



# State Revolving Fund Loan Programs

## Drinking Water, Wastewater, Nonpoint Source

---

### ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

---

#### FALL CREEK REGIONAL WASTE DISTRICT Collection System Improvements STATE REVOLVING FUND PROJECT # WW 09 17 48 03

**DATE:** December 21, 2010

**TARGET PROJECT APPROVAL DATE:** January 20, 2011

#### 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 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:

**Max Henschen**  
**Senior Environmental Manager**  
**State Revolving Fund**  
**100 N. Senate Ave. IGCN 1275**  
**Indianapolis, IN 46204**  
**317-232-8623; mhensche at ifa.in.gov**

# ENVIRONMENTAL ASSESSMENT

## I. PROJECT IDENTIFICATION

Project Name and Address: Fall Creek Regional Waste District  
Collection System Improvements  
P.O. Box 59  
9378 S. 650 West  
Pendleton, IN 46064-0059

SRF Project Number: WW 09 17 48 03

Authorized Representative: Mark Jablonski, President, Board of Trustees

## II. PROJECT LOCATION

The Fall Creek Regional Waste District (RWD) project is located in and near Pendleton, Fall Creek Civil Township, Madison County. The proposed collection system improvements are located in the Phase I and Phase II project areas, as shown on Figure 1. The Public Land Survey System coordinates are:

|                              | USGS 7.5'<br>Quadrangle | Township | Range | Section        |
|------------------------------|-------------------------|----------|-------|----------------|
| <b>PHASE I</b>               |                         |          |       |                |
| E. Water St.                 | Anderson South          | 18N      | 7E    | 21             |
| S.R. 67                      | Anderson South          | 18N      | 7E    | 21             |
| Falls Park                   | Anderson South          | 18N      | 7E    | 16             |
| S. Broadway Ave.             | Pendleton               | 18N      | 7E    | 21,28          |
| S. Pendleton Ave.            | Pendleton               | 18N      | 7E    | 21             |
|                              | Ingalls                 | 18N      | 7E    | 21,29          |
| <b>PHASE II</b>              |                         |          |       |                |
| State St.                    | Anderson South          | 18N      | 7E    | 21             |
| Force main &<br>Lift Station | Ingalls                 | 18N      | 7E    | 19, 20, 29, 30 |

## III. PROJECT NEED AND PURPOSE

The District proposes to replace vitrified clay pipe sewers in Pendleton which have deteriorated and are subject to excessive infiltration/inflow. The infiltration/inflow has caused increased the pumps in the East Water, South Broadway, South Pendleton and the Pendleton Main lift stations to run more often. The District will also replace the undersized and deteriorated 10-inch force main from the Pendleton Main Lift Station to the Pendleton Reformatory with a 14-inch force main. The undersized force main has caused surcharging in the overflow basin and in sewers upstream of the lift station; overflows at upstream manholes have been observed.

#### IV. PROJECT DESCRIPTION

The proposed project consists of replacing approximately 1,230 feet of 12-inch sanitary sewer, 1,372 feet of 10-inch sanitary sewer, 12,495 feet of 8-inch sanitary sewer, and 3,000 feet of 6-inch lateral lines; replacing approximately 9,000 feet of 14-inch HDPE or PVC force main; replacing approximately 7 manholes; replacing the three pumps rated at 1,200 gallons per minute (gpm) with 25 HP motors at the Pendleton Main Lift Station pumps with three pumps rated at 2,680 gpm with 45 HP motors; installation of corrosion resistant lining at the Reformatory Lift Station, pavement repair, and other appurtenances and site work. The District has obtained a construction permit from the Indiana Department of Environmental Management and a construction in a floodway permit from the Indiana Department of Natural Resources.

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

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

|  |                          |
|--|--------------------------|
| <u>Construction Costs</u>                    |                          |
| Collection/transport improvements            | \$2,527,000              |
| Contingency                                  | <u>253,000</u>           |
| <b>Total Estimated Construction Cost</b>     | <b>\$2,780,000</b>       |
| <u>Non-Construction Costs</u>                |                          |
| Financial                                    | \$ 30,000                |
| Legal  | 30,000                   |
| *Land & Right-of-Way Acquisition             | 15,000                   |
| Engineering Planning                         | 30,000                   |
| Engineering Design and Bidding               | 170,000                  |
| Construction Administration                  | 75,000                   |
| Project Resident Inspection                  | 125,000                  |
| Misc. Non-Construction Contingency           | <u>10,000</u>            |
| <b>Total Estimated Non-Construction Cost</b> | <b>\$ <u>485,000</u></b> |
| <b>Total Estimated Project Cost</b>          | <b>\$3,265,000</b>       |

\*Land and easement acquisition are not eligible for SRF reimbursement; however, soft costs to obtain easements or land are eligible.

B. Fall Creek RWD will finance the project with a 20-year loan of approximately \$3,265,000 from the State Revolving Fund (SRF) Loan Program at an interest rate to be determined at the time of 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

**No Action:** The no-action alternative would fail to address the infiltration/inflow related to the deteriorating sewer system. The capacity of the Pendleton Main Lift Station would continue to be restricted due to an undersized and deteriorated force main. This alternative was rejected.

