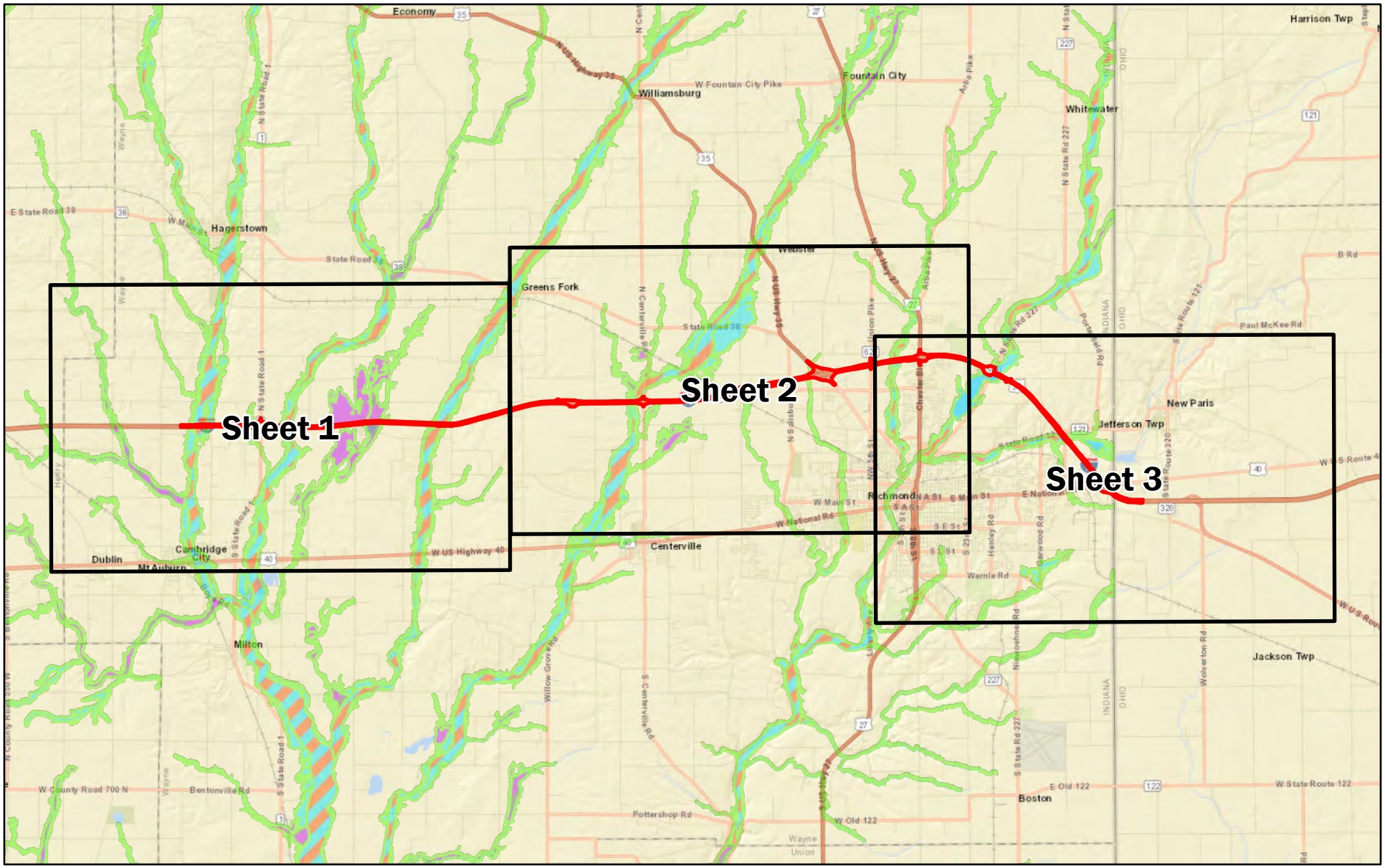
