



State Revolving Fund Loan Programs Drinking Water, Wastewater, Nonpoint Source

ENVIRONMENTAL ASSESSMENT AND FINDING OF NO SIGNIFICANT IMPACT

TOWN OF CHESTERTON

MERIDIAN ROAD WASTEWATER COLLECTION AND TRANSPORT SYSTEM PRELIMINARY ENGINEERING REPORT STATE REVOLVING FUND PROJECT # WW 15 01 64 04

DATE: October 29, 2014

TARGET APPROVAL DATE: November 28, 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 Environmental Assessment (EA) attached to this Finding of No Significant Impact (FNSI). 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 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: **Meridian Road Wastewater Collection and Transport System**
Town of Chesterton
1490 Broadway
Chesterton, IN 46304

SRF Project Number: WW 15 01 64 04

Authorized Representative: Stephanie Kuziela, Clerk Treasurer

II. PROJECT LOCATION

The proposed collection and transport system will be located in Liberty Township in Porter County in Township 36 N, Range 5 W, in Sections 13, 14, 23 and 24 on the Chesterton Quadrangle map; see Figure 1.1 and Figure 1.2.

III. PROJECT NEED AND PURPOSE

The proposed project will transport wastewater generated from Fox Chase Farms residential subdivision and Whispering Sands mobile home community to the Town of Chesterton's sanitary collection system. The existing Fox Chase Farms septic/cluster treatment and collection system and Whispering Sands extended aeration treatment facility are aged and problematic, having had a number of failures resulting in environmental degradation.

IV. PROJECT DESCRIPTION

The selected alternative will abandon the Fox Chase Farms collection, treatment and disposal system; construct a low pressure sewer system for Fox Chase Farms; decommission the Whispering Sands wastewater treatment facility; construct a lift station to be located between the two communities; and construct a force main to transport wastewater to Chesterton's collection system. See Figure 6.1.

V. ESTIMATED PROJECT COSTS, AFFORDABILITY AND FUNDING

A. Selected Plan Estimated Cost Summary

Transport System

Lift Station - 400 gpm	\$309,000
8-inch Diameter Force Main	\$609,000
Air Release Valves and Vault	\$22,000
8-inch Diameter Gravity Sewer and Manholes	\$48,000
Bore and Jack Casing Pipe	\$52,000

Fox Chase Low Pressure Sewer

3-inch Diameter Low Pressure Sewer	\$137,000
4-inch Diameter Low Pressure Sewer	\$110,000
2-inch Diameter Low Pressure Laterals within ROW	\$108,000
Curb Stop, Cleanouts, Vaults	\$120,000

Subtotal Construction Cost	\$1,515,000
Contingency	\$152,000
Total Construction Cost	\$1,667,000
Non-Construction Costs	\$500,000
Total Estimated Project Cost	\$2,167,000

- B. Chesterton 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. The Whispering Sands portion of the project will be completed utilizing local funds.

VI. DESCRIPTION OF EVALUATED ALTERNATIVES

The “**No Action**” alternative is not a viable alternative. The results of not taking any corrective action will lead to further failure of the components in each of the systems.

A. Fox Chase Farms Collection System

Replacement Gravity Sewer in Fox Chase Farms Subdivision: This alternative would replace the existing collection network in Fox Chase Farms with conventional gravity sewers. Implementation would involve significant disturbance due to open-cut trenches and restoration costs would result in high project costs.

Replacement Low Pressure Sewer in Fox Chase Farms Subdivision: This alternative would replace the existing collection network in Fox Chase Farms with a new grinder pump/low pressure sewer network. Residents would connect their building sewer to a grinder pump station which consists of a basin, simplex grinder pump, float switches and a control panel. The grinder would cut and shred solids so that it can be moved through smaller diameter pipe. Installation can take place by horizontal directional drilling, resulting in less disturbance and construction cost savings. This is the chosen alternative to replace the Fox Chase Farms collection system.

B. Transport and Treatment

Rehabilitation of Whispering Sands Treatment Facility and Regionalization: This alternative would connect the Fox Chase Farms collection system to the Whispering Sands existing treatment facility, and implement improvements to the Whispering Sands treatment facility. The existing treatment facility is 45 years old, well past its useful life. The facility struggles to maintain compliance, and would not be able to increase flow rate to accommodate Fox Chase due to space constraints. Significant rehabilitation or construction of a new treatment facility would need to occur, and the current owners of the facility are not interested in remaining responsible for their wastewater treatment.

