



# State Revolving Fund Loan Programs

## Drinking Water, Wastewater, Nonpoint Source

---

### ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

---

#### TOWN OF BARGERSVILLE

#### Water Treatment Plant and System Improvements

#### Phase 1

#### STATE REVOLVING FUND PROJECT # DW 11044101

**DATE: May 23, 2011**

**TARGET PROJECT APPROVAL DATE: June 22, 2011**

#### I. INTRODUCTION

The above entity has applied to the Drinking Water State Revolving (WWSRF) Loan Program for a loan to finance all or part of the drinking water 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 DWSRF 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:

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

---

**ENVIRONMENTAL  
ASSESSMENT**

---

---

**I. PROJECT IDENTIFICATION**

Project Name and Address: Water treatment Plant and  
System Improvements  
Phase 1  
Town of Bargersville  
24 North Main Street  
PO Box 420  
Bargersville, IN 46106

Authorized Representative: Rowana Umbarger, Town Council President

SRF Number: DW 11044101

**II. PROJECT LOCATION AND BACKGROUND**

The project area is located in Bargersville, Indiana, in Morgan County and is in the Mooresville East quadrangle, Section 13, Township 13 North, Range 2 East. See Figure 1.02-1.

**III. PROJECT NEED AND PURPOSE**

The existing water treatment plant (WTP) serving the Bargersville drinking water system is currently exceeding over 90 percent of its design capacity and has received an early warning letter from the Indiana Department of Environmental Management (IDEM). The population in the 20 year service area is growing steadily, and peak demands have already surpassed the existing water treatment plant design capacity. In August 2010, the existing WTP operated 24 hours per day for several consecutive days to meet the water demand. Additionally, there is limited availability around the existing WTP and well fields to allow for expansion. Therefore, to meet the existing peak water demands, future projected water demands and augment the existing WTP during peak water demand periods, it is necessary to construct a new 6.0 million gallons per day (MGD) WTP as Phase 1.

**IV. PROJECT DESCRIPTION**

The project will consist of the construction of a new 6.0 MGD WTP with fluidized bed reactors, 100 KW electrical generator, two clarifiers, media blow down pit, recycle tank, lined backwash storage lagoon, storm water detention area, septic system, new electrical service, and SCADA system. See Figure 6.03-1.

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

**A. Selected Plan Estimated Cost Summary:**

<u>Description</u>	<u>Estimated Costs</u>
<b>Construction</b>	
Water Treatment Plant	\$ 10,242,700
Contingency	<u>392,000</u>
<i>Water Treatment Plant Construction Total</i>	<i>\$ 10,635,00</i>
<b>Non-Construction</b>	
Construction Engineering and PER Preparation	\$ 295,000
Administrative and Legal Fees	<u>70,000</u>
<i>Non-Construction Total</i>	<i>\$ 365,000</i>
<b>Total Project Cost</b>	<b>\$ 11,000,000</b>

- B.** Bargersville plans to finance the project through a 20-year SRF loan at an interest rate to be determined at the 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**

Under this alternative the capacity issues meeting peak water demand and operational issues would continue. This alternative was rejected for these reasons.

**Construction of a New Water Treatment Plant**

This is the selected alternative.

**Rehabilitation versus Replacement versus Expansion/Upgrade**

This alternative would require would require that new wells be developed close to the existing water treatment plant (WTP) and or expansion of the existing WTP. The existing WTP is surrounded by housing subdivisions and gravel pits, thereby not allowing for any expansion of the existing WTP and or their wells system in the area. Therefore, this alternative was rejected.

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

**A. Direct Impacts of Construction and Operation**

**Disturbed / Undisturbed Land:** The WTP will be constructed on undisturbed farmland. The water treatment plant construction will disturb and area of 525 feet by 400 feet, or approximately 5 acres. There will be no soil borrow areas. An archaeological field reconnaissance has been completed for this site.

**Structural Resources:** (Figure 5.02-1) The proposed project will not affect historic sites or districts, including sites on or eligible for listing on the National Register of Historic Places, according to the Morgan County Interim Reports and the historic sites information on the website of the Indiana Department of Natural Resources Division of Historic Preservation and Archaeology. The SRF's finding pursuant to Section 106 of the National Historic Preservation Act is: "no historic properties affected."

