

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 9, 2015

B. DISTRICT OFFICE, FILE NAME, AND NUMBER: Detroit District, Michiana Branch, Bridgewater Golf Course - Stand Alone JD, LRE-1998-1170040-A14

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State: Indiana County/parish/borough: Dekalb City: near Auburn
Center coordinates of site (lat/long in degree decimal format): Lat. 41.38626° N, Long. -85.03334° W.
Universal Transverse Mercator: Zone 16, X 664340, Y 4583673

Name of nearest waterbody: Cedar Creek

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Maumee River

Name of watershed or Hydrologic Unit Code (HUC): 4100003

- Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
 Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):

- Office (Desk) Determination. Date: January 13-14, 2015
 Field Determination. Date(s): December 10, 2014

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- Waters subject to the ebb and flow of the tide.
 Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Are** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- TNWs, including territorial seas
 Wetlands adjacent to TNWs
 Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
 Non-RPWs that flow directly or indirectly into TNWs
 Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
 Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
 Impoundments of jurisdictional waters
 Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: 678 linear feet: width (ft) and/or acres.
Wetlands: 4.62 acres.

c. Limits (boundaries) of jurisdiction based on: 1987 Delineation Manual

Elevation of established OHWM (if known): .

2. Non-regulated waters/wetlands (check if applicable):³

- Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain: **The features labeled Section II: Isolated Wetland, Section III: Isolated Wetland, and Section IV: Isolated**

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

Wetland on the attached schematic were inspected on December 10, 2014 and during the site visit no hydrologic surface or subsurface connection to downstream waters of the United States was observed. Additional review of applicable USGS Topo maps, aerial photography, and county drainage maps do not indicate the presence of hydrologic surface or subsurface connection to downstream waters (i.e., the water(s) is/are not part of a tributary system to a TNW). Section II is a depressionnal wetland entirely surrounded by upland agricultural fields. Section III is an excavated depressionnal wetland surrounded by upland forest and agricultural field. Section IV is a forested wetland adjacent to an excavated pond (pond is outside of delineation limits). This man-made pond, according to the consultant, is part of a closed-loop-system used to pump water to create a water-feature at the clubhouse entrance. The feature labeled Detention Pond on the attached schematic is a man-made detention pond / golf course pond that was excavated out of upland, and is therefore not considered a water of the United States.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**

Identify TNW: .

Summarize rationale supporting determination: .

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”: .

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

(i) **General Area Conditions:**

Watershed size: 175,000 acres

Drainage area: 175,000 acres

Average annual rainfall: 37 inches

Average annual snowfall: 28 inches

(ii) **Physical Characteristics:**

(a) **Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through 2 tributaries before entering TNW.

Project waters are 30 (or more) river miles from TNW.

Project waters are 1 (or less) river miles from RPW.

Project waters are 20-25 aerial (straight) miles from TNW.

Project waters are 1 (or less) aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW⁵: Cedar Creek, a RPW, flows to the St. Joseph River which joins the St. Mary's River to form the Maumee River, a TNW.

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

Tributary stream order, if known: .

(b) **General Tributary Characteristics (check all that apply):**

Tributary is: Natural
 Artificial (man-made). Explain: .
 Manipulated (man-altered). Explain: Cedar Creek is a natural stream of which the upper portions have been straightened and deepened (channelized) to support agricultural drainage.

Tributary properties with respect to top of bank (estimate):

Average width: 75 feet
Average depth: . feet
Average side slopes: **2:1**.

Primary tributary substrate composition (check all that apply):

Silts Sands Concrete
 Cobbles Gravel Muck
 Bedrock Vegetation. Type/% cover:
 Other. Explain: .

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: vegetated (forested) banks .

Presence of run/riffle/pool complexes. Explain: .

Tributary geometry: **Relatively straight**

Tributary gradient (approximate average slope): %

(c) **Flow:**

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime: Cedar Creek has perennial, year around flow.

Other information on duration and volume: Cedar Creek is a RPW with constant flow and is classified as Riverine, Stream Bed, Permanently Flooded (RSBH).

Surface flow is: **Discrete and confined**. Characteristics: .

Subsurface flow: **Pick List**. Explain findings: .

