



# State Revolving Fund Loan Programs

## Drinking Water, Wastewater, Nonpoint Source

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### ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

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#### CITY OF FORT WAYNE OUTFALL 61 AND 62 RELIEF SEWER STATE REVOLVING FUND PROJECT WW 14 31 02 07 – Project 10

**DATE: October 10, 2014**

**TARGET APPROVAL DATE: November 10, 2014**

#### I. INTRODUCTION

The above entity has applied to the State Revolving Fund (CWSRF) 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 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 deadline 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 – IGCN 1275  
100 N. Senate Ave.  
Indianapolis, IN 46204  
317-234-7294  
[adouglas@ifa.in.gov](mailto:adouglas@ifa.in.gov)

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# ENVIRONMENTAL ASSESSMENT

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## I. PROJECT IDENTIFICATION

Project Name and Address:

**Outfall 61 and 62 Relief Sewer – Project 10**  
City of Fort Wayne  
200 East Berry Street, Suite 270  
Fort Wayne, IN 46802

SRF Project Number:

WW14 31 02 07

Authorized Representative:

Mr. Kumar Menon,  
Director of Public Works

## II. PROJECT LOCATION

Fort Wayne is located in central Allen County. The proposed Outfall 61 and 62 Relief Sewer is located in Fort Wayne East USGS quadrangle, Adams Township, T30N, R13E, sections 5 and 6; and St. Joseph Township, T31N, R13E and section 32.

## III. PROJECT NEED AND PURPOSE

Outfalls 61 and 62 are part of the city's Long Term Control Plan (LTCP) and identified in Control Measure 9 of the Consent Decree. The combined sewer overflows (CSOs) from these outfalls discharge to Baldwin Ditch. The LTCP approved in April 2008 recommended satellite disinfection at these two outfalls. Satellite disinfection consisted of screening to remove solids; chlorination/dechlorination disinfection system; and a pump for returning flow back to the conveyance system. However, this option would not reduce the frequency and volume of the combined sewage reaching the outfalls but only provide solids reduction and disinfection. A study of Subbasins Nos. R14033 and R14075 was completed in 2010, which specifically addressed several options for eliminating CSOs from Outfalls Nos. 61 and 62.

The proposed project involves the redirection of the overflows from CSO outfalls 61 and 62 to a proposed relief sewer, which will use weirs to control the amount of flow to the proposed relief sewer. Combined sewage in the proposed relief sewer will be conveyed to the water pollution control plant (WPCP) for treatment. This should reduce the frequency of overflows at these two outfalls to no more than four events per year.

## IV. PROJECT DESCRIPTION

The proposed project includes (see Figures 1 and 2):

- A. installing approximately 6,687 feet of 48-inch diameter reinforced concrete pipe (RCP) with polyvinyl chloride liner;
- B. installing approximately 20 manholes;
- C. installing bar racks at regulator for CSO 61 and at CSO 62;
- D. installing inverted siphons;
- E. installing approximately 1,340 feet of RCP storm sewer;
- F. installing approximately nine catch basins;
- G. installing CSO 61 weir and diversion structure; and
- H. installing one outfall structure.

**V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING**

A. Selected Plan Estimated Cost Summary

<u>Construction Components</u>	<u>Costs</u>
Mobilization/Demobilization	\$ 266,160
Construction Engineering	533,700
Installing 6,687 feet of 48-inch RCP	1,760,040
60-Inch Dia. Manholes	100,000
Special Backfill	540,050
Roadway Construction	279,000
Excavation	356,400
Tree Removal	20,000
Restoration	59,500
Floatable Control Bar Rack (S18 082)	5,000
CSO 61 New Weir & Diversion Structure	80,000
CSO 62 Diversion Structure & Bar Rack	250,000
24-Inch Storm Sewer	361,800
Catch Basins	22,500
Inverted Siphons	110,000
Outfall Structure	83,000
Utility Relocation	56,000
<b>Sub Total Construction Cost</b>	<b>\$ 4,883,150</b>
Contingency Cost	<u>\$ 488,315</u>
<b>Total Construction Cost</b>	<b>\$ 5,371,465</b>
<u>Non-Construction</u>	<u>Costs</u>
Design	\$ 910,000
Construction Management & Inspection	520,000
Financial and Legal	188,000
Land Costs*	<u>35,450</u>
<b>Total Non-Construction Cost</b>	<b>\$ 1,653,450</b>
<b>Total Estimated Project Costs</b>	<b>\$ 7,024,915</b>

\* Land purchase cost, \$35,450 is ineligible for SRF funding.

