



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

CITY OF FORT WAYNE PRELIMINARY ENGINEERING REPORT Three Rivers Protection and Overflow Reduction Tunnel (3RPORT) STATE REVOLVING FUND PROJECT # WW 16 06 02 08

DATE: May 16, 2016

TARGET PROJECT APPROVAL DATE: June 16, 2016

I. INTRODUCTION

The above entity has applied to the Clean Water State Revolving Fund (SRF) Loan Program for a loan to finance all or part of the wastewater project described in the accompanying Environmental Assessment (EA). As part of facilities planning requirements, an environmental review has been completed which addresses the project's impacts on the natural and human environment. This review is summarized in the attached EA, which can also be viewed at <http://www.in.gov/ifa/srf/>.

II. PRELIMINARY FINDING OF NO SIGNIFICANT IMPACT (FNSI)

The SRF Clean Water Program has evaluated all pertinent environmental information regarding the proposed project and determined that an Environmental Impact Statement is not necessary. Subject to responses received during the 30-day public comment period, and pursuant to Indiana Code 4-4-11, it is our preliminary finding that the construction and operation of the proposed facilities will result in no significant adverse environmental impact. In the absence of significant comments, the attached EA shall serve as the final environmental document.

III. COMMENTS

All interested parties may comment upon the EA/FNSI. Comments must be received at the address below by the target approval date above. Significant comments may prompt a reevaluation of the preliminary FNSI; if appropriate, a new FNSI will be issued for another 30-day public comment period. A final decision to proceed, or not to proceed, with the proposed project shall be effected by finalizing, or not finalizing, the FNSI as appropriate. Comments regarding this document should be sent within 30 days to:

April Douglas
Senior Environmental Manager
State Revolving Fund
100 N. Senate Ave. IGCN 1275
Indianapolis, IN 46204
317-234-7294; adouglas@ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **Three Rivers Protection and Overflow Reduction Tunnel (3RPORT)**
City of Fort Wayne
200 East Berry Street, Suite 270
Fort Wayne, IN 46802

SRF Project Number: WW 16 06 02 08

Authorized Representative: Kumar Menon, Director of Public Works and Utilities

II. PROJECT LOCATION

The project consists of a deep-rock tunnel approximately 150 feet deep and approximately 5 miles in length, roughly following the St. Mary's and Maumee rivers from Foster Park north and through downtown Fort Wayne. The tunnel route will occur in Allen County, Fort Wayne West quadrangle map, Township 30 North, Range 12 East, Sections 2, 3, 10 and 15 and Township 30 North, Range 13 East, Section 6. See Figures 1 through 13.

III. PROJECT NEED AND PURPOSE

Fort Wayne City Utilities (FWCU) has entered into a Consent Decree with the U.S. EPA, Department of Justice, and Indiana Department of Environmental Management (IDEM) to implement a combined sewer overflow (CSO) Long Term Control Plan (LTCP) to reduce the volume of combined sewage that is discharged into the waterways within the City of Fort Wayne.

IV. PROJECT DESCRIPTION

The Wastewater Utility Improvements, Chapter 13 – 3RPORT include: The construction of approximately 24,500 feet of 16-foot diameter tunnel located over 150 feet underground; approximately 1,760 feet of 3 through 8-foot diameter connection tunnels; approximately 9 drop shafts; approximately 6,500 feet of 24-inch through 132-inch diameter consolidation and relief sewers; approximately 320 feet of 18-foot diameter connection sewer to the Wet Weather Pump Station; approximately 1,700 feet of headworks connection sewer; and the construction of a Deep Dewatering Pump Station, with a total rated capacity of 30 MGD.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

3RPORT Construction Costs

Tunnel	\$ 85,750,000
Connection Tunnels	5,280,000
Drop Shafts	18,900,000
Consolidation and Relief Sewers	13,000,000
WWPS Connection	640,000
Headworks Connection Sewer	1,530,000
Launch Shaft	16,900,000
Deep Dewatering Pump Station	9,000,000
Retrieval Shaft	6,400,000
Mobilization/Demobilization	<u>2,500,000</u>
Construction Sub-Total	\$159,900,000
Contingencies	<u>15,990,000</u>
Total Construction Costs	\$175,890,000

Non-Construction Costs

Construction Management and Inspections	\$ 12,800,000
Legal and Financial	<u>6,310,000</u>
Non-Construction Sub-Total	\$ 19,110,000

Total Project Costs \$ 195,000,000

B. The City of Fort Wayne will finance the project with a loan from the State Revolving Fund Loan Program for a 20-year term at an annual fixed interest rate to be determined at loan closing. The actual loan amount will depend on the bids received.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

The “No Action” alternative is not practical, environmentally sound nor economical. If no action is taken, the City will not be able to achieve the goals of the CSO-LTCP, and the City will not be in compliance with its NPDES Permit or Consent Decree.

Optimal Operation of Existing Facilities: This is not a feasible alternative to achieve compliance with the requirements of the Consent Decree and LTCP. The City of Fort Wayne operates the sanitary and combined sewer systems as effectively as possible with continual observation and maintenance.

Collection System Rehabilitation/Replacement: Rehabilitation of the existing sewers will not fully address the problems with surcharging and flooding.

Phasing: This project is part of the City’s efforts to phase in improvements for compliance with the LTCP and CD.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: The majority of the ground disturbing construction will take place on ground that was previously disturbed by construction of the existing sewers or regulator structures. Some of the drop shafts and consolidation sewers will be placed in ground that is previously undisturbed. These areas have been subjected to archaeological reconnaissance.

Structural Resources (Figure 14): Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic properties occur, they will be temporary and will not alter the characteristics that qualify such properties for inclusion in or eligibility for the National Register of Historic Places. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "*no historic properties affected.*"

Surface Waters: The St. Mary's and Maumee Rivers are in the project area, but will not be adversely affected by this project. The project will not adversely affect waters of high quality listed in 327 IAC 2-1-2(3), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-(2), Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3), or waters on the Outstanding Rivers list (Natural Resources Commission Non-rule Policy Document).

Wetlands (Figures 1 through 13): Wetlands will not be impacted by the construction or operation of this project.

Floodplain (Figures 1 through 13): A majority of the construction will occur in a floodway. The proposed drop shafts or deep rock tunnel construction will be installed at grade or underground. The Deep Dewatering Pump Station will be constructed in the 100-year flood plain. The project will not impact the existing floodplain levels.

Groundwater: Groundwater supplies, sole source aquifers, and drinking water supplies will not be negatively impacted by this project. If dewatering is required, dewatering flows will be settled prior to discharge, or otherwise will not introduce solids to the surface waters.

Plants and Animals: The Preliminary Engineering Report (PER) states: *Approximately 4 trees will be removed for the construction of the drop shafts; 1 each at Drop Shafts 2, 5, 7 and 12. The construction and operation of the proposed project items will not negatively impact state or federal-listed threatened or endangered species or their habitat.*

The project will be implemented to minimize impact to non-endangered species and their habitat.

Prime Farmland: The project will not convert prime farmland.

Air Quality: Construction activities may generate some noise, fumes and dust, but should not significantly affect air quality.

