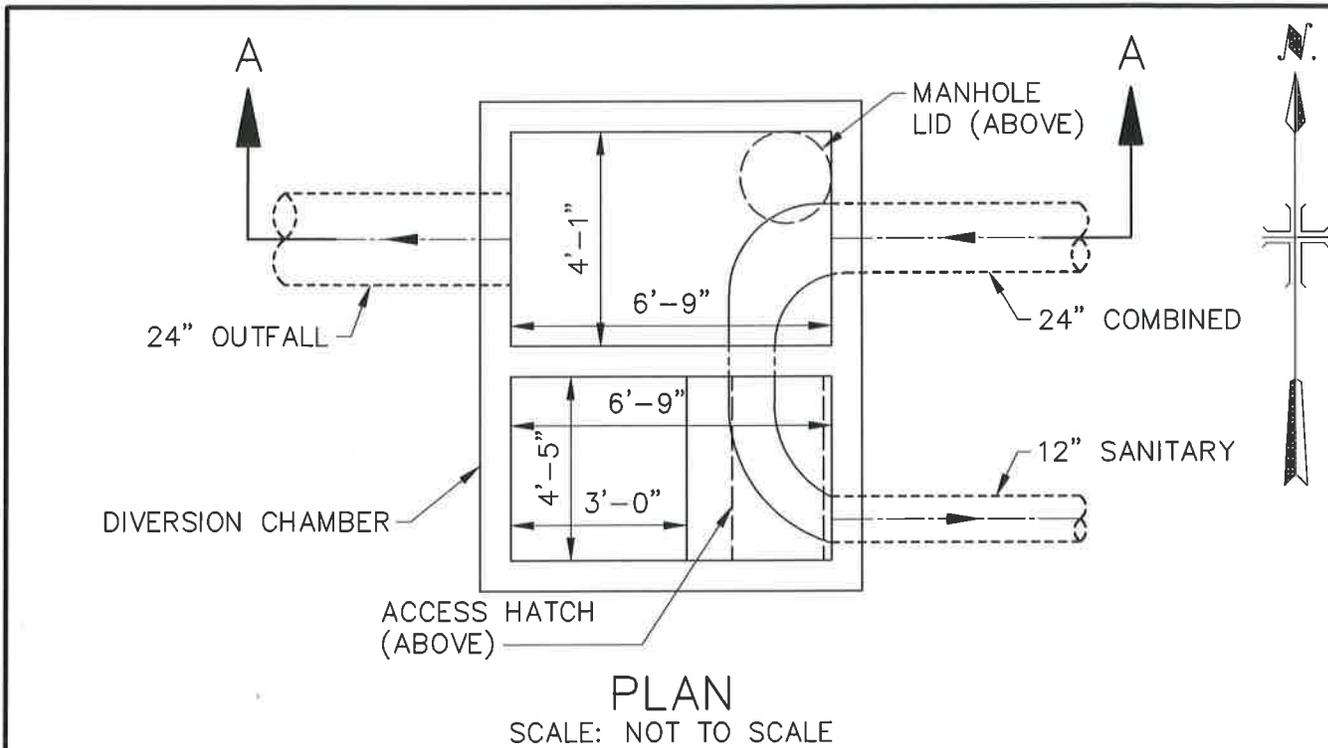
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WATER POLLUTION CONTROL DEPARTMENT  
WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
STRUCTURE 1013  
PLAN AND SECTION

