



# State Revolving Fund Loan Programs

## Drinking Water, Wastewater, Nonpoint Source

---

### ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

---

#### CITY OF PORTLAND

#### North Side Sewer Separation Project and Wastewater Treatment Plant Improvements

#### SRF PROJECT WW 11 20 38 01

**DATE: May 14, 2012**

**TARGET PROJECT APPROVAL DATE: June 13, 2012**

#### 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:

**Amy Henninger**  
**Senior Environmental Manager**  
**State Revolving Fund**  
**100 N. Senate Ave. IGCN 1275**  
**Indianapolis, IN 46204**  
**317-232-6566; ahenning at ifa.in.gov**

---

# ENVIRONMENTAL ASSESSMENT

---

## I. PROJECT IDENTIFICATION

Project Name and Address: **North Side Sewer Separation Project and  
Wastewater Treatment Plant Improvements**  
City of Portland  
321 N. Meridian Street  
Portland, IN 47371

SRF Project Number: WW 11 20 38 01

Authorized Representative: Mr. Randy Geesaman, Mayor

## II. PROJECT LOCATION

Portland is located in Jay County, approximately 50 miles south of Fort Wayne. There are two project areas: (1) the northwest portion of the city where combined sewers will be separated, and (2) the wastewater treatment plant, located in the southwest portion of the city.

The sewer separation project area is in Wayne Township in the Portland USGS quadrangle, T23N, R14E in sections 7, 8, 9, 16, 17 and 18; the wastewater treatment plant (WWTP) is in section 29. See Figure 5-1.

## III. PROJECT NEED AND PURPOSE

In October 2008, Portland entered into an Agreed Order with IDEM. The Agreed Order addresses required Combined Sewer Overflow (CSO) Long Term Control Plan (LTCP) improvements, compliance and implementation. The North Side Sewer Separation Project is one of the sewer separation projects approved in the LTCP and enforced in the Agreed Order.

Although the WWTP is not under enforcement action, upgrades are required based on age and the condition of the facility. The plant has not received a significant upgrade or modernization in nearly 30 years. Existing equipment is deteriorated; specifically sludge digester and tertiary filter building equipment. The sludge digesters require cleaning every other year, which is more frequent than should occur. The digester cover, heater, mixer, and other equipment have exceeded their useful service lives. The tertiary filter hydraulic capacity has diminished and total suspended solids levels in the effluent have been increasing over time. If deterioration is allowed to continue, the City may face a permit violation.

The purpose of the North Side Sewer Separation Project is to achieve compliance with the Agreed Order, and to significantly reduce CSO discharges on the northwest side of the City. The purpose of the WWTP improvements is to prevent further deterioration which could lead to violation of State and Federal regulations.

#### IV. PROJECT DESCRIPTION

The North Side Sewer Separation project includes the design and installation of approximately 29,600 feet of new sanitary sewers, and rehabilitation of approximately 4,700 feet of combined sewers. See Figure 4-2 and 4-3.

WWTP anaerobic sludge digester improvements include replacing the cover, heater, mixing equipment, pumps, gas safety equipment, burner, and repair of the building roof. WWTP tertiary filter improvements include repairing the underdrain system, sand blasting and painting the filter gallery, and replacing the media, building roof, dehumidifiers, filter valves and actuators. In addition, the administration building roof will be replaced and the laboratory will have wall repairs. See Figure 4-4.

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

##### A. Selected Plan Estimated Cost Summary

##### **North Side Sewer Separation Construction and Equipment Costs**

8-inch Sanitary Sewer	\$1,450,000
10-inch Sanitary Sewer	\$140,000
12-inch Sanitary Sewer	\$1,107,000
15-inch Sanitary Sewer	\$353,000
18-inch Sanitary Sewer	\$23,000
Sanitary Manholes	\$295,000
CIPP Sewer Rehabilitation	\$378,000
Manhole Cementitious Liner	\$2,000
Roadway Bores	\$79,000
Lateral Reconnections	\$81,000
Site and Pavement Restoration	\$1,217,000
Traffic Control	\$46,000
Mobilization/Demobilization	<u>\$156,000</u>
<i>Sewer Separation Construction and Equipment Subtotal</i>	<i>\$5,322,000</i>
<i>Contingencies</i>	<i><u>\$532,000</u></i>
<b><i>Sewer Separation Estimated Construction Cost</i></b>	<b><i>\$5,854,000</i></b>

