State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT
AND
FINDING OF NO SIGNIFICANT IMPACT

TOWN OF NEWBURGH
EPWORTH ROAD, MEDICAL CORRIDOR SANITARY SEWER EXTENSION

STATE REVOLVING FUND PROJECT # WW 14 25 87 05

DATE: November 17, 2014

TARGET PROJECT APPROVAL DATE: December 17, 2014

I. INTRODUCTION

The above entity has applied to the 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 in color 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 target project approval date. 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
Compliance Officer
State Revolving Fund – IGCN 1275
100 N. Senate Ave.
Indianapolis, IN 46204
317-232-6566
ahenning@ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address:	Town of Newburgh 23 W. Jennings Street P.O. Box 6 Newburgh, IN 47629
SRF Project Number:	WW14 25 87 05
Authorized Representative:	Leanna Hughes, President Town Council of Newburgh

II. PROJECT LOCATION

Newburgh is located in southwestern Warrick County in southwest Indiana. The town's project area is north of the town, generally along Epworth Road from State Road 66 to State Road 62. The project consists of a new lift station, forcemain, and gravity sewer along Epworth Road. The project area will occur in Ohio Township in the Newburgh USGS topographic quadrangle, T6S, R9W, sections 17, 20 and 21 and also occur in the same civil township but in the Daylight USGS topographic quadrangle, T6S, R9W, sections 8 and 17 (Figure 3).

III. PROJECT NEED AND PURPOSE

Newburgh's collection system consists of a 100 percent sanitary sewer system with no overflow points. The existing system consists of three subsystems: Cypress Creek in the southern most part of the system; the Northeast Interceptor in the middle; and the Victoria Lift Station in the northern part of the system. In 2007, the Master Lift Station was placed in operation to handle anticipated flows in the northern part of the service area, which transports flow directly to the wastewater treatment plant (WWTP). This lift station was designed large enough to provide growth in the western portions of the sewer system for 20 years.

The proposed Epworth Road gravity sewer project will discharge to an existing 21-inch gravity sewer that coveys flow to the Master Lift Station. This sewer was installed when the Master Lift Station was constructed for the sole purpose of accommodating flows from Epworth Road.

The WWTP was recently upgraded in 2009 and had its average design capacity increased from 4.6 million gallons per day (MGD) to 7.36 MGD and its peak design capacity increased from 14 MGD to 19 MGD. The WWTP includes: three bar screens, comminutor, vortex grit removal, eight sequencing batch reactors with stage aeration, and ultraviolet disinfection. Sludge is processed in five aerobic digesters prior to being removed to a landfill. The capacity of the WWTP is adequate enough to receive and treat the projected flows from the proposed Epworth Road medical corridor sanitary sewer extension project.

There is no wastewater collection system in the proposed project area. All existing homes and businesses are currently served by on-site septic systems. The proposed sewer extension is in an area subject to flooding which will not accommodate on-site septic systems during heavy rain events. The proposed project area is anticipating rapid steady growth due to the planned medical campus and related health service facilities over the course of the next 20 years. Using the on-site systems along the Epworth Road corridor would not be suitable for the expected health care facilities whose needs will be greater than on-site systems to be able to treat. The project will allow the replacement of these on-site systems as recommended by the County Sanitarian. In correspondence dated June 10, 2014, the Warrick County Health Department stated: *"Although there is wide range of effective technology in the area of private residential waste disposal systems, it is the Health Department's position that when sanitary sewers are made available as an option to property owners by the local sewer utility serving the area, they are a safer and more environmentally sound means of waste disposal.* In addition, this project area is a part of a Tax Increment Financing District for the Warrick County Wellness Trail with a focus on improving the county's health and environment.

Newburgh's West Side Sewer Master Plan identifies seven sewer trunk lines necessary to provide service to the medical campus and health facilities as shown on Figure 3. The proposed project will be the first phase of this ultimate service area and includes: trunk line #1 - 21-inch southern gravity sewer (SGS); trunk line #2 - 8-inch northern gravity sewer (NGS); trunk line #4 – 12-inch NGS; 8-inch and 12-inch dual force mains; and the Lynch Road Lift Station (Figure 6).

IV. PROJECT DESCRIPTION

The proposed Epworth Road sewer extension project includes (see Figure 5):

A. Installing approximately 7,470 feet of 21-inch SGS;

B. Installing approximately 2,150 feet of 8-inch NGS;

C. Installing approximately 2,015 feet of 12-inch NGS;

D. Installing approximately 47 manholes;

E. Constructing the Lynch Road lift station with two pumps each having an initial capacity between 375 gallons per minute (gpm) and 915 gpm, while having an ultimate capacity between 750 gpm and 1,830 gpm; and

F. Installing approximately 4,550 feet of 8-inch and 12-inch dual force mains.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