Open Space and Recreational Opportunities: The project will neither create nor destroy open space or recreational opportunities.

Lake Michigan Coastal Program: The project will not affect the Lake Michigan Coastal Zone.

National Natural Landmarks: Construction and operation of the proposed project will not affect National Natural Landmarks.

B. Indirect Impacts

The City's Preliminary Engineering Report (PER) states: *The City of Fort Wayne through the authority of its Council planning commission, or other means, will ensure that future development, as well as future collection system or treatment works projects connecting to SRF funded facilities will not adversely affect wetlands, wooded areas, steep slopes, archaeological/historical/structural resources or other sensitive environmental resources. The City will require new development and treatment works projects to be constructed within the guidelines of the U.S. Fish and Wildlife Service, IDNR, IDEM, and other environmental review authorities.*

C. Comments from Environmental Review Authorities

In correspondence dated February 5, 2016, the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology stated:

Pursuant to IC 13-18-21 and 327 IAC 14 and Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer ("Indiana SHPO") is conducting an analysis of the materials dated and received by the Indiana SHPO on January 8, 2016, for the above indicated project in Fort Wayne, Adams and Wayne Townships, Allen County, Indiana.

In regard to buildings and structures, we have noted the following properties within the probable area of potential effects, and we believe that it meets the criteria of eligibility for inclusion in the National Register of Historic Places:

*Col. David N. Foster Memorial, 1500 W. Washington Blvd., (site #003-215-25671)
C. Strasburg & Sons Junk Warehouse, 235 E. Superior St., (site # 003-215-27003)*

Additionally, we have noted the following properties within the probable area of potential effects, and we believe that they meet the criteria for inclusion in the National Register of Historic Places due to their historical and architectural significance:

*Lakeside Historic District, (site #003-214/215-21001-21445)
Wayne Oil Tank and Pump Co. Historic District, (Site #003-214-29001-006)*

Furthermore, we have noted the following properties listed in the National Register of Historic Places within the probable area of potential effects:

*John Brown Stone Warehouse, (The Canal House), 114 East Superior St., listed December 15, 1997
Fort Wayne Park and Boulevard System Historic District, listed December 28, 2010
Southwood Park Historic District, listed December 22, 2009
Illsley Place-West Rudisill Historic District, listed April 21, 2006
West End Historic District, listed November 15, 1984
Hugh McCulloch House, listed October 23, 1980
Wells Street Bridge, listed September 15, 1988*

It is our understanding that historic property owners have expressed concerns regarding potential effects such as vibration and landscape changes; however, the City through consultation with property owners is working to avoid and minimize any effects to historic

resources. Therefore, based on the information provided to our office, we do not believe the characteristics that qualify the above identified historic properties for inclusion in the National Register will be diminished as a result of this project.

In terms of archaeology:

- We concur with the recommendation for the archaeological survey at the locations of Drop Shaft 2, the Retrieval Shaft at Indian Village Park, and at the three segments of the Foster Park Relief Sewer, as specified by McCullough and Bennett (1/5/2016).
- It should be noted that no archaeological work is necessary at Drop Site 7, providing that the proposed project stays within the scope of the work provided by the archaeologist. If project activities change, then additional consultation will be necessary.
- We concur that no archaeological survey is needed within the portions of the proposed project not listed above.

In correspondence dated May 11, 2016, the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology stated:

Pursuant to IC 13-18-21 and 327 IAC 14 and Section 106 of the National Historic Preservation Act (54 U.S.C. § 306108) and 36 C.F.R. Part 800, the Indiana State Historic Preservation Officer ("Indiana SHPO") is conducting an analysis of the materials dated and received by the Indiana SHPO on April 12, 2016, for the above indicated project in Fort Wayne, Adams and Wayne Townships, Allen County, Indiana.

Based on our analysis, it has been determined that no historic properties will be altered, demolished, or removed by the proposed project.

Thank you for the submission of the archaeological report by McCullough and McCullough (April 9, 2016). We concur with the results of the archaeological survey and no further work is necessary provided that project activities stay within the areas as specified to and evaluated by the archaeologists.

If any prehistoric or historic archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 & 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 & 29 does not obviate the need to adhere to applicable federal statutes and regulations, including but not limited to 36 C.F.R 800

If you have any further questions regarding this determination, please contact the DHPA. Questions about archaeological issues should be directed to Rachel Sharkey at (317) 234-5254 or rsharkey@dnr.IN.gov. Questions about historic buildings or structures pertaining to this project should be directed to Kim Marie Padgett at (317) 234-6705 or kpadgett@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA # 18704.

In correspondence dated February 9, 2016, the United States Fish and Wildlife Service stated:

This responds to your letter dated January 27, 2016, requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U.S. Fish and Wildlife Service's Mitigation Policy.

The proposed project will have no effect on wetlands or other significant habitat types. Project impacts are expected to be minor in nature. Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no objections to the project as currently proposed. This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised list be published, it will be necessary for the Federal agency to reinitiate consultation.

We appreciate the opportunity to comment at this early stage of project planning. If project plans change such that fish and wildlife habitat may be affected, please coordinate with our office as soon as possible.

In correspondence dated February 16, 2016 the Department of Natural Resources Environmental Unit Stated:

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment: Portions of this project will require the prior approval of the Department of Natural Resources' Division of Water for construction in a floodway under the Flood Control Act IC 14-28-1. According to the plans submitted, these portions would include the retrieval shaft and any drop shafts and screens and gate structures located within the floodway; formal approval from the Division of water for the tunnel itself is not required. Please contact the Division of Water's Technical Services section when plans are completed in order to determine the appropriate authorization process.

Natural Heritage Database: The Natural Heritage Program's data have been checked. The peregrine falcone (Falco peregrines), a state species of special concern, has been documented within ½ mile southeast of DS-08 and DS-09. Also beginning at DS-01 and moving clockwise along the tunnel, the Fort Wayne Parks and Recreation Department properties listed below are within ½ mile of the project alignment:

- 1. Indian Village Park*
- 2. Foster Park*
- 3. Justin Study Park*
- 4. St. Mary's River Greenway*
- 5. Orff Park*
- 6. Thieme Drive Overlook*
- 7. Roosevelt Park*
- 8. Boone Street Block Party*
- 9. Guldlin Park*
- 10. Bloomingdale Park*

11. *Camp Allen Playground*
12. *Swinney Park*
13. *Moody Park*
14. *Community Center*
15. *Headwaters Park West*
16. *Wells Street Park*
17. *Lawton Park*
18. *Zeis Park*
19. *Historic Old Fort*
20. *Headwaters Park East*
21. *Courthouse Green Park*
22. *Freimann Square*
23. *Salon Plaza*
24. *Lakeside Park*
25. *East Central Park*
26. *Nuckols Park*
27. *Memorial Park*
28. *Summit Street Block Park*

Fish & Wildlife Comments: Since most of the construction associated with this project is underground and the drop shaft will create minimal ground disturbance, we do not foresee any impacts to the peregrine falcon as a result of this project.