**Wetlands:** (Figure 5.03-1) Wetlands will not be impacted by the construction or operation of the proposed project. Mitigation measures to lessen and compensate for wetland impacts cited in comment letters about the project from the Indiana Department of Natural Resources (IDNR) and the US Fish and Wildlife Service (USFWS) will be implemented. Erosion control measures will be implemented during construction to ensure that nearby wetlands are not affected by runoff from the construction site not from dewatering operations. Dewatering flows will not be allowed to discharge directly to wetlands. An erosion control permit has been obtained for the project.

**Surface Waters:** The proposed project will not cross any streams. The 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).

**Floodplain:** (Figure 5.05-1) The proposed WTP will be installed within a floodway. Mitigation measures cited in comment letters will be implemented. Construction in a Floodway Permit has been obtained (ap # FW-25609).

**Groundwater:** Dewatering of the site may be necessary and may cause temporary lowering of the groundwater table. Interruption of well water supply during construction is not anticipated. If necessary, discharge from dewatering will be directed through a dewatering bag and then through a No. 2 stone filter bed prior to discharging into surrounding surface waters. Groundwater will not be adversely affected by construction of these projects. The project will not impact a sole source aquifer.

**Plants and Animals:** The construction and operation of the project will not negatively impact state or federal-listed endangered species or their habitat. The project will be implemented to minimize impact to non-endangered species and their habitat.

**Prime Farmland:** The project will cause conversion of approximately 5 acres of farmland.

**Air Quality:** Construction activities may generate some noise, fumes and dust. Construction activities should not impact ozone, airborne pollutants or other air quality concerns.

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

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

## **B. Indirect Impacts**

The Town's Preliminary Engineering Report (PER) states: *The Town 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, 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, Indiana Department of Natural Resources (IDNR), Indiana Department of Environmental Management (IDEM), and other environmental review authorities.*

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

In correspondence dated March 28, 2011 the Natural Resources Conservation Service stated: *The project to construct a new water treatment plant and to make other system improvements in the Town of Bargersville, Morgan and Johnson County, Indiana, as referred to in your letter received March 17, 2011, will cause conversion of prime farmland.*

Subsequent documentation provided by the Town of Bargersville states that 5 acres of prime farmland will be disturbed as a result of Phase I of this project.

This document is the first notice to the U.S. Fish and Wildlife Service (USFWS) the Indiana Department of Natural Resources (IDNR) Division of Historic Preservation and Archaeology, and the IDNR Division of Water.

## **VIII. MITIGATION MEASURES**

The City of Bargersville states in their PER that:

*Mitigation measures to lessen and compensate for wetland impacts cited in the comment letters about the project from the IDNR and the USFWS will be implemented. Erosion control measures will be implemented during construction to ensure that nearby wetlands are not affected by runoff from the construction site or from dewatering operations. Dewatering flows will not be allowed to discharge directly to wetlands.*