**Collection System Replacement or Rehabilitation:** This alternative proposes the replacement or rehabilitation of deteriorated gravity sanitary sewers and force main, as well as replacement of

pumps at the Pendleton Main Lift Station and the addition of corrosion resistant lining at the Reformatory Lift Station. The sewer and force main work will occur along the same routes as the existing sewer lines. This is the selected alternative. Sewers will likely be replaced by digging, although the project will be bid with cured-in-place-pipe, a trenchless technology, as an alternative rehabilitation method.

## VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

### A. Direct Impacts of Construction and Operation

**Undisturbed/Disturbed Land:** All work will be implemented in areas significantly disturbed by previous construction activity at the existing lift station or along existing sewer and force main routes, usually under city streets or next to roads. Figure 2 illustrates the State Street project area; the existing sewer is in a grassy easement in a residential area; the sewer there will be replaced by open cut or, if bids are favorable, with cured-in-place-pipe, a trenchless technology; in either case, tree removal should not be necessary.

**Structural Resources** (Figures 3, 4, & 5): The projects will not affect historic sites or districts, including sites on or eligible for listing on the National Register of Historic Places, according to the Madison County Interim Report and the historic sites information on the website of the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology.

Sewer replacement or rehabilitation will not affect any curbs, curbside vegetation, brick sewers or brick streets. Construction and operation of the project will not alter, demolish or remove historic sites. 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 State or National registers. The SRF's finding pursuant to Section 106 of the Historic Preservation Act is: "no historic properties affected."

**Surface Waters:** The force main will cross Fall Creek at two locations by horizontal directional drilling and will be buried a minimum of three feet beneath the creek bed. The project will not adversely affect natural, scenic, or recreational rivers and streams or waters of high quality or exceptional use streams.

**Wetlands** (Figure 6): The directionally drilled force main will not affect Fall Creek, a riverine wetland, or its tributary.

**100-Year Floodplain** (Figure 7): The force main will cross the Fall Creek 100-year floodplain at two locations, and a portion of the Falls Park Area replacement/rehabilitation project is in the same floodplain. However, the project improvements will not displace additional floodwater.

**Groundwater:** Dewatering may be required to temporarily lower the groundwater table for purposes of open cut pipe replacement. Minor fluctuations in groundwater level will be temporary.

**Plants and Animals:** The projects will not affect endangered species or their habitat. No tree removal is anticipated to implement the project; the force main will be directionally drilled

along the wooded corridor parallel to Fall Ck. Drive south of SR 38 and where it crosses Fall Creek and a tributary of Fall Creek.

**Prime Farmland:** The project will not affect prime/unique farmland.

**Air Quality:** Air quality will be temporarily impacted by construction activities, including vehicle exhaust and dust.

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

The proposed project will not affect National Natural Landmarks

## **B. Indirect Impacts**

The Regional Waste District's Preliminary Engineering Report (PER) states: *The Fall Creek Regional Waste District will take all 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 Fall Creek Regional Waste District will require new 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**

The Natural Resources Conservation Service, in correspondence dated May 5, 2010, stated that the projects *will not cause a conversion of prime farmland.*

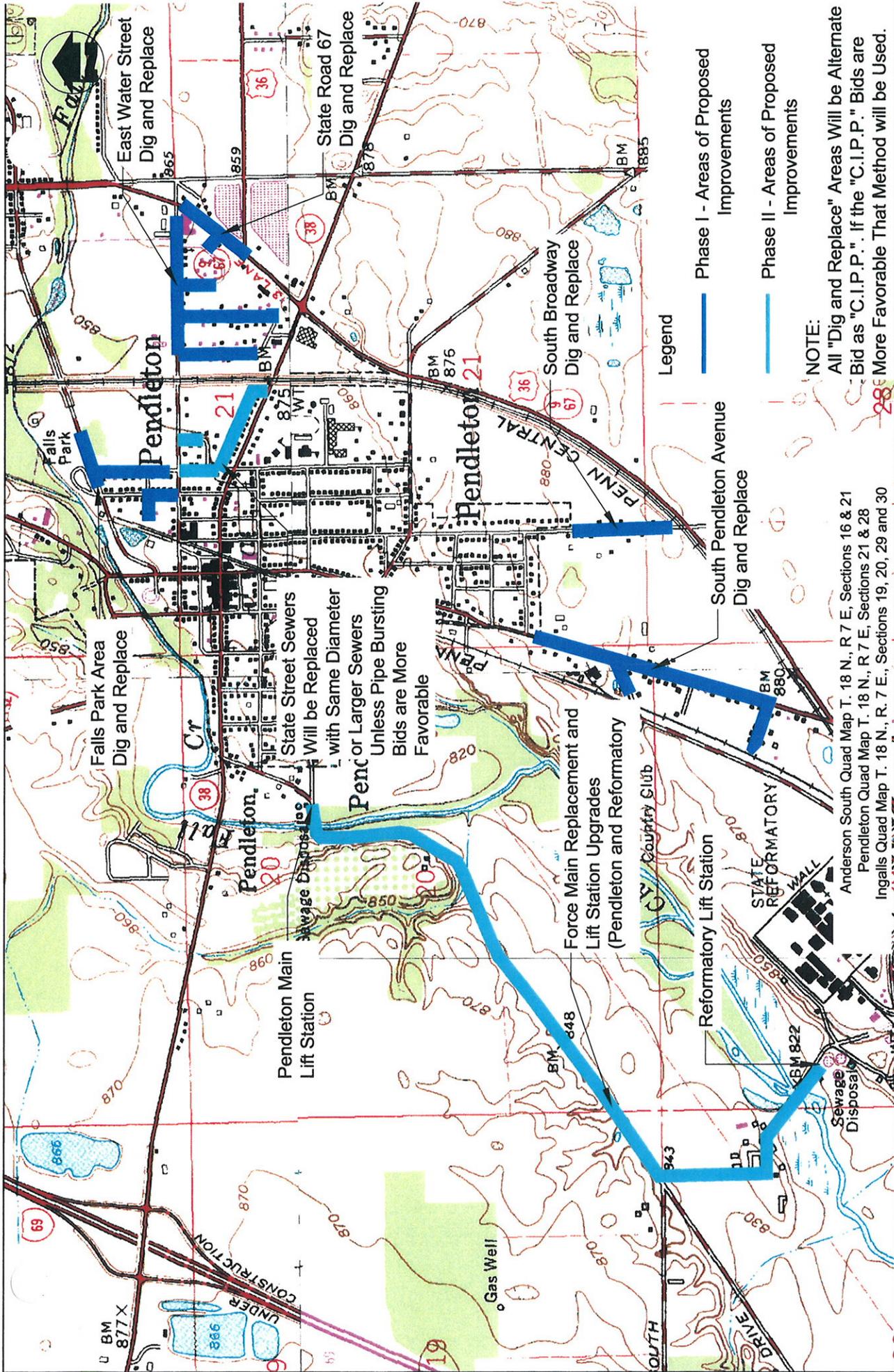
This is the first notice for comment to the U.S. Fish and Wildlife Service, the IDNR Environmental Unit, and the IDNR Division of Historic Preservation and Archaeology.