Regionalization with the Town of Chesterton: This alternative involves connecting both Fox Chase Farms and Whispering Sands wastewater to Chesterton's existing sewer system. Fox Chase Farms septic/cluster treatment system and Whispering Sands treatment facility would both be decommissioned. The most economical connection to Chesterton's system would be via force main, due to grade. A new lift station would be constructed between the two communities, and each would connect their collection system to the new lift station. Because this alternative includes eliminating two discharge locations and provides the best long-term treatment solution, it is the chosen transport and treatment alternative.

VII. ENVIRONMENTAL IMPACTS OF THE FEASIBLE ALTERNATIVES

A. Direct Impacts of Construction and Operation

Disturbed/Undisturbed Land: The project area includes existing neighborhoods and areas previously disturbed by utility and road construction. The proposed force mains will be installed utilizing horizontal directional drilling at a depth of four feet to reduce surface disturbance. The proposed low pressure sewers in the Fox Chase Farms subdivision will be within areas previously disturbed by road construction.

Structural Resources (Figures 5.2): 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 Porter County Interim Report 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.*"

Surface Waters: The project will not adversely affect Outstanding State Resource Waters (327 IAC 2-1.3-3(d)), Exceptional Use Streams (327 IAC 2-1-11(b)), Natural and Scenic Recreational Rivers and Streams (312 IAC 7-2), Salmonid Stream (327 IAC 2-1.5-5(a)(3)), or waters on the Outstanding Rivers list (NRCS Non- Rule Policy Document).

The project includes one stream crossing that will be completed utilizing horizontal directional drilling methods to reduce impacts to the stream.

Wetlands (Figure 5.3): Wetlands will not be impacted by the construction or operation of the project. The force main from Whispering Sands and north along Meridian Road will be installed using directional drilling construction methods to avoid impacts to nearby wetlands.

Floodplain (Figure 5.4): A portion of the project will be installed within the 100-year floodplain utilizing directional drilling methods to avoid impacts to the floodplain.

Groundwater: Dewatering may be required to temporarily lower the groundwater table in some areas during construction and modification. Minor fluctuations in groundwater levels will be temporary in nature. Discharge from dewatering activities will be filtered or settled to remove sediment and will not be directly discharged to any waterway, wetland, or storm water conveyance. Notes to this effect will be included in the project plans and specifications.

Plants and Animals: The construction and operation of the project will not negatively impact state or federal listed endangered species and their habitat. No tree impacts are anticipated as a result of this project.

Prime Farmland: The project will not cause a conversion of prime farmland.

Air Quality: The Chesterton PER states: *Air quality in the project area will only be impacted during construction, due to dust, exhaust and other construction activities. This will be a short-term impact on air quality.* The project is located in a residential and agricultural area.

Open Space and Recreational Opportunities: The construction of the proposed project will neither create nor destroy open space or recreational opportunities.

Lake Michigan Coastal Zone Program: The project is located within the Lake Michigan Coastal Zone boundary. The project will not affect the Lake Michigan Coastal Program.

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

B. Indirect Impacts

The Town of Chesterton's Preliminary Engineering Report (PER) states: *Any new home construction on the vacant lots in Fox Chase Farms would be regulated by the Porter County Building Department and Plan Commission offices, whom will ensure that future development will not adversely affect wetlands, wooded areas, steep slopes, archaeological/ historical/ structural resources, or other sensitive environmental resources.*

C. Comments from Environmental Review Authorities

In correspondence dated September 24, 2014, the Natural Resources Conservation Service stated: *The project to make sanitary sewer improvements in the Town of Chesterton, Porter County, Indiana, as stated in the letter received September 16, will not cause a conversion of prime farmland.*

This document is the first notice to U.S. Fish and Wildlife Service (USFWS), the DNR Environmental Unit and the Division of Historic Preservation and Archaeology.

VIII. MITIGATION MEASURES

The Town of Chesterton's PER states: *Construction related impacts are primarily short-term effects resulting from construction activities. Mitigation measures for these impacts are the responsibility of the contractor, and are governed by requirements in the project plans and specifications, and appropriate regulations.*

Erosion and sediment control measures are required by the project specifications. The specifications require the contractor provide an erosion and sediment control program consisting of a project schedule, along with a description of measures to be used during construction for erosion

and sediment control. Adherence to the required plan will minimize adverse impacts from erosion and sedimentation.