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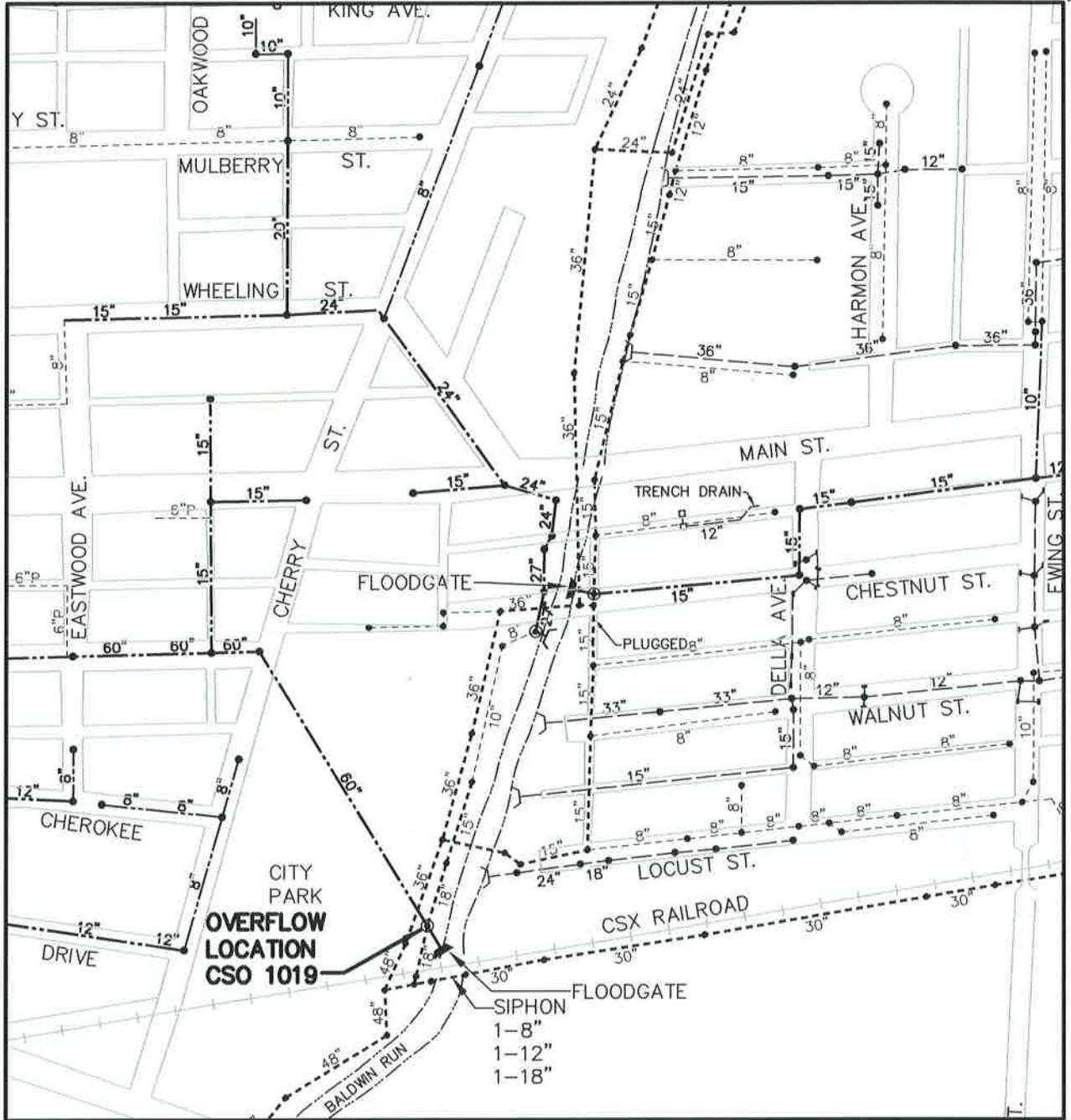
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