## **VIII. MITIGATION MEASURES**

The RWD's Preliminary Engineering Report (PER) lists several construction mitigation measures for the project. One such mitigation measure is the proposed directional drilling of the force main where the line crosses Fall Creek. The PER further states: *Appropriate structural (e.g. sediment basins, staked hay bales, riprap) or agronomic (e.g. seeding, mulching, liming, fertilizing) practices to control runoff and sedimentation will be provided during and after construction in accordance with the latest edition of "Indiana Handbook for Erosion Control in Developing Areas." Land grading and excavating will be kept to a minimum in order to reduce runoff and erosion problems. Surface and subsurface drainage patterns will be restored as early as possible. Areas of exposed soil will be periodically wetted. The Rule 5 permit will be acquired before construction starts. Mitigation measures cited in comment letters from the Indiana Department of Natural Resources (IDNR) and the U.S. Fish and Wildlife Service will be implemented for [the] stream crossings.*

## **IX. PUBLIC PARTICIPATION**

A properly noticed Public Hearing was held on March 19, 2009 at 7:00 pm at the Fall Creek Regional Waste District Administration Building, 9378 S CR 650 W, Pendleton, Indiana. There were no public comments at the hearing and the utility did not receive written comments during the 5-day period following the public hearing.



|   |  |  |                              |                         |
|---|--|--|------------------------------|-------------------------|
|  <p><b>Engineers • Architects • Planners</b></p> | <p><b>USGS QUAD MAP</b></p> <p>SANITARY SEWER REHABILITATION AND FORCEMAIN REPLACEMENT PROJECT<br/>FALL CREEK REGIONAL WASTE DISTRICT<br/>PENDLETON, INDIANA</p> |  | <p>PROJECT: 3290-17</p>      | <p>FIGURE: <b>1</b></p> |
|   | <p>SCALE: 1" = 1500'</p>   |  | <p>DRAWN: CDW</p>            |                         |
|   | <p>0 750 1500 3000 FEET</p>  |  | <p>REV. DATE: 09-14-2010</p> |                         |

**Legend**

- Phase I - Areas of Proposed Improvements
- Phase II - Areas of Proposed Improvements

**NOTE:**  
All "Dig and Replace" Areas Will be Alternate Bid as "C.I.P.P.". If the "C.I.P.P." Bids are More Favorable That Method will be Used.

**Legend**

- Phase I - Areas of Proposed Improvements
- Phase II - Areas of Proposed Improvements

**NOTE:**  
All "Dig and Replace" Areas Will be Alternate Bid as "C.I.P.P.". If the "C.I.P.P." Bids are More Favorable That Method will be Used.

**Legend**

- Phase I - Areas of Proposed Improvements
- Phase II - Areas of Proposed Improvements

**NOTE:**  
All "Dig and Replace" Areas Will be Alternate Bid as "C.I.P.P.". If the "C.I.P.P." Bids are More Favorable That Method will be Used.

**Legend**

- Phase I - Areas of Proposed Improvements
- Phase II - Areas of Proposed Improvements

**NOTE:**  
All "Dig and Replace" Areas Will be Alternate Bid as "C.I.P.P.". If the "C.I.P.P." Bids are More Favorable That Method will be Used.