Construction and Equipment Costs

Mobilization	$ 198,172
2-inch Combination Air Valves	32,416
Isolation Valve & Bypass Connection	35,000
Duplex Variable Frequency Drive (VFD) Lift Station	778,084
Pretreatment Odor Control	75,000
Backup Generator & Transfer Switch	125,000
Power Supplied to Lift Station Site	65,000
8-inch polyvinyl chloride (PVC) Gravity Sewer	303,399
12-inch PVC Gravity Sewer	282,232
Dual 8-inch & 12-inch PVC Force Mains	736,580
21-inch PVC Gravity Sewer	672,340
Manholes	254,927
Water Tight Castings	37,835
Jack & Bore 24-inch Casing	159,390
Jack & Bore 36-inch Casing	197,950
Restoration	144,460
Sediment and Erosion Control	63,282
Traffic Control	63,095
Construction and Equipment Subtotal	**$ 4,224,162**
Contingencies	416,708
Total Estimated Construction Cost	**$ 4,640,870**
Non-Construction Costs	
Administrative and Legal	161,500
Land & Easement Acquisition	10,000
Basic Engineering Fees	
Design	188,381
Construction	82,599
Survey	13,810
Other (soil borings/testing, cost by utilities to perform relocations)	41,260
Project Inspection	121,110
Facility Start-up	5,000
Non-Construction Subtotal	**$ 623,660**
Total Estimated Project Cost	**$ 5,264,530**

B. The town will borrow $5,264,530 through a 20-year State Revolving Fund Loan Program (SRF) loan at an interest rate to be determined at loan closing. Monthly user rates and charges may need to be analyzed to determine if adjustments are required for loan repayment.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

Two alternatives were evaluated including the "No Action" alternative.

A. "No-Action" Alternative

This alternative was rejected since the use of individual septic systems would continue. Based on impending development for a large medical campus and health service facilities in this area, they will likely be required to connect to the town's collection system or risk contamination to existing wells and groundwater by installing on-site systems in an area subject to flooding.

B. New Lift Station, Force Main and Gravity Sewers

This alternative involves the following:

The proposed 21-inch SGS will connect to an existing manhole near the intersection of County Road 350 South and County Road 900 West. The gravity sewer will then extend west approximately 3,850 across an agricultural field and terminate east of the drainage ditch on the east side of Epworth Road. The sewer will then be extended north along Epworth Road and parallel a drainage ditch to Oak Grove Road. This portion of the 21-inch SGS will be installed in a new utility easement. The 21-inch SGS will then extend approximately 750 feet north of Oak Grove Road in a new easement. At this location, the drainage ditch ends and the 21-inch SGS will shift to the Epworth Road right of way (ROW) and connect to a manhole that will accept flows from the proposed 8-inch and 12-inch dual force mains.

The proposed 8-inch NGS will be installed approximately 1,600 feet north of Oak Grove Road and extend north along the east side of Epworth Road within the existing ROW for approximately 2,100 feet. At this point the NGS will be change in size from an 8-inch sewer to a 12-inch sewer prior to crossing Howard Ditch on the east side of Epworth Road. The 12-inch NGS will then extend approximately 700 feet north where it will cross Epworth Road and then continue north on the west side of the road within the existing ROW. The 12-inch NGS will then continue north for approximately 900 feet where it will cross Telephone Road and extend west for approximately 260 feet and connect to the proposed Lynch Road lift station site.

The proposed lift station will be located at the intersection of Lynch Road and Telephone Road. It will have dual force mains (i.e., 8-inch and 12-inch) that will be extended east to Lynch Road where they will turn south crossing Telephone Road staying within the existing ROW and extend further south for approximately 875 feet. At this point, both force mains will cross east to Epworth Road paralleling both the proposed 8-inch and 12-inch NGS within the Epworth Road ROW and extend further south for approximately 3,000 feet where they will terminate at the northern most SGS manhole. **This was the selected alternative.**

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed / Undisturbed Land: Construction of the proposed project will occur in both disturbed and undisturbed land. The majority of the project will remain within areas disturbed by previous road construction. The undisturbed area is the SGS segment that will cross an existing cultivated crop field and the lift station site off Telephone Road. The town implemented Phase 1A Reconnaissance Level Archaeology Survey on the project areas that might not have

been significantly disturbed by previous construction activity. The survey did not find significant archaeological resources.

Structural Resources (Appendix G): The proposed SGS will occur near the historic house at 1050 W Epworth Road. 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*."

Surface Waters: An intermittent tributary to Edwards Ditch will be temporarily affected by the installation of the SGS. The proposed project will include the crossing of Howard Ditch which will be completed utilizing horizontal directional drilling methods to reduce impacts to the stream. The project will not adversely affect outstanding state resource waters listed in 327 IAC 2-1.3-3(d), exceptional use streams listed in 327 IAC 2-1-11(b), Natural, Scenic and Recreational Rivers and Streams listed in 312 IAC 7-(2), or Salmonid Streams listed in (327 IAC 2-1.5-5(a)(3) or streams on the Outstanding River List for Indiana.

Wetlands (Figure 10): The proposed project will not impact wetlands.

100-Year Floodplain (Figure 12): The proposed project will be constructed within the floodplain. All of the sewers will be installed below ground which will not displace the floodwaters or cause a change in the grade within the floodplain; however, the proposed lift station will have part of its structure above ground. Protection will be provided for structures within the floodplain area as required by the Indiana Department of Natural Resources.