In a highly developed and urbanized area, small patches of undeveloped land become the last remaining areas of useable habitat for local and migratory fish, wildlife, or botanical resources. Focusing development on previously disturbed areas (such as agricultural areas, vacant properties, etc.) can help preserve undisturbed areas as habitat for wildlife resources. For more information on wildlife habitat conservation visit the Wildlife Habitat Council's website at www.wildlifehc.org. The Wildlife Habitat Council (WHC) works to increase the amount of quality wildlife habitat on corporate, private, and public lands.

The measures below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. *Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.*
2. *Minimize and contain within the project limits all tree and brush clearing.*
3. *Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.*
4. *Do not deposit or allow demolition materials or debris to fall or otherwise enter the waterway.*
5. *Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.*
6. *Seed and protect all disturbed slopes that are 3:1 or steeper with heavy-duty net-free biodegradable erosion control blankets to minimize the entrapment and snaring of small*

wildlife such as snakes and turtles (follow manufacturer's recommendations for installation); seed and apply mulch on all other disturbed areas.

7. Plant 5 trees, at least 2 inches in diameter-at-breast height, for each tree which is removed that is ten inches or greater in diameter-at-breast height.

8. Inspect natural structural erosion and sediment control practices daily and repair as necessary until all construction is complete and disturbed areas are permanently stabilized.

VIII. MITIGATION MEASURES

The City of Fort Wayne's PER states:

The project will be designed and implemented to minimize soil erosion and mitigation measures cited in comment letters from governing agencies will be implemented. Erosion control measures including seeding, sodding, inlet protection, silt fence, stone construction entrance and dust control may be implemented in accordance with current soil erosion control practices at the time of construction to reduce/eliminate erosion of the soils.

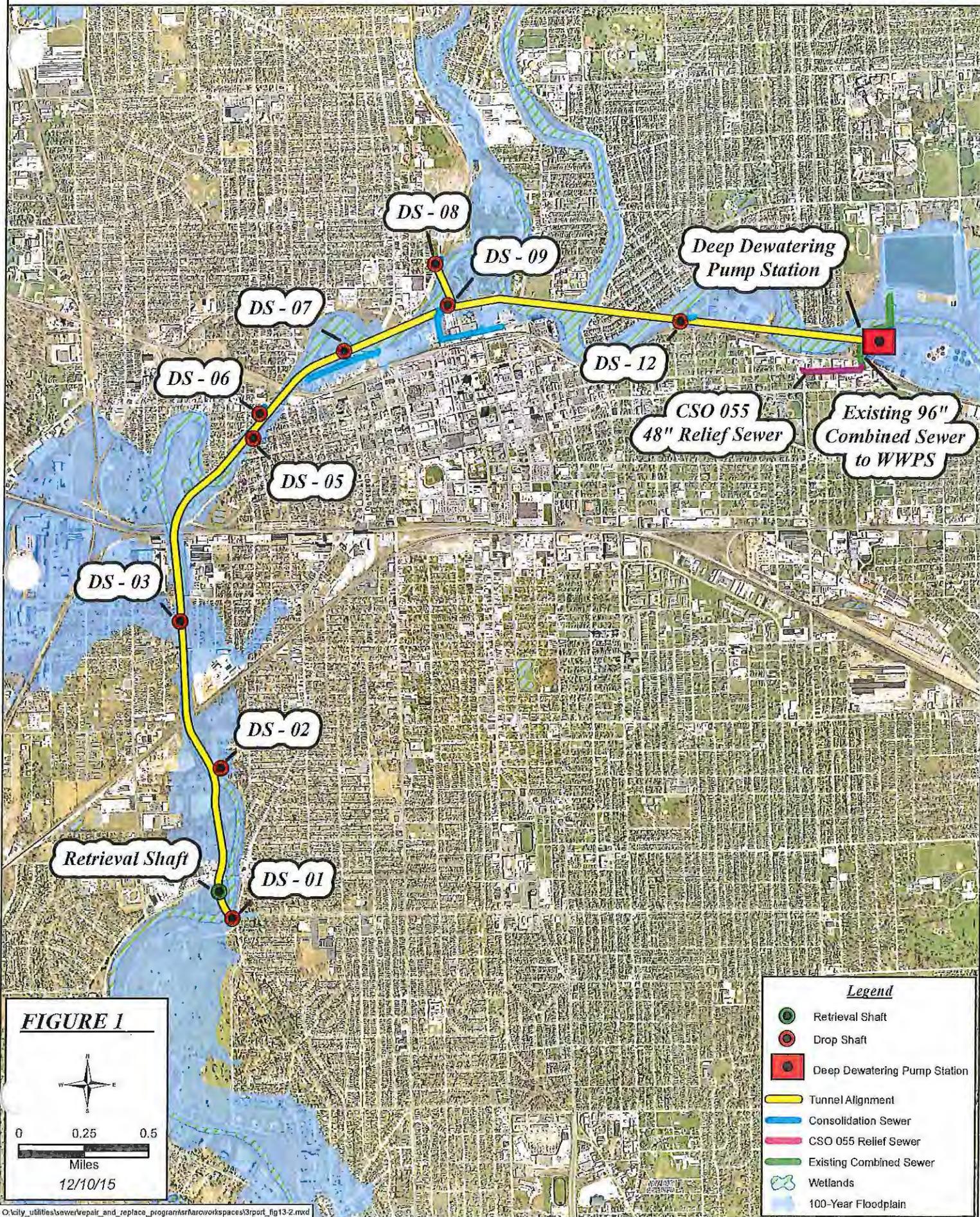
To mitigate construction noises and the subsequent resident complaints, construction will only be allowed from 7:00am to 5:00pm Monday through Friday. Appropriate erosion control measures will be implemented during construction to abate dust and airborne dirt particles. The contractor will be required to maintain all equipment in good working order to mitigate noise and air pollution caused by faulty operating equipment.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on February 17, 2016 at 10:00 am at the City of Fort Wayne, 200 East Berry Street, Suite 270, Fort Wayne, IN 46802. Written comments concerning the work near Drop Shaft 5 were received during the 5-day comment period following the hearing, and are being taken into consideration or addressed.