##### **WWTP Improvements Construction and Equipment Costs**

Replace Anaerobic Sludge Digester Cover – 50' Diameter	\$325,000
Replace Sludge Digester Heater	\$125,000
Replace Sludge Digester Pumps	\$153,000
Replace Sludge Digester Mixing Equipment	\$150,000
Replace Sludge Digester Gas Safety Equipment and Burner	\$175,000
Repair and Insulate Sludge Digester Building Roof	\$12,000
Replace Tertiary Filter Media and Repair Underdrain	\$160,000
Replace Tertiary Filter Building Dehumidifier	\$15,000
Replace Tertiary Filter Valves and Actuators	\$460,000
Sand Blast and Paint Tertiary Filter Gallery	\$75,000
Repair Tertiary Filter Building Roof	\$40,000

Administration Building Repairs	<u>\$50,000</u>
WWTP Construction and Equipment Subtotal	\$1,740,000
Contingencies	<u>\$174,000</u>
<b>WWTP Estimated Construction Cost</b>	<b><u>\$1,914,000</u></b>

**Non-Construction Costs**

Financial	\$66,000
Legal	\$114,000
Engineering Services	\$1,177,000
*Land/Easement Acquisition	<u>\$35,000</u>
<b>Sewer Separation + WWTP Non-Construction Subtotal</b>	<b><u>\$1,392,000</u></b>

**Total (Sewer Separation + WWTP) Estimated Project Cost      \$9,160,000**

\*Land and easement acquisition (\$35,000) are not eligible for State Revolving Fund reimbursement; however, soft costs to obtain easements or land are eligible.

- B. Portland will finance the North Side Sewer Separation and WWTP Improvements projects with a loan from the SRF Program for a 20-year term at an annual fixed interest rate to be determined at loan closing.

**VI. DESCRIPTION OF EVALUATED ALTERNATIVES**

- A. Sewer separation. For Portland, the “No Action” alternative for sewer separation is not viable, since the system is required to be separated by the approved CSO LTCP and subsequent Agreed Order with IDEM. Besides the “No Action” alternative, Portland evaluated: (1) construct complete new sanitary sewer; and (2) construct partial new sanitary sewer. Constructing all new sanitary sewers would provide a tight system with very little infiltration/inflow (I/I) and standardized sizing, and the existing combined sewers could be converted to storm sewers. Constructing partial new sanitary sewers includes rehabilitating portions of the existing combined sewer for sanitary flow. This alternative reuses all of the functional components of the existing sewer infrastructure, and is therefore more cost effective, is easier to implement, and has less environmental impacts. **The selected alternative is to construct partial new sanitary sewer.**
- B. WWTP improvements. Portland rejected the “No Action” alternative for the WWTP improvements, since it would eventually result in permit violation and enforcement by regulatory agencies. Maximizing the use of the existing facilities makes a cost-effective alternative and addresses plant deficiencies which are a direct result of equipment exceeding its useful life. **The selected alternative is to implement the WWTP improvements as described above.**

**VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES**

- A. Direct Impacts of Construction and Operation

Undisturbed/Disturbed Land: The proposed sewer separation project and WWTP improvements will be constructed on disturbed land.

Structural Resources: 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 the Section 106 of the national Historic Preservation Act is: "no historic properties affected."

Plants and Animals: Construction and operation of the project will not negatively impact endangered species or their habitat, and will be implemented to minimize impact to non-endangered species and their habitat.

Prime Farmland: The proposed project will not affect prime farmland according to the NRCS correspondence dated March 4, 2010.

Wetlands (Figure 5-6): Wetlands will not be affected by construction or operation of the project.

100-Year Floodplain (Figure 5-7): The WWTP site and sewer separation project boundaries are located outside of the 100-year floodplain.

Surface Waters (Figure 5-1): 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 (Natural Resources Commission Non-rule Policy Document).

Groundwater: Construction of the 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 activities may limit access to Haynes Park, located near the 600 block of West Votaw Street, and Milton Miller Park, located near the 1400 block of North Franklin Street. The proposed project's construction and operation will neither create nor destroy open space and recreational activities.

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

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

## B. Indirect Impacts

The Preliminary Engineering Report (PER) states: *The City will take appropriate steps to ensure that future development, as well as future collection system or treatment works projects connecting to SRF-funded facilities will not adversely impact archaeological, historical, structural resources, wetlands, or other sensitive environmental resources. The county and 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

This document serves as first notice to the DNR Division of Historic Preservation and Archaeology.