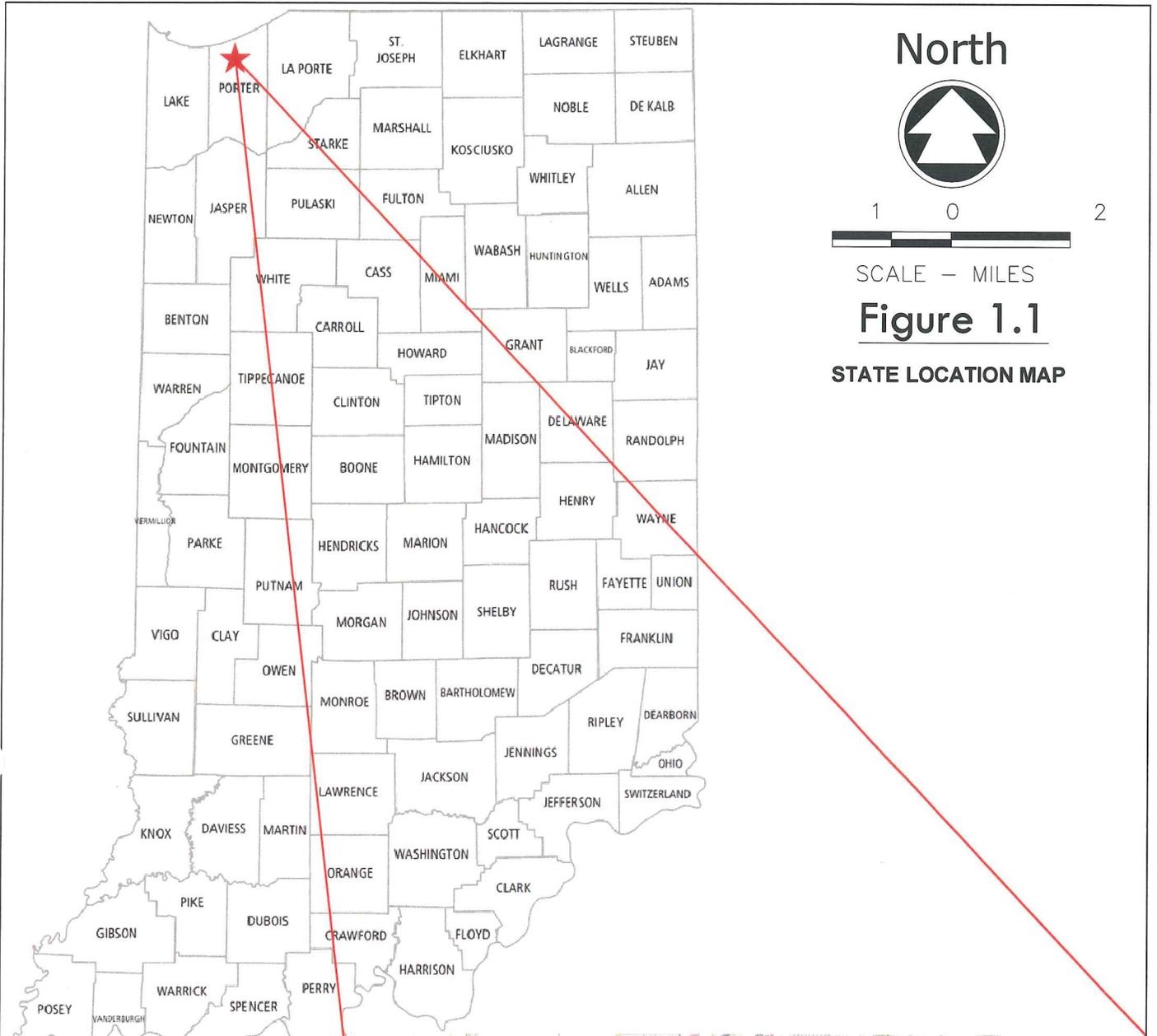
The specifications will required the contractor to provide dust control measures. These measures generally consist of periodic watering of the construction area.

Traffic control during construction activities will adhere to appropriate requirements.

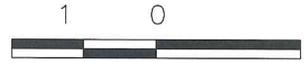
Mitigation of Operation Impacts: Proper operation and maintenance of the lift station, force main, and low pressure sewer system will improve the reliability of the components, leading to long term proper collection and transport of the wastewater from Fox Chase and Whispering Sands to the Town of Chesterton.

IX. PUBLIC PARTICIPATION

A properly noticed public hearing was held on September 15, 2014, at 7:00 pm at the Chesterton Town Hall to discuss the PER. Questions regarding monthly rates and a nearby system were addressed during the hearing. No written comments were received during the 5-day comment period following the hearing.