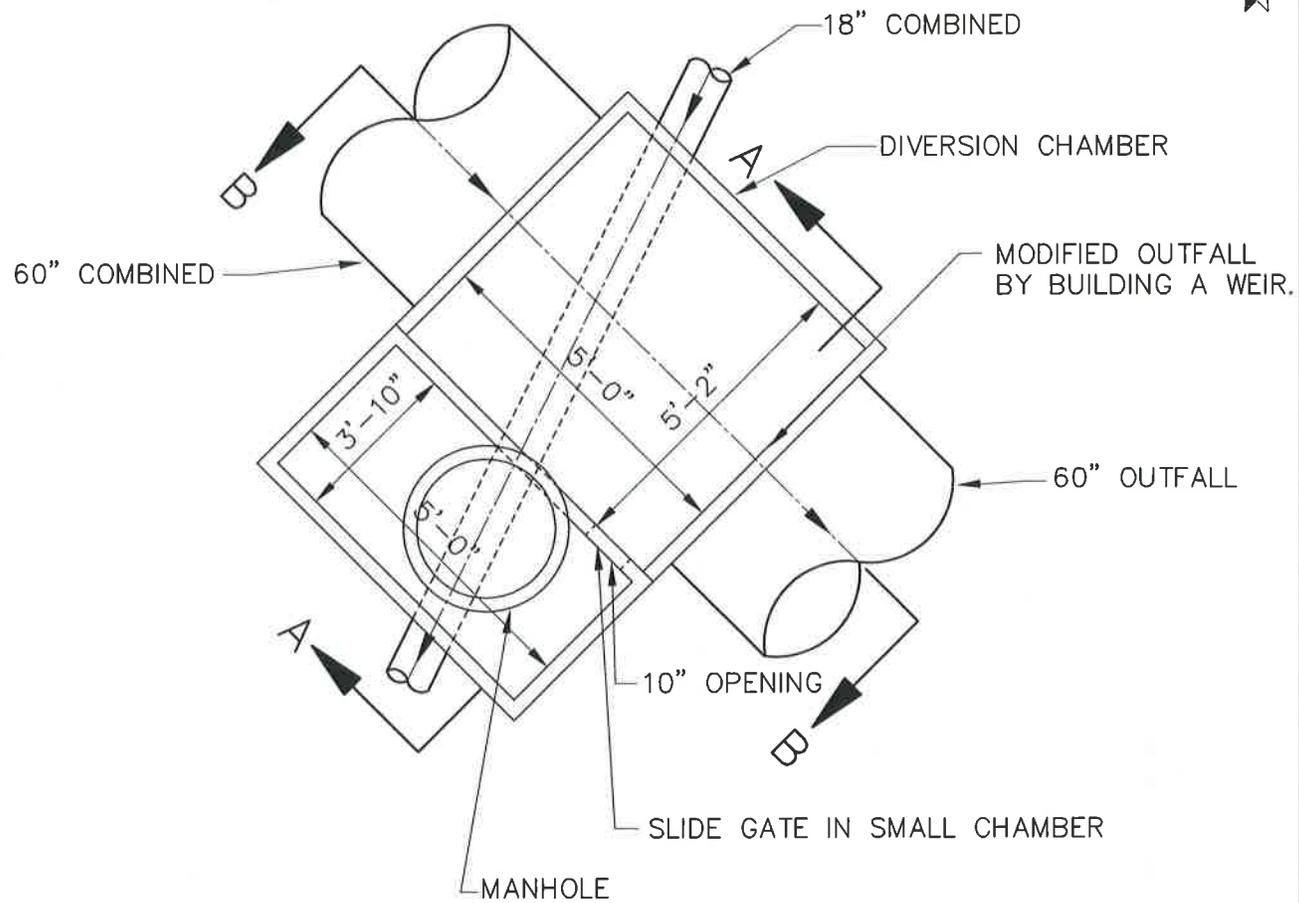
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FIGURE NO. B13