**G&W**  
Engineers • Architects • Planners

**STATE STREET**  
REPLACEMENT / REHABILITATION METHODS

SANITARY SEWER REHABILITATION AND FORCEMAIN REPLACEMENT PROJECT  
FALL CREEK REGIONAL WASTE DISTRICT  
PENDLETON, INDIANA

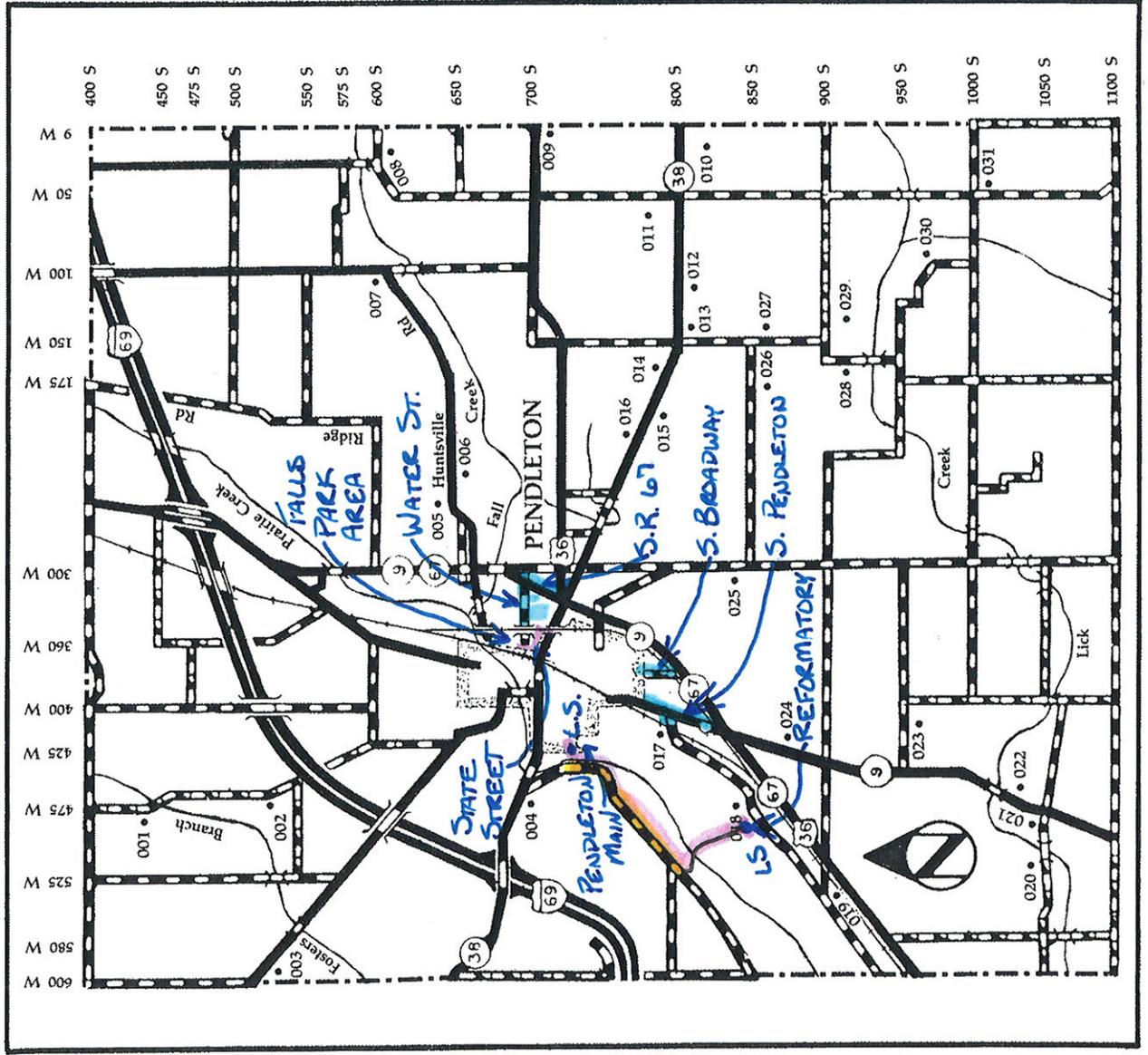
PROJECT:  
3290-17

DRAWN:  
CDW

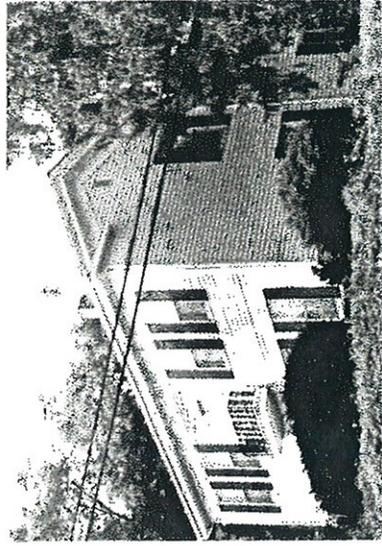
DATE:  
09-14-2010

**2**

# Fall Creek Township (60001-031)



| No. | Rtg. | Description   |
|-----|------|---|
| 001 | C    | House, 450 W; Greek Revival, c.1860; Architecture (534)             |
| 002 | C    | Farm, 450 W; Greek Revival, c.1860; Architecture (343)              |
| 003 | C    | Farm, State Road 132; Carpenter-Builder, c.1870; Architecture (343) |
| 004 | O    | Farm, State Road 38; Greek Revival, c.1860; Architecture (343)      |



|     |   |  |
|-----|---|--|
| 005 | N | 004<br>Blakely Farm, New Columbus Road; Greek Revival/Italianate, c.1860; Architecture (015) |
| 006 | C | Farm, New Columbus Road; Bungalow, 1936; Architecture (015)                                  |
| 007 | C | Williams House, New Columbus Road; Carpenter-Builder/Italianate, 1884; Architecture (015)    |
| 008 | N | Concrete House, 600 S; Vernacular, c.1900; Architecture, Vernacular/Construction (015)       |
| 009 | C | Haines Farm, U.S. 36; Carpenter-Builder/Free Classic, c.1900; Architecture (502)             |
| 010 | C | Farm, State Road 38; Italianate, c.1870; Architecture (502)                                  |