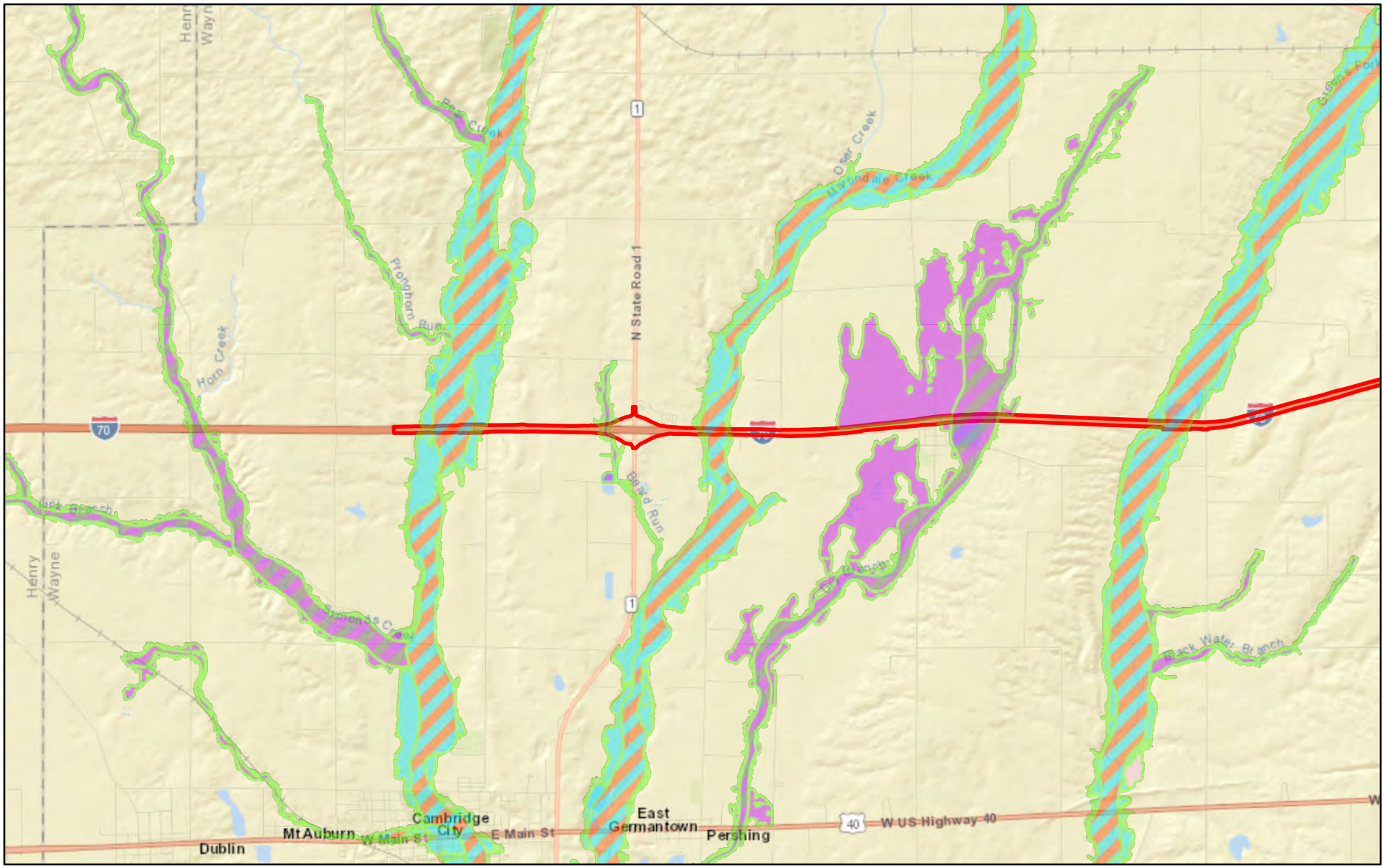
IDNR Floodplain Index