Dye (or other) test performed: .

Tributary has (check all that apply):

Bed and banks
 OHWM⁶ (check all indicators that apply):
 clear, natural line impressed on the bank the presence of litter and debris
 changes in the character of soil destruction of terrestrial vegetation
 shelving the presence of wrack line
 vegetation matted down, bent, or absent sediment sorting
 leaf litter disturbed or washed away scour
 sediment deposition multiple observed or predicted flow events
 water staining abrupt change in plant community
 other (list):
 Discontinuous OHWM.⁷ Explain: .

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

High Tide Line indicated by: Mean High Water Mark indicated by:
 oil or scum line along shore objects survey to available datum;
 fine shell or debris deposits (foreshore) physical markings;
 physical markings/characteristics vegetation lines/changes in vegetation types.
 tidal gauges
 other (list):

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: Cedar Creek carries water received from a primarily agricultural landscape. Water quality would be expected

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

to be fair to poor with overland runoff during precipitation events and snow melt from the surrounding development and agricultural fields having a negative impact on water quality.

Identify specific pollutants, if known: Specific pollutants could include sediments, pesticides, fertilizers and nutrients (field application of manure).

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width): The 250' wide forested riparian zone could provide habitat and a travel corridor for multiple wildlife species.
- Wetland fringe. Characteristics:
- Habitat for:
- Federally Listed species. Explain findings: The forested riparian corridor could provide habitat for the federally listed Indiana bat (*Myotis sodalis*).
- Fish/spawn areas. Explain findings:
- Other environmentally-sensitive species. Explain findings: *Ptychobranthus fasciolaris*, the Kidneyshell mussel is a state listed species found in Cedar Creek downstream of the project area.
- Aquatic/wildlife diversity. Explain findings: Downstream of the project area, Cedar Creek is listed as an Outstanding State Resource Water and is one of four streams in Indiana's Natural, Scenic and Recreational Rivers System.

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: Section I = 0.53 acres

Wetland type. Explain: Section I is a forested wetland.

Wetland quality. Explain: Wetland Section I continues off-site to the north and is part of a large NWI forested wetland complex adjacent to Cedar Creek. Quality would be fair to low because of farming impacts.

Project wetlands cross or serve as state boundaries. Explain: No wetlands within the review area cross or serve as state boundaries.

(b) General Flow Relationship with Non-TNW:

Flow is: **Intermittent flow**. Explain: Topography and soil mapping suggests potential flow through Section I to Cedar Creek.

Surface flow is: **Overland sheetflow**

Characteristics: Topography and soil mapping suggests potential flow through Section I to Cedar Creek.

Subsurface flow: **Unknown**. Explain findings: Soil mapping suggests potential flow through Section I to Cedar Creek.

Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain: Section I is a portion of a large wetland/forest complex abutting Cedar Creek.

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **30 (or more)** river miles from TNW.

Project waters are **20-25** aerial (straight) miles from TNW.

Flow is from: **Wetland to navigable waters**.

Estimate approximate location of wetland as within the **100 - 500-year** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain: In general, the wetland receive overland flow from agricultural fields and a golf course development.

Identify specific pollutants, if known: Section I is surrounded primarily by agriculture land mixed with some residential development, including a golf course. Water quality is considered to be fair with overland run-off from the development and the agricultural land to have a negative impact on water quality.

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

Riparian buffer. Characteristics (type, average width):

Vegetation type/percent cover. Explain: Wetland Section I is forested, providing vegetative diversity within a farmed or mowed landscape.

Habitat for:

Federally Listed species. Explain findings: The forested wetlands could provide habitat for the endangered Indiana bat (*Myotis sodalis*).

Fish/spawn areas. Explain findings:

Other environmentally-sensitive species. Explain findings: "Forested swamps" are designated "Critical Wetlands and/or Critical Aquatic Sites" in the state of Indiana.

Aquatic/wildlife diversity. Explain findings: The forest cover with its diversity of plants would provide habitat for multiple species within a landscape that is dominated by agriculture and other development.