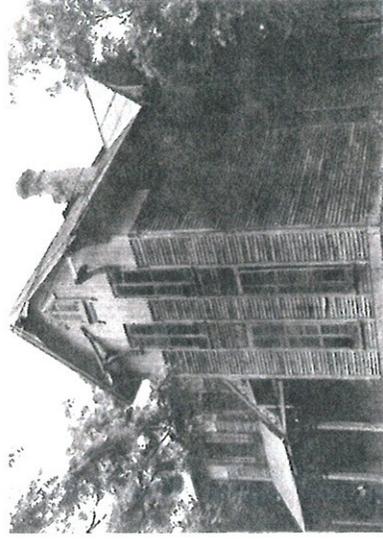
Figure 3: from Madison County Interim Report  
Indiana Historic Sites and Structures Inventory

PHASE I  
PHASE II

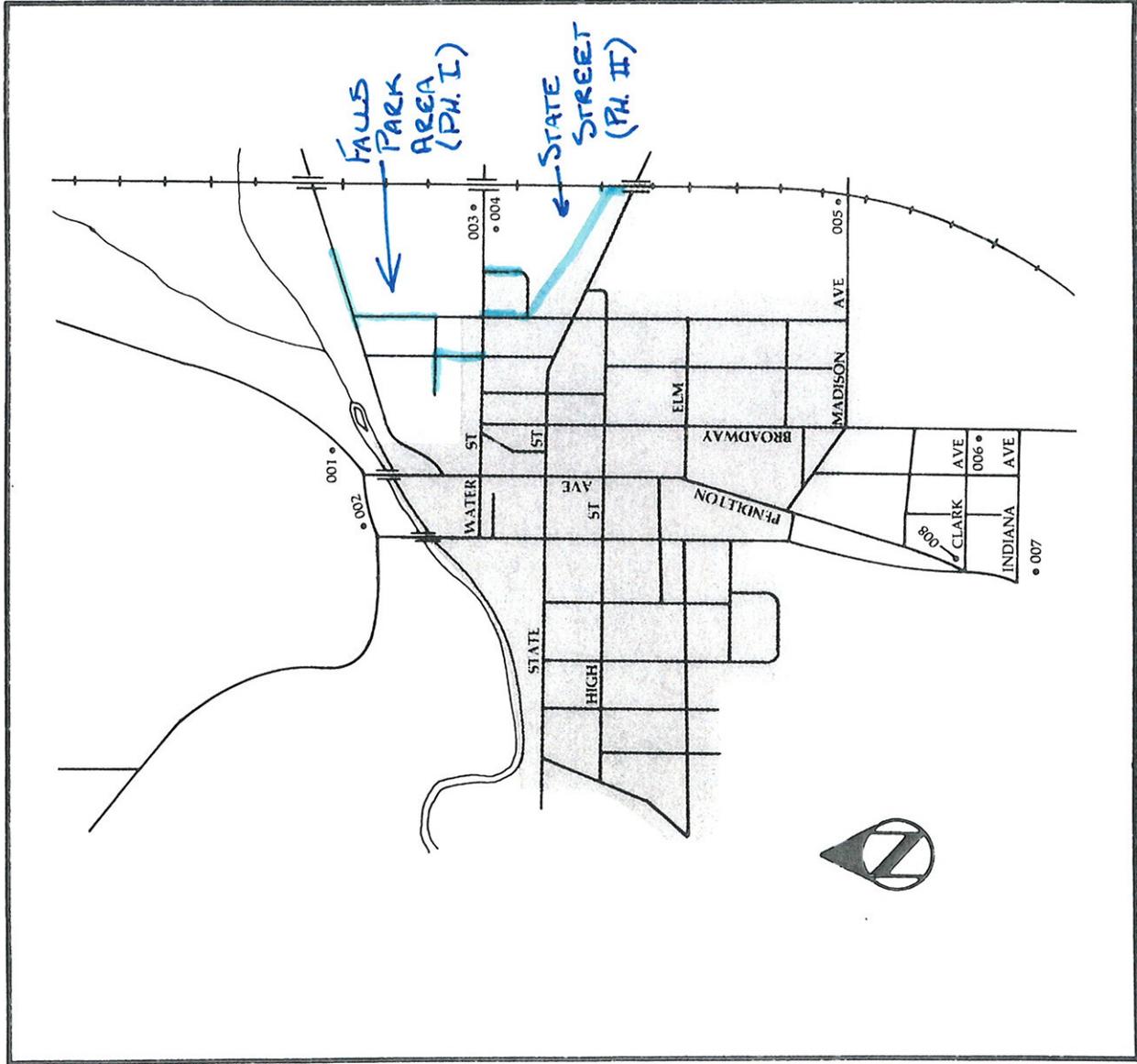
74  
Nov 9-24-10

# Pendleton Scattered Sites (62 )I-008)

| No. | Rtg. | Description   |
|-----|------|---|
| 001 | N    | House, North Pendleton Avenue; Italianate, 1871; Architecture (015)             |
| 002 | O    | House, Fall Creek Drive; Eastlake, c.1880; Architecture (015)                   |
| 003 | N    | House, East Water Street; Prairie, c.1908; Architecture (015)                   |
| 004 | N    | House, East Water Street; Free Classic, 1908; Architecture (015)                |
| 005 | C    | House, Madison Avenue; Carpenter-Builder/Queen Anne, c.1880; Architecture (015) |
| 006 | C    | House, 712 South Broadway; Carpenter-Builder, c.1860; Architecture (015)        |
| 007 | N    | House, South Pendleton Avenue; Italianate, c.1880; Architecture (015)           |
| 008 | N    | "Silver Hill," South Pendleton Avenue; Italianate, 1874-76; Architecture (015)  |



002



and 9-24-10

Figure 4: from Madison County Interim Report  
Indiana Historic Sites and Structures Inventory

# Pendleton Historic District (1001-656)

John Rogers was the first settler in the area of what is now known as Madison County. He arrived in the area in 1818 and located along Fall Creek. By the early 1820's, many pioneers had joined Rogers in a settlement known as "the Falls" on Fall Creek. Thomas McCartney erected a mill and owned a small store at the Falls. Though the concentration of pioneer homes around the Falls gave the appearance of a town, a town was not platted until 1830. That year, Thomas Pendleton had his property surveyed and platted, the original plat containing 46 lots.

The opening of the New Castle & Lafayette State Road in 1829 brought an influx of travelers into the area around Pendleton. Business and mills were built and the new town became an economic center of the area. The oldest building standing in Pendleton today dates from this early period. The Federal style James Gray House (410) on North Main Street was built by the wealthy businessman as his residence in the 1830's. It was later enlarged and is used as an inn today.

When Madison County was formed in 1823, Pendleton was the county seat. A building used temporarily as a courthouse was built on the west side of North Main Street in town. It was log and had dirt floors. By 1826, the county seat was moved to Anderson.

During its first ten years, Pendleton, or the Falls as it was known at that time, was a "boom town" and economic center on the new frontier. During the next twenty years, the town became well established. Completion of the railroad and telegraph brought new stimulus for growth of the town. In 1852, the Indianapolis &