North

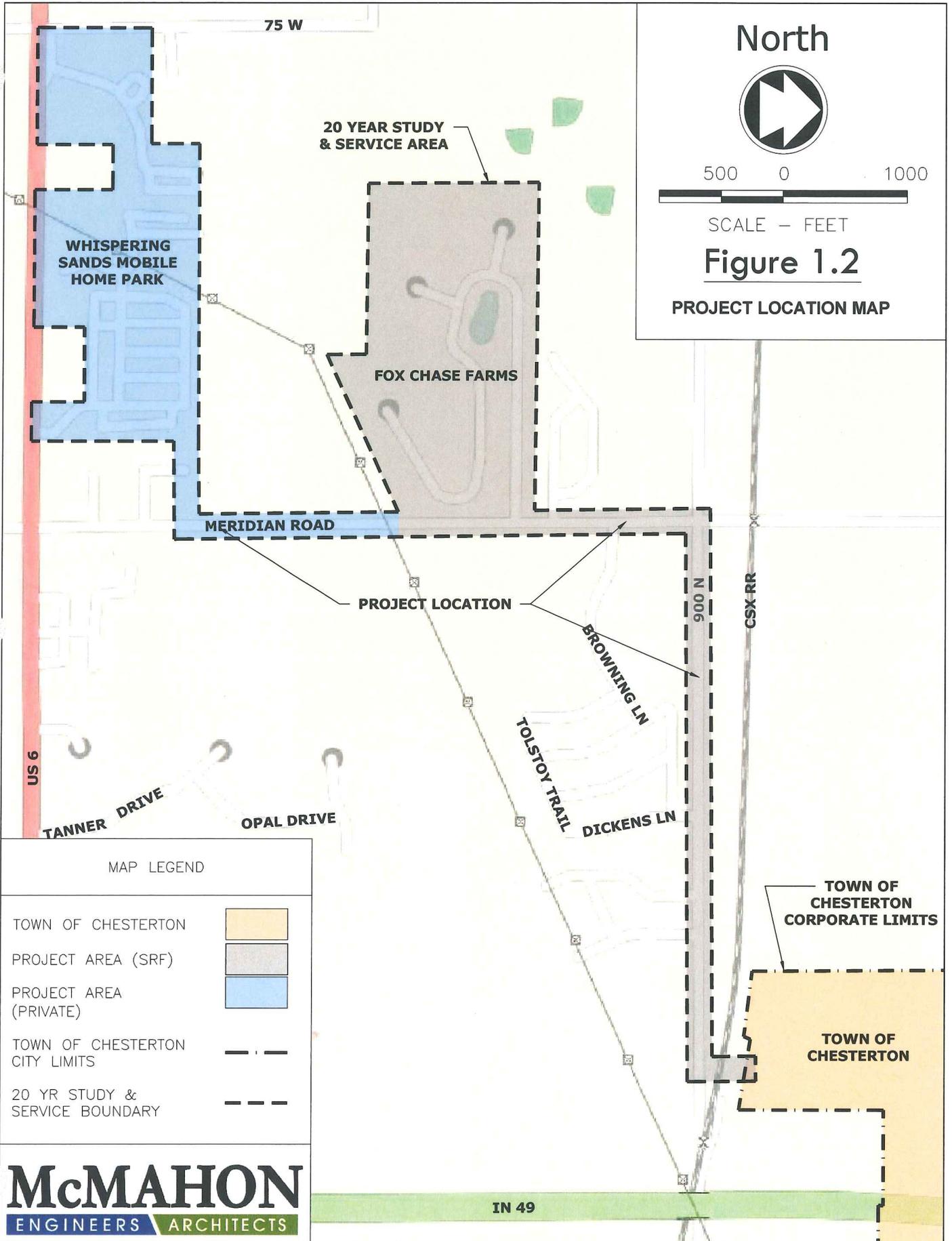


SCALE - MILES

Figure 1.1

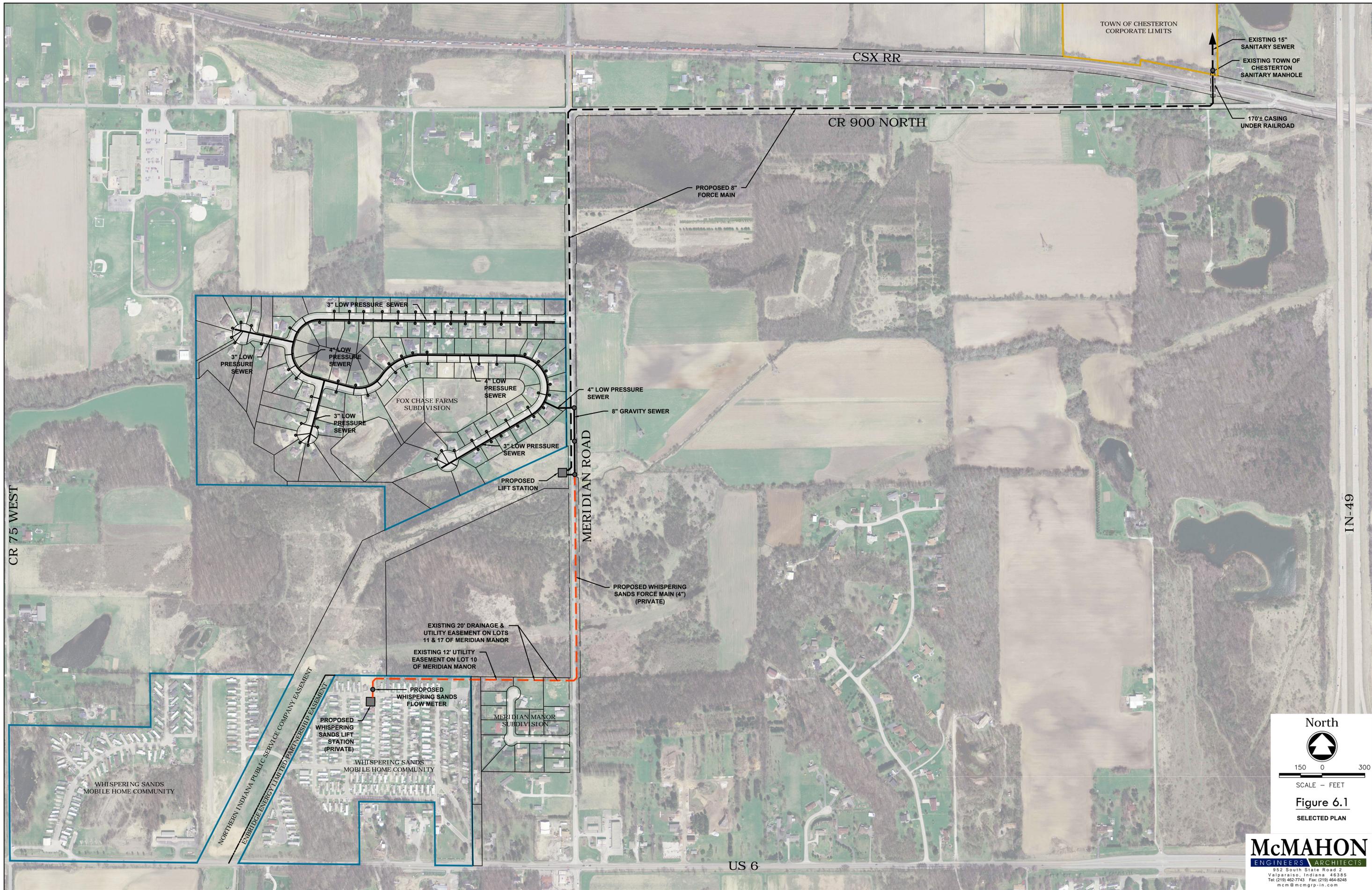
STATE LOCATION MAP





MAP LEGEND

TOWN OF CHESTERTON	
PROJECT AREA (SRF)	
PROJECT AREA (PRIVATE)	
TOWN OF CHESTERTON CITY LIMITS	
20 YR STUDY & SERVICE BOUNDARY	



TOWN OF CHESTERTON CORPORATE LIMITS

EXISTING 15" SANITARY SEWER

EXISTING TOWN OF CHESTERTON SANITARY MANHOLE

170" CASING UNDER RAILROAD

CSX RR

CR 900 NORTH

PROPOSED 8" FORCE MAIN

3" LOW PRESSURE SEWER

4" LOW PRESSURE SEWER

3" LOW PRESSURE SEWER

3" LOW PRESSURE SEWER

3" LOW PRESSURE SEWER

4" LOW PRESSURE SEWER

4" LOW PRESSURE SEWER

4" LOW PRESSURE SEWER

3" LOW PRESSURE SEWER

3" LOW PRESSURE SEWER

FOX CHASE FARMS SUBDIVISION

MERIDIAN ROAD

PROPOSED WHISPERING SANDS FORCE MAIN (4") (PRIVATE)

EXISTING 20' DRAINAGE & UTILITY EASEMENT ON LOTS 11 & 17 OF MERIDIAN MANOR

EXISTING 12' UTILITY EASEMENT ON LOT 10 OF MERIDIAN MANOR

PROPOSED WHISPERING SANDS FLOW METER

PROPOSED WHISPERING SANDS LIFT STATION (PRIVATE)