Groundwater: Although the ground water table is between 0 and 10-inches the groundwater quality should not be affected by the proposed project. If dewatering is required to complete construction, dewatering flows will be discharged to a settling basin prior to being discharged to surface water. The amount of dewatering is anticipated to be minimal. The project will not impact a sole source aquifer.

Plants and Animals: The construction and operation of the proposed project will be implemented to minimize impact to state or federal-listed endangered species or their habitat. No scrub, shrub, or wooded land is located near the project and will therefore not be affected by this project. All lines are anticipated to be installed with open cut methods with the exception of the Howard Ditch crossing and road crossings that will utilize trenchless technology.

Prime Farmland: The proposed line segment between the intersection of CR 350 South and CR 900 West and Epworth Road will cause a conversion of prime farmland. In a memo from NRCS, 0.1 acres of prime farmland will be directly converted.

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

Open Space and Recreational Opportunities: The proposed project's construction will neither create nor destroy open space and 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 town's Preliminary Engineering Report (PER) states: *The Town of Newburgh, 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 Town 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 the first notice to most such authorities.

In correspondence dated April 21, 2014, the Natural Resources Conservation Service stated: *The revised proposed project for the Epworth Road Sanitary Sewer Expansion in the Town of Newburgh…. will cause a conversion of prime farmland.*

VIII. MITIGATION MEASURES

The town's PER lists the following mitigation measures:

A. Provisions will be included in the construction specifications to limit such problems and to provide erosion control in accordance with current state standards.

B. The work is expected to be completed during normal working hours, restricting any work related nuisances to those hours.

C. All construction equipment will be required to have mufflers to reduce noise pollution.

D. Additionally, reasonable and proper construction techniques and clean up practices will be required by the contractor to reduce dust emissions.

E. Proper surface wetting practices will be required.

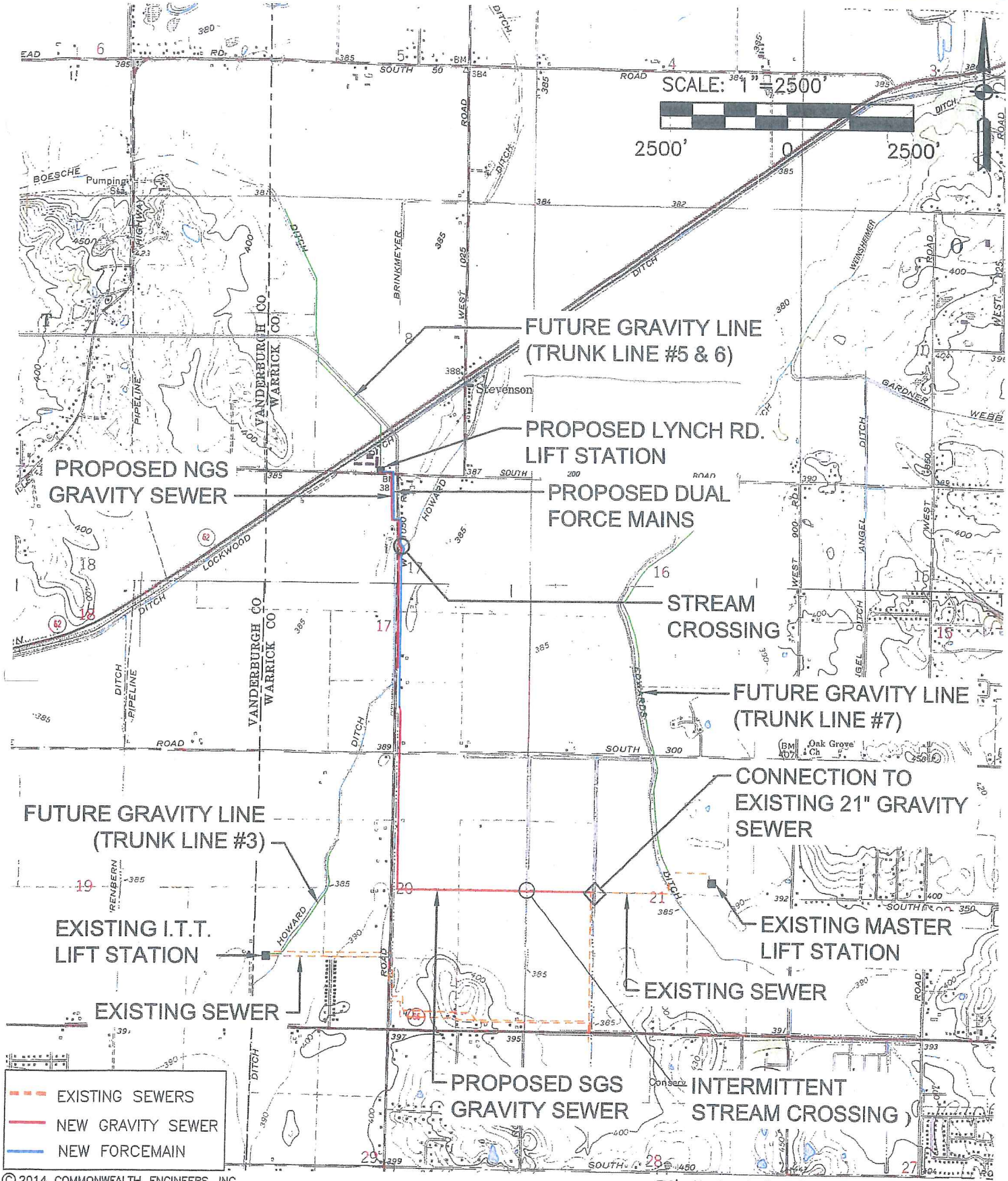
F. Erosion control measures including seeding, drainage inlet protection, and silt fencing will also be utilized.