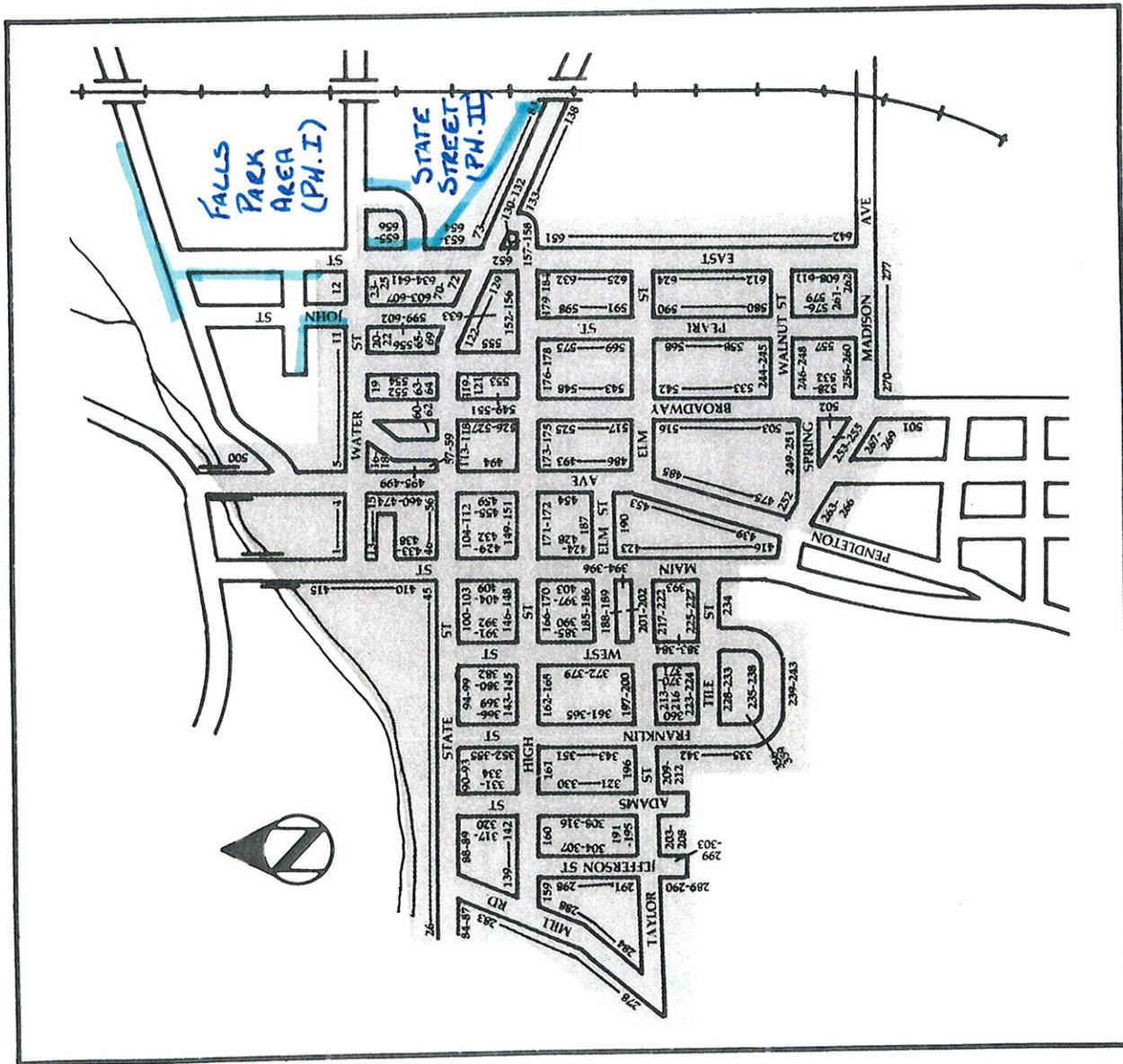
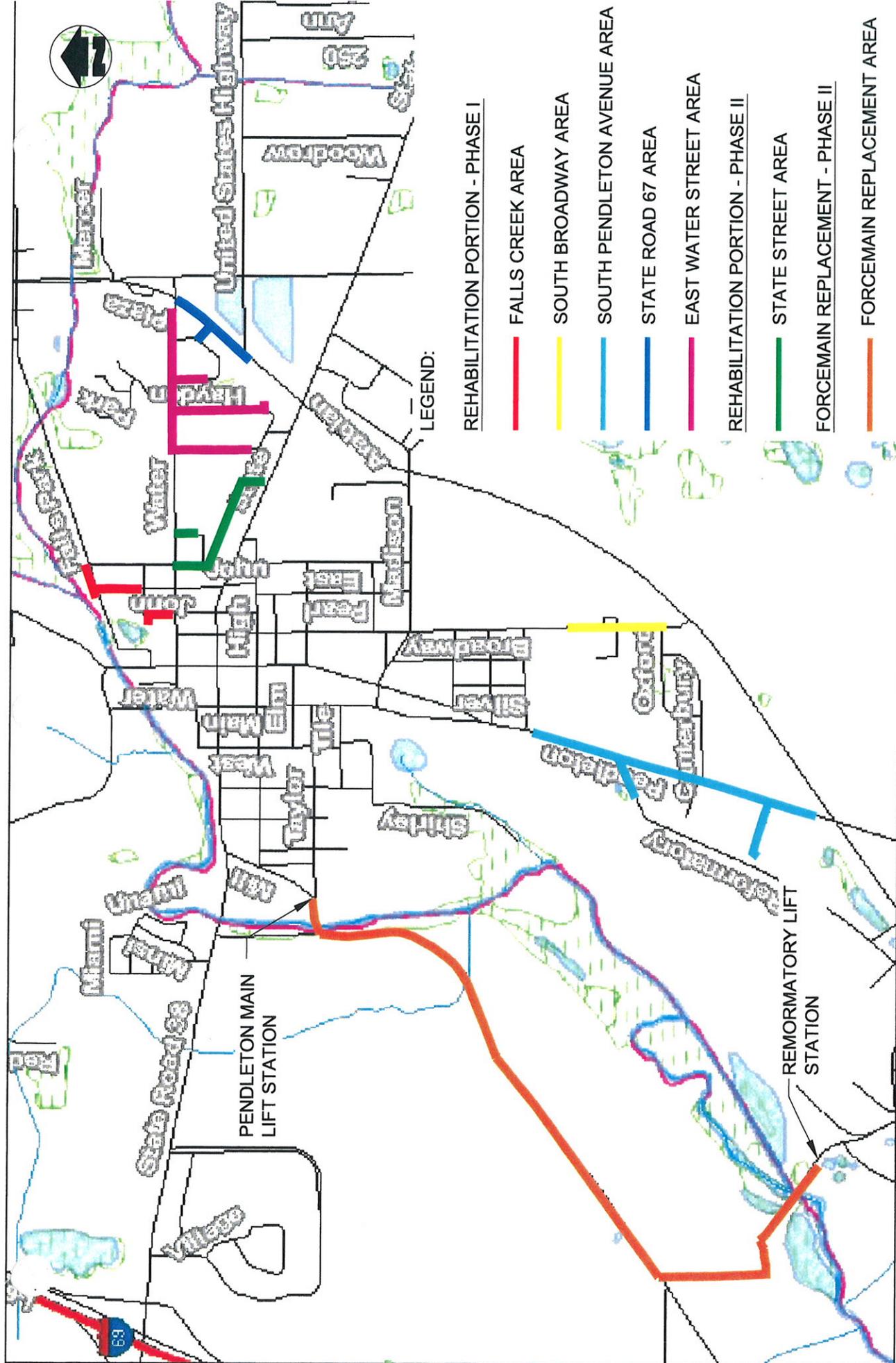
