



State Revolving Fund Loan Programs

Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

TOWN OF MIDDLETOWN
8th Street Sewer Improvements
SRF PROJECT WW 14 02 33 01

DATE: Dec. 12, 2013

TARGET PROJECT APPROVAL DATE: Jan. 12, 2014

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 at ifa.in.gov

ENVIRONMENTAL ASSESSMENT

I. PROJECT IDENTIFICATION

Project Name and Address: **8th Street Sewer Improvements**
Town of Middletown
653 Locust Street
Middletown, IN 47356

SRF Project Number: WW 14 02 33 01

Authorized Representative: Betty Riley, Town Council President

II. PROJECT LOCATION

Middletown's 8th Street sewer improvement project is located in Fall Creek Township in Henry County in the Middletown Quadrangle, Township 19N, Range 9E, Section 32 (figures 1-3).

III. PROJECT NEED AND PURPOSE

During wet weather events the sewer system experiences inflow and infiltration (I/I). A significant source of I/I is from structurally deteriorated piping, lack of storm sewer inlets and storm sewers, and failing sanitary and storm laterals currently connected to the combined sewer. The proposed project will provide a separate storm sewer to redirect the storm water flow from the combined sewer to Fall Creek and a new sanitary sewer to replace an existing deteriorated sanitary sewer. By redirecting storm water flow from the combined sewer system to a separate storm sewer system, the town will realize a reduced frequency of CSO events from CSO Outfall 002 and continue with meeting its approved Long Term Control Plan (LTCP) schedule.

IV. PROJECT DESCRIPTION

The primary proposed project will install a combination of approximately 8,131 feet of storm sewer ranging in size from 12- to 48-inches with all related manholes and catch basins along with the replacement of approximately 1,243 feet of sanitary sewer ranging in size from 10- to 12-inches and all related manholes through the ravine area.

As an alternate routing, the project will consist of installation of approximately 7,952 feet of storm sewer ranging in size from 12- to 48-inches with all related manholes and catch basins along with the installation of approximately 2,448 feet of sanitary sewer ranging in size from 8- to 18-inches with all related manholes that will transport sanitary and storm flow from High Street down 5th Street to Locust Street instead of transporting the flows through separate sewer systems in the ravine area. The town has considered this alternate routing for ease of future sewer maintenance.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

Construction Costs

A. Primary Project-Ravine Area

All sanitary and storm sewer installation	\$1,537,254
Contingency	<u>154,000</u>
Construction Sub-Total	\$1,691,254

Non-Construction Costs **\$527,500**

Primary Project Total Estimated Project Cost **\$2,218,754**

B. Alternate Routing

All sanitary and storm sewer installation	\$1,967,667
Contingency	<u>196,000</u>
Construction Sub-Total	\$2,163,667

Non-Construction Costs **\$527,500**

Alternate Routing Total Estimated Project Cost **\$2,691,167**

B. Middletown 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. Continued use of the combined sewer will not allow the town to meet its LTCP goals and schedule, and it would continue CSO discharges during wet weather.

Collection System Sewer Modifications: This is the selected alternative to relieve storm water from entering the combined sewer.

Off-Line Storage and Metered Release to the WWTP: This alternative would provide for off-line storage of the flows during wet weather and controlled metered discharge to the WWTP. This alternative is cost-prohibitive and was rejected.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: Work related to the installation of storm and sanitary sewers will occur in disturbed rights-of-way, adjacent to and within roadways, alleys and existing utility trenches. All areas have been previously disturbed by previous construction activity.

Structural Resources (Figures 4-5): The proposed storm sewer installation will occur near the John W. Hedrick House at 506 High Street, a site listed on the National Register of Historic Places as NR-0497. 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: Fall Creek will be temporarily affected by the replacement of a 24-inch storm outfall with a larger 48-inch storm outfall. 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 6): Fall Creek is a riverine wetland and will be temporarily impacted by the project. Mitigation measures to lessen and compensate for wetland impacts cited in comment letters about the project from the Indiana Department of Natural Resources and the U.S. Fish and Wildlife Service will be implemented.

Floodplain (Figure 7): The project will not include dredge or fill in the floodway without a permit from IDNR Division of Water. No change in grade will occur within the floodplain.

Groundwater: The project will not impact a drinking water supply or sole source aquifer.

Plants and Animals: A 12-inch and 18-inch storm and sanitary sewer currently exist in the potential cross country route through the ravine area in an established utility corridor. Any overgrown bush within the utility corridor will be removed for the replacement and installation of the sewers.

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 town's Preliminary Engineering Report (PER) states: *Middletown 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 affect 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

In correspondence dated November 27, 2013, the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology stated:

Pursuant to IC 13-18-21 and 327JAC 14 and Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) 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 October 28, 2013, for the above indicated project in Middletown, Henry County, Indiana.

In regard to buildings and structures, we have identified the following property (per the Henry County Interim Report) 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 due to its historical and architectural significance:

Franklin- Wisheart House, 5th Street, Site #065-409-22008

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

*John W. Hedrick House, 506 High Street (Site #065-409-22027), listed December 27, 1984
Middletown Commercial Historic District, listed March 31, 2010*

However, based on the information provided to our office, we do not believe that there will be any alterations to the characteristics of the above identified historic properties qualifying them for inclusion in or eligibility for the National Register (see 36 C.F.R § &00.16[i]).