IDNR Floodplain - Sheet 1 of 3



Study Area

Flood Hazard (Best Available) Features

FEMA Zone AE Floodway

DNR Approximate Floodway

FEMA Zone A

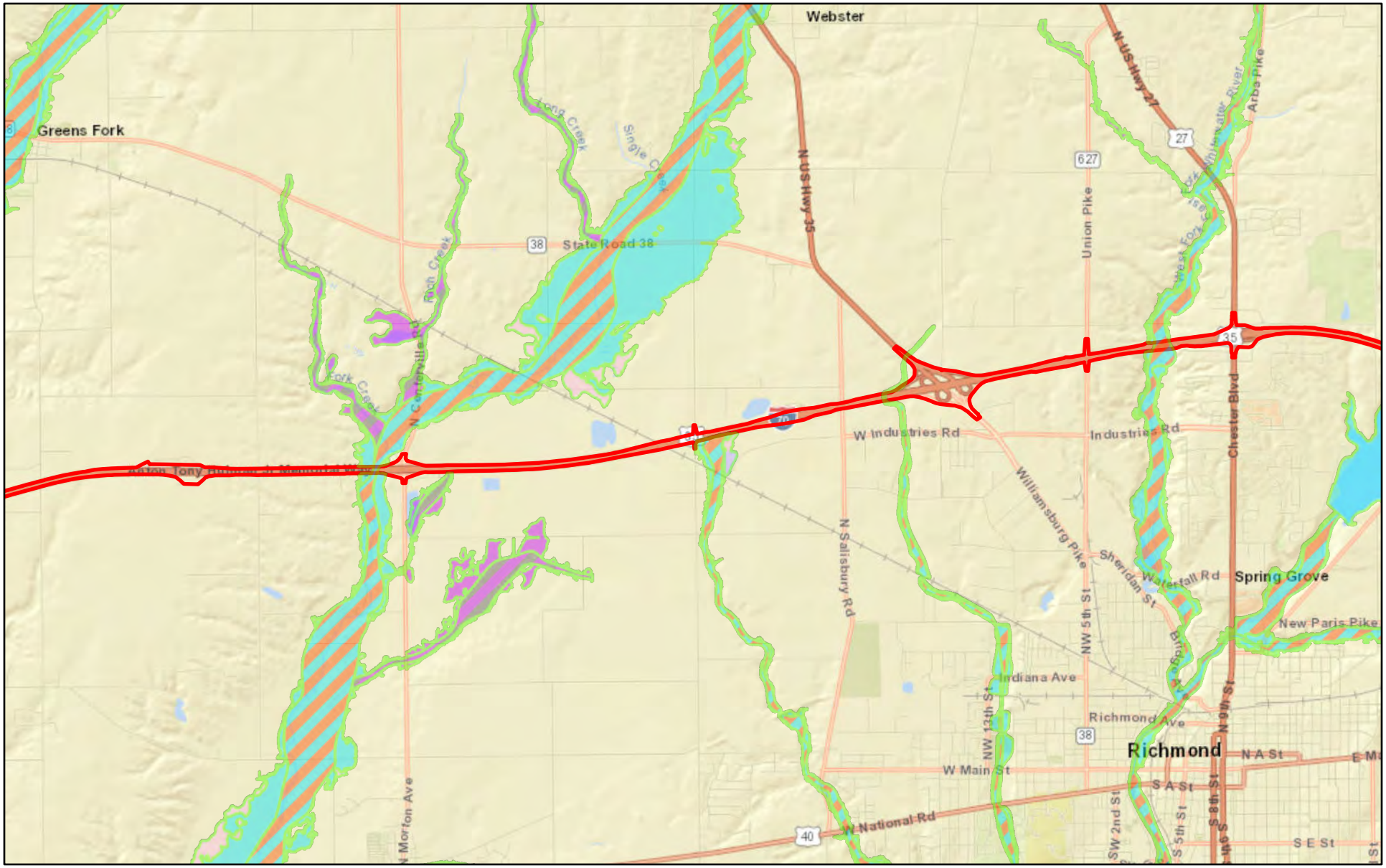