In correspondence dated June 3, 2010 the Department of Natural Resources 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. Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project. The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered or rare have been reported to occur in the project vicinity.*

In correspondence dated March 2, 2010 the United States Fish and Wildlife Service stated: *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.*

The Natural Resources Conservation Service, in correspondence dated March 4, 2010 stated that *"The project to separate combined sewers in the City of Portland, Jay County, Indiana, as referred to in your letter received March 1, 2010, will not cause a conversion of prime farmland."*

## VIII. MITIGATION MEASURES

The PER states:

*Appropriate structural (e.g., sediment basins, silt fence, riprap) or agronomic (e.g., seeding, mulching, liming, fertilizing) practices to control runoff and sedimentation will be in place before, during, and after construction.*

*Exposed soils and unpaved roadways will be periodically wetted to reduce the suspension of dust and air-borne contaminants. As practical, the number and size of construction equipment and vehicles will be minimized in order to reduce emissions.*

*Construction will be scheduled for daylight hours only to limit noise related concerns.*

In correspondence dated June 3, 2010 the Department of Natural Resources states: *Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures.*

*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. 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.*

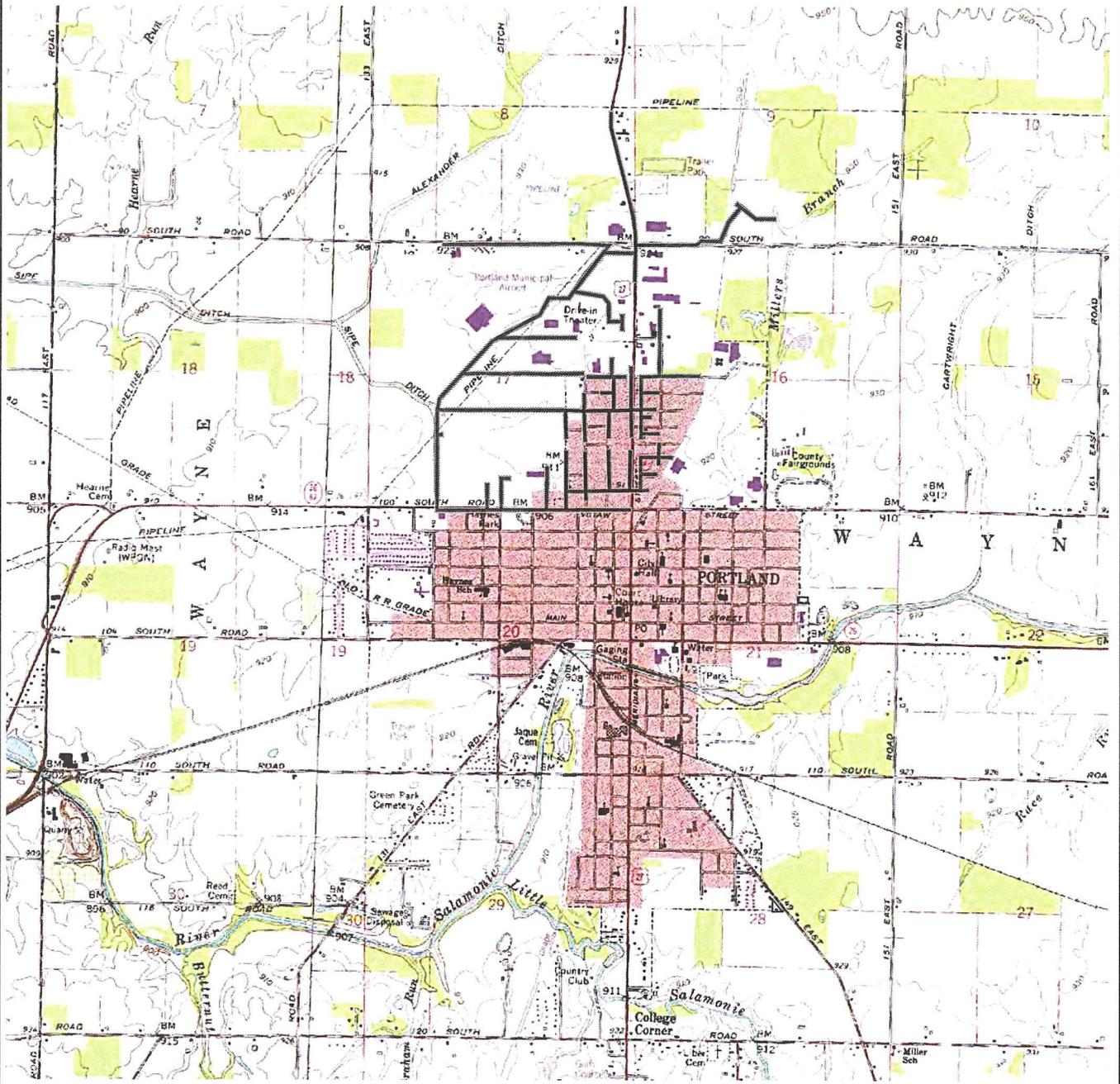
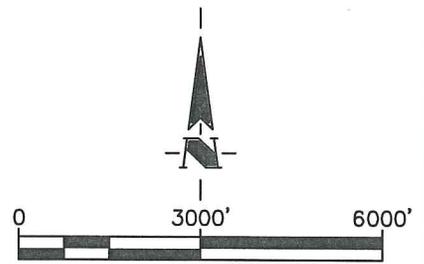
*Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas.*