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 WATER POLLUTION CONTROL DEPARTMENT  
 WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
 STRUCTURE 1019  
 LOCATION PLAN



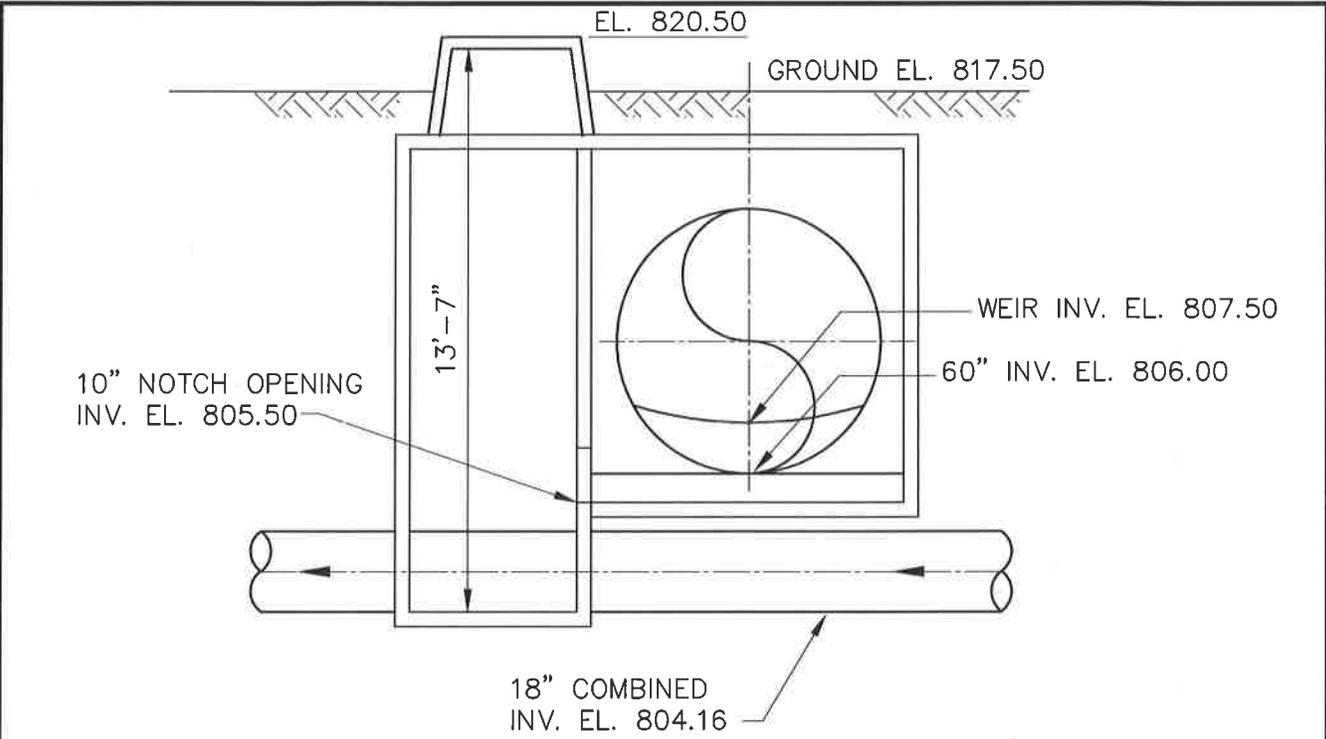
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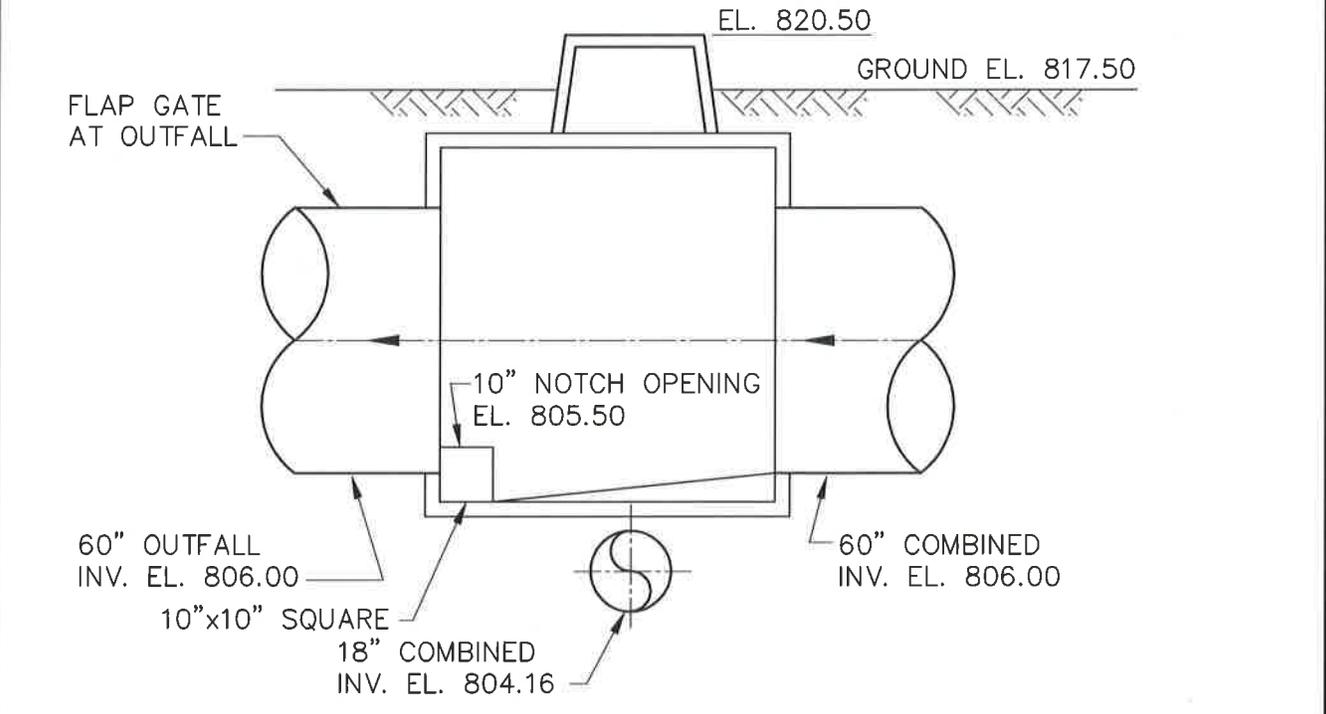
CITY OF LANCASTER  
WATER POLLUTION CONTROL DEPARTMENT  
WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
STRUCTURE 1019  
PLAN