DNR Approximate Fringe

DNR 0.2% Flood Hazard

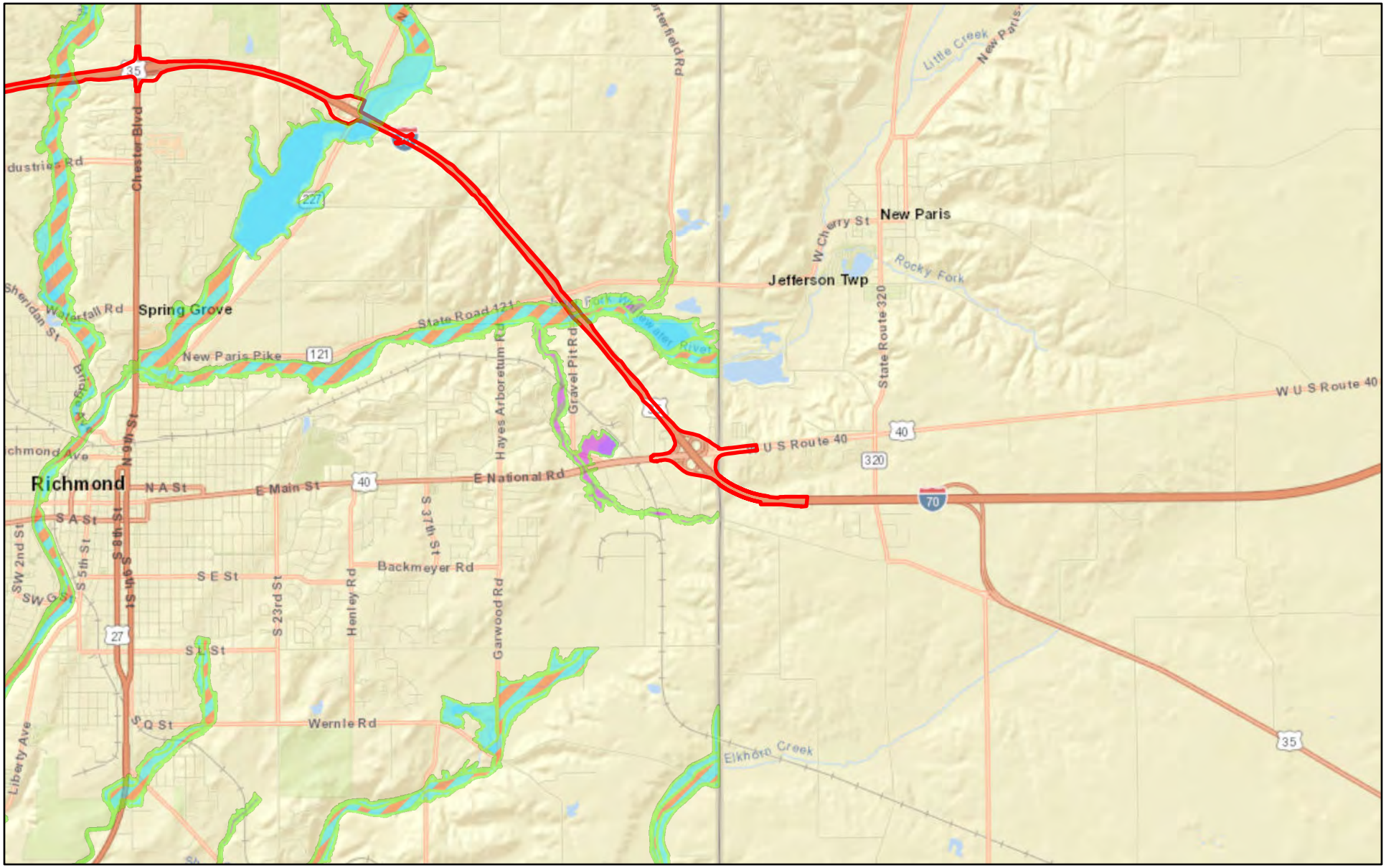
Scale: 1:60,000

0 0.5 1 2 Miles

IDNR Floodplain - Sheet 2 of 3