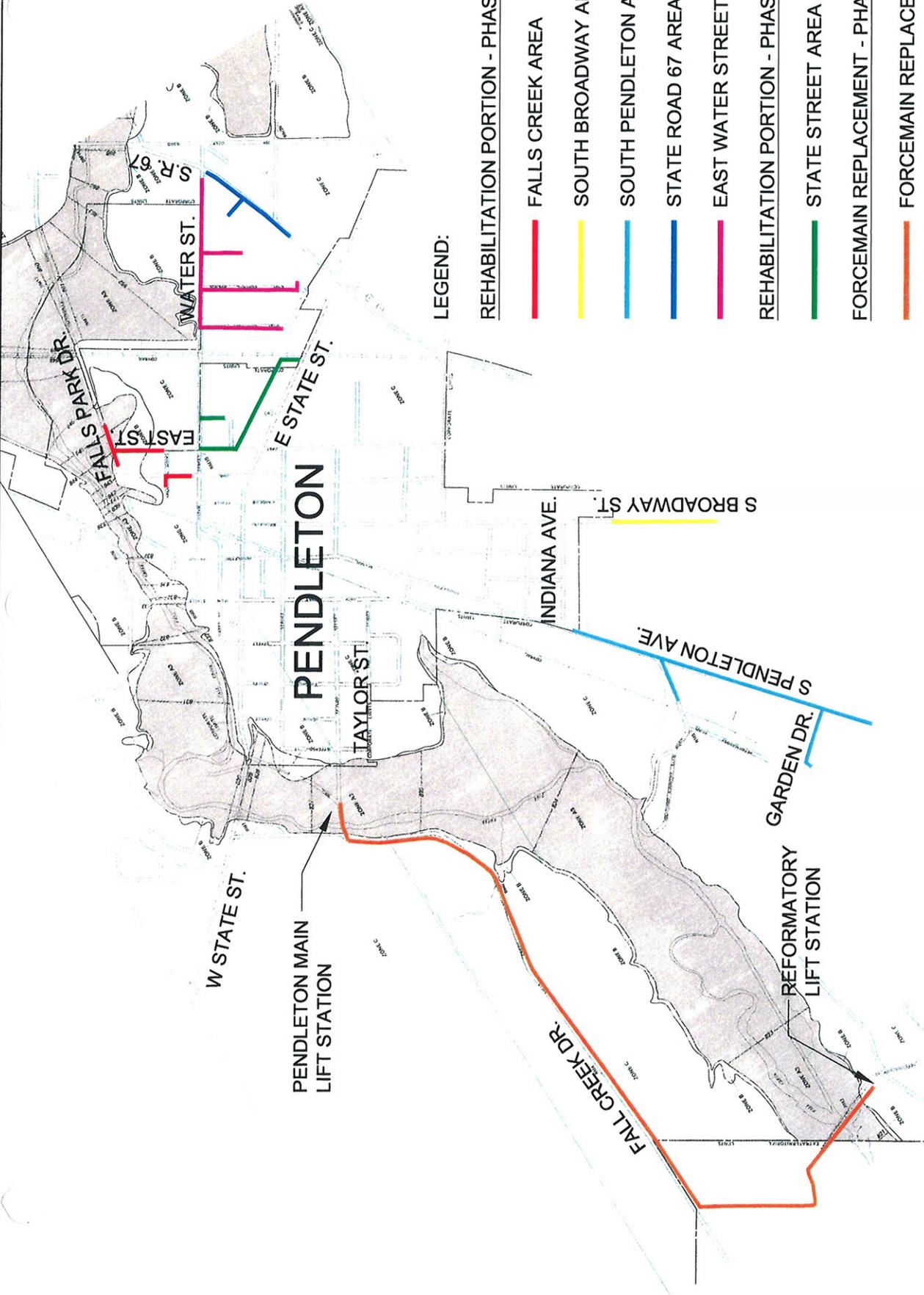