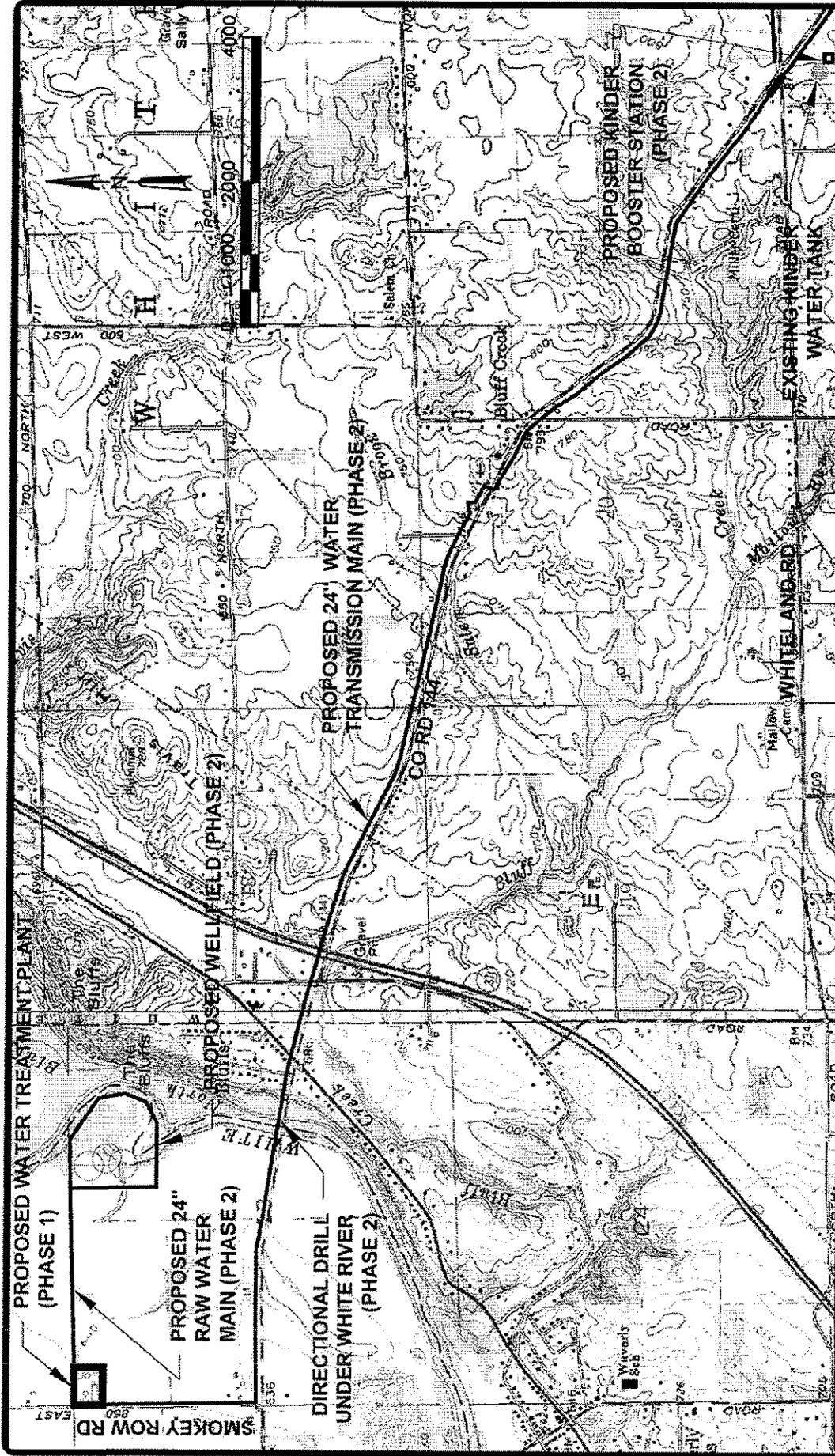
*Mitigation measures will be implemented during dewatering operations to control the amount of sediment discharged to surface water. Two of the measures include attaching a dewatering bag to the end of the discharge to filter out sediment and discharging through a no. 2 stone filter bed. The well facility needed to supply the new WTP will harvest groundwater as it flows by the well field and will not have a net impact on the groundwater in the area.*

*Mitigation measures cited (to protect plant/ animal resources) in comment letters from the IDNR and USFWS will be implemented.*

*Measures will be taken to minimize dust initiated by these construction activities. The completed project is not anticipated to impact existing air pollutants or create additional pollutants.*

## **IX. PUBLIC PARTICIPATION**

A properly noticed public hearing was held on March 30, 2011 at 7:00 pm at the Bargersville Municipal Building to discuss the project's preliminary engineering report. No comments on the project were voiced at the public hearing, and no written comments were submitted in the five-day period following the public hearing. Bargersville did receive written comments on April 14, 2011 which was after the 5-day public comment period. These comments have been addressed by Bargersville.