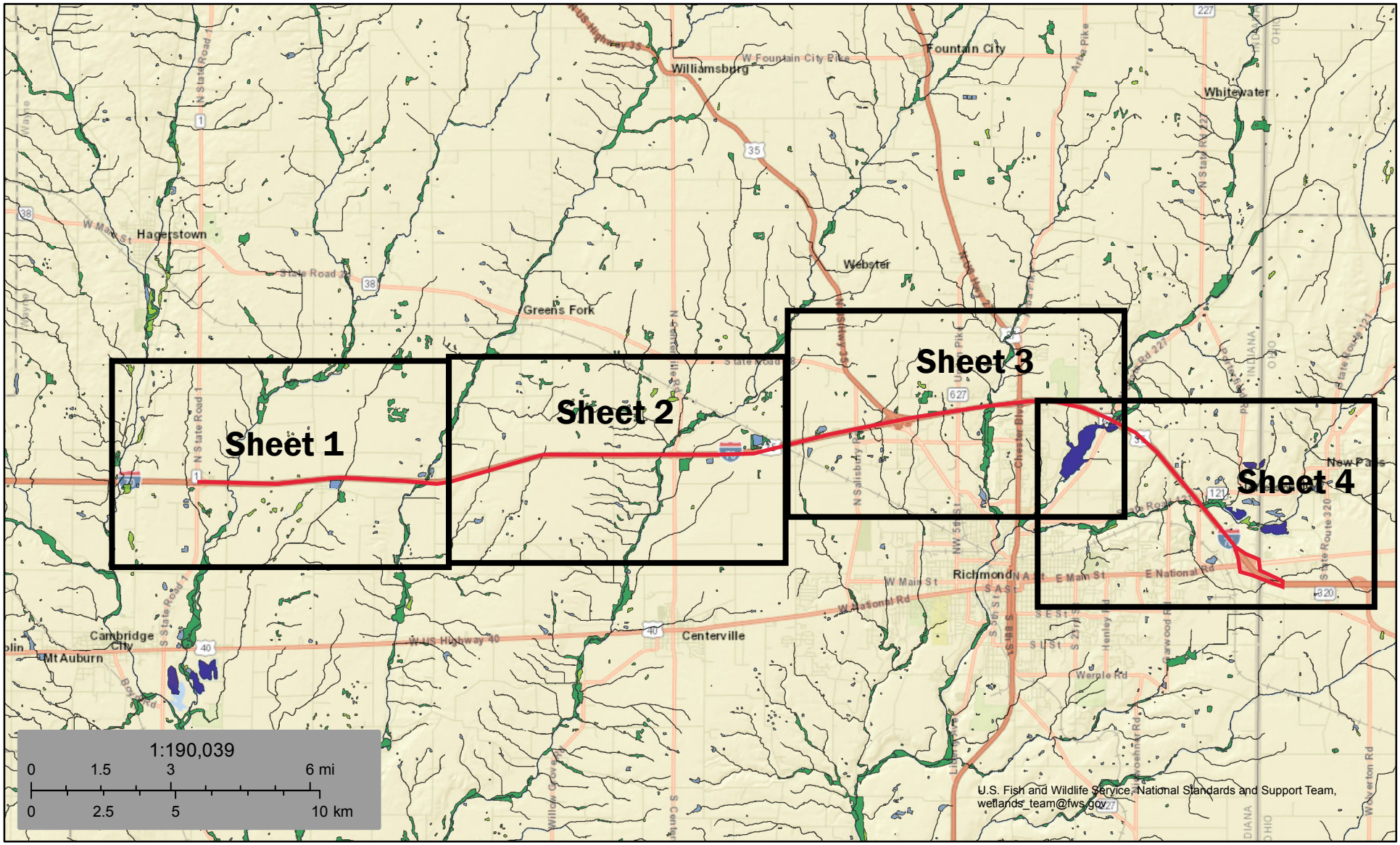
IDNR Floodplain - Sheet 3 of 3



U.S. Fish and Wildlife Service

National Wetlands Inventory

Index Map



November 21, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

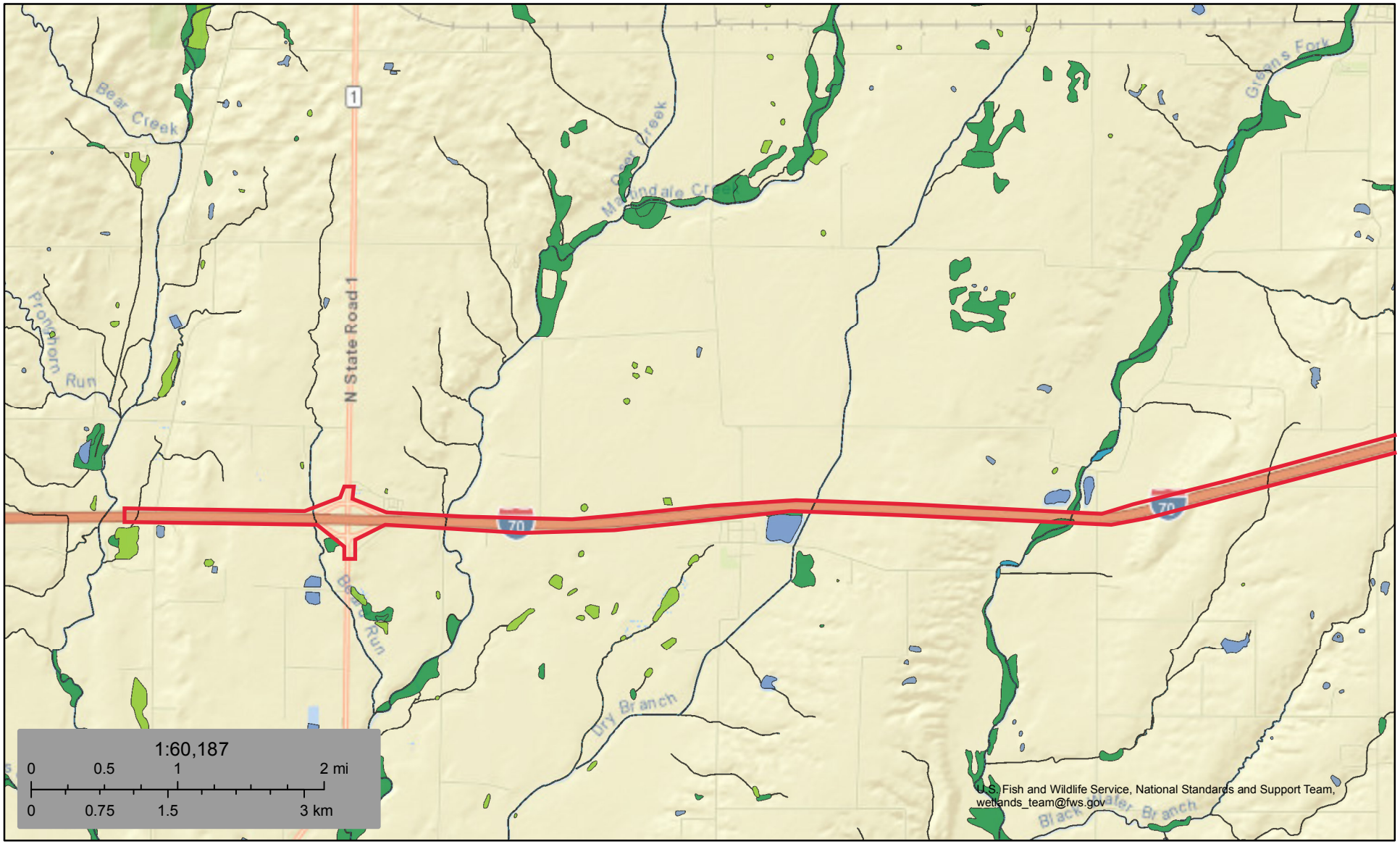
Study Area

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service

National Wetlands Inventory

Sheet 1



August 8, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
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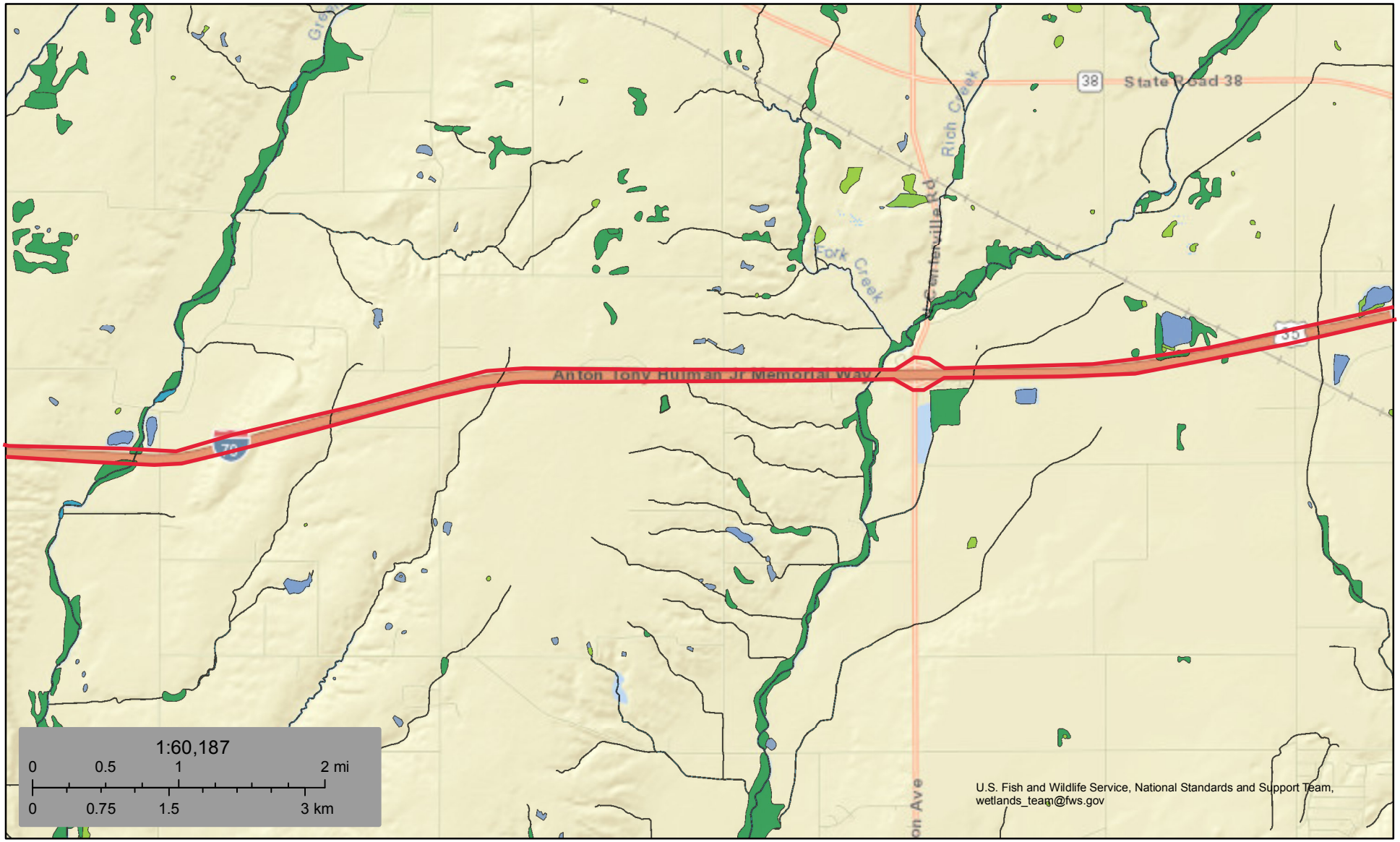
Study Area

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service

National Wetlands Inventory

Sheet 2



August 8, 2022

Wetlands

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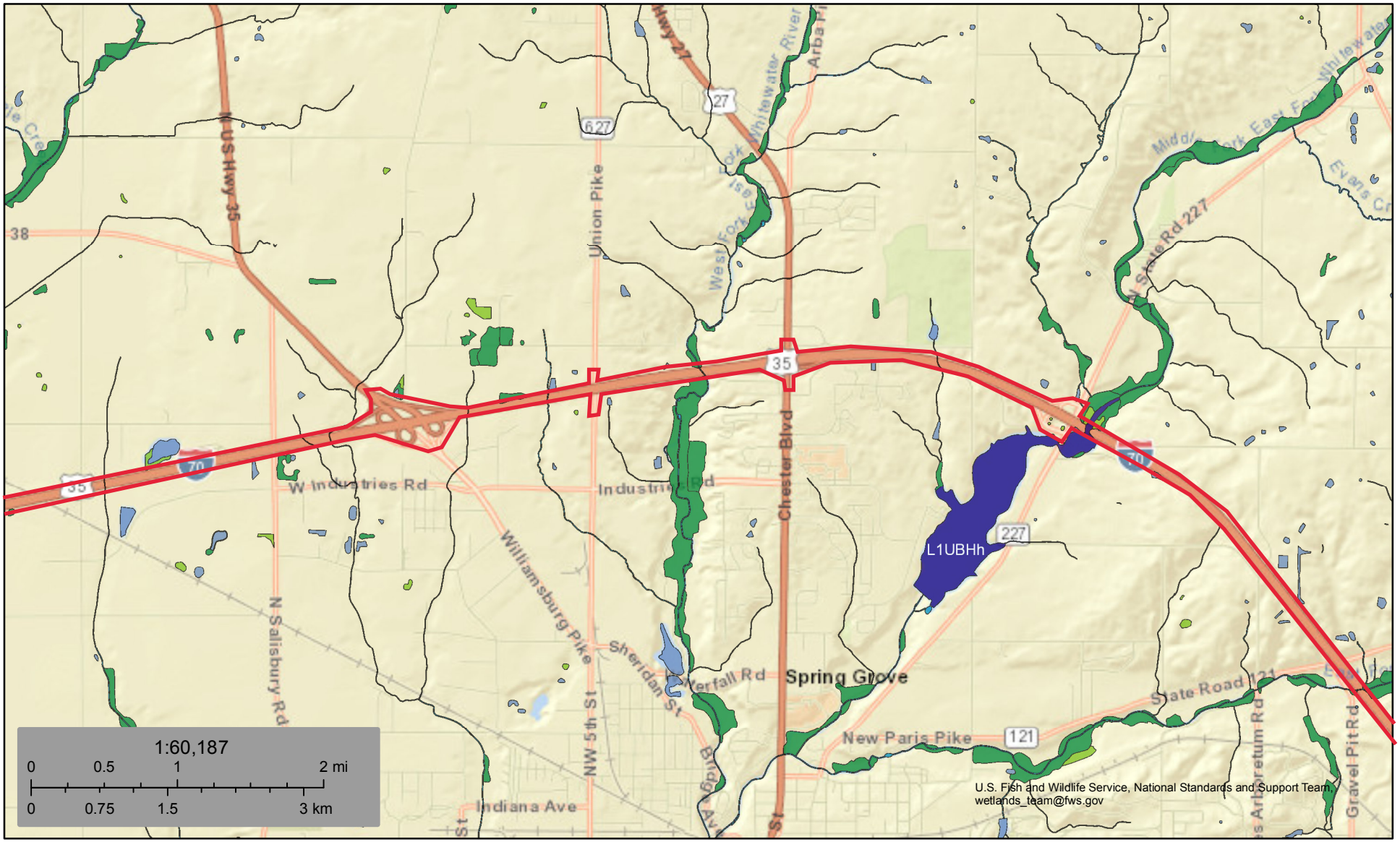
Study Area

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service

National Wetlands Inventory

Sheet 3



August 8, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
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- Freshwater Pond
- Lake
- Other
- Riverine

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