In regard to archaeology, we have not identified any currently known archaeological resources listed in or eligible for the National Register of Historic Places within the proposed project area. This analysis is subject to the following condition:

- The project remains within previously disturbed areas. If there are portions of the project area which have not been disturbed by prior construction activities, then archaeological investigations would be needed in those areas. Also, please be advised that archaeological resources may exist underneath modern development.*

If any archaeological artifacts, features, or human remains are uncovered during construction, 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 correspondence dated November 8, 2013, the United States Fish and Wildlife Service stated:

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 consists of installation of approximately 8,400 feet of storm sewer, construction or rehabilitation of existing sanitary sewer. In addition, the project includes replacement of a 24" storm outlet with a 48" outlet into Fall Creek. We recommend the following measure to minimize physical impacts to Fall Creek:

1. *Minimize erosion and cover or contain soil piles to prevent runoff to streams during construction.*
2. *Restabilize disturbed stream banks as quickly as possible after construction is completed.*
3. *Revegetate with native plant species in areas that are currently dominated by natural vegetation.*

Storm sewers convey storm runoff directly to streams with no natural filtration through soil. Urban pollutants, especially in the "first flush" runoff can cause significant degradation of the receiving stream. Increased surface runoff causes increased peak flows, resulting in destabilization of the stream channel, bank erosion and downcutting. We recommend grassed ditches rather than storm sewers. If that is not feasible, we recommend installation of detention facilities to detain and treat storm runoff prior to entering sewers.

Endangered Species

The proposed project is within the range of the federally endangered Indiana bat (Myotis sodalis) and the northern long-eared bat (Myotis septentrionalis), a species proposed as endangered. There are no known occurrences of this species or its habitat within or near the project area, therefore we concur that the proposed project is not likely to adversely affect this listed species.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If however, new information on endangered species at the site becomes available or if project plans are changed significantly, please contact our office for further consultation.

In correspondence dated November 12, 2013 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: This proposal may require the formal approval of our agency pursuant to the Flood Control Act(IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile. However, if the project qualifies for utility exemption under Administrative Rule 312 IAC 10-5-4 or the general license for outfall structures under Administrative Rule 312 IAC 10-5-8 (see enclosures), a permit from the Department is not required. Please include a copy of this letter with the permit application (if required).

Natural Heritage Database: 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.

Fish & Wildlife Comments: Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

1) *Bank Stabilization and Wildlife Passage: Minimize the use of riprap and use alternative erosion protection materials whenever possible. Where riprap must be used, we recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank up to the ordinary high water mark (ohwm). From the ohwm to the top of the bank, we recommend using bioengineered bank stabilization methods instead of riprap. This can provide equal or better erosion control protection than riprap. This will allow a natural, vegetated stream bank to develop and will allow wildlife passage along the creek's banks and riparian corridor.*

Information about bioengineering techniques can be found at

<http://fwww.in.gov/legislative/iac/20120404-1R-312120154NRA.xml.pdf>. Also, the following is a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: <http://directives.sc.egov.usda.gov/17553.wba>.

2) *Riparian Habitat: We recommend a mitigation plan be developed (and submitted with the permit application, if required) if habitat impacts will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <http://www.in.gov/legislative/iac/20120801-IR-312120434NRA.xml.pdf>.*

Impacts that remove trees from a non-wetland, riparian area should be mitigated. Impacts to non-wetland forest over one (1) acre should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees).

The additional measures listed 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 inchannel disturbance and the clearing of trees and brush.*
3. *Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.*
4. *Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.*
5. *Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.*
6. *Minimize the movement of resuspended bottom sediment from the immediate project area.*
7. *Do not deposit or allow demolition materials or debris to fall or otherwise enter the waterway.*
8. *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.

9. 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); seed and apply mulch on all other disturbed areas.

In correspondence dated May 23, 2013 the Natural Resources Conservation Service Stated:

The proposed project to make sewer improvements in the Town of Middletown, Henry County, Indiana, as stated in your letter received May 22, 2013, will not cause a conversion of prime farmland.

VIII. MITIGATION MEASURES

Middletown's PER states:

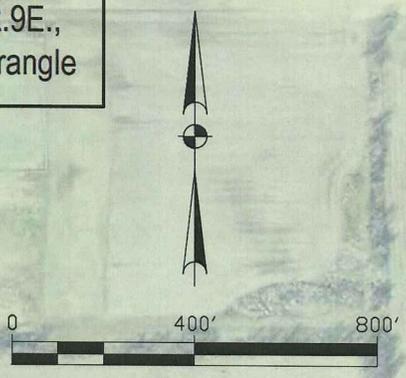
Any mitigation measures cited in comment letters from the Department of Natural resources and the U.S. Fish and Wildlife Service will be implemented. The project will be implemented to minimize impact to non-endangered species and their habitat.

Existing topsoil will be reused during the restoration process, if applicable. The amount of dust may be mitigated by periodic wetting of the exposed soil to reduce the suspension of particles. Normal daytime hours will be used for work activities to reduce noise impacts.