## **VIII. PUBLIC PARTICIPATION**

A properly noticed public hearing was held on June 6, 2011 at 7 pm in the City of Portland Community Building, 1616 North Franklin Street, Portland, IN. No written comments were received in the 5-day period following the hearing. Questions from Council members were addressed during the hearing.

LEGEND

PROPOSED CONSTRUCTION ALIGNMENT



T:\7\7645\001\dwgs...\_XHBITS\FIG 5\TOPOGRAPHIC MAP.dwg, 5/7/2010 4:43:24 PM, DWG To PDF Bonus Pack.pc3



CITY OF PORTLAND  
 PRELIMINARY ENGINEERING REPORT  
 TOPOGRAPHIC MAP

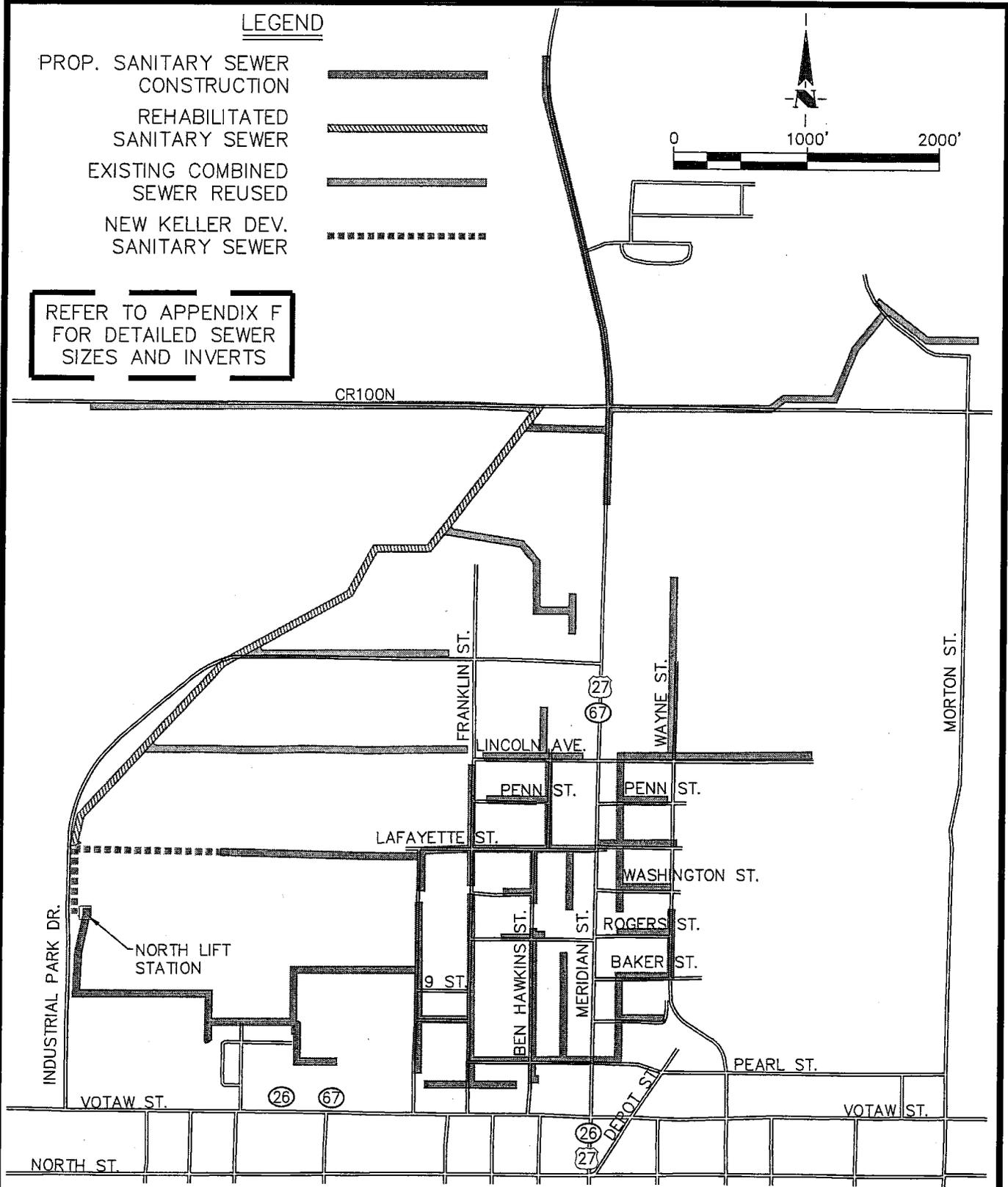
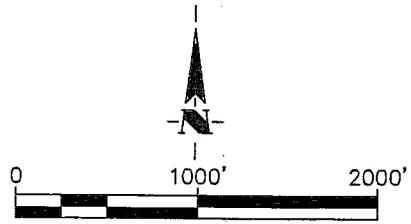
Figure No.  
 5-1