G. Protection will be provided for structures within the floodplain area as required by the Indiana Department of Natural Resources.

H. Mitigation measures cited in comment letters from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

IX. PUBLIC PARTICIPATION

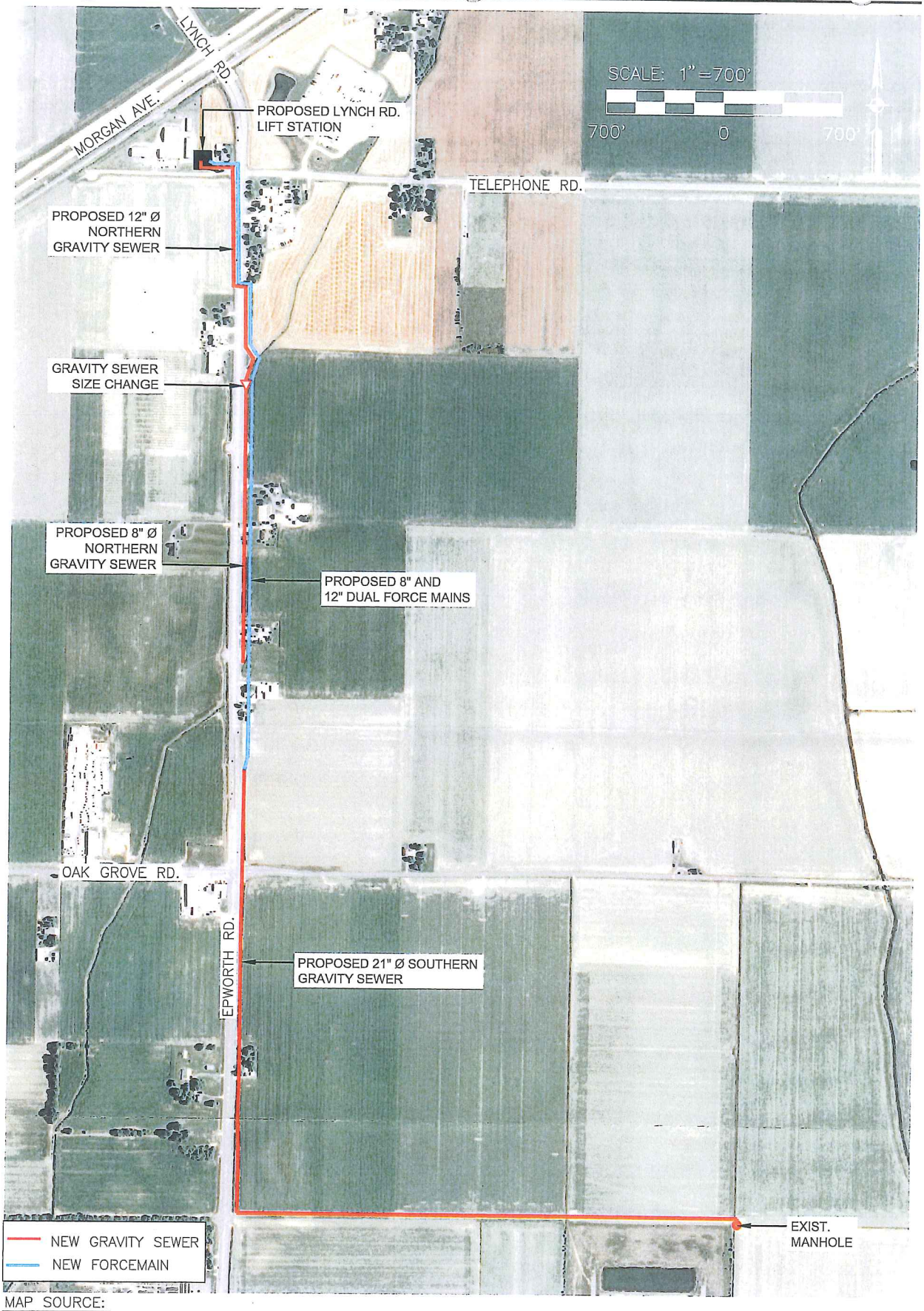
A properly noticed public hearing to present the proposed project to the public was held on July 23, 2014 at 5:00 p.m. in the Town Hall. No questions were raised and no written comments were received.