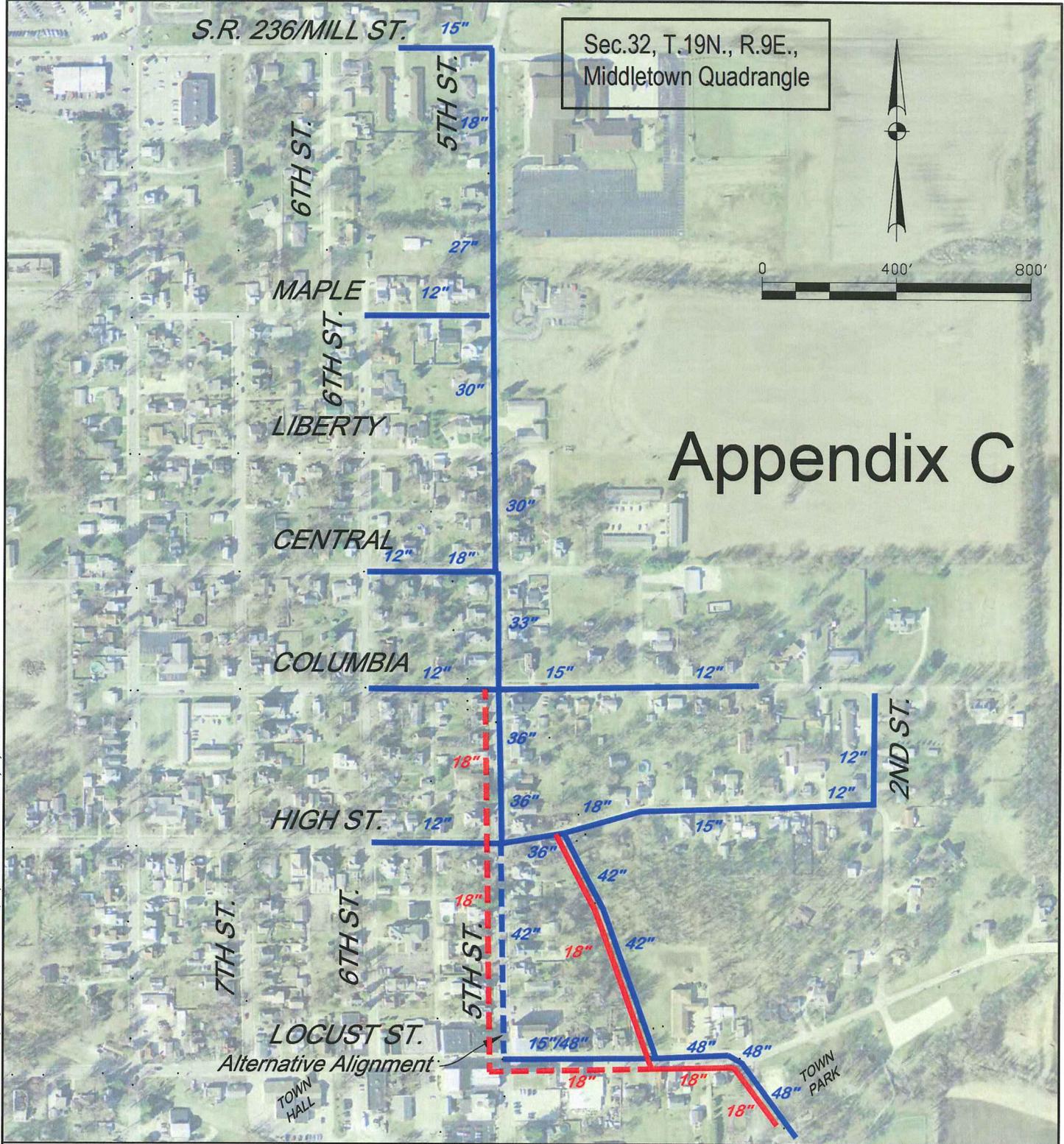
IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on June 11, 2013, at 7:00 pm at the Middletown Town Hall to discuss the PER. No written comments were received during the 5-day comment period following the hearing.

Sec.32, T.19N., R.9E.,
Middletown Quadrangle



Appendix C



- STORM SEWER IMPROVEMENTS
- - - STORM SEWER ALTERNATIVE ALIGNMENT
- SANITARY SEWER IMPROVEMENTS
- - - SANITARY SEWER ALTERNATIVE ALIGNMENT

Revised: 10/24/13

U:\54251\Proj\Development\Studies-Reports\Appendix\Middletown-5thStreet-sanitary.dwg Jeff Carlson Plot: 10/24/2013 9:50 AM Save: 10/22/2013 11:19 AM