- B. Fort Wayne will finance the eligible portions of 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 monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

## **VI. DESCRIPTION OF EVALUATED ALTERNATIVES**

Several alternatives were evaluated for the Outfalls 61 and 62 Relief Sewer project including the “No Action” alternative.

### **A. “No Action”**

This alternative was rejected, since Outfalls 61 and 62 would continue to have frequent overflows during wet weather events and the city would not be in compliance with its Consent Decree.

### **B. Optimal Operation of Existing Facilities**

This alternative was rejected, since despite the city’s best efforts to operate and maintain the combined sewer system the overflows at CSOs 61 and 62 would not be reduced.

### **C. Collection System Rehabilitation**

This alternative was rejected because rehabilitation of the existing sewers will not address the problem of reducing overflow events to Baldwin Ditch.

### **D. Satellite Disinfection at Outfalls Alternative**

The LTCP recommended this alternative which included: screening for removing solids; a disinfection basin sized to allow for 30 minutes of chlorine contact time at peak flow; dechlorination; and pumping back to the sewer system. However, this alternative was rejected since it would not reduce the number of overflow events and the location of the treatment system would not meet the required setback distance of 500 feet from nearby residences.

### **E. Satellite Storage Facility Alternative**

This alternative involved the construction of two underground facilities that would handle a volume of 12.4 million gallons. One would be located in an open area at Brentwood Elementary School adjacent to East State Boulevard and the other in the parking lot of the shopping area at the corner of East State Boulevard and Coliseum Boulevard. This alternative was rejected due to cost.

### **F. Interceptor Relief Sewer Alternative**

This alternative involves the installation of new diversion structures that will be located along East State Boulevard where flows from the existing combined sewers (i.e., 60-inch and 48-inch) will be diverted to the proposed 48-inch relief sewer. When the capacity of the proposed relief

sewer has been reached, excess flows will then be allowed to overflow through Outfalls 61 and 62. This redirection of flows will be accomplished with weirs inside the manholes/diversion structures on the relief sewer and/or at connection points between the combined sewers and the proposed relief sewer. The weirs will be designed to allow a maximum of 36 million gallons per day into the relief sewer, thereby preventing unpermitted overflows downstream, and limiting the number of overflows at CSOs 61 and 62 to a maximum of four events in a typical year.

**Based on cost this was the selected alternative.**

## VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

### A. Direct Impacts of Construction and Operation

**Disturbed and Undisturbed Areas:** The proposed project will be constructed in a residential area that has been previously disturbed and in other areas along the proposed route that have not been previously disturbed.

**Structural Resources and Historic Sites (Figures 3 and 4):** The proposed project should not affect any historical or architectural structures. Construction and operation of the project will not alter, demolish or remove historic properties. If any visual or audible impacts to historic sites 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 the Section 106 of the National Historic Preservation Act is: "no historic properties affected."

**Plants and Animals:** The construction and operation of the project will not impact state or federal-listed endangered species or their habitat. Some wooded, scrub or shrub areas are in the locations of the proposed project. Approximately thirty trees will be removed for the construction of the relief sewer in addition to scrub areas being cleared.

**Prime Farmland:** The proposed project will not cause a conversion of prime farmland.

**Wetlands (Figure5):** The proposed project will affect wetlands.

**100-Year Floodplain:** The proposed project will not take place within the 100-year floodplain.

**Surface Waters:** The proposed 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.

**Groundwater:** Construction of the proposed project will not affect groundwater quality.

**Air Quality:** Dust and noise will be produced during construction activities.

**Open Space and Recreational Opportunities:** The proposed project's construction will neither create nor destroy open space and recreational opportunities

The proposed project will not affect National Natural Landmarks or the Lake Michigan Coastal Zone.