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FIGURE NO. B14



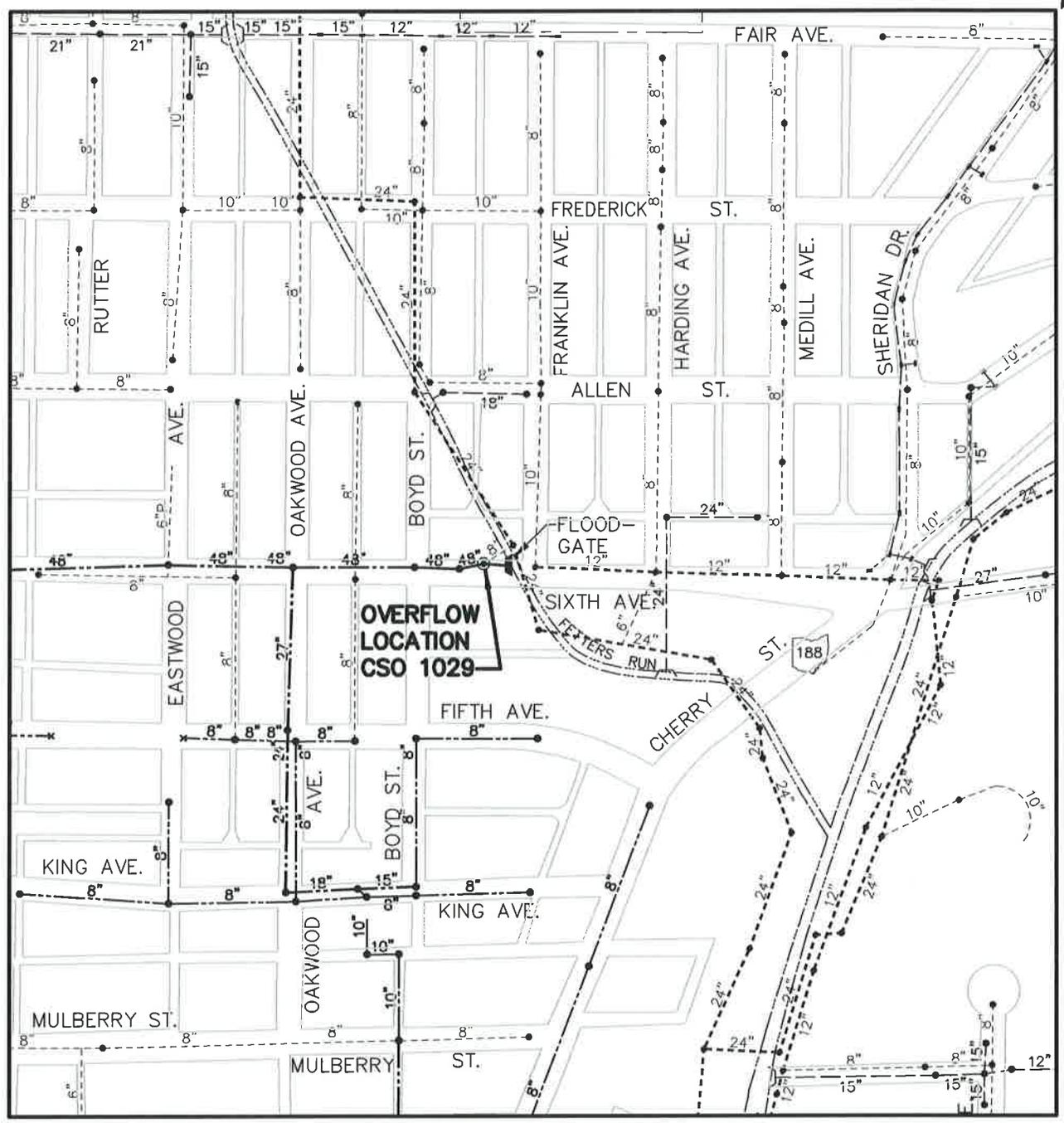
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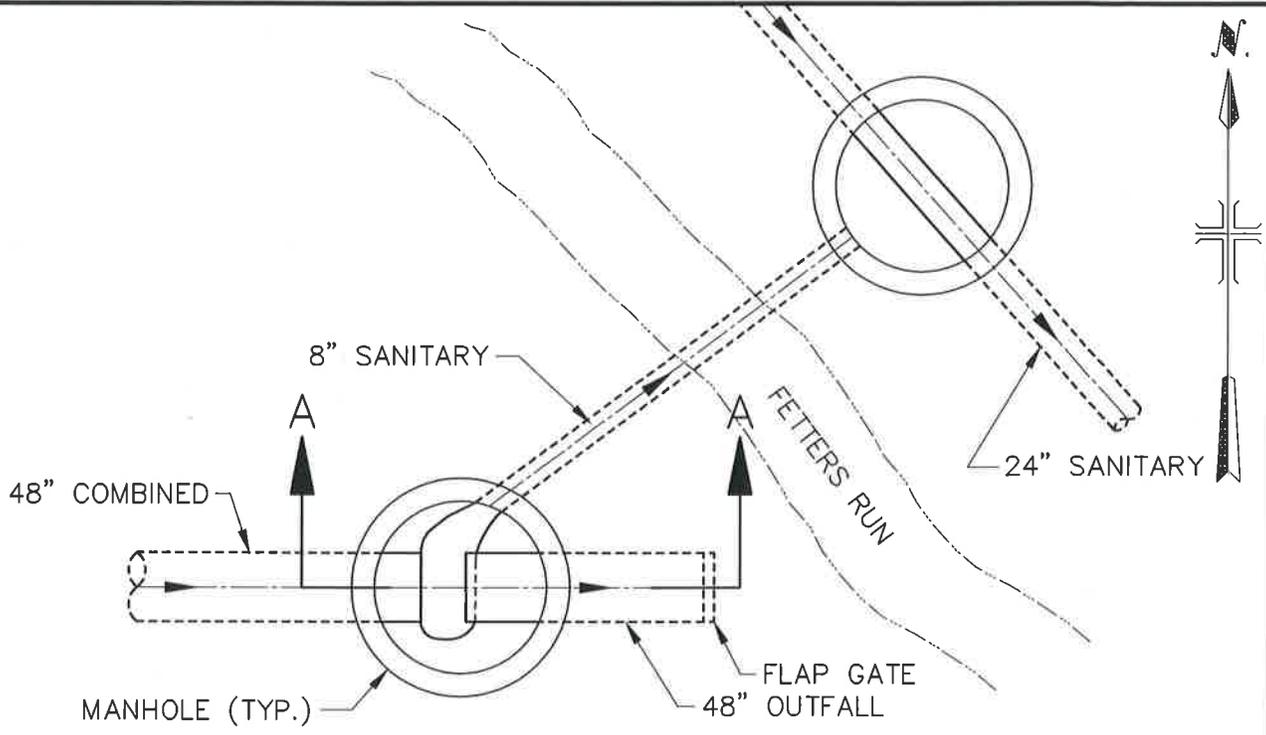
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CITY OF LANCASTER  
 WATER POLLUTION CONTROL DEPARTMENT  
 WASTEWATER COLLECTION SYSTEM