DRAWN: J. Carlson
 CHECKED: G. Nulliner
 DATE: MAY 2013

**5TH STREET
SEWER IMPROVEMENTS**

**MAP OF PROPOSED IMPROVEMENTS
MIDDLETOWN, INDIANA**

HORIZONTAL SCALE	1"=300'
VERTICAL SCALE	
SHEET	
OF	
PROJECT	

BFS NO2033-9922

Figure 1

Middletown WW 14 02 33 01

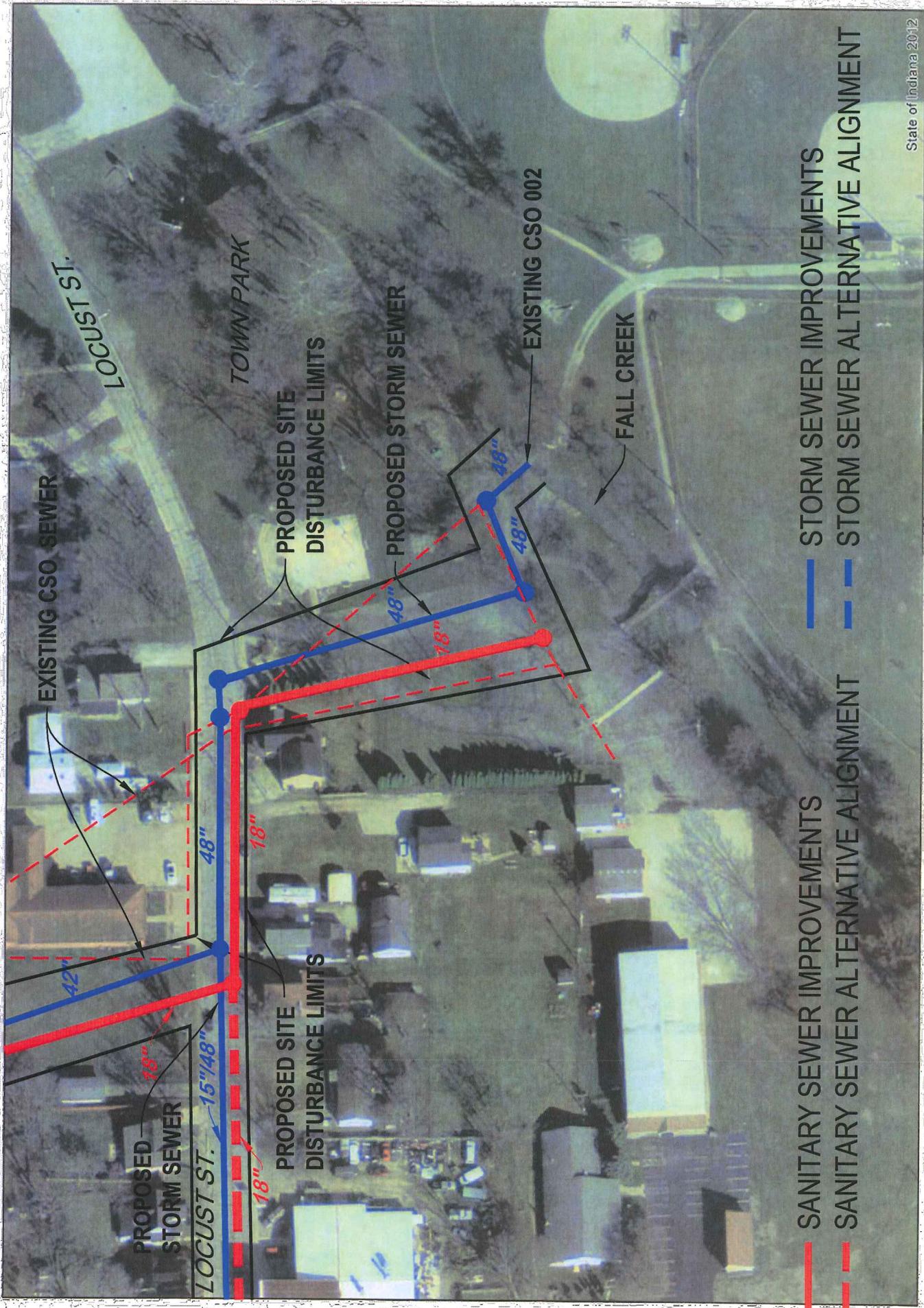
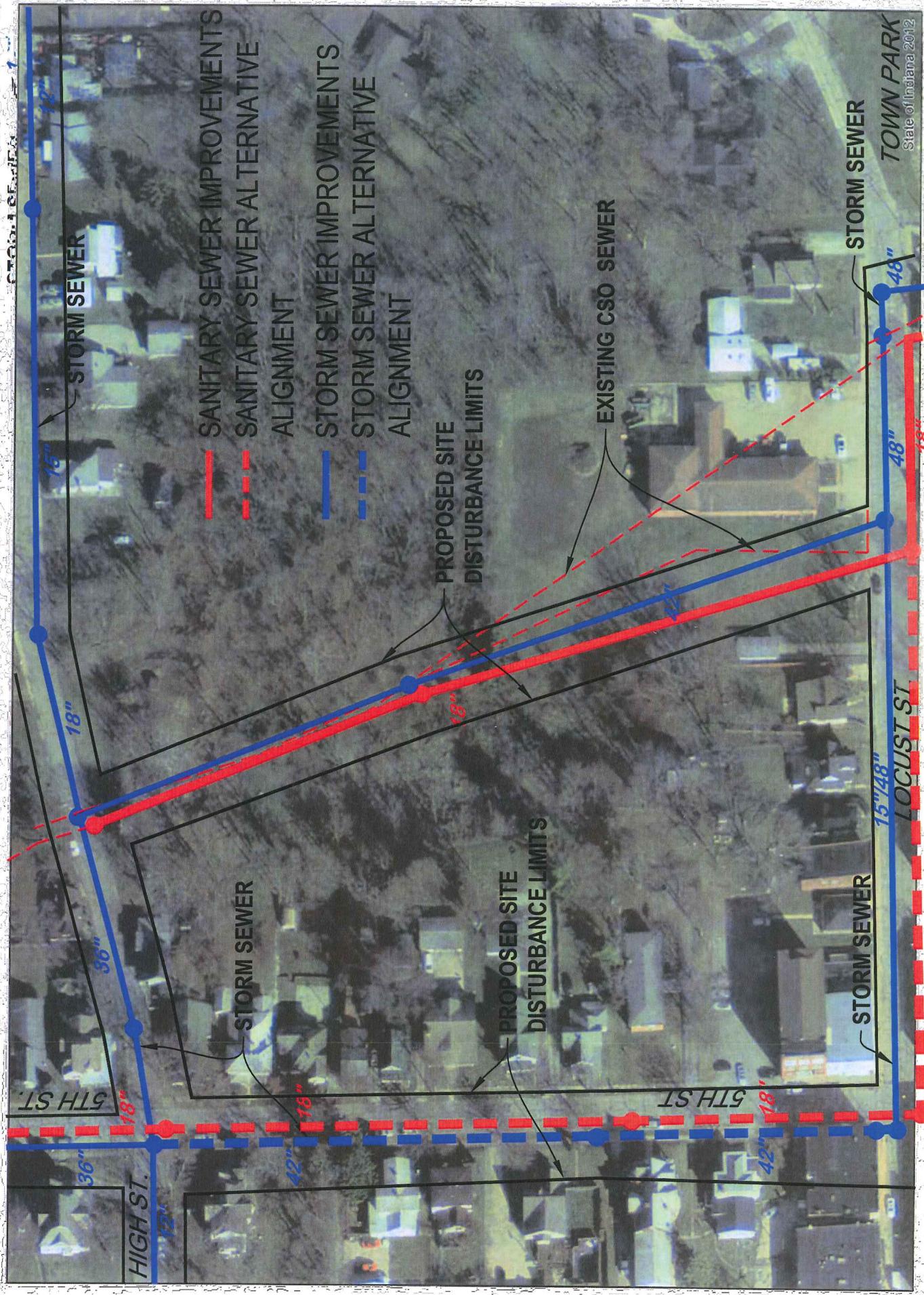