Date  
 MAY 2010

**LEGEND**

- PROP. SANITARY SEWER CONSTRUCTION
- REHABILITATED SANITARY SEWER
- EXISTING COMBINED SEWER REUSED
- NEW KELLER DEV. SANITARY SEWER

REFER TO APPENDIX F  
FOR DETAILED SEWER  
SIZES AND INVERTS

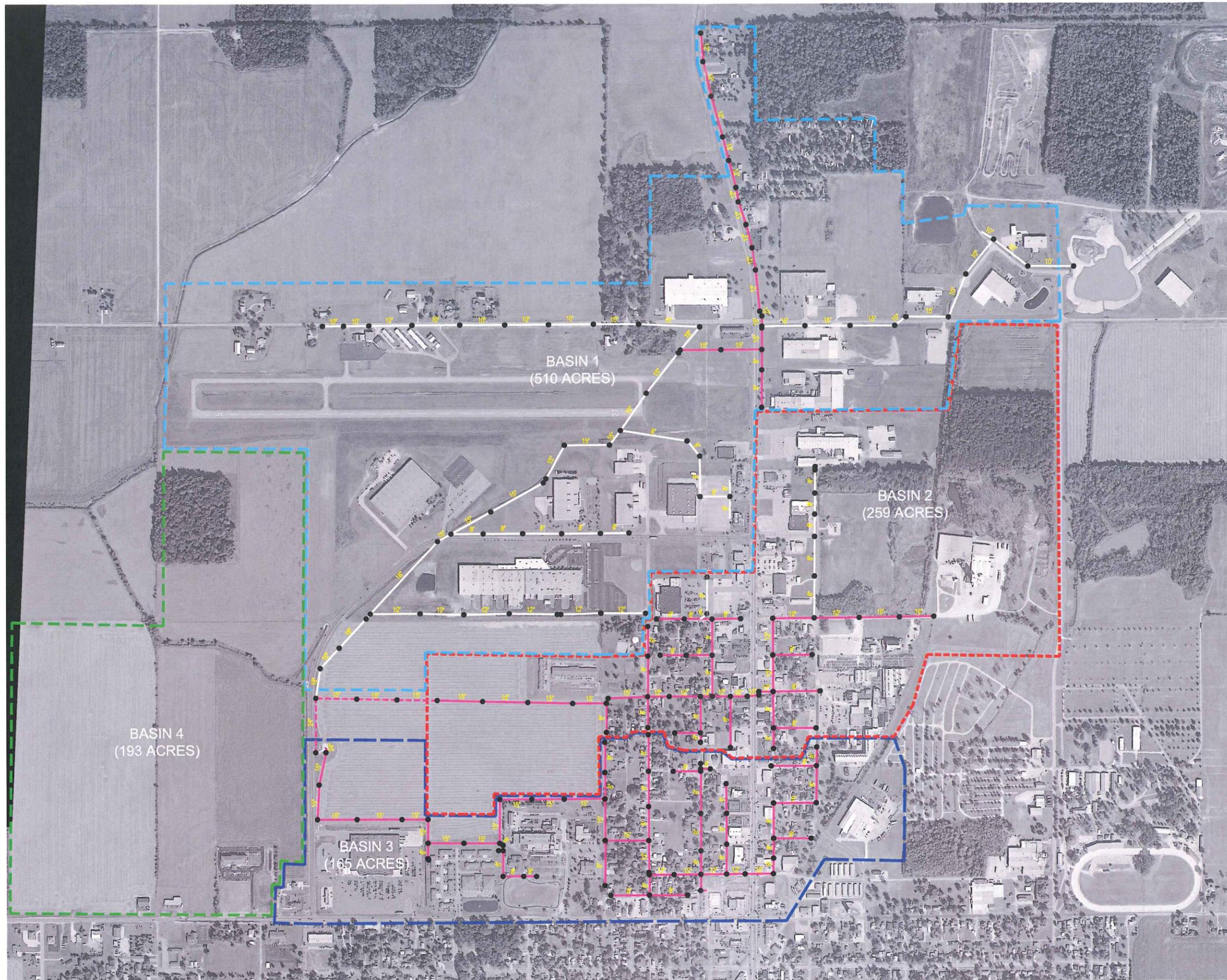
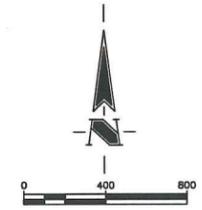