WHISPERING SANDS MOBILE HOME COMMUNITY

MERIDIAN MANOR SUBDIVISION

WHISPERING SANDS MOBILE HOME COMMUNITY

NORTHERN INDIANA PUBLIC SERVICE COMPANY EASEMENT

ENBRIDGE ENERGY LIMITED PARTNERSHIP EASEMENT

IN-49

US 6

North



150 0 300

SCALE - FEET

Figure 6.1

SELECTED PLAN

McMAHON

ENGINEERS ARCHITECTS

952 South State Road 2
Valparaiso, Indiana 46385
Tel: (219) 462-7745 Fax: (219) 464-8046
mcm@mcmgrp-in.com

Historic Site No.

017 C House, Meridian Road; Cottage, c.1910;
Vernacular/Construction

018 C Farm, Meridian Road; House: Bungalow, c.1927; Outbuildings:
livestock barn, silo, chicken house, windmill, milk house,
drive-in corncrib, shed; architecture, Vernacular/Construction

North



1 0 2



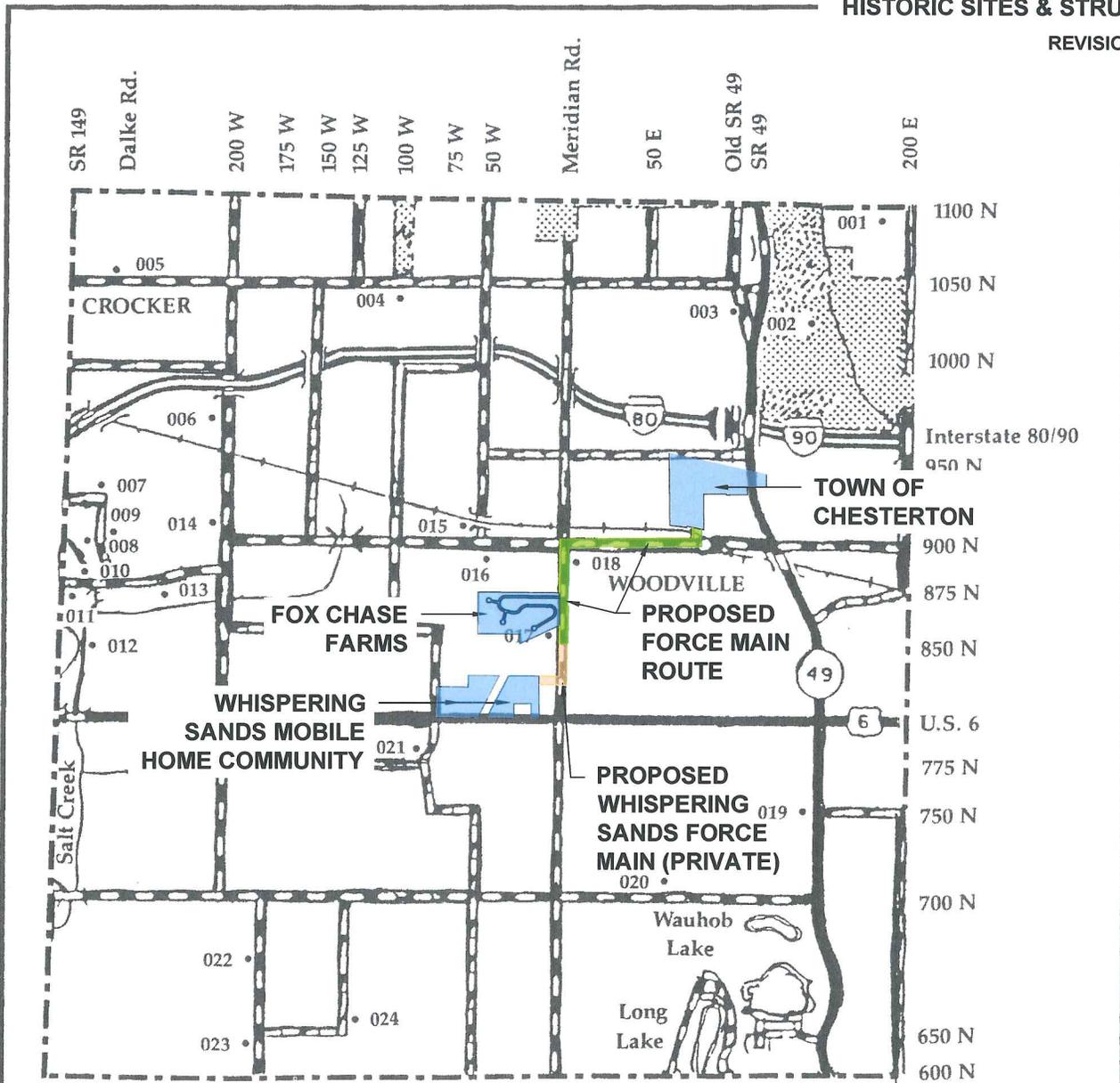
SCALE - FEET

Liberty Township (15001-024)