Figure 2

Middletown WW 14 02 33 01



REVISED: 10/24/13

Figure 3

Middletown Scattered Sites (22001-100)

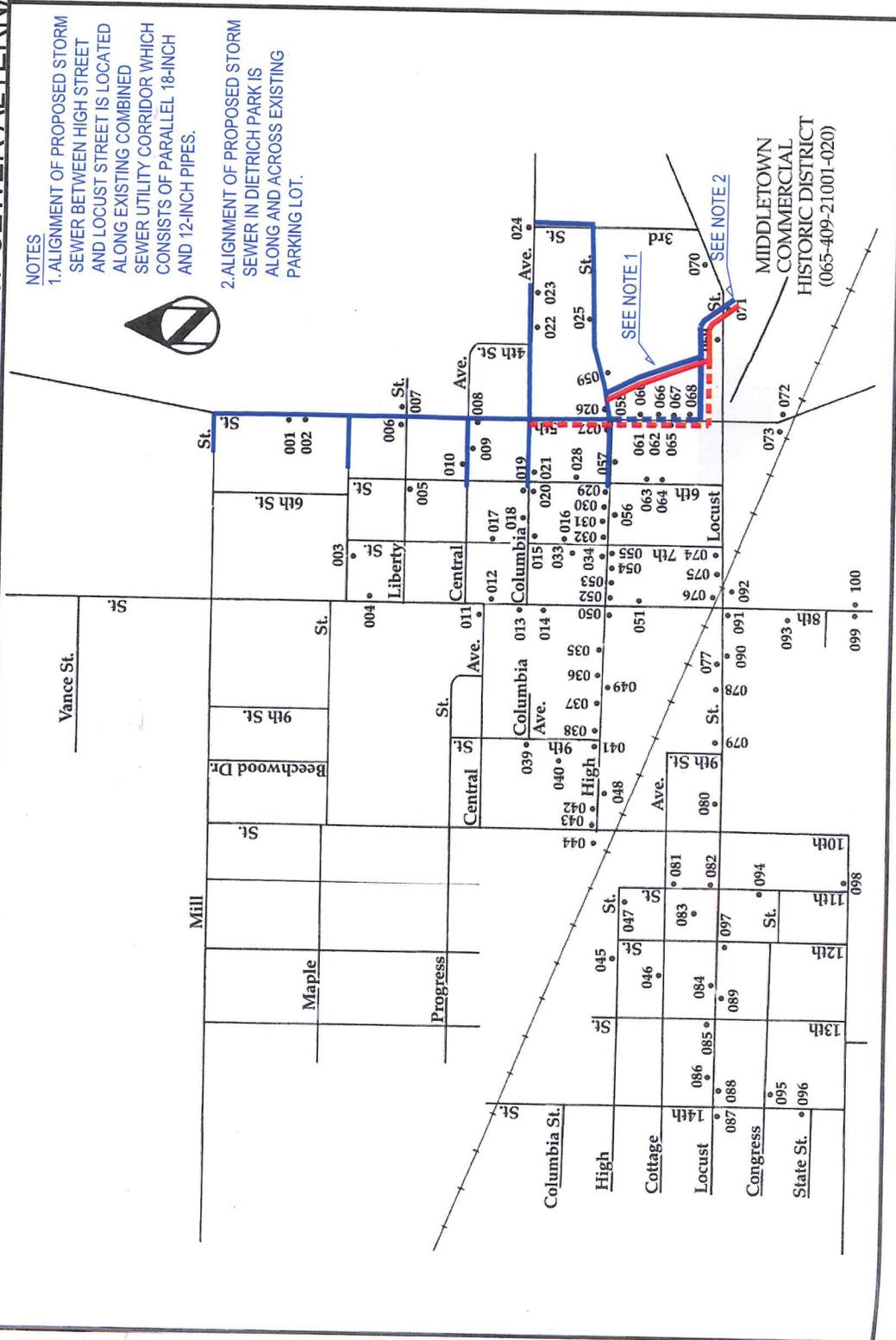
— STORM SEWER IMPROVEMENTS

- - - - STORM SEWER ALTERNATIVE ALIGNMENT

— SANITARY SEWER IMPROVEMENTS

- - - - SANITARY SEWER ALTERNATIVE ALIGNMENT

NOTES
 1. ALIGNMENT OF PROPOSED STORM SEWER BETWEEN HIGH STREET AND LOCUST STREET IS LOCATED ALONG EXISTING COMBINED SEWER UTILITY CORRIDOR WHICH CONSISTS OF PARALLEL 18-INCH AND 12-INCH PIPES.
 2. ALIGNMENT OF PROPOSED STORM SEWER IN DIETRICH PARK IS ALONG AND ACROSS EXISTING PARKING LOT.