CITY OF PORTLAND  
PRELIMINARY ENGINEERING REPORT  
OPTION 2: NEW/REHAB SEWER

Figure No.  
4-2

Date  
May, 2010rev 3/21/2012

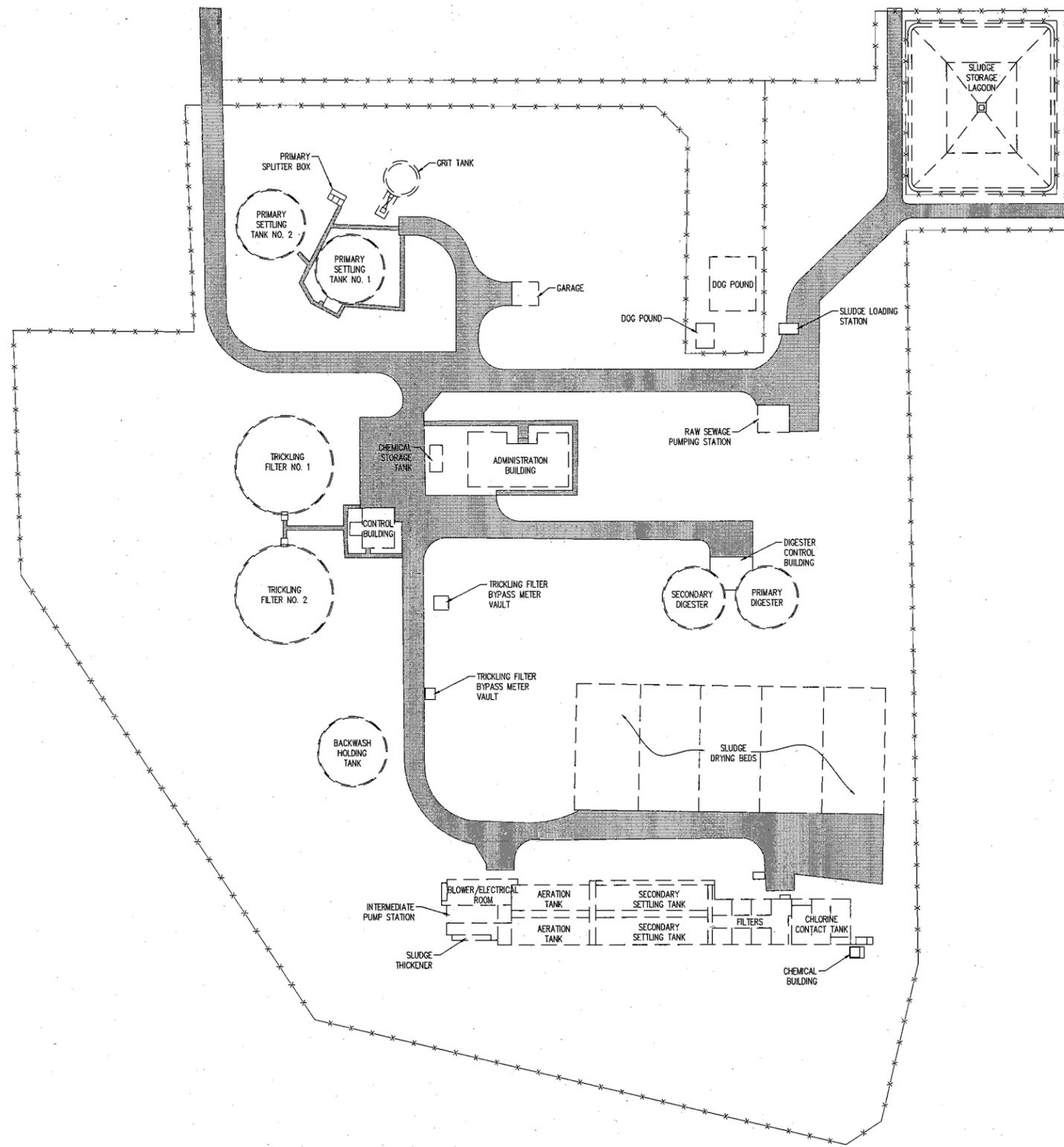
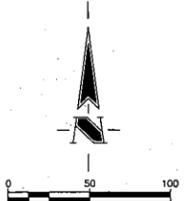
Figure 4-3