### B. Indirect Impacts

The city's Preliminary Engineering Report (PER) states: *The City of Fort Wayne will ensure 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 impact 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 authorities.*

### **C. Comments from Environmental Review Authorities**

This document serves as the first notice to the U. S. Fish and Wildlife Service and the Indiana Department of Natural Resources: Environmental Unit and Department of Historical Preservation and Archaeology.

In correspondence dated August 13, 2014 the Natural Resources Conservation Service stated: *The proposed project...will not cause a conversion of prime farmland.*

## **VIII. MITIGATION MEASURES**

The city's Preliminary Engineering Report lists the following mitigation measures:

*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 soils.*

*Mitigation measures will be implemented as requested by the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service.*

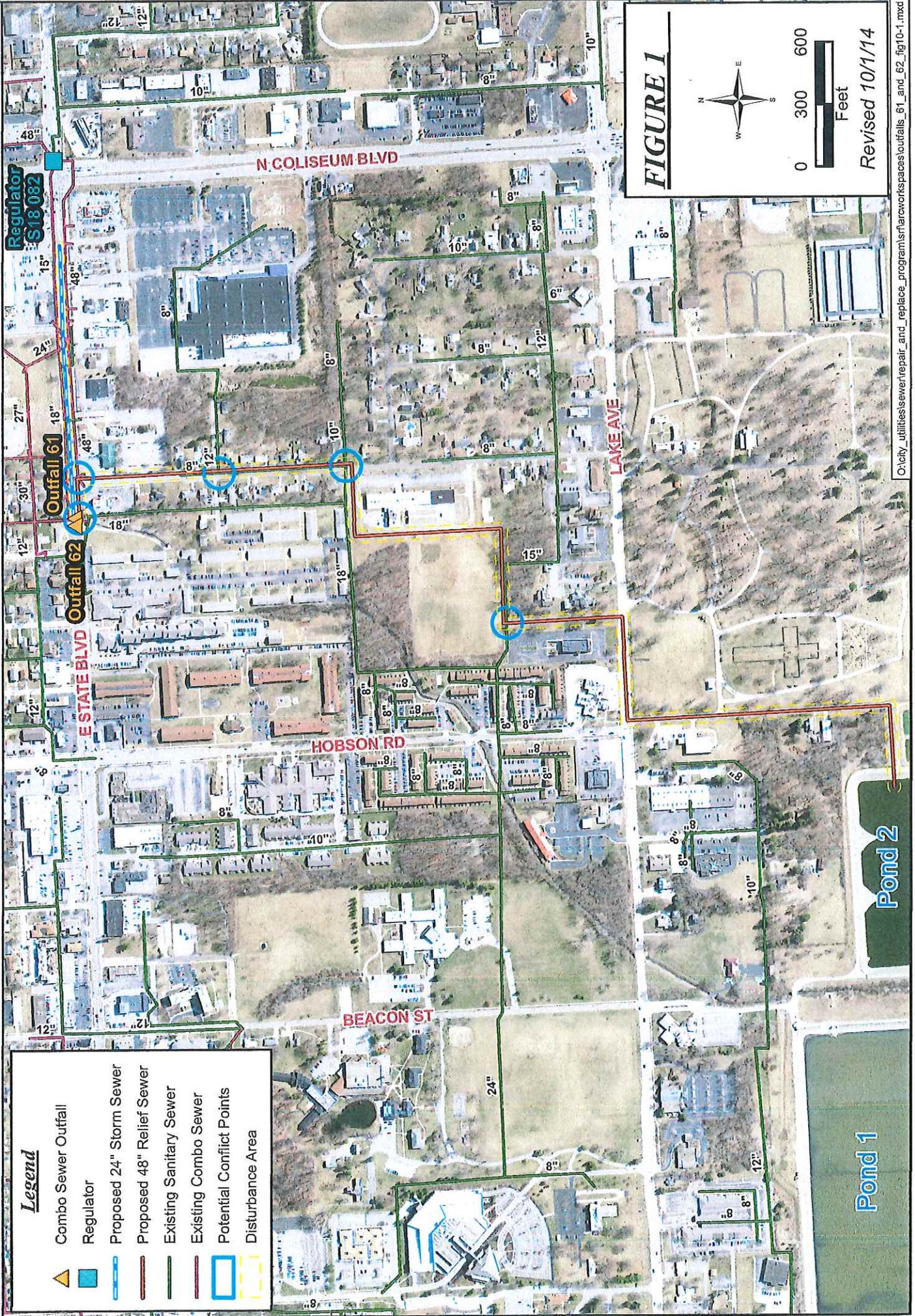
*To mitigate construction noises and the subsequent resident complaints, construction will only be allowed from 7:00 a.m. to 5:00 p.m. Monday through Friday. Appropriate erosion control measures will be implemented during construction to abate dust and airborne dirt particles. The contractor will be 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 August 13, 2014 at 10:00 a.m., in the Council Chambers, Room 035, Citizens Square, 200 East Main Street. The city did not receive written comments in the 5-day period following the public hearing.