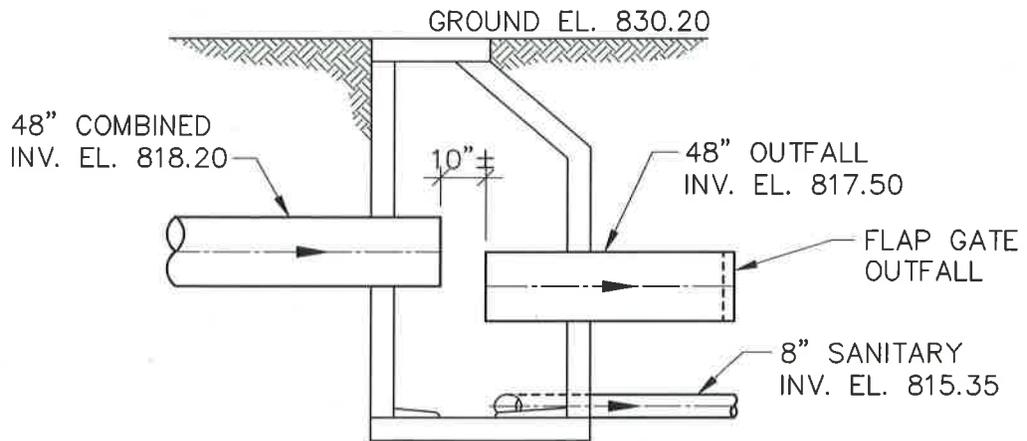
COMBINED SEWER OVERFLOW  
 STRUCTURE 1029  
 LOCATION PLAN