3. Characteristics of all wetlands adjacent to the tributary (if any)

All wetland(s) being considered in the cumulative analysis: **1**

Approximately (0.53) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>	<u>Directly abuts? (Y/N)</u>	<u>Size (in acres)</u>
Section I (Y)	0.53		

Summarize overall biological, chemical and physical functions being performed: According to 2005 study of the Cedar Creek Watershed pollutants were one of the many factors having a negative impact on water quality. Some of the pollutants that are affecting the water quality of Cedar Creek outlined in the report included, but are not limited to sediment, nutrients which include nitrogen, phosphate, and toxins from pesticides and herbicides. Because Section I is located in a predominantly agricultural setting with some residential development, it provides some ability to help trap sediment, nutrients, and toxins before water enters into Cedar Creek, the St. Joseph River and ultimately the Maumee River, a TNW. The report also stated that wetland loss was one of the many factors that are increasing the levels of pollutants into the St. Joseph River. The wetland, although small, does provide filtration of pollutants. The St. Joseph River is the source of drinking water for the City of Fort Wayne, the second largest city in the state of Indiana. Additionally, the wetland serves to slow and retain floodwaters during storm events. The downstream St. Joseph River and Maumee River in Fort Wayne are part of a USACE constructed flood control project; the construction and repair of the levees/floodwalls are ongoing. The Maumee River in its lower reaches near Lake Erie is an EPA listed Area of Concern (AOC). The subject wetlands provide more than an insubstantial role in maintaining the physical, biological, and chemical integrity of the St. Joseph and Maumee Rivers and ultimately Lake Erie.

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: Wetland Section I is adjacent to Cedar Creek, a RPW that is a tributary of the Maumee River (TNW). This wetland contributes to floodwater storage, sediment and pollutant retention, settling, and filtering within the watershed of a TNW that in its lower reaches is an EPA designated AOC. These wetlands also contribute to available habitat and a riparian corridor for multiple species in a landscape dominated by agriculture and other development.

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. TNWs and Adjacent Wetlands. Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or, acres.
 Wetlands adjacent to TNWs: acres.

2. RPWs that flow directly or indirectly into TNWs.

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: Cedar Creek exhibits a defined bed and bank and has year-round flow. It is represented by a solid blue line on the USGS topographic map. A portion of Cedar Creek (lower Cedar Creek, outside of this review area) is designated as an "Outstanding State Resource Water" and is one of four streams in Indiana's Natural, Scenic and Recreational Rivers system .
- Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: **678** linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).
 Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
- Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: **2.19** acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: **0.53** acres.

7. Impoundments of jurisdictional waters.⁹

⁸See Footnote # 3.

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from “waters of the U.S.,” or
- Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
- Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- which are or could be used by interstate or foreign travelers for recreational or other purposes.
- from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- which are or could be used for industrial purposes by industries in interstate commerce.
- Interstate isolated waters. Explain: .
- Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).
- Other non-wetland waters: acres.
Identify type(s) of waters: .
- Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
 - Prior to the Jan 2001 Supreme Court decision in “SWANCC,” the review area would have been regulated based solely on the “Migratory Bird Rule” (MBR).
- Waters do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction. Explain: .
- Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
- Lakes/ponds: 1 acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 1.12 acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the “Significant Nexus” standard, where such a finding is required for jurisdiction (check all that apply):

- Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
- Lakes/ponds: 1 acres.
- Other non-wetland waters: acres. List type of aquatic resource: .
- Wetlands: 1.12 acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: Wetland Delineation Report for Bridgewater Golf Community: Dekalb County, Indiana dated November 23, 2014 by Earth Source, Inc.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps: .

⁹ To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰ Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