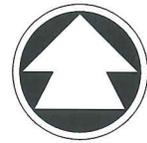
Figure 5.2

HISTORIC SITES & STRUCTURES

REVISION 09/26/2014



North



500 0 1000

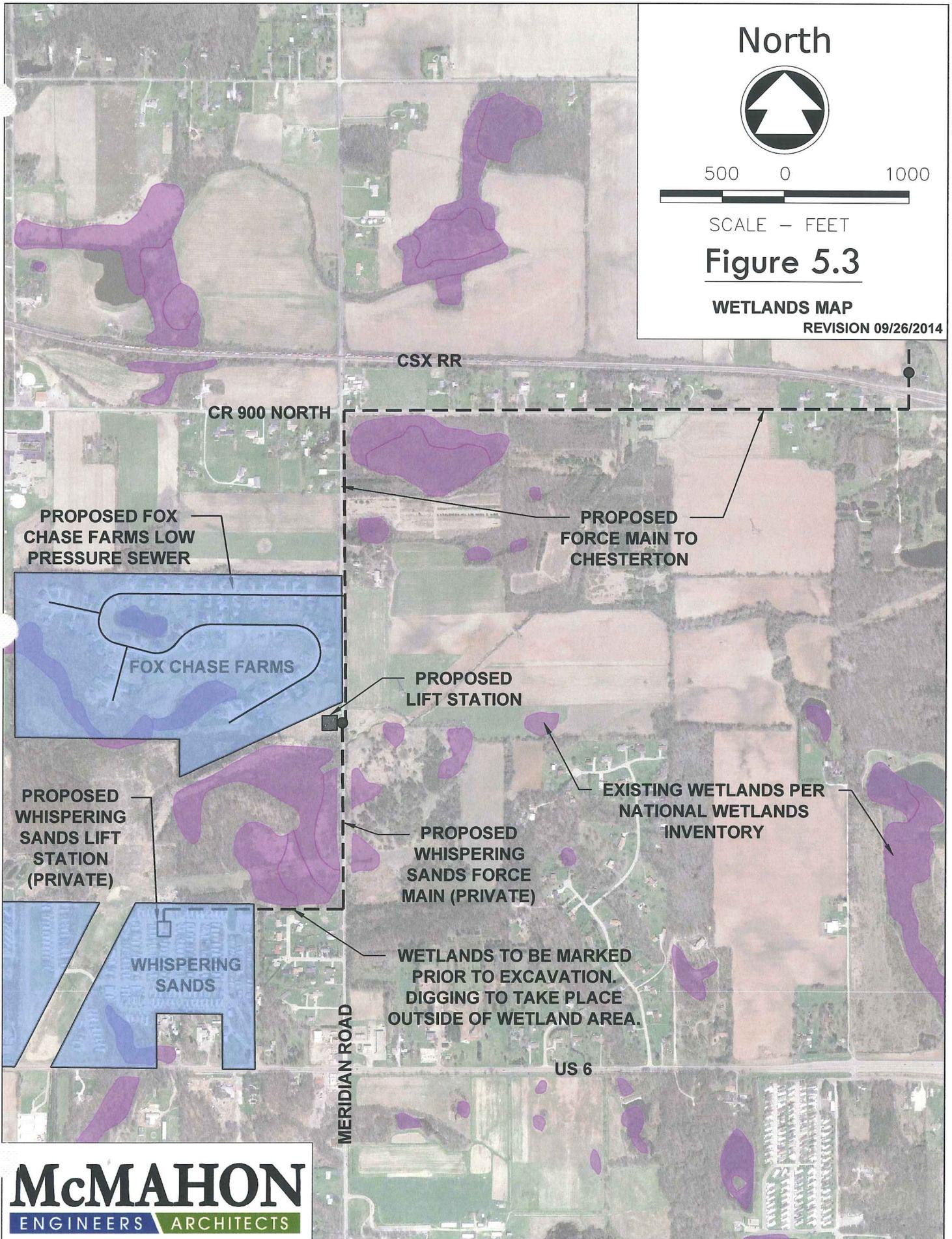


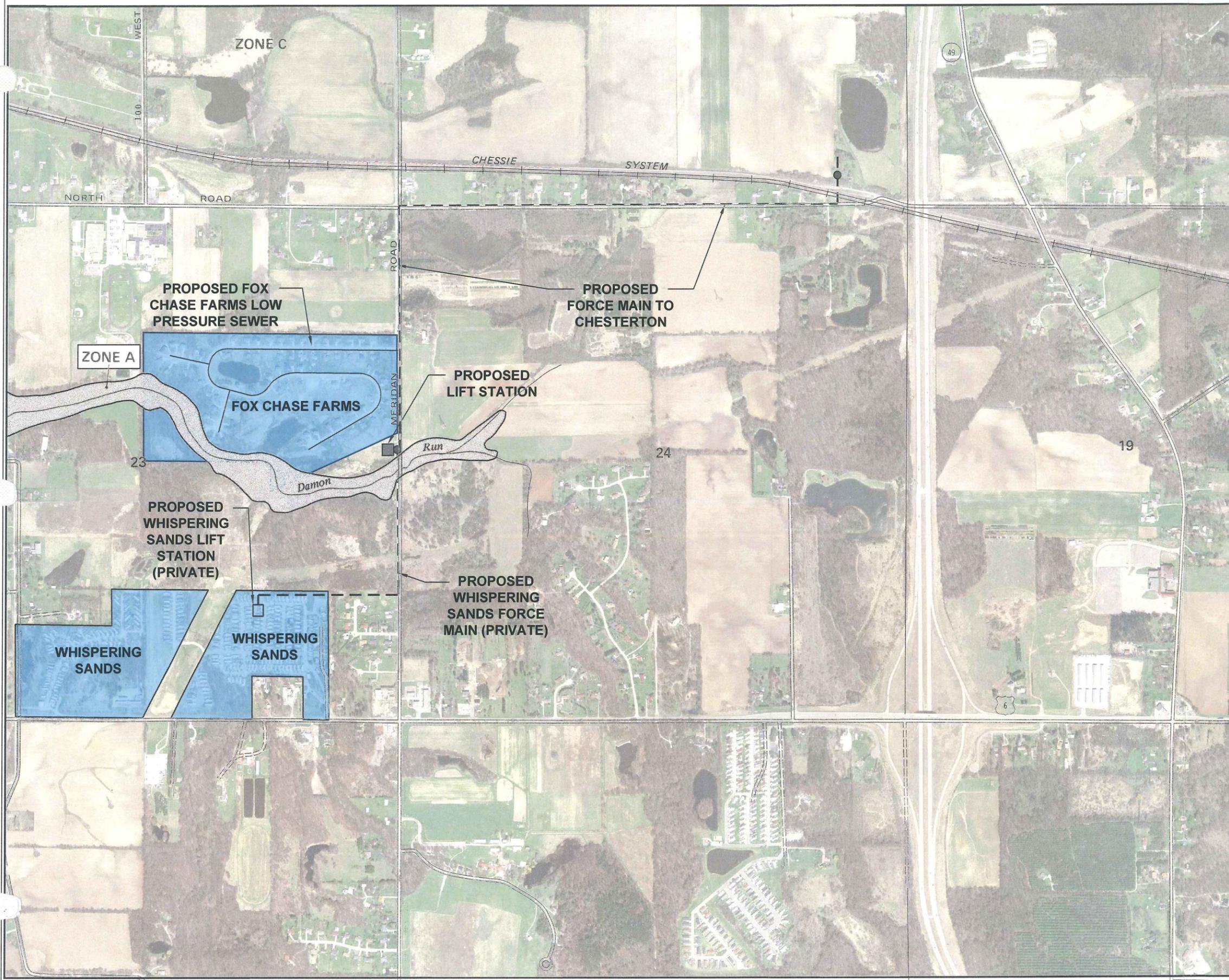
SCALE - FEET

Figure 5.3

WETLANDS MAP

REVISION 09/26/2014





APPROXIMATE SCALE
 1000 0 1000 FEET

Figure 5.4

100 YR FLOODPLAIN & FLOODWAY MAP
NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

COUNTY OF
PORTER,
INDIANA
 (UNINCORPORATED AREAS)

PANEL 60 OF 190
 (SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
180425 0060 B
EFFECTIVE DATE:
APRIL 1, 1982



federal emergency management agency
 federal insurance administration

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