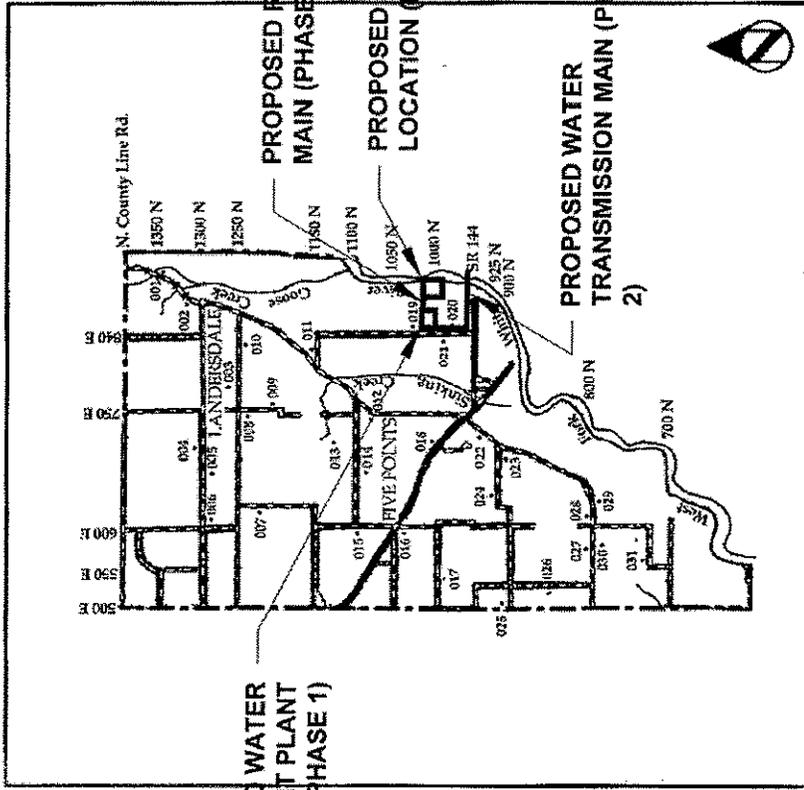


1-02-1  
4005-304

**PROJECT LOCATION**  
**PHASE 1 - WATER TREATMENT PLANT**

**BARGERSVILLE WATER TREATMENT PLANT AND SYSTEM IMPROVEMENTS**  
**TOWN OF BARGERSVILLE**  
**JOHNSON COUNTY, IN**

# Madison Township (00001-031)



Madison Township is located in the northeast corner of Morgan County. The topography is primarily level terrain with the White River forming the township's southeastern boundary.

The township's first permanent resident was Abner Cox who came to the area in 1824 and settled with his family in the township's northern section. Other settlers soon followed including Brothers Thomas, George H. and Joseph Becker, Joseph Hershaw and the Lawless family all of whom came to the area during the early 1820s.

Madison Township has no remaining towns. The township's main road is located in the township's northeast corner and is located along a major road but little is written about it. The William Lawless House (00002), an outstanding example of the Gothic Revival style, is one of the few buildings remaining in Landsdale. Five of the few buildings remaining along a major thoroughfare has been destroyed.