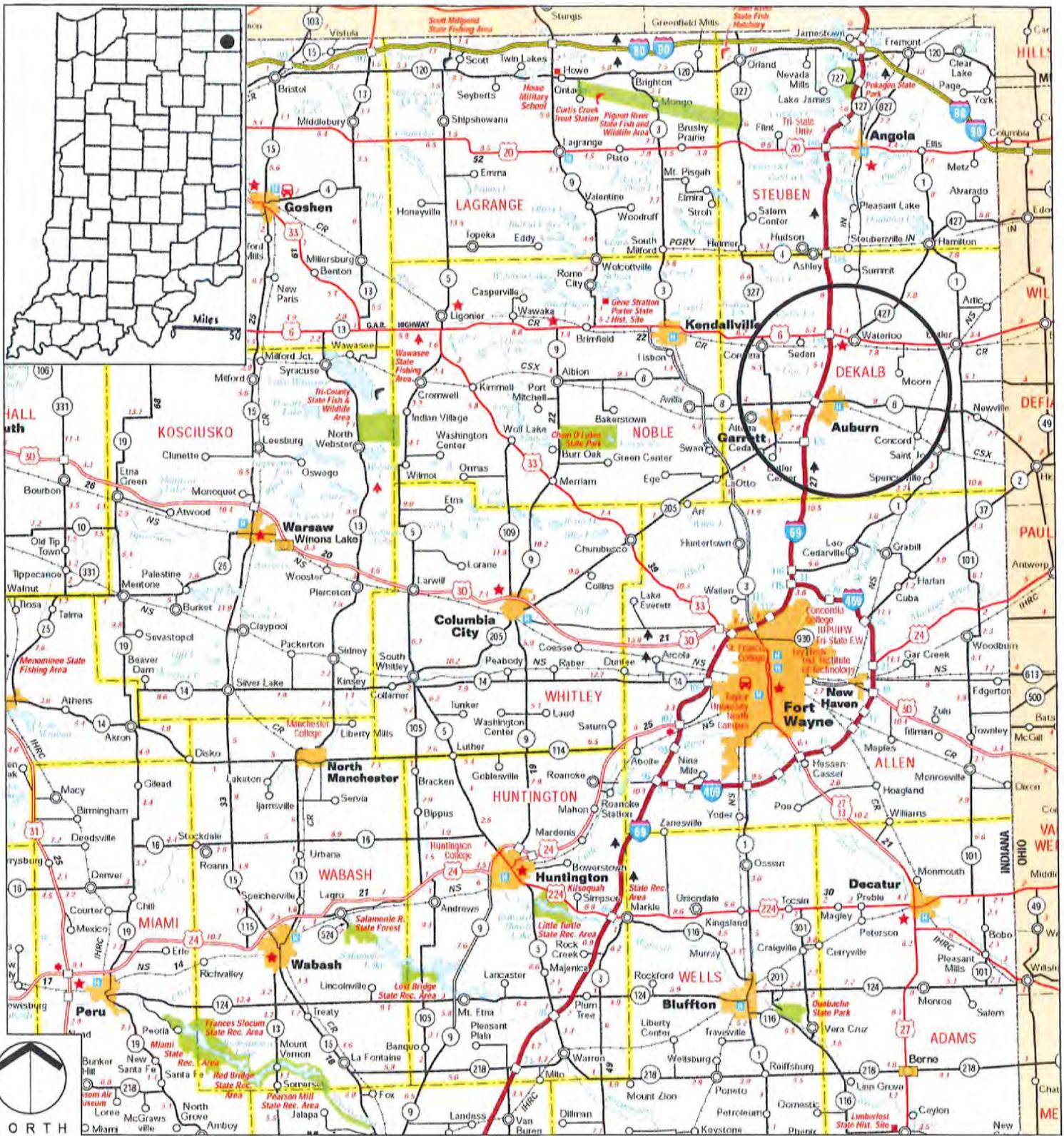
- Corps navigable waters' study: Detroit District Navigability Reports for Navigable Status of Maumee River, Indiana and Navigable Status of St. Joseph River, Indiana. December 1979.
- U.S. Geological Survey Hydrologic Atlas:
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: 1:24K, Waterloo, Ind. Quad Map.
- USDA Natural Resources Conservation Service Soil Survey. Citation: Hydric Rating by Map Unit, Web Soil Survey and the Soil Survey of DeKalb County Indiana, issued August 1982 .
- National wetlands inventory map(s). Cite name: USFWS online wetlands mapper.
- State/Local wetland inventory map(s): .
- FEMA/FIRM maps: FIRM map for DeKalb County, Indiana, Map Numbers 18033C0143E and 18033C0144E.
- 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Google Earth 3/29/2014.
or Other (Name & Date): Wetland Delineation Report photos dated October 16, 2014.
- Previous determination(s). File no. and date of response letter: File No. 98-117-004-0GC, August 5, 1998. Wetland Section V is an NWI emergent wetland and has been altered (expanded) as compensatory wetland mitigation for impacts authorized by USACE in 1998 (File No. 98-117-004-0GC). Wetland Section VI is depicted as a freshwater pond on the NWI map and was created for compensatory wetland mitigation for impacts authorized in 1998.
- Applicable/supporting case law: .
- Applicable/supporting scientific literature: .
- Other information (please specify): Cedar Creek Natural, Scenic and Recreational Rivers Study, Indiana Department of Natural Resources, November 3, 1975, Cedar Creek Watershed Management Plan, St. Joseph River Watershed Initiative, September 9, 2005, DeKalb County GIS regulated drain layers, Beacon Schneider Corp and CoCIGIS Cadastral Mapping, DeKalb County 2 ft. contours layer Beacon Schneider Corp, Distribution of the Native Freshwater Mussels in the Rivers of Allen County, Indiana, Warren W. Pryor, September 9, 2005, Indiana County Endangered, Threatened and Rare Species lists for DeKalb and Allen Counties, USACE Project Information Sheet for Fort Wayne, IN Flood Protection Project, USFWS Region 3 Species by County List.