Figure 5: from Madison County Interim Report  
Indiana Historic Sites and Structures Inventory



|   |  |   |  |                         |                         |
|---|--|---|--|-------------------------|-------------------------|
| <br><b>Engineers • Architects • Planners</b> | <p>SCALE: 1" = 1500'</p>  | <p><b>WETLANDS MAP</b></p> <p>SANITARY SEWER REHABILITATION AND FORCEMAIN REPLACEMENT PROJECT<br/>FALL CREEK REGIONAL WASTE DISTRICT<br/>PENDLETON, INDIANA</p> |  | <p>PROJECT: 3290-17</p> | <p>FIGURE: <b>6</b></p> |
|   |  | <p>DRAWN: CDW</p>   |  | <p>DATE: 09-14-2010</p> |                         |



**LEGEND:**

**REHABILITATION PORTION - PHASE I**

FALLS CREEK AREA

SOUTH BROADWAY AREA

SOUTH PENDLETON AVENUE AREA

STATE ROAD 67 AREA

EAST WATER STREET AREA

**REHABILITATION PORTION - PHASE II**

STATE STREET AREA

**FORCEMAIN REPLACEMENT - PHASE II**

FORCEMAIN REPLACEMENT AREA

**FLOODPLAIN MAP**

SANITARY SEWER REHABILITATION AND  
FORCEMAIN REPLACEMENT PROJECT  
FALL CREEK REGIONAL WASTE DISTRICT  
PENDLETON, INDIANA

PROJECT:

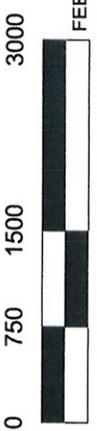
3290-17

DRAWN:

CDW

REV. DATE:

09-14-2010



SCALE: 1" = 1500'



**Engineers • Architects • Planners**

FIGURE:

**7**