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 FIGURE NO. B16

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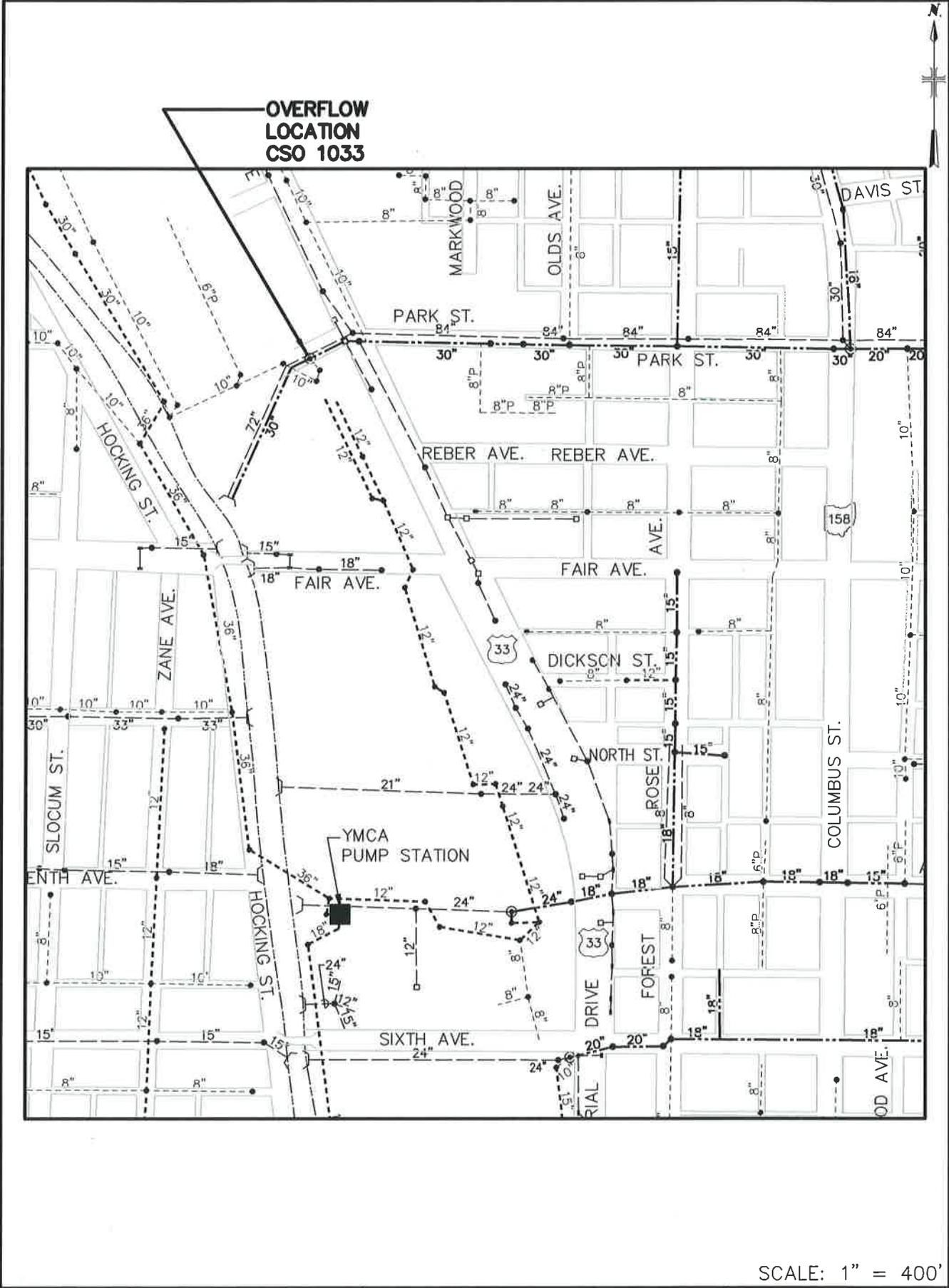


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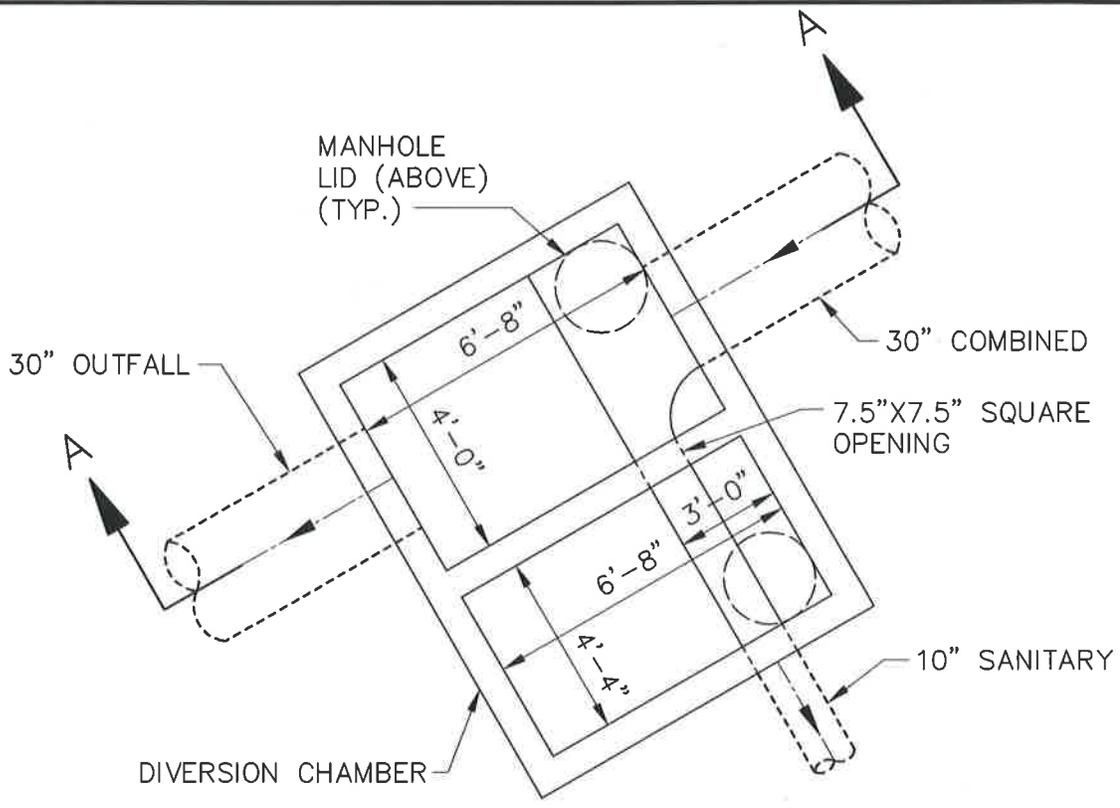