B. ADDITIONAL COMMENTS TO SUPPORT JD:

I inspected the review area on December 10, 2014. The site is a mix of forested/naturalized areas interspersed within a golf course and agricultural fields. Below I outline my findings for each aquatic feature labeled on the attached schematic:

- Cedar Creek is a RPW as it has continuous, perennial flow, a defined bed and bank, and exhibits an OHWM. Cedar Creek is a tributary of the Maumee River, which is a Traditional Navigable Water (TNW).
- Section I is a forested wetland that continues off-site to the north to become part of a larger forested wetland complex adjacent to Cedar Creek, and is considered a water of the United States.
- Section II is a depressional, mixed scrub/shrub forested wetland, surrounded by upland agricultural fields and upland maintained golf course grounds. No surface or other physical connection to downstream waters was observed during the inspection. Additionally, no subsurface tiles or drains are documented on county maps.
- Section III is an excavated, forested depression that is surrounded by upland forest and agricultural fields. No surface or other physical connection to downstream waters was observed during the inspection. Additionally, no subsurface tiles or drains are documented on county maps.
- Section IV is a forested wetland adjacent to an excavated pond immediately outside of the delineation area. This man-made pond, according to the consultant, is part of a closed-loop-system used to pump water to create a water-feature at the golf course clubhouse entrance. No surface or other physical connection to downstream waters was observed during the inspection. Additionally, no subsurface tiles or drains are documented on county maps.
- Section V is an emergent wetland that was expanded (additional emergent wetland created) as compensatory wetland mitigation for USACE authorized impacts to wetlands on August 5, 1998 (File No. 98-117-004-0GC). This wetland is connected to Cedar Creek by the Harry Shull tile drain and is considered a water of the United States.
- Section VI is a mixed forested wetland adjacent to Cedar Creek that was created as compensatory wetland mitigation for USACE authorized impacts to wetland on August 5, 1998 (File No. 98-117-004-0GC). Wetland Section VI is considered a water of the United States.
- The feature labeled detention pond is a man-made pond excavated out of upland and according to 33 CFR 328.3 "artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water . . ." are generally not considered water of the United States.

In summary, the isolated wetlands Section II, Section III, and Section IV have no known surface or subsurface means that could provide a connection to an RPW or TNW. Because those isolated wetlands have no observed or known nexus to interstate commerce, the destruction or degradation of the wetland would not affect interstate travelers for recreational or other purposes. The isolated wetlands, and the detention pond, are not waters of the United States subject to jurisdiction under Section 404 of the Clean Water Act because they lack a link to interstate or foreign commerce sufficient to serve as a basis for jurisdiction. Wetlands Section V and Section VI were either created or expanded (partially created) as compensatory mitigation for wetland impacts permitted by the USACE. The compensatory wetland mitigation was a condition of USACE authorization No. 98-117-004-0GC dated August 5, 1998. Section V and VI are connected to Cedar Creek via the Harry Shull tile drain. Section VI and Section I are wetlands adjacent to Cedar Creek. Cedar Creek is a RPW that is a tributary of the Maumee River, a TNW. Cedar Creek and Wetlands Section I, V, and VI are therefore considered water of the United States and are subject to regulation under Section 404 of the Clean Water Act.