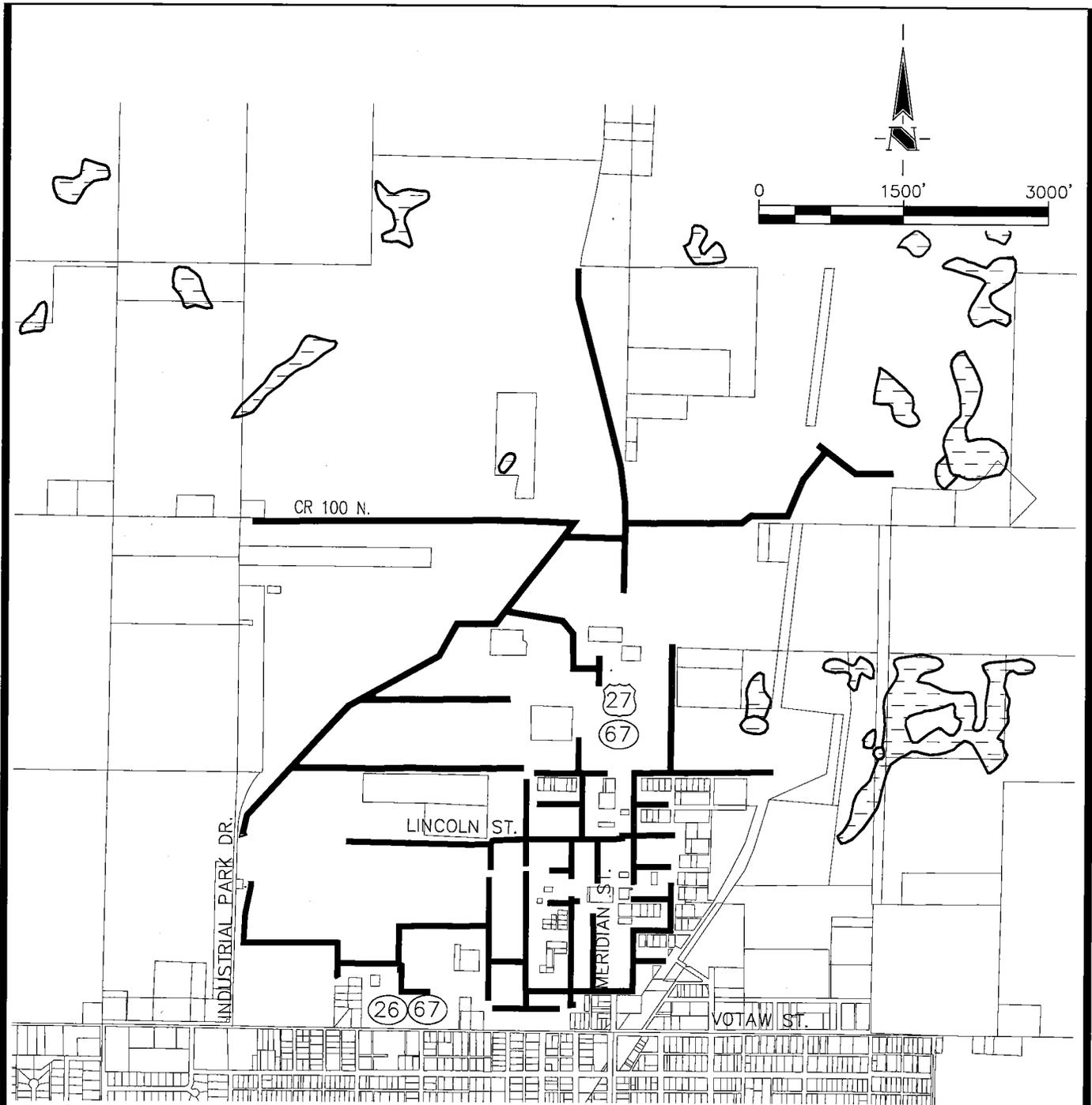


CITY OF PORTLAND PROPOSED SANITARY SEWER

LEGEND:	
---	SANITARY SERVICE AREA BOUNDARY
—	PROPOSED SANITARY SEWER
---	EXISTING SANITARY TO BE REUSED
---	NEW KELLER DEV. SANITARY SEWER
●	SANITARY STRUCTURE
X	PROPOSED SANITARY SEWER DIAMETER

Figure 4-4





WETLAND DATA FROM IndianaMap (INMAP.INDIANA.EDU)