BFS & S
 Butler Fairman Seufert
 CIVIL ENGINEERS

DRAWN: C. Mimiello
 CHECKED: J. Lightner
 DATE: MAY 2013

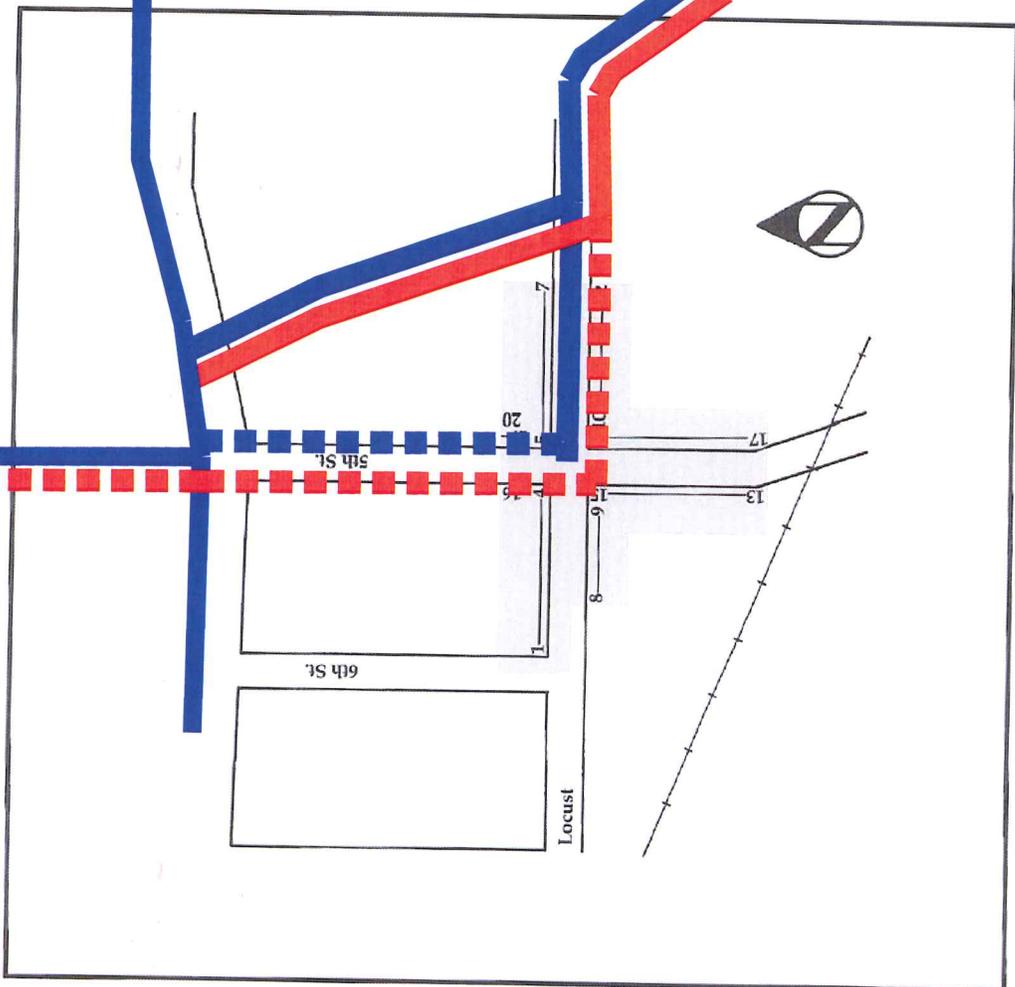
5TH STREET SEWER IMPROVEMENTS
 APPENDIX D-INTERIM REPORT (HISTORIC SITES/STRUCTURES MAP)
 FIGURE 5D

MIDDLETOWN, INDIANA

45
 REVISED: 10/15/13
 HORIZONTAL SCALE
 VERTICAL SCALE
 SHEET OF PROJECT
 BRS No. 20383.99

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

Middletown Commercial Historic District (065-409-21001-020)



Although settlers had come to the area during the early 1820s, the village of Middletown was not officially platted until December, 1829 by Jacob Kooitz. The town's original plat encompassed what is now Middletown's downtown commercial area.

In 1830, Chauncey Burr who operated a tannery, became the town's first postmaster. With the establishment of the post office the town was named Middletown because of its location midway between New Castle and Anderson. The road connecting these two communities passed through Middletown providing an impetus for growth. By 1840, Middletown was incorporated.

Because of Middletown's access to Fall Creek, and its location in a rich agricultural area, many of its early industries were related to milling. Sawmills, gristmills and a flour mill were among the town's industries. When the Pittsburgh, Cincinnati and St. Louis Railroad came through Middletown in 1856, the town's development increased dramatically. Between the years 1850 and 1880, the town's population jumped from 188 to 880.