CITY OF LANCASTER  
WATER POLLUTION CONTROL DEPARTMENT  
WASTEWATER COLLECTION SYSTEM

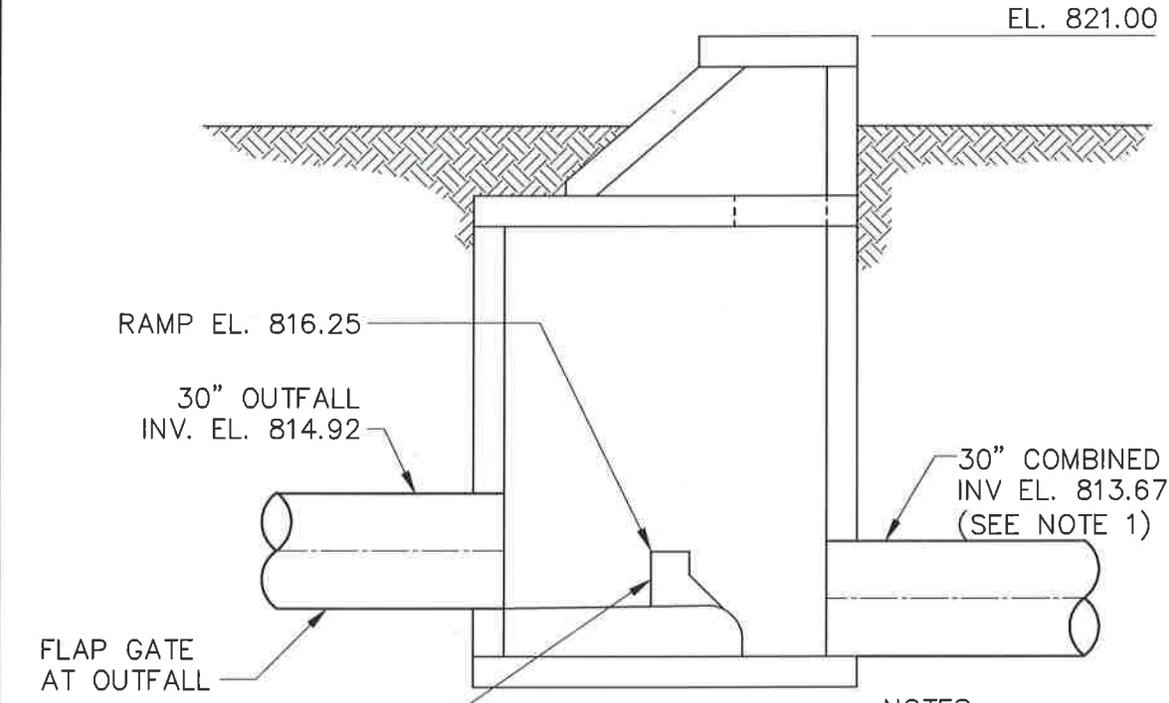
COMBINED SEWER OVERFLOW  
STRUCTURE 1033  
LOCATION PLAN

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**SECTION A**  
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- NOTES:  
1. BASED ON LANCASTER, OH SEWERAGE IMPROVEMENTS CONTRACT "67-1" SHEET 13 OF 14, INVERT ELEVATION WAS REVISED.

CITY OF LANCASTER  
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WASTEWATER COLLECTION SYSTEM

COMBINED SEWER OVERFLOW  
STRUCTURE 1033  
PLAN AND SECTION

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FIGURE NO. B19

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