FIG's Newburgh–EpworthRd.San.Expansion RK.dwg 50

COMMONWEALTH	TOWN OF NEWBURGH, INDIANA	FIGURE
	EPWORTH RD. CORRIDOR SANITARY SEWER PROJECT	3
	PROJECT AREA MAP	

received 9/8/14

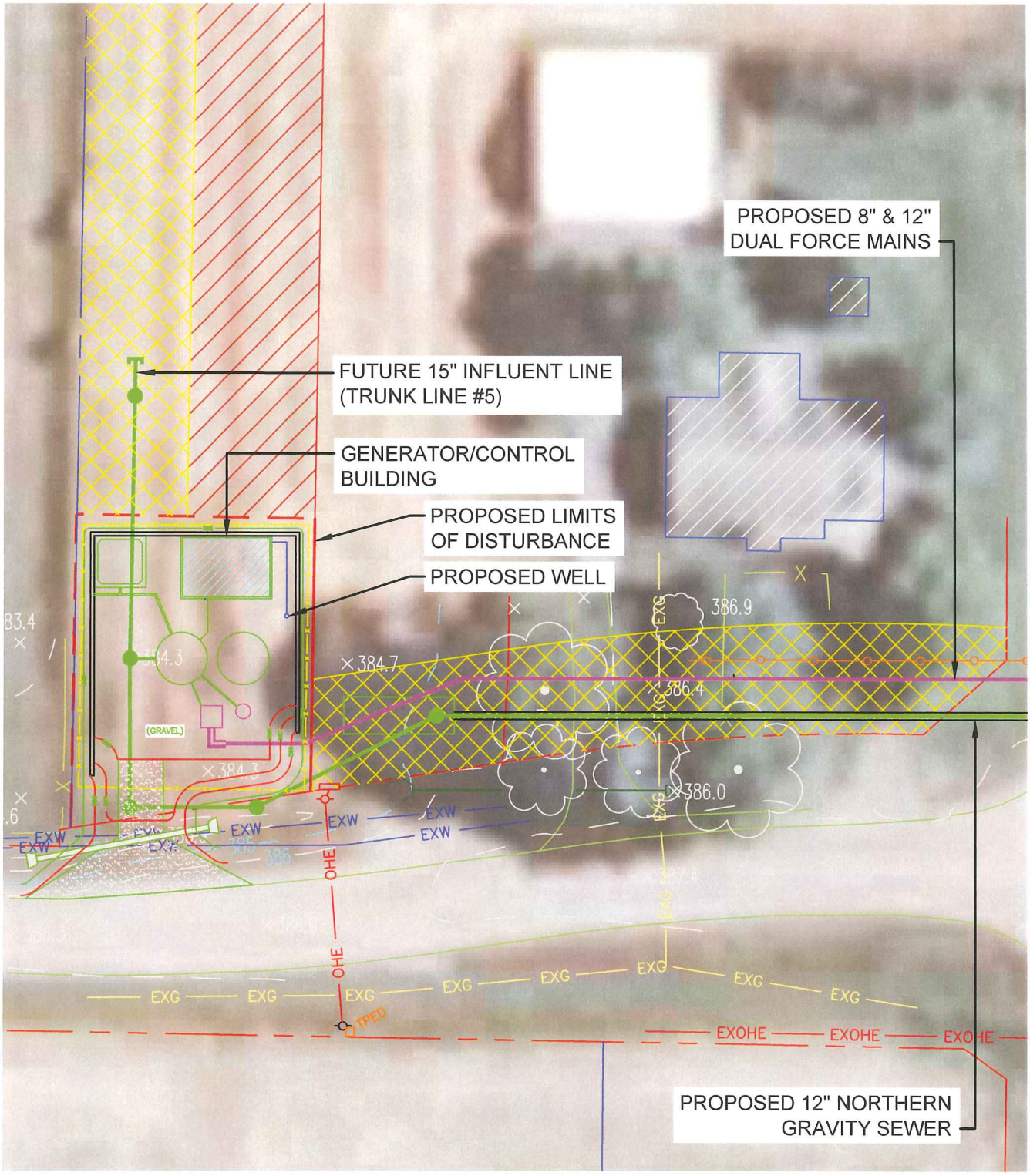


MAP SOURCE:

INDIANA SPATIAL DATA PORTAL

FIG's Newburgh–EpworthRd.San.Expansion RK.dwg 50

COMMONWEALTH	TOWN OF NEWBURGH, INDIANA	FIGURE
	EPWORTH RD. CORRIDOR SANITARY SEWER PROJECT	5
	PROPOSED PROJECT	



NEW GRAVITY SEWER
NEW FORCEMAIN

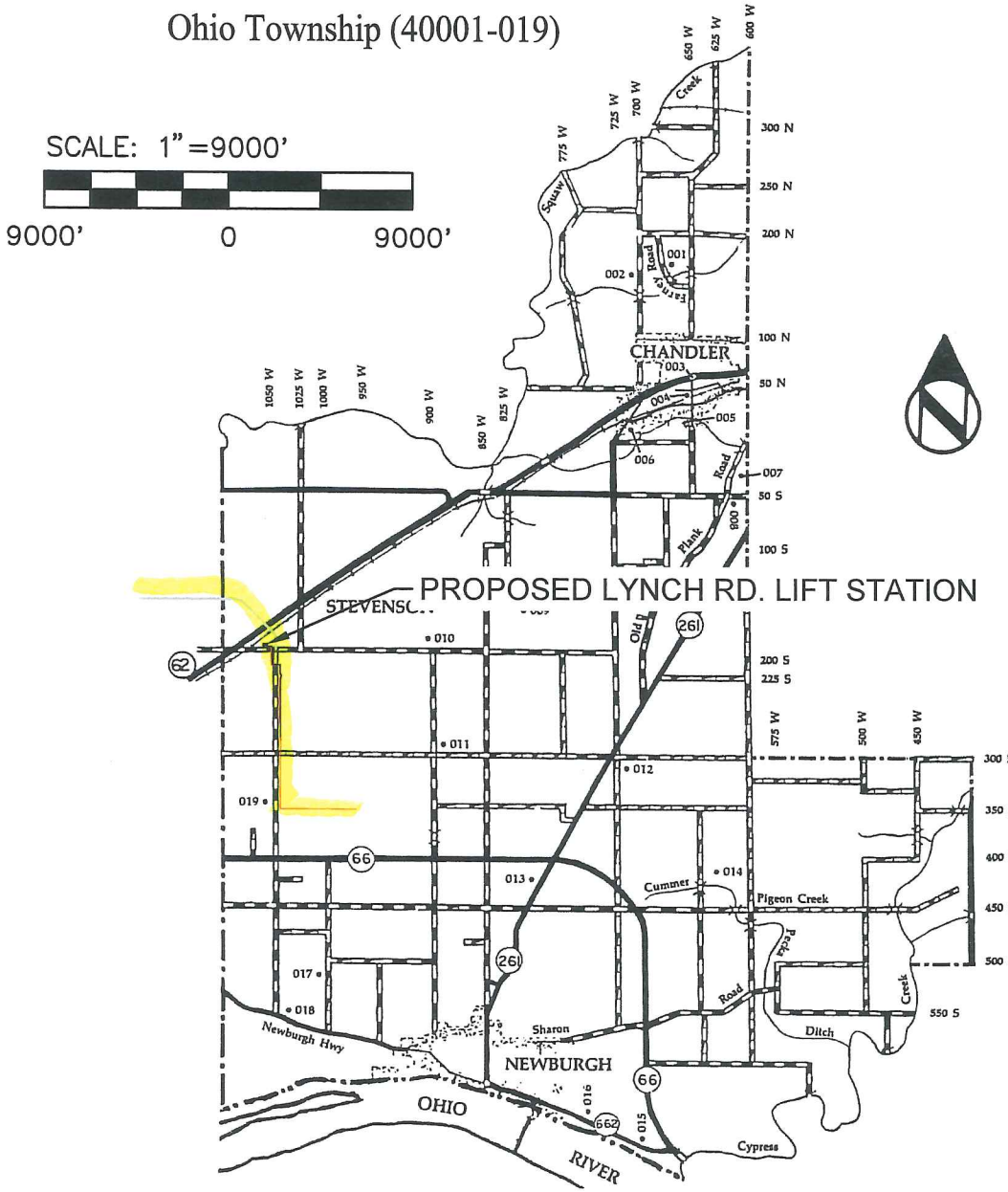
SCALE: 1"=40'

40' 0 40'

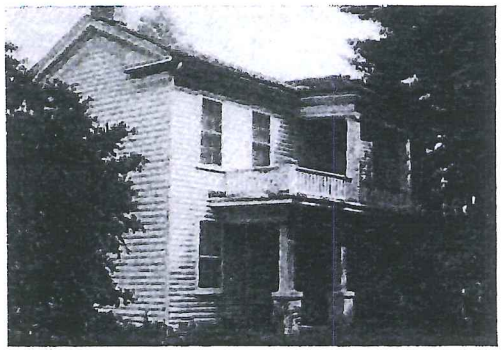
FIG's Newburgh–EpworthRd.San.Expansion RK.dwg 50

COMMONWEALTH ENGINEERS, INC.	TOWN OF NEWBURGH, INDIANA EPWORTH RD. CORRIDOR SANITARY SEWER PROJECT LYNCH ROAD LIFT STATION SITE PLAN	FIGURE 6

Ohio Township (40001-019)



No.	Rtg.	Description
001	C	**Frank McCool House,** Parney Road; Carpenter-Builder, c.1890; Architecture (058)
002	C	**House,** 201 E. Williams Street, Chandler; Second Empire, c.1890; Architecture (058)
003	C	**House,** 107 W. Walnut Street, Chandler; Carpenter-Builder, c.1900; Architecture (058)
004	C	**Chandler General Store,** 110 Walnut Street, Chandler; Nineteenth Century Functional, c.1900; Architecture, Commerce (058)
005	N	**Traction Station,** 650 W, Chandler; Arts & Crafts, c.1915; Architecture, Transportation (058)
006	C	**Hatchett House,** 800 Washington Avenue, Chandler; Bungalow, c.1925; Architecture (154)
007	O	**Sanders House,** Old Plank Road; Greek Revival, c.1835; Architecture, Transportation (058)