With the discovery of natural gas in 1887, Middletown's economy was further bolstered with the opening of several industries which took advantage of the town's ready access to cheap fuel as well as transportation routes. A glassmaking company and two metal rolling mills opened on the town's western edge. This industrial growth, while not eliminating the agricultural based economy of the area, greatly diversified the town's businesses and brought in many new residents to work in the factories.

By the 1890s, Middletown was the county's third largest town and with the coming of the interurban, the town developed as the commercial center for the surrounding area. A disastrous fire in 1890 which destroyed much of the downtown area provided the opportunity for the construction of more substantial

REVISED: 10/15/13

HORIZONTAL SCALE	
VERTICAL SCALE	
SHEET	
OF	
PROJECT	

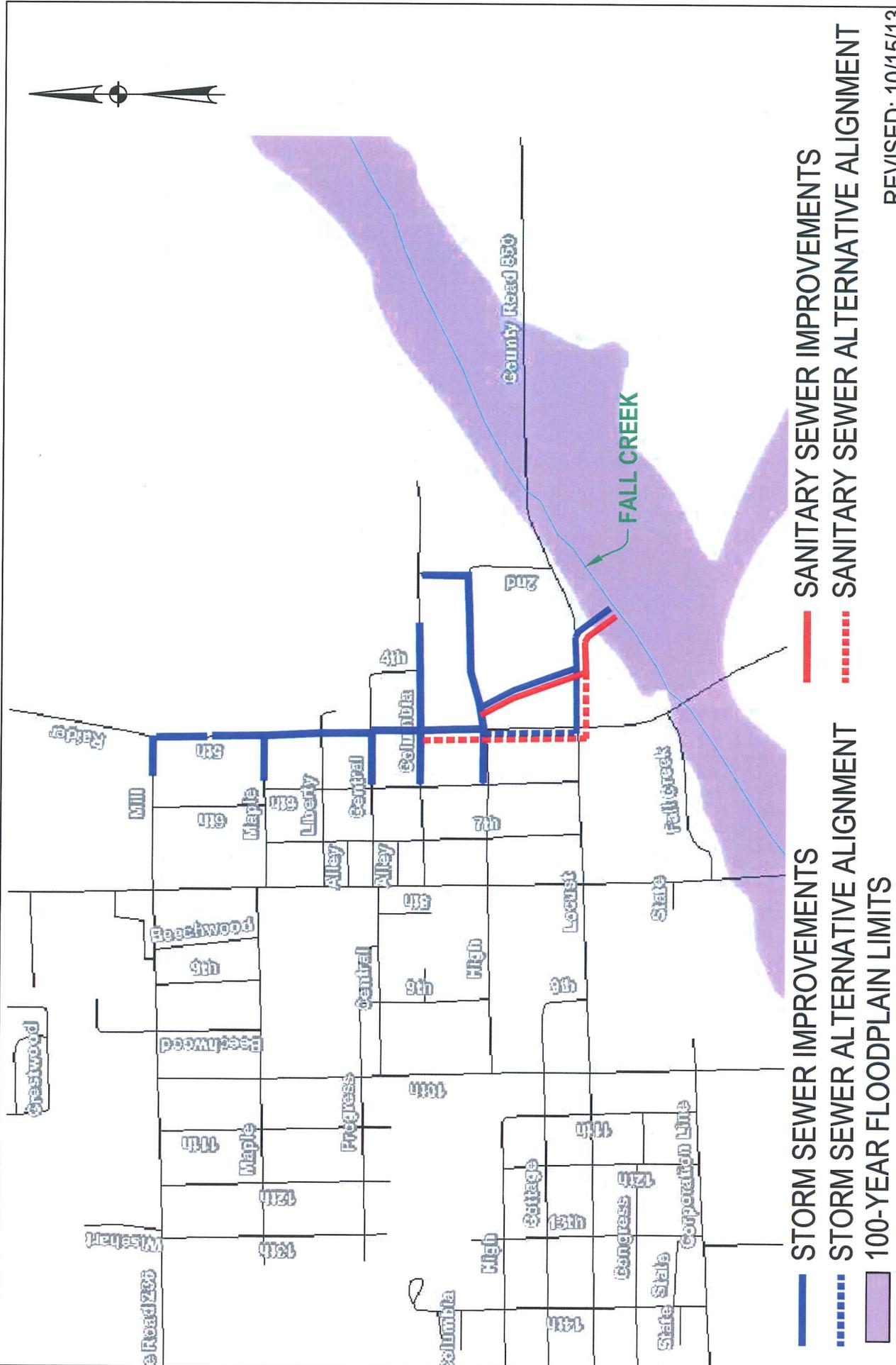
5TH STREET SEWER IMPROVEMENTS APPENDIX D-INTERIM REPORT (HISTORIC SITES/STRUCTURES MAP) FIGURE 5A

DRAWN: C. Miniello
CHECKED: J. Lightner
DATE: MAY 2013



MIDDLETOWN, INDIANA

Figure 5: from the Henry County Interim Report Historic Sites and Structures Inventory