**LEGEND**

WETLANDS 

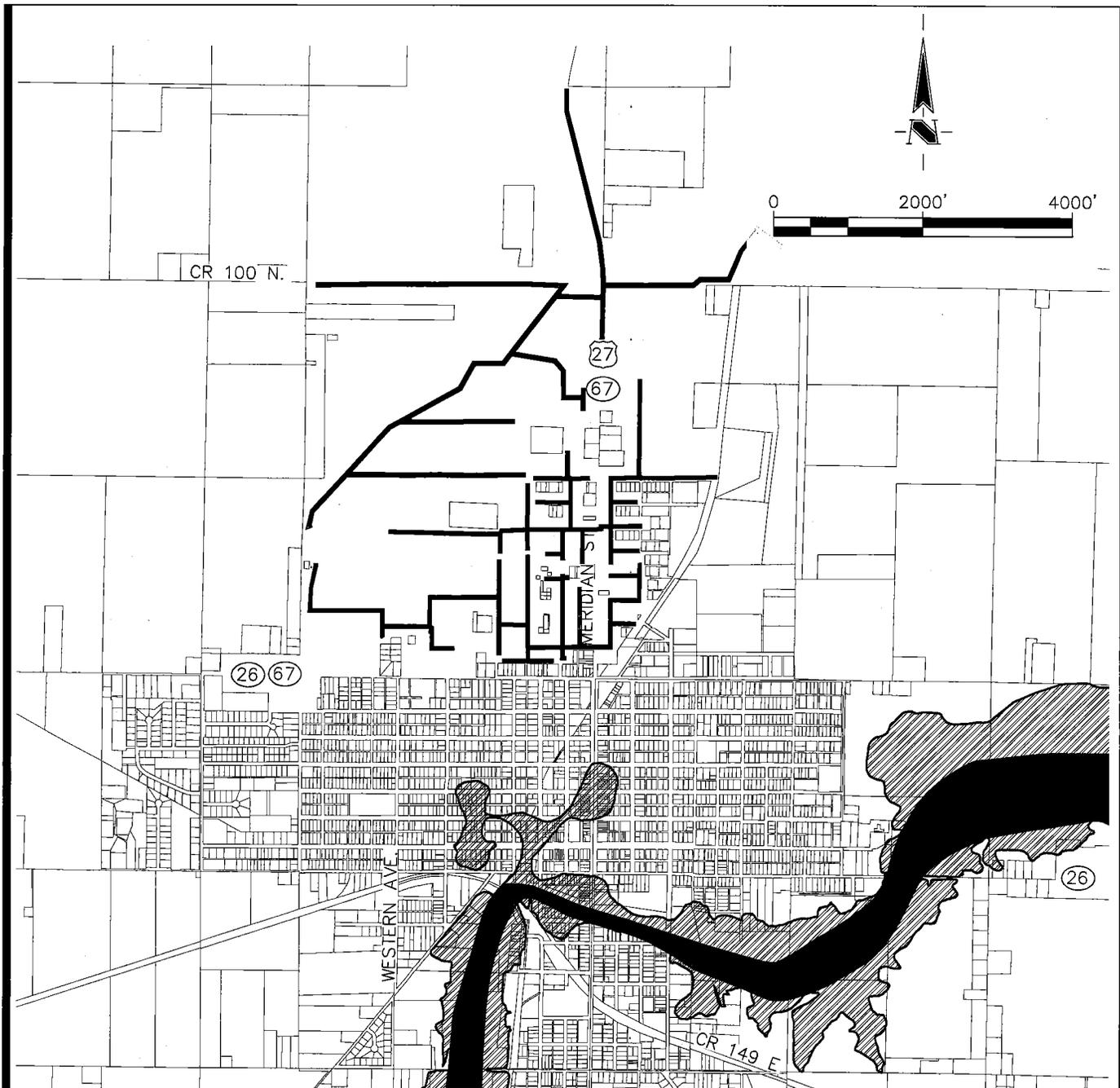
PROPOSED CONSTRUCTION ALIGNMENT 



CITY OF PORTLAND  
PRELIMINARY ENGINEERING REPORT  
WETLANDS MAP

Figure No.  
5-6

Date  
MAY 2010  
Revision Date  
APRIL 2012



FLOOD DATA FROM IndianaMap (INMAP.INDIANA.EDU)

LEGEND

- FLOODWAY LIMITS 
- FLOODPLAIN LIMITS 
- PROPOSED CONSTRUCTION ALIGNMENT 



CITY OF PORTLAND  
PRELIMINARY ENGINEERING REPORT  
FLOODPLAIN MAP

Figure No.  
5-7

Date  
MAY 2010  
Revision Date  
APRIL 2012