007

008	C	**Martel House,** Old Plank Road; Carpenter-Builder, c.1885; Architecture (058)
009	N	**House,** 150 S; Greek Revival, c.1865; Architecture (154)

NEW GRAVITY SEWER
NEW FORCEMAIN

MAP SOURCE:
INDIANA MAP

FIG's Newburgh—EpworthRd.San.Expansion RK.dwg 50

COMMONWEALTH ENGINEERS, INC.

TOWN OF NEWBURGH, INDIANA

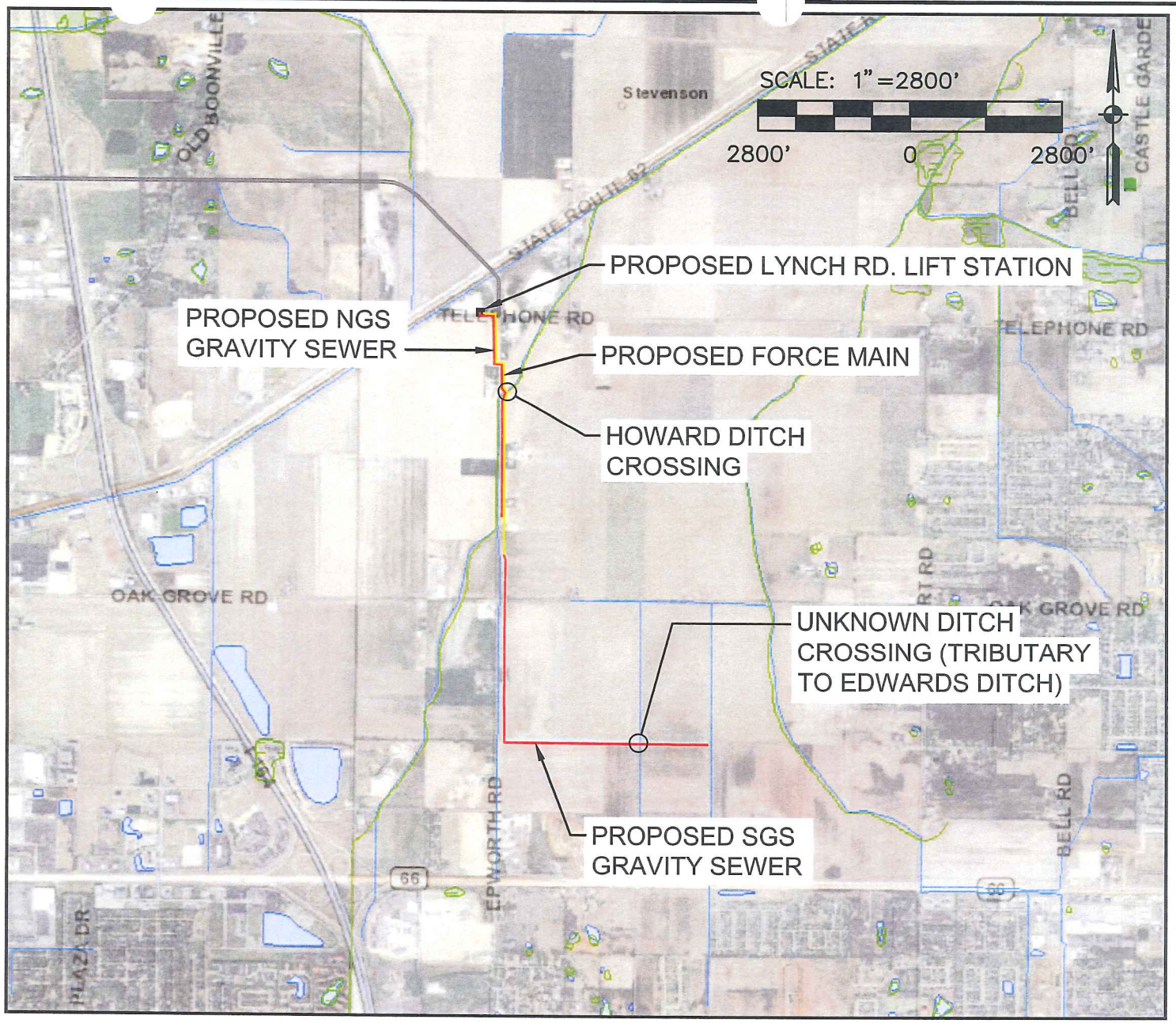
EPWORTH RD. CORRIDOR SANITARY SEWER PROJECT

WARRICK COUNTY INTERIM REPORT

APPENDIX

G

Date: 3/4/2014



Legend

- Wetlands
- Wetland Points
- Wetland Lines
- Streams (NHD)
- Rivers (NHD)
- Lakes (NHD)
- State Boundary