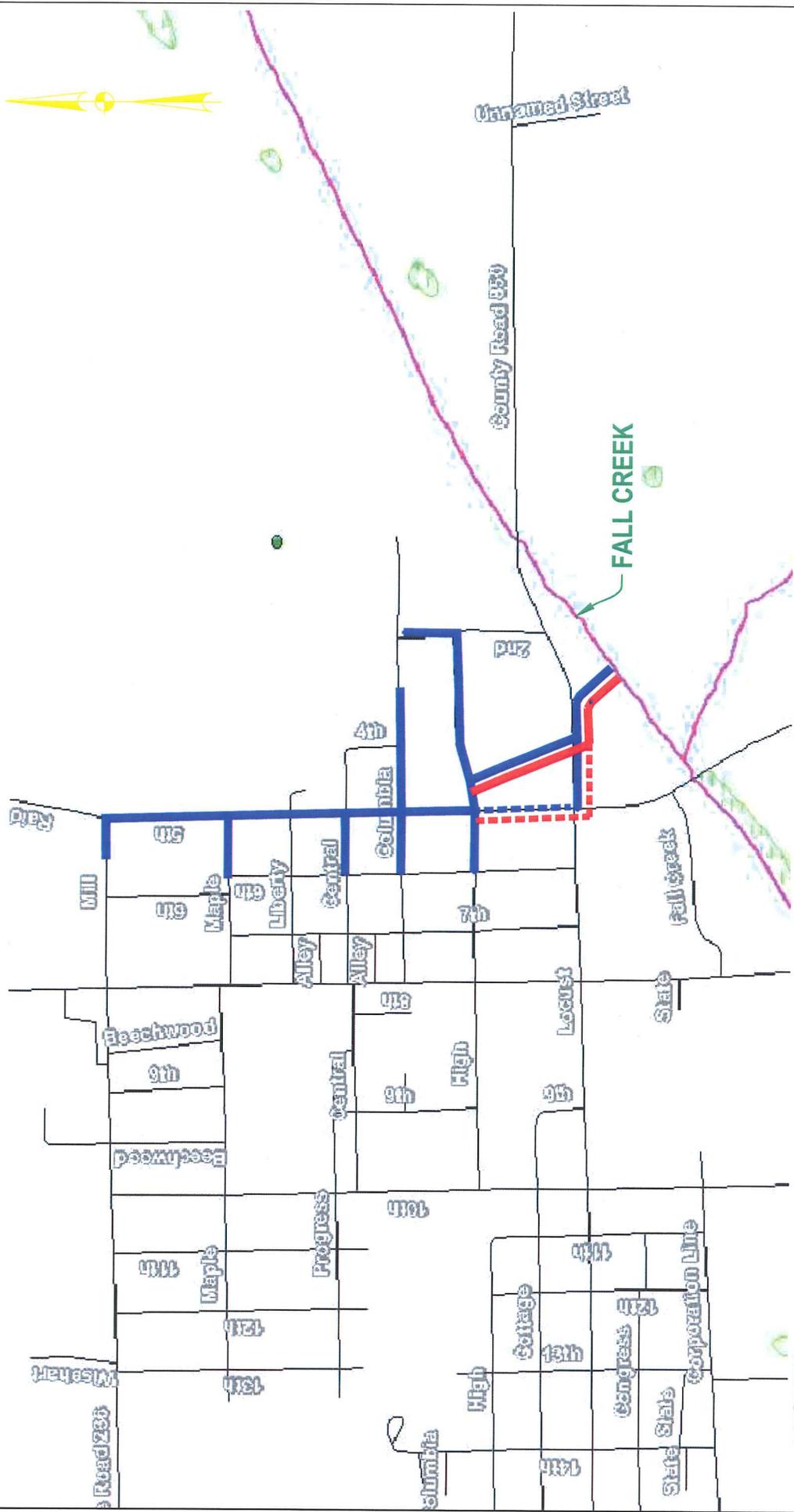


- STORM SEWER IMPROVEMENTS
- - - - - STORM SEWER ALTERNATIVE ALIGNMENT
- 100-YEAR FLOODPLAIN LIMITS
- SANITARY SEWER IMPROVEMENTS
- - - - - SANITARY SEWER ALTERNATIVE ALIGNMENT

REVISED: 10/15/13

<p>Butler Fairman Scufert CIVIL ENGINEERS</p>	<p>DRATN: <u>C. Miniello</u></p> <p>CHECKED: <u>J. Lightner</u></p> <p>DATE: <u>MAY 2013</u></p>	<p>5TH STREET SEWER IMPROVEMENTS 100 YR FLOODPLAIN MAP</p>
		<p>MIDDLETOWN, INDIANA</p>
		<p>HORIZONTAL SCALE _____</p> <p>VERTICAL SCALE _____</p> <p>SHEET _____ OF _____</p> <p>PROJECT _____</p>

Figure 6



- STORM SEWER IMPROVEMENTS
- - - STORM SEWER ALTERNATIVE ALIGNMENT
- SANITARY SEWER IMPROVEMENTS
- - - SANITARY SEWER ALTERNATIVE ALIGNMENT

LEGEND

 RIVERINE WETLANDS

REVISED: 12/12/13

<p>BFS Butler Fairman Seufert CIVIL ENGINEERS</p>	<p>DRAWN: C. Minello CHECKED: G. Nullner DATE: MAY 2013</p>	<p>5TH STREET SEWER IMPROVEMENTS NATIONAL WETLANDS INVENTORY MAP</p> <p>MIDDLETOWN, INDIANA</p>	<p>HORIZONTAL SCALE VERTICAL SCALE SHEET OF PROJECT</p>
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Figure 7