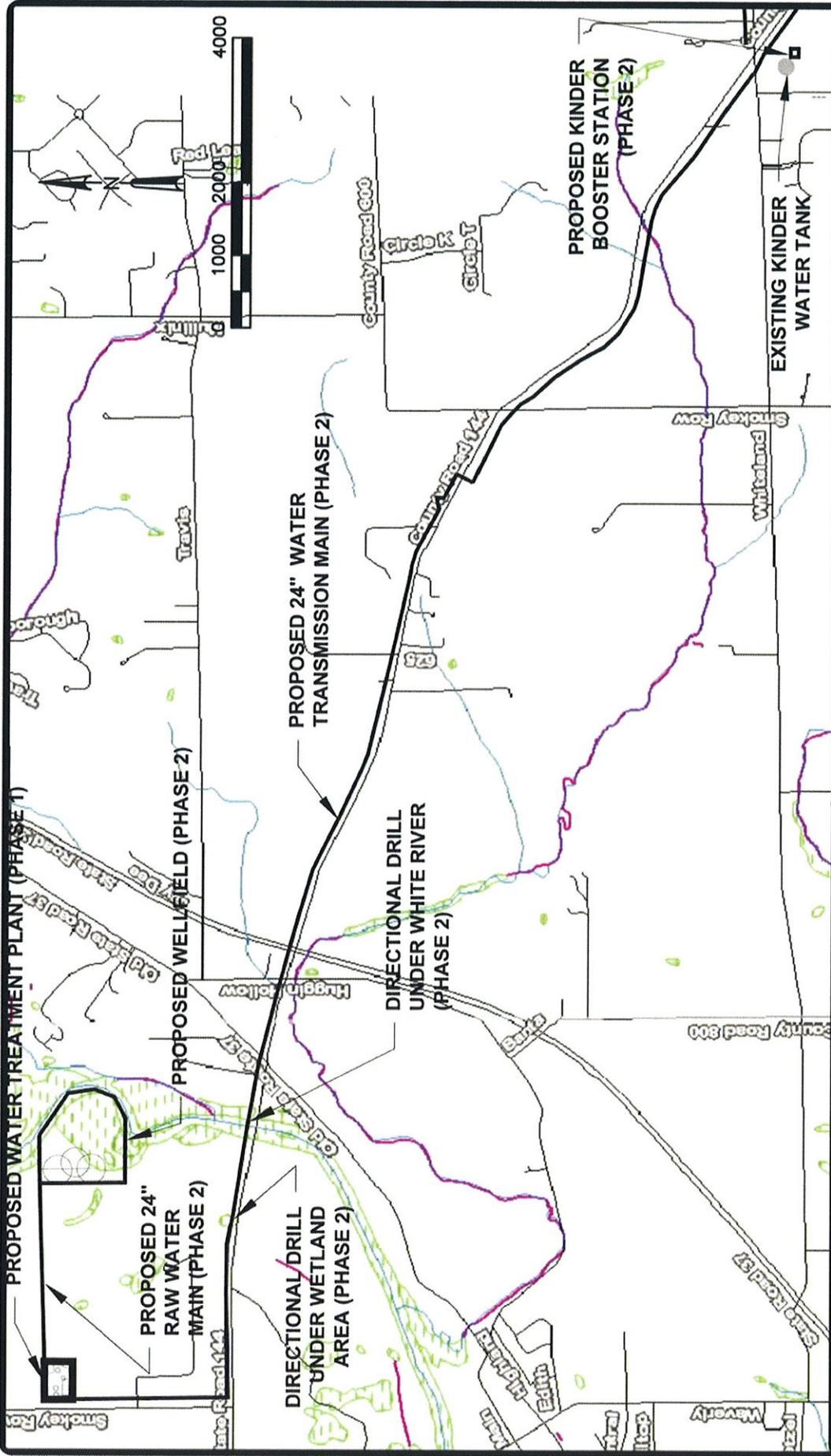
Few examples of pre-Civil War architecture remain in the township. The Thomas Watson House (00022) was built in 1849 and is one of the county's earliest extant homes. The Lancaster Centenary Road (00023) which dates to the 1840s, is a good example of the central-passage house form.

Much of the township's architecture dates to the late nineteenth century. A number of farmsteads attest to the modest prosperity of the area's farmers. Farms on 1250 N (00008), 850 E (00020), North Watson Road (00025), and Centenary Road (00030) are typical of the county's many late nineteenth century farm complexes.

Several religious congregations were organized in Madison Township. The Mount Olive Methodist Episcopal Church (00010) was established in 1878. The Centenary Methodist Episcopal Church (00029) was organized in 1866 and was named by Mrs. Louisa Slaughter in honor of the 1865 Methodist Church