FIG's Newburgh–EpworthRd.San.Expansion RK.dwg 50

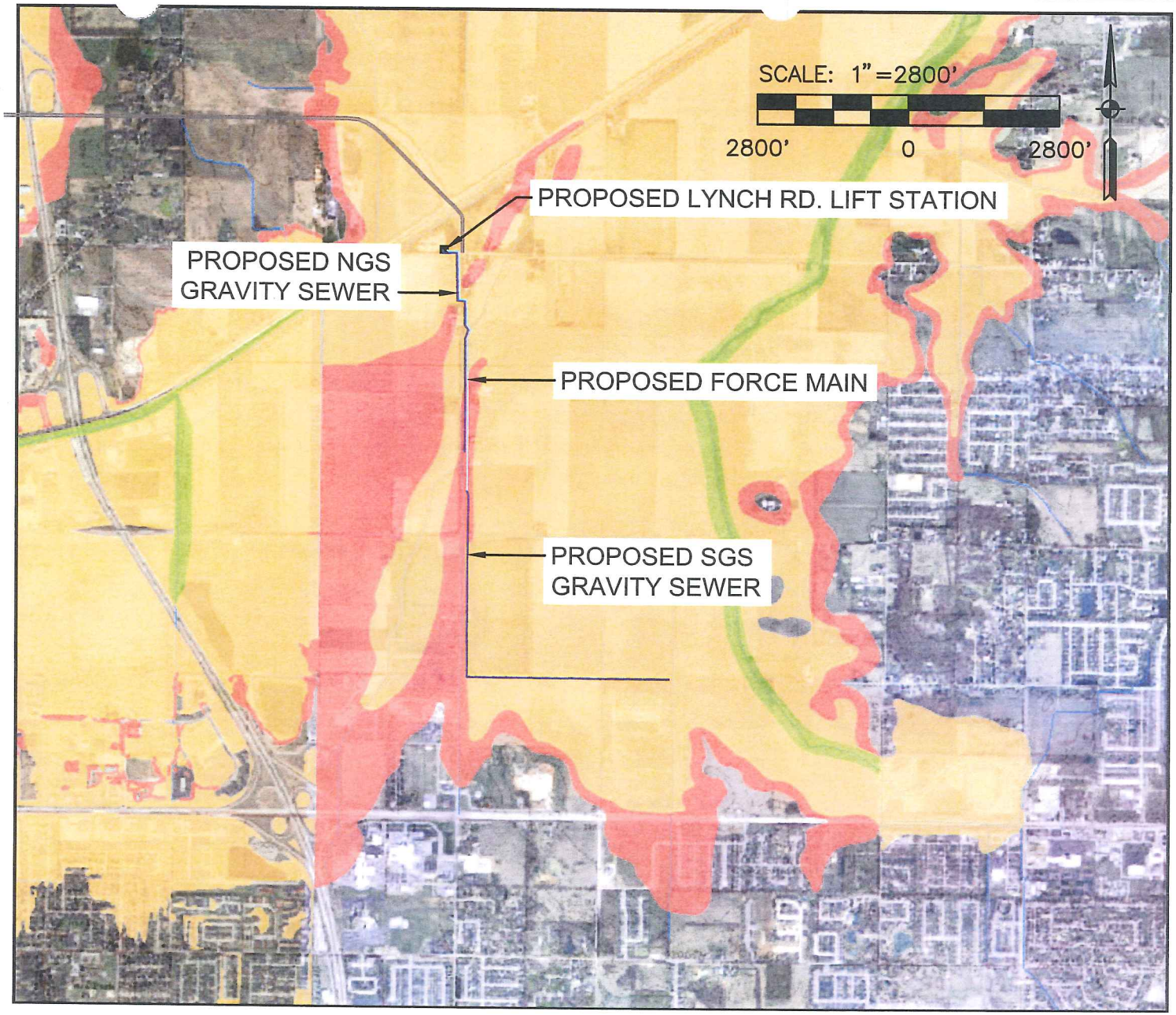
NEW GRAVITY SEWER
NEW FORCEMAIN

MAP SOURCE:
INDIANA MAP

COMMONWEALTH

TOWN OF NEWBURGH, INDIANA	FIGURE
EPWORTH RD. CORRIDOR SANITARY SEWER PROJECT	10
WETLANDS MAP	

Date: 4/1/2014



Legend

- 0.2% Risk (aka 500-year Flood
- 1% Risk (aka 100-yr Flood Zone
- Floodway
- Streams (NHD)
- State Boundary
- State Boundary
- NEW GRAVITY SEWER
- NEW FORCEMAIN

FIG's Newburgh–EpworthRd.San.Expansion RK.dwg 50

MAP SOURCE:
INDIANA MAP

COMMONWEALTH

TOWN OF NEWBURGH, INDIANA
EPWORTH RD. CORRIDOR SANITARY SEWER PROJECT
FIRM FLOODPLAIN MAP

FIGURE
12