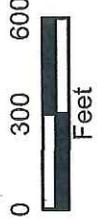
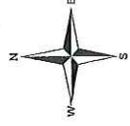
# OUTFALL 61 AND 62 RELIEF SEWER



**Legend**

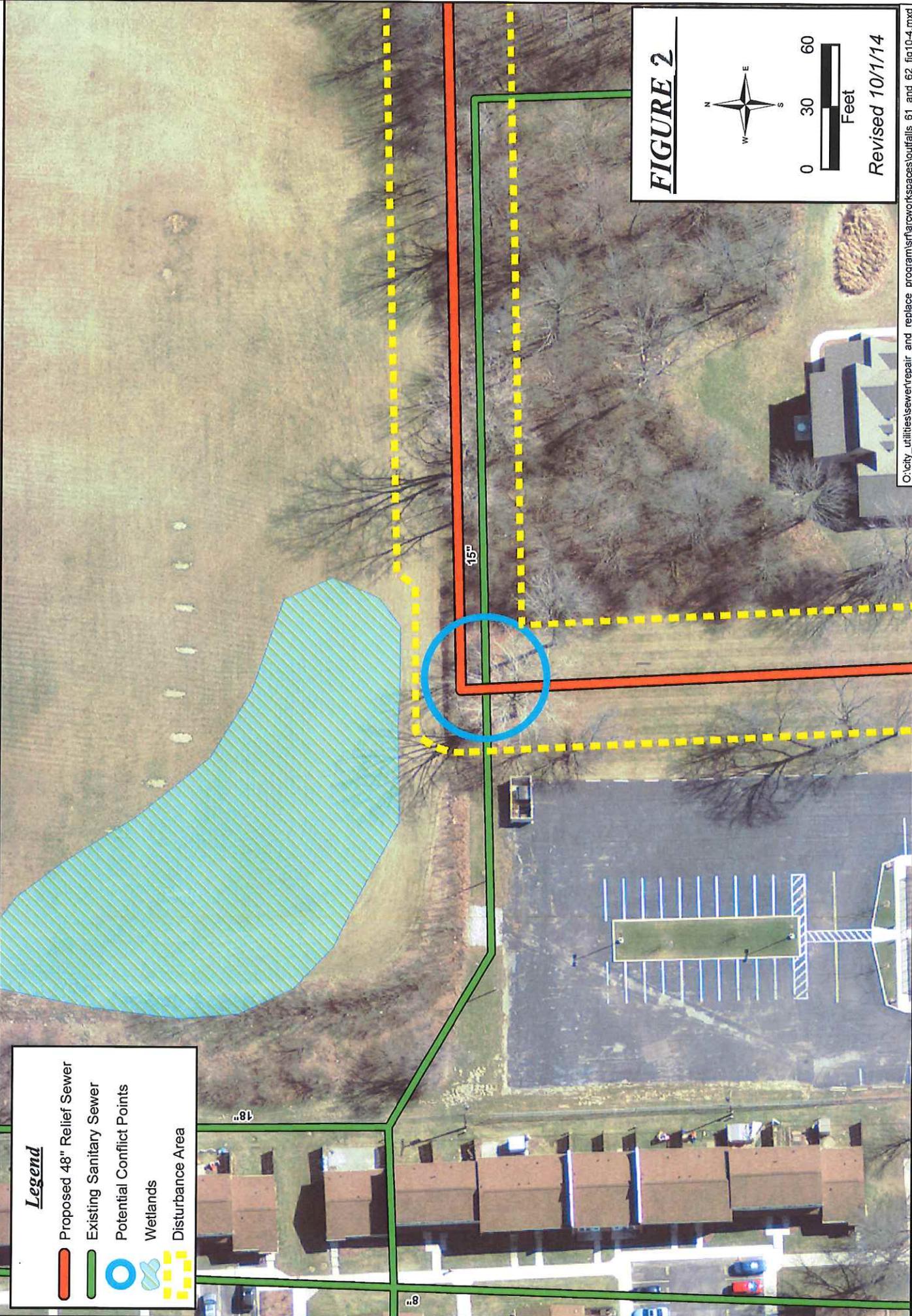
- Combo Sewer Outfall
- Regulator
- Proposed 24" Storm Sewer
- Proposed 48" Relief Sewer
- Existing Sanitary Sewer
- Existing Combo Sewer
- Potential Conflict Points
- Disturbance Area