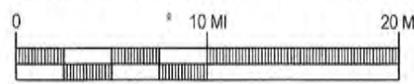
Project Name:
BRIDGEWATER GOLF COMMUNITY

Agent:



Earth-Source Inc
 14921 Hand Road, Fort Wayne, IN 46818
 (260) 489-8511 Fax (260) 489-8607

REGIONAL LOCATION MAP

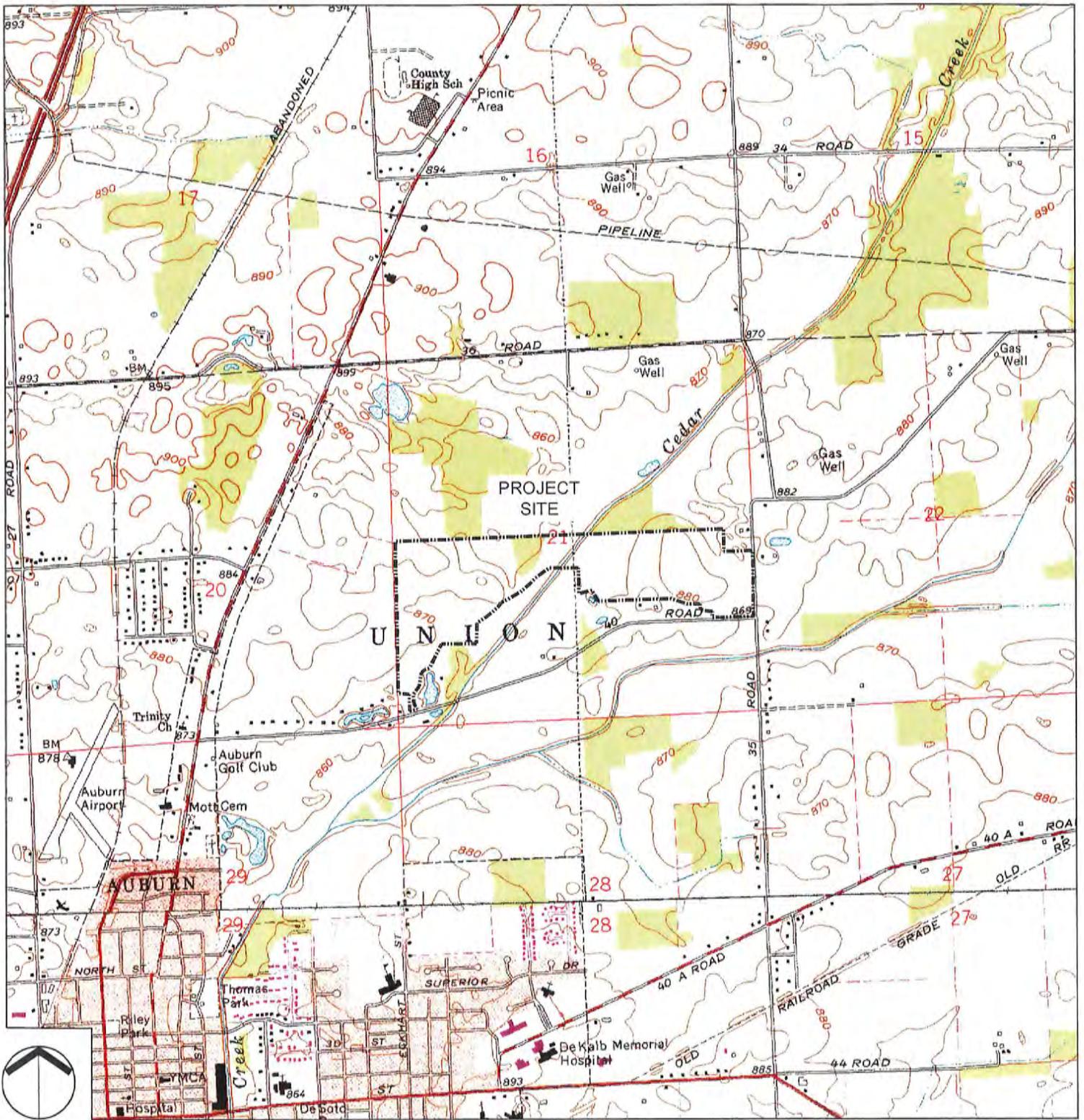


Scale 1 IN = 10 MI

Applicant:

MLS ENGINEERING
 217 AIRPORT NORTH OFFICE PARK
 FORT WAYNE, IN 46825

State:		County:	
INDIANA		DEKALB	
Township Name:			
UNION			
Township:	Range:	Section:	
T34N	R13E	20 & 21	
Quadrangle:			
WATERLOO (IN)			
Latitude/Longitude (NAD 27):			
41° 23' 19.92" N, 85° 02' 08.17" W			
Date:	Attachment:		
11-23-2014	B1		



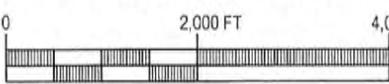
Project Name:
BRIDGEPORT GOLF COMMUNITY

Agent:



Earth-Source Inc
14921 Hand Road, Fort Wayne, IN 46818
(260) 489-8511 Fax (260) 489-8607

PROJECT LOCATION MAP



Scale 1 IN = 2,000 FT

Applicant:
MLS ENGINEERING
217 AIRPORT NORTH OFFICE PARK
FORT WAYNE, IN 46825

State:		County:	
INDIANA		DEKALB	
Township Name:			
UNION			
Township:	Range:	Section:	
T34N	R13E	20 & 21	
Quadrangle:			
WATERLOO (IN)			
Latitude/Longitude (NAD 27):			
41° 23' 19.92" N, 85° 02' 08.17" W			
Date:	Attachment:		
11-23-2014	B2		



Section V:
jurisdictional

Cedar Creek:
jurisdictional

Section III: non-
jurisdictional

Section I:
jurisdictional

LIMITS OF DELINEATION
SECTION V:
ISOLATED WETLAND
2.43 ACRES

CEDAR CREEK
678 LINEAR FEET
(ON-SITE)

SECTION I:
WETLAND
0.53 ACRES

SECTION VI:
WETLAND
1.66 ACRES

SECTION III:
ISOLATED WETLAND
0.29 ACRES

SECTION II:
ISOLATED WETLAND
0.71 ACRE

DETENTION
POND

Section VI:
jurisdictional

SECTION IV:
ISOLATED WETLAND
0.12 ACRES

Section II: non-
jurisdictional

Section IV: non-
jurisdictional

Detention Pond:
non-jurisdictional



N O R T H

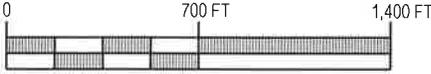
Project Name:
BRIDGEPORT GOLF COMMUNITY

Agent:



Earth-Source Inc
14921 Hand Road, Fort Wayne, IN 46818
(260) 489-8511 Fax (260) 489-8607