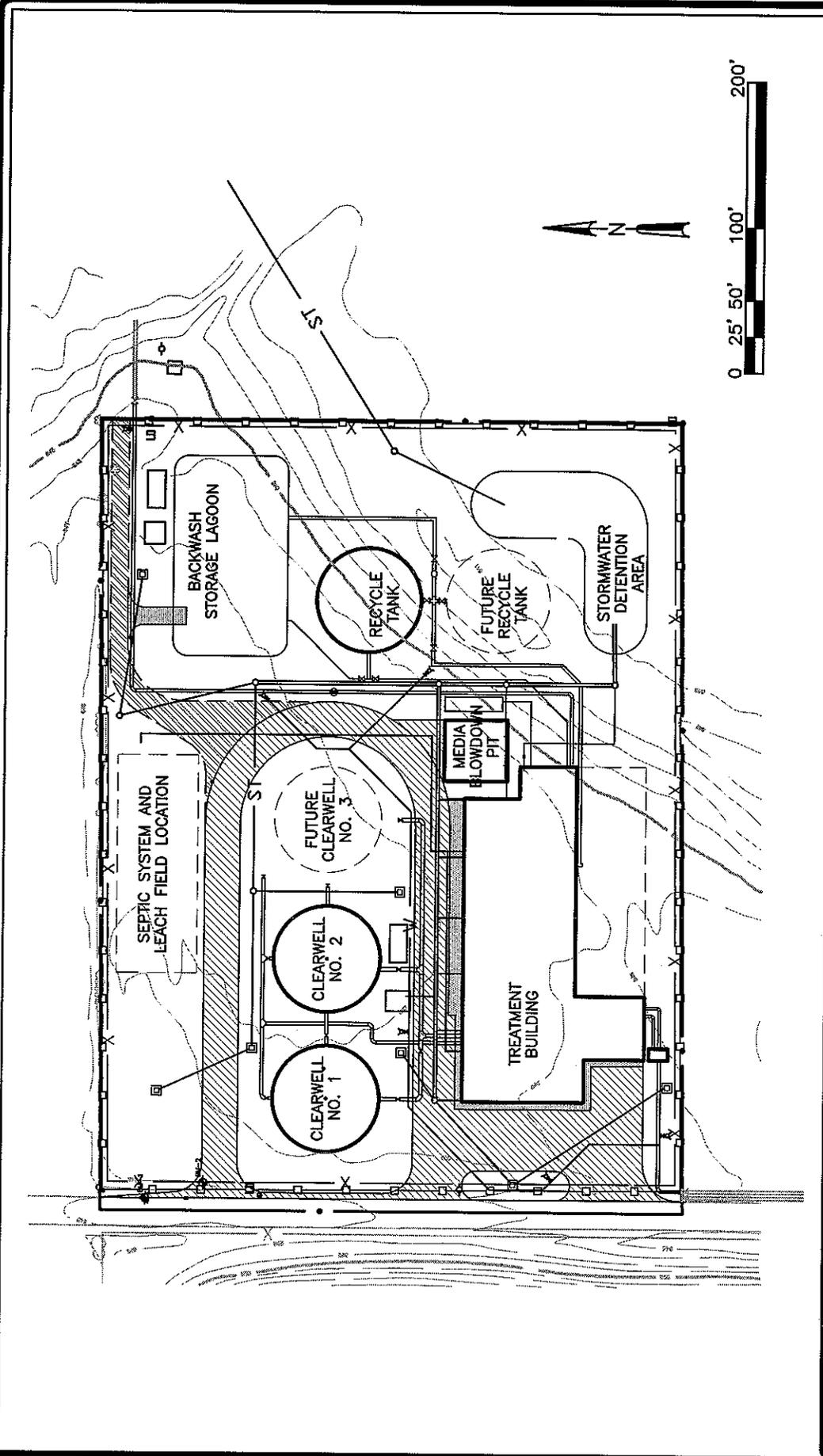
## HISTORICAL MAP PHASE 1 - WATER TREATMENT PLANT BARGERSVILLE WATER TREATMENT PLANT AND SYSTEM IMPROVEMENTS TOWN OF BARGERSVILLE JOHNSON COUNTY, IN



5.03-1  
4005-004

**WETLANDS MAP**  
**PHASE 1 - WATER TREATMENT PLANT**  
**BARGERSVILLE WATER PLANT AND SYSTEM IMPROVEMENTS**  
**TOWN OF BARGERSVILLE**  
**JOHNSON COUNTY, IN**





**WATER TREATMENT PLANT LAYOUT**

**BARGERSVILLE WATER TREATMENT PLANT AND SYSTEM UPGRADES  
TOWN OF BARGERSVILLE  
JOHNSON COUNTY, IN**



**e-03-1**  
4005-004

REVISED MAY 5, 2011