**FIGURE 1**



Revised 10/1/14

# OUTFALL 61 AND 62 RELIEF SEWER



**Legend**

- Proposed 48" Relief Sewer
- Existing Sanitary Sewer
- Potential Conflict Points
- Wetlands
- Disturbance Area

**FIGURE 2**

0 30 60  
Feet

Revised 10/1/14

# Sector 18 (003-214-18001/18005)

— Relief Sewer  
 - - - Storm Sewer

No. RfP.	Description
001 C	Fort Wayne Orphan's Home School, 2525 Lake Ave., Tudor Revival/Craftsman, 1923; Architecture, Education, Social History
002 C	House, 3301 Lake Ave., Gabled EIP/Influents and Queen Anne influence, c.1885; Architecture, Vernacular/Construction
003 C	House, 3959 Lake Ave., Cape Cod/Tudor Revival, c.1950, Architecture
004 C	House, 2625 Hobson Rd., Gabled EIP/Queen Anne, c.1890/revived c.1952; Vernacular/Construction
005 C	House, 2629 Hobson Rd., Gabled EIP/Queen Anne, c.1890/revived c.1952; Architecture, Vernacular/Construction

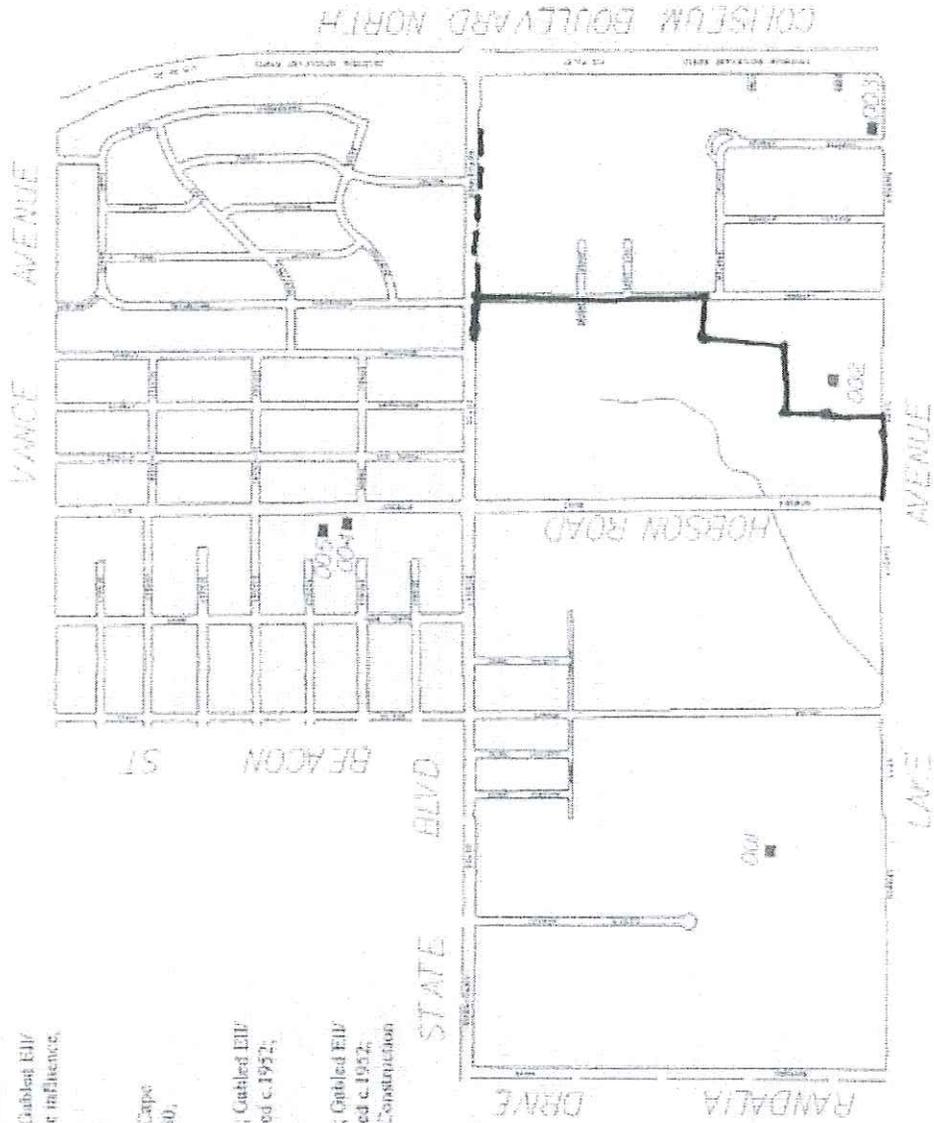


Figure 3: from the Allen County Interim Report Historic Sites and Structures Inventory

— Relief Sewer

Sector 22 (003-214-22001/22002)

- | No. Rtg. | Description  |
|----------|--|
| 001 O    | House, 2916 Lake Ave., Colonial Revival/Craftsman, c.1924, outbuildings; Architecture  |
| 002 N    | Catholic Cemetery, 3500 Lake Ave.; Radial plan cemetery, 1873-present, Egyptian Revival Mausoleum, 1918 (Charles Weatherborg, architect); Tudor Revival office, c.1940; Sculpture, other features; Architecture, Art, Ethnic heritage, Exploration/settlement, Indiana, Landscape architecture |