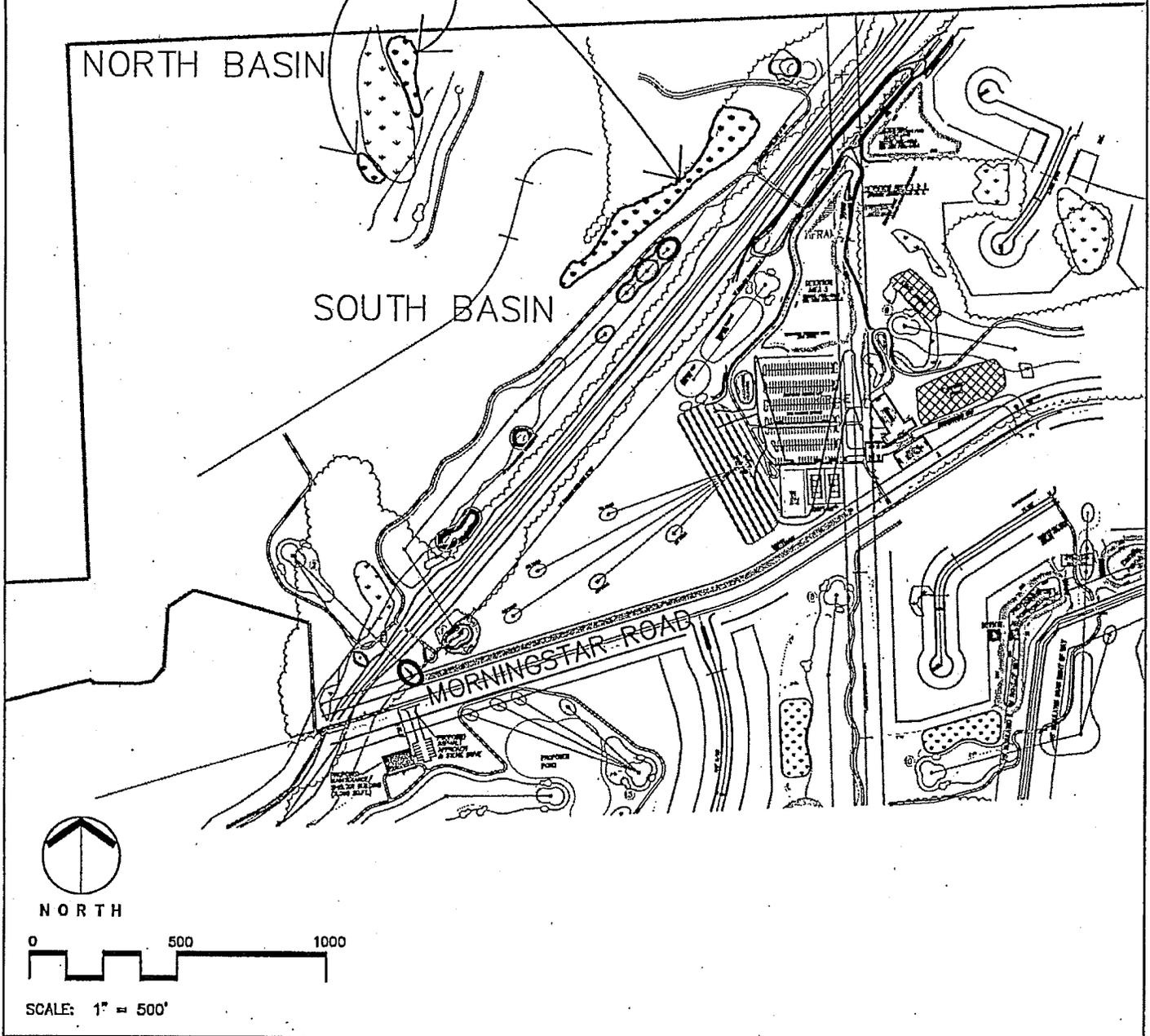
WETLAND DELINEATION MAP



Applicant:
MLS ENGINEERING
217 AIRPORT NORTH OFFICE PARK
FORT WAYNE, IN 46825

State: INDIANA		County: DEKALB	
Township Name: UNION			
Township: T34N	Range: R13E	Section: 20 & 21	
Quadrangle: WATERLOO (IN)			
Latitude/Longitude (NAD 27): 41° 23' 19.92" N, 85° 02' 08.17" W			
Revised Date: 12-16-2014		Attachment: B6	

MITIGATION WETLANDS
2.08 ACRES



PURPOSE:
GOLF COURSE AND
RESIDENTIAL
DEVELOPMENT

PREPARED BY:
Earth Source, Inc

14921 Hand Road, Ft. Wayne, IN 46818
 (260) 489-8511 Fax (260) 489-8607

DELINEATION OF MITIGATION
WETLAND

BRIDGEWATER GOLF COMMUNITY
BRIDGEWATER DEVELOPMENT LLC
 129 MAIN STREET
 AUBURN, INDIANA 46706

STATE: INDIANA
COUNTY: DEKALB
TOWNSHIP: UNION
T31N; R12E; SECTS. 20, 21, & 28
QUADRANGLE:
WATERLOO

B10

12/10/03