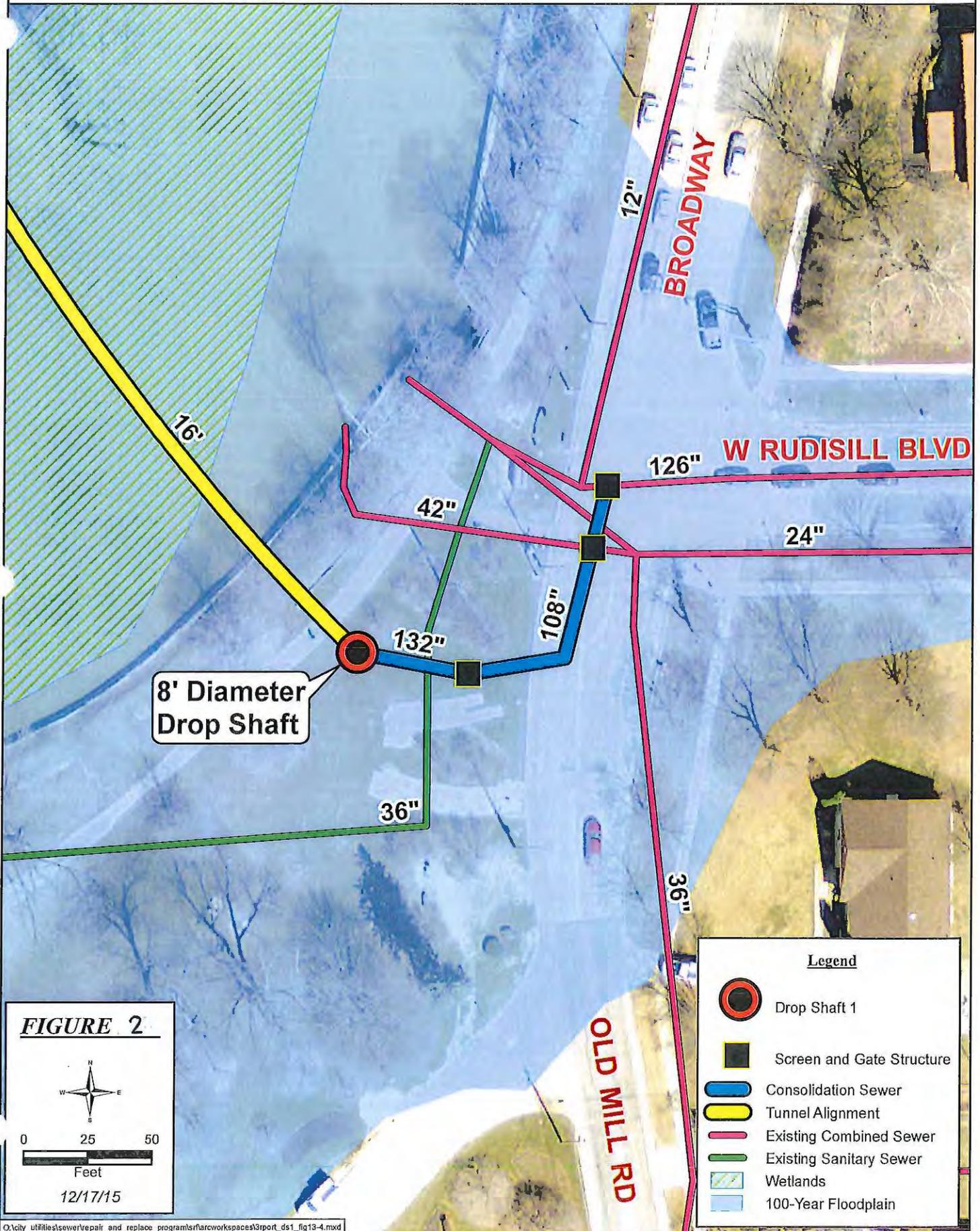


3RPORT





DROP SHAFT 1



8' Diameter Drop Shaft

Legend

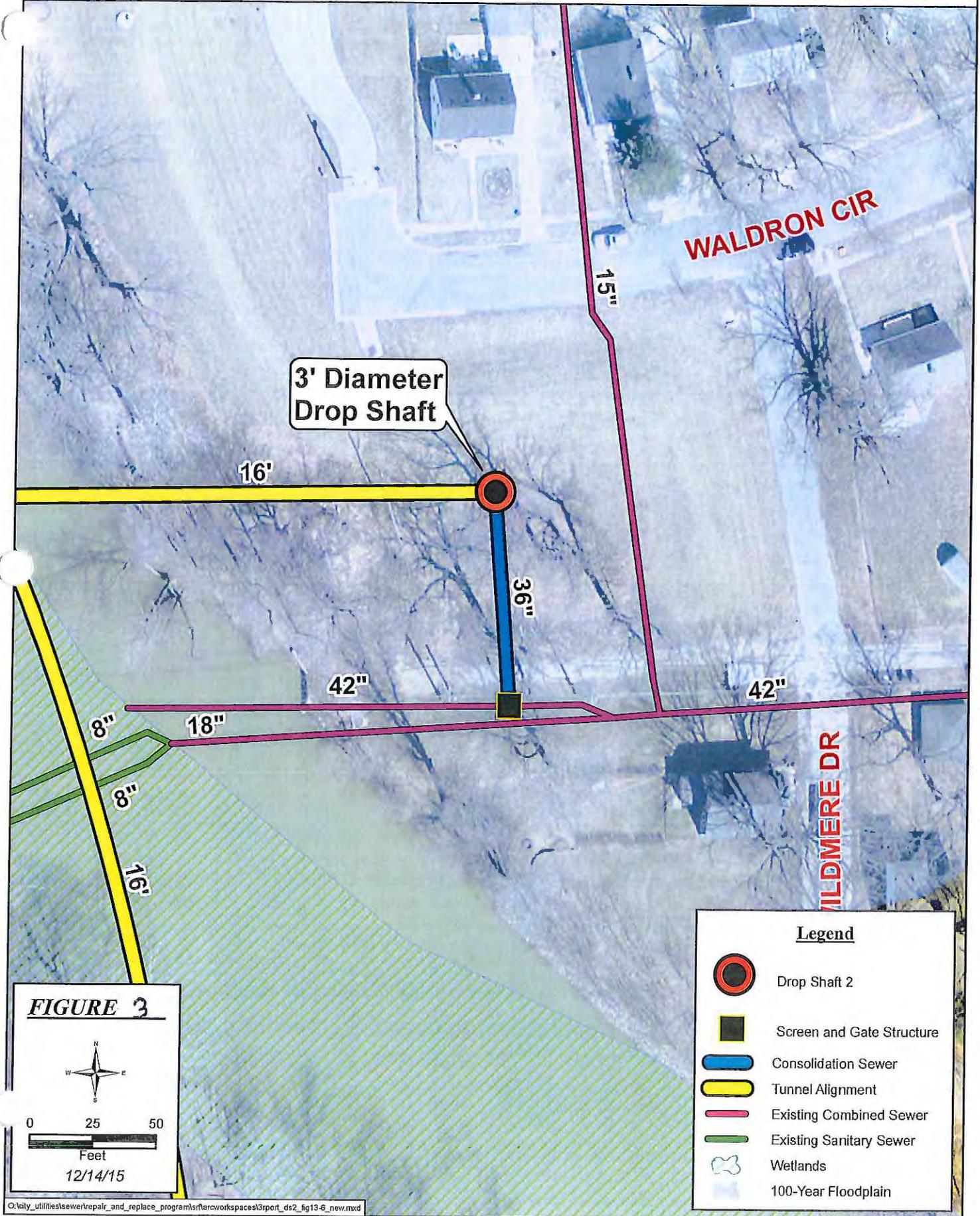
- Drop Shaft 1
- Screen and Gate Structure
- Consolidation Sewer
- Tunnel Alignment
- Existing Combined Sewer
- Existing Sanitary Sewer
- Wetlands
- 100-Year Floodplain

FIGURE 2

0 25 50
Feet
12/17/15



DROP SHAFT 2





DROP SHAFT 3

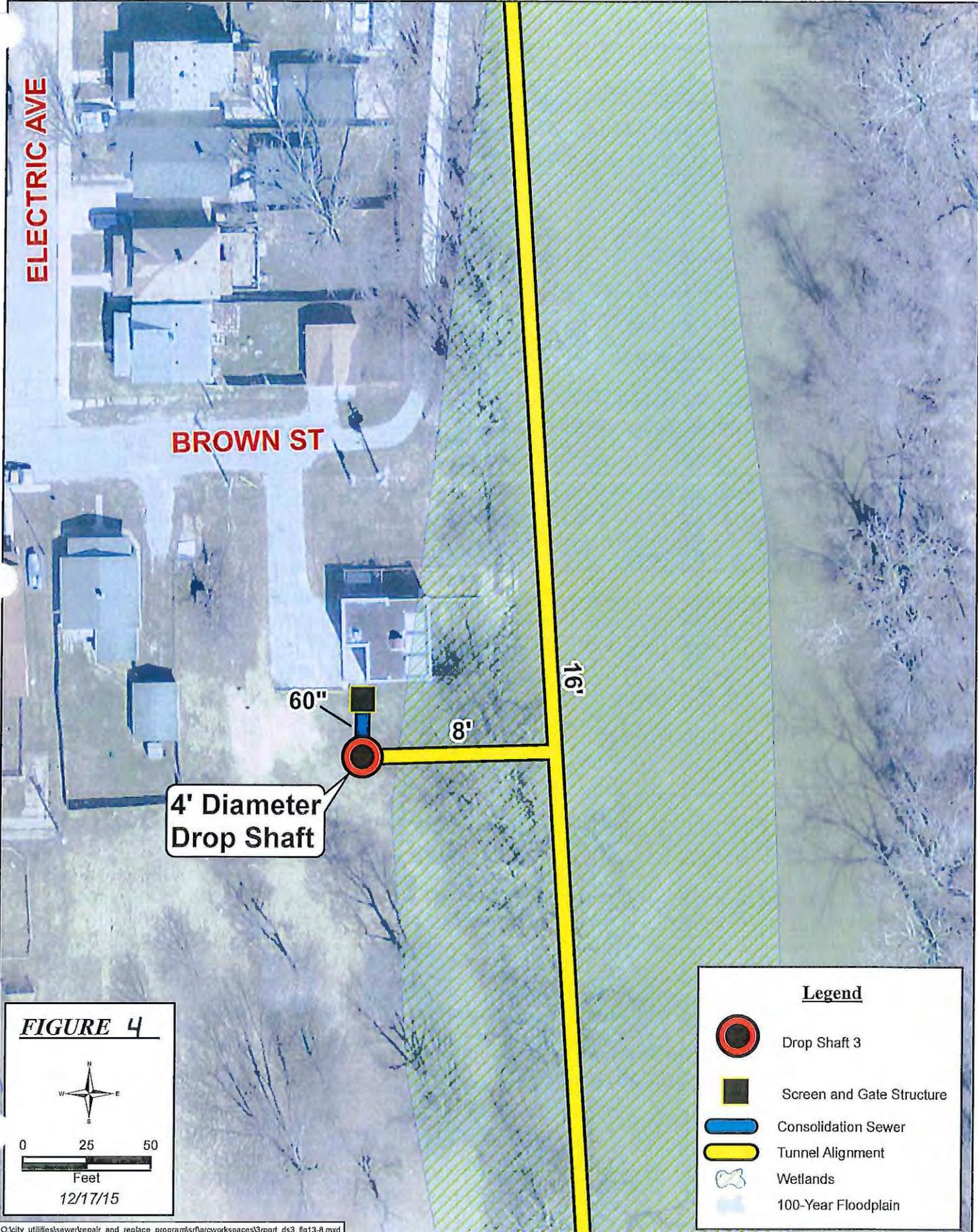


FIGURE 4



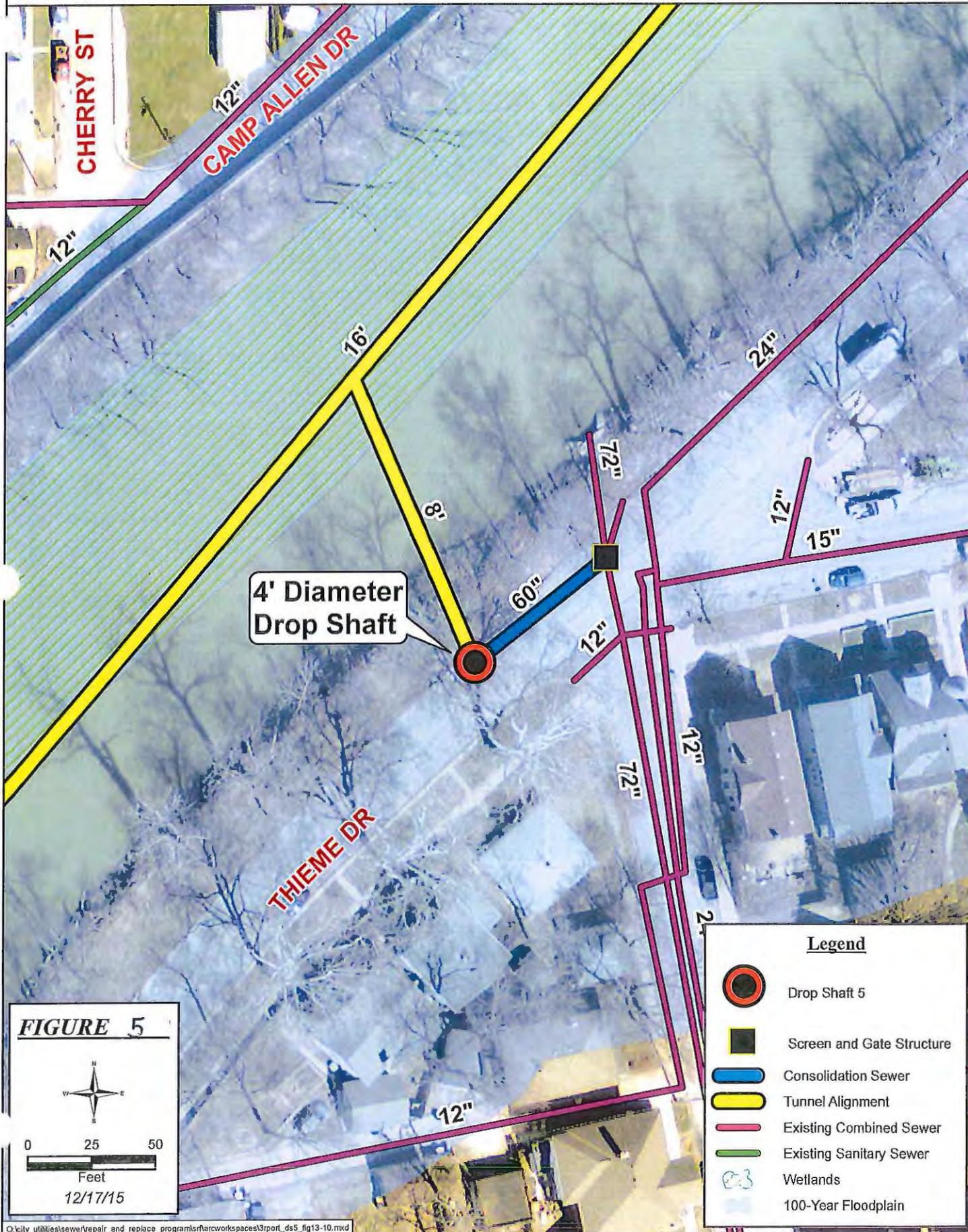
12/17/15

Legend

-  Drop Shaft 3
-  Screen and Gate Structure
-  Consolidation Sewer
-  Tunnel Alignment
-  Wetlands
-  100-Year Floodplain



DROP SHAFT 5





DROP SHAFT 6

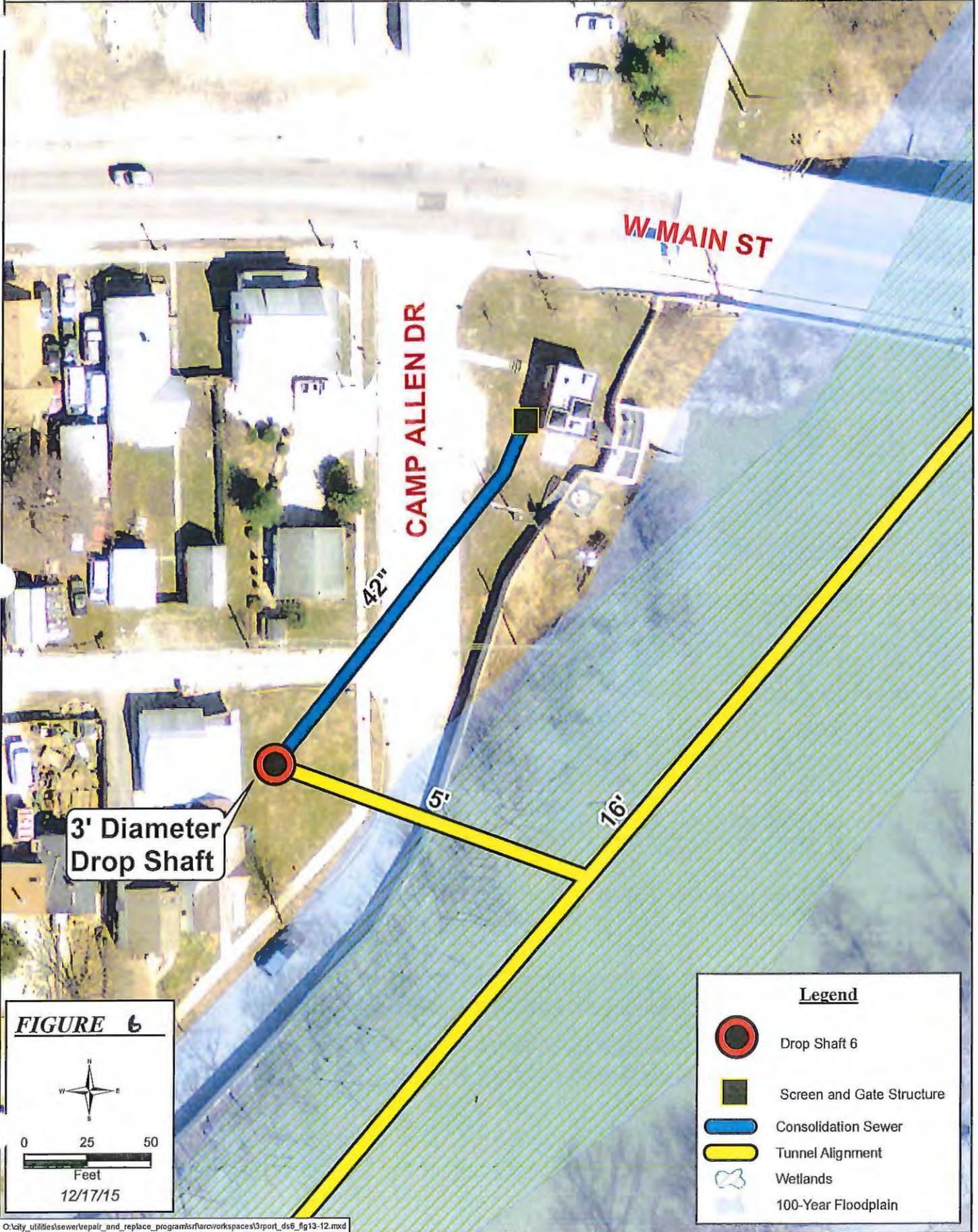


FIGURE 6



12/17/15

Legend

-  Drop Shaft 6
-  Screen and Gate Structure
-  Consolidation Sewer
-  Tunnel Alignment
-  Wetlands
-  100-Year Floodplain



DROP SHAFT 8

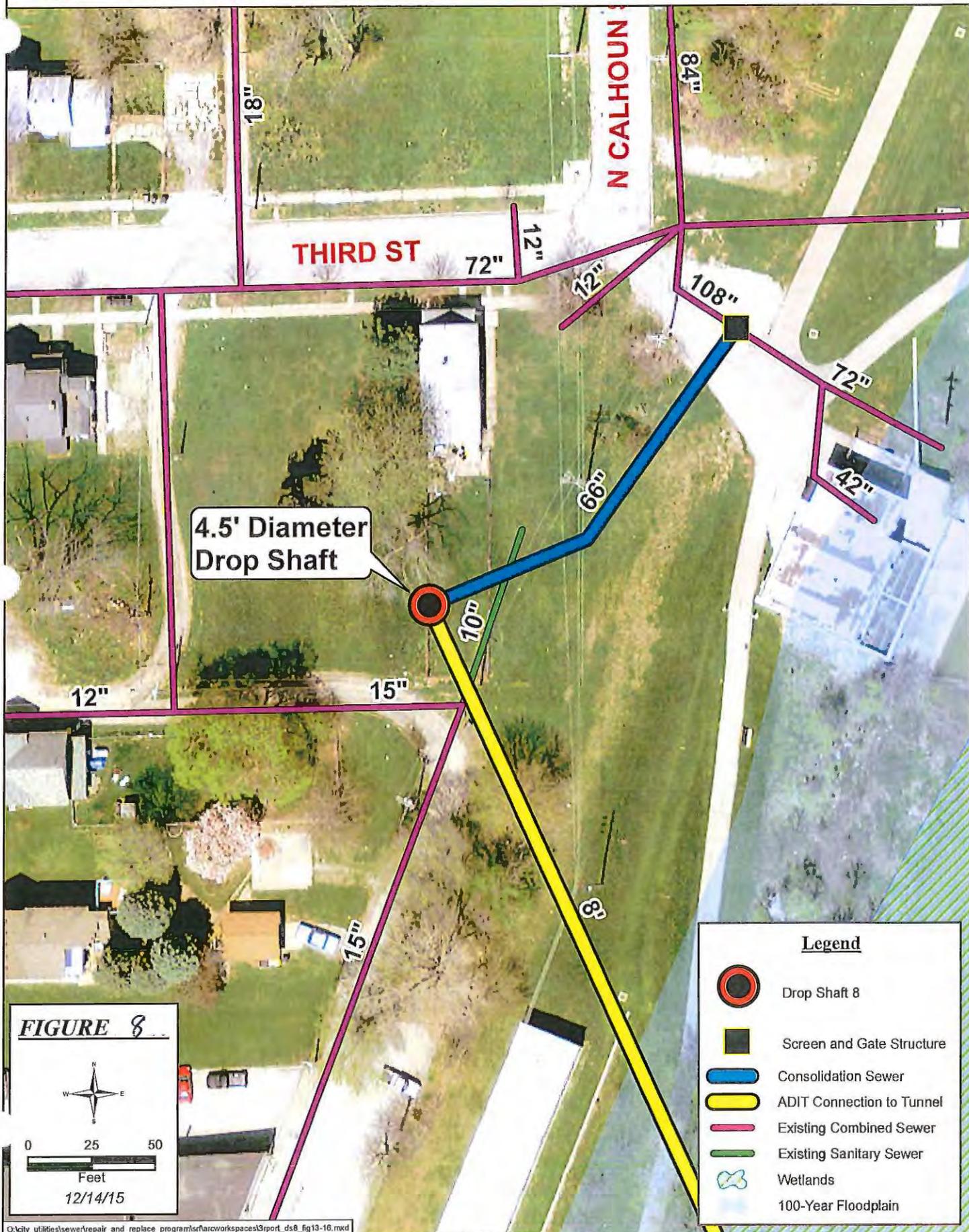
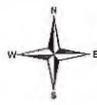


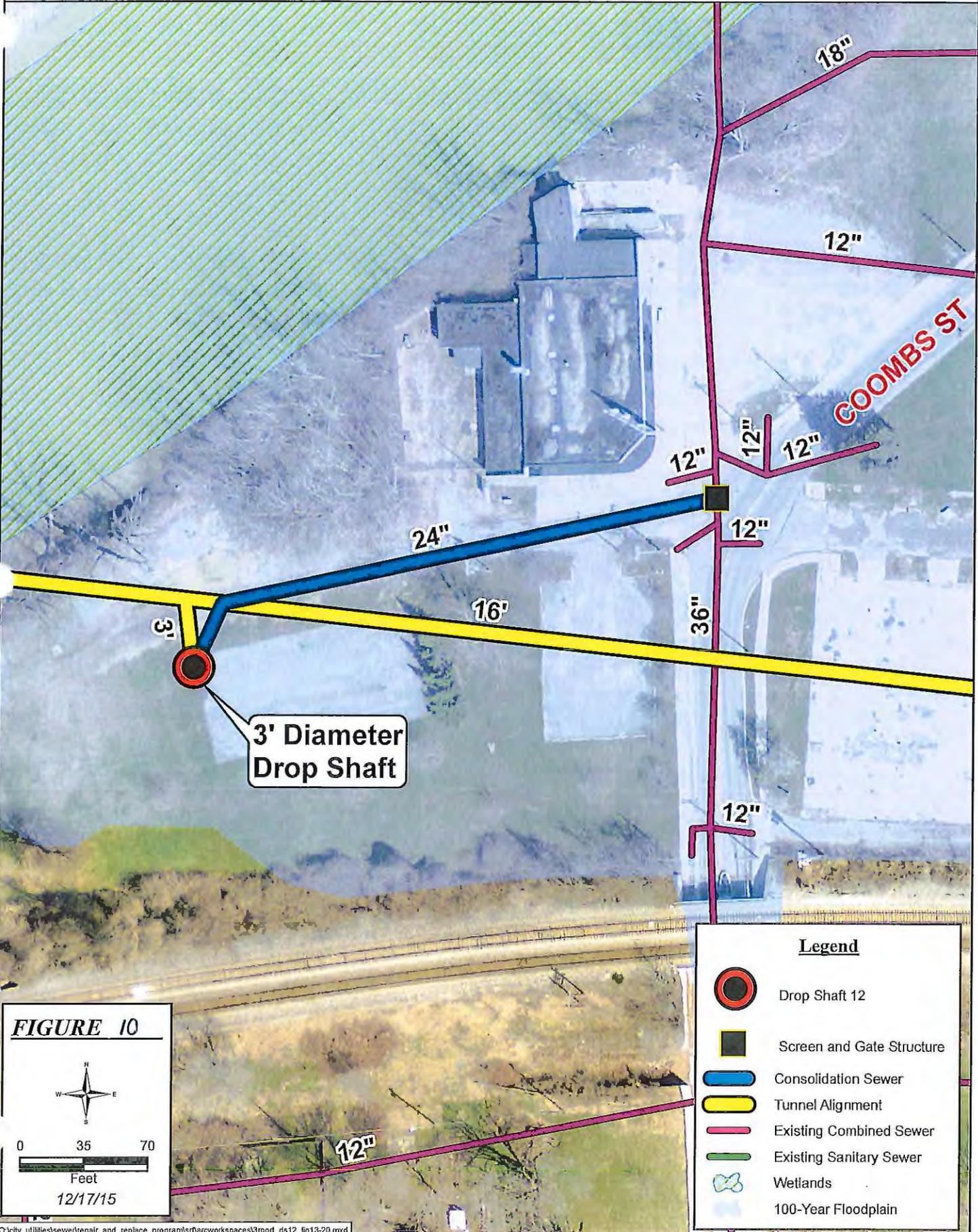
FIGURE 8



12/14/15



DROP SHAFT 12



3' Diameter Drop Shaft

Legend

- Drop Shaft 12
- Screen and Gate Structure
- Consolidation Sewer
- Tunnel Alignment
- Existing Combined Sewer
- Existing Sanitary Sewer
- Wetlands
- 100-Year Floodplain

FIGURE 10

0 35 70
Feet
12/17/15



RETRIEVAL SHAFT

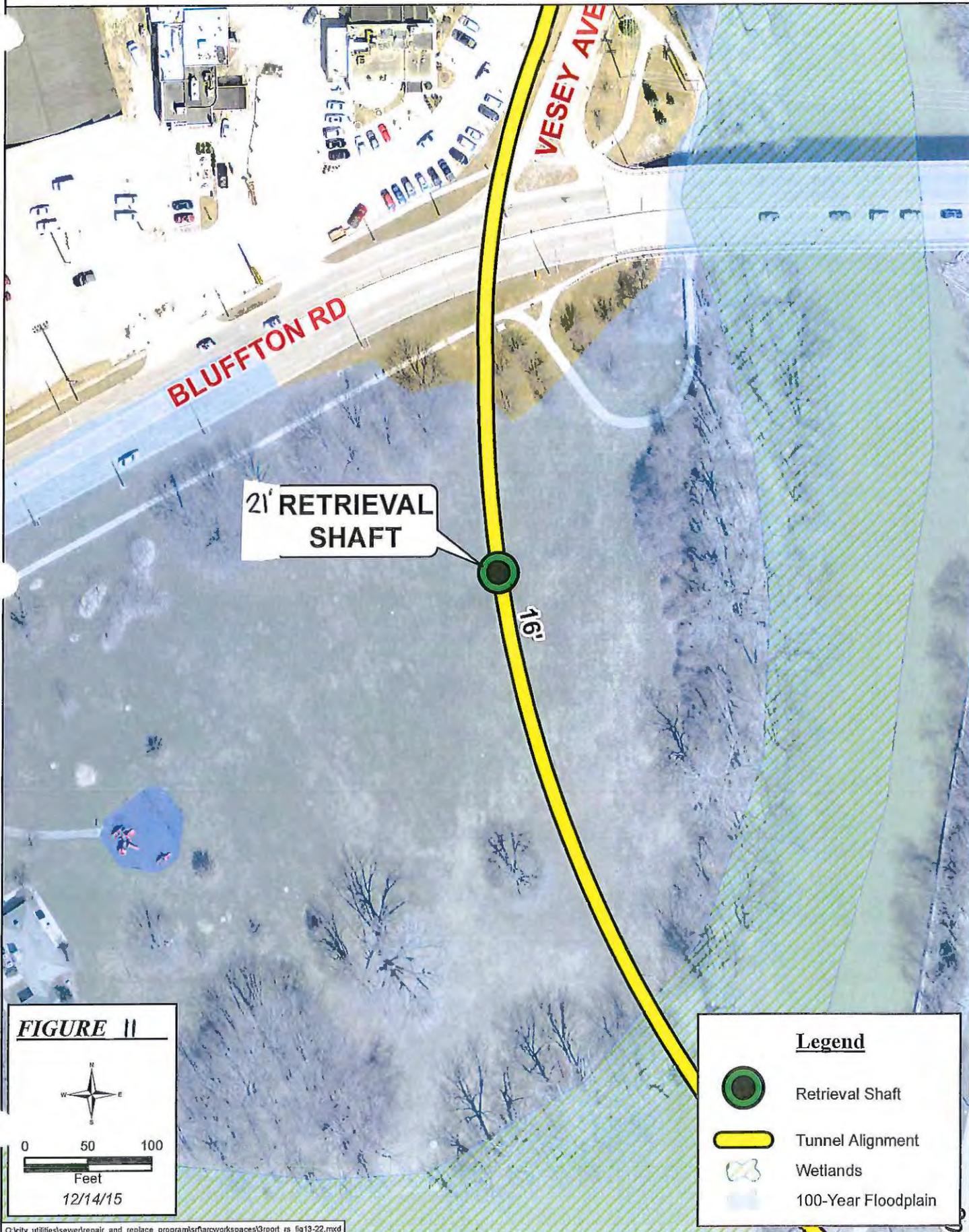


FIGURE 11



0 50 100

Feet

12/14/15

Legend



Retrieval Shaft



Tunnel Alignment

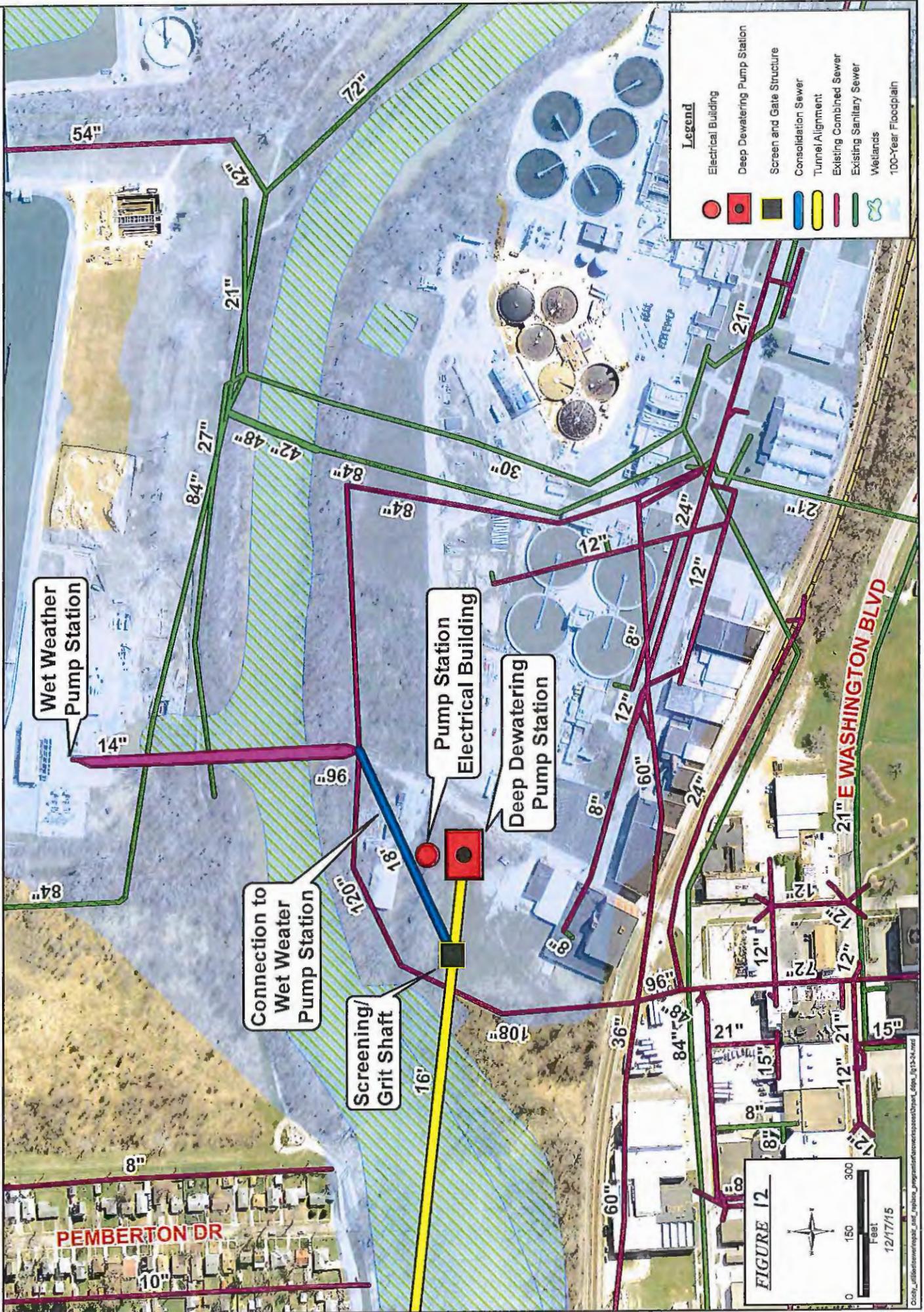


Wetlands

100-Year Floodplain



DEEP DEWATERING PUMP STATION



Legend

- Electrical Building
- Deep Dewatering Pump Station
- Screen and Gate Structure
- Consolidation Sewer
- Tunnel Alignment
- Existing Combined Sewer
- Existing Sanitary Sewer
- Wetlands
- 100-Year Floodplain

FIGURE 12

Feet
12/17/15

Coolby_colleccollected/repair_and_rephase_pumpstation/figures/figure12.dwg, 12/17/15



3RPORT