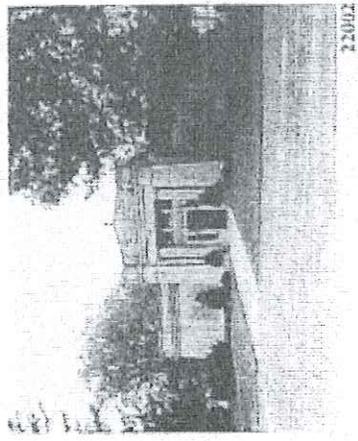
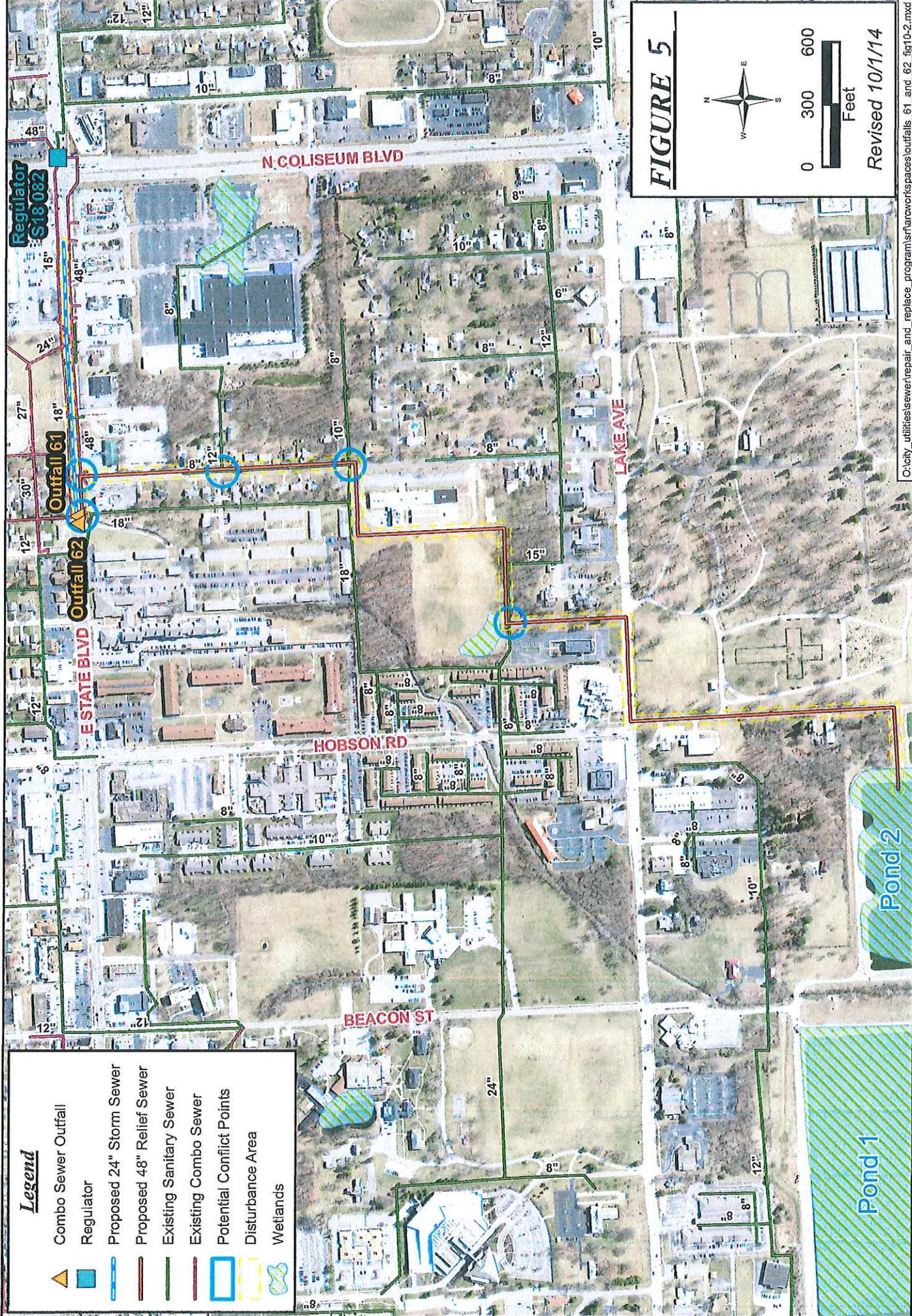


Figure 4: from the Allen County Interim Report Historic Sites and Structures Inventory



# OUTFALL 61 AND 62 RELIEF SEWER



**Legend**

- Combo Sewer Outfall
- Regulator
- Proposed 24" Storm Sewer
- Proposed 48" Relief Sewer
- Existing Sanitary Sewer
- Existing Combo Sewer
- Potential Conflict Points
- Disturbance Area
- Wetlands

**FIGURE 5**

0 300 600  
Feet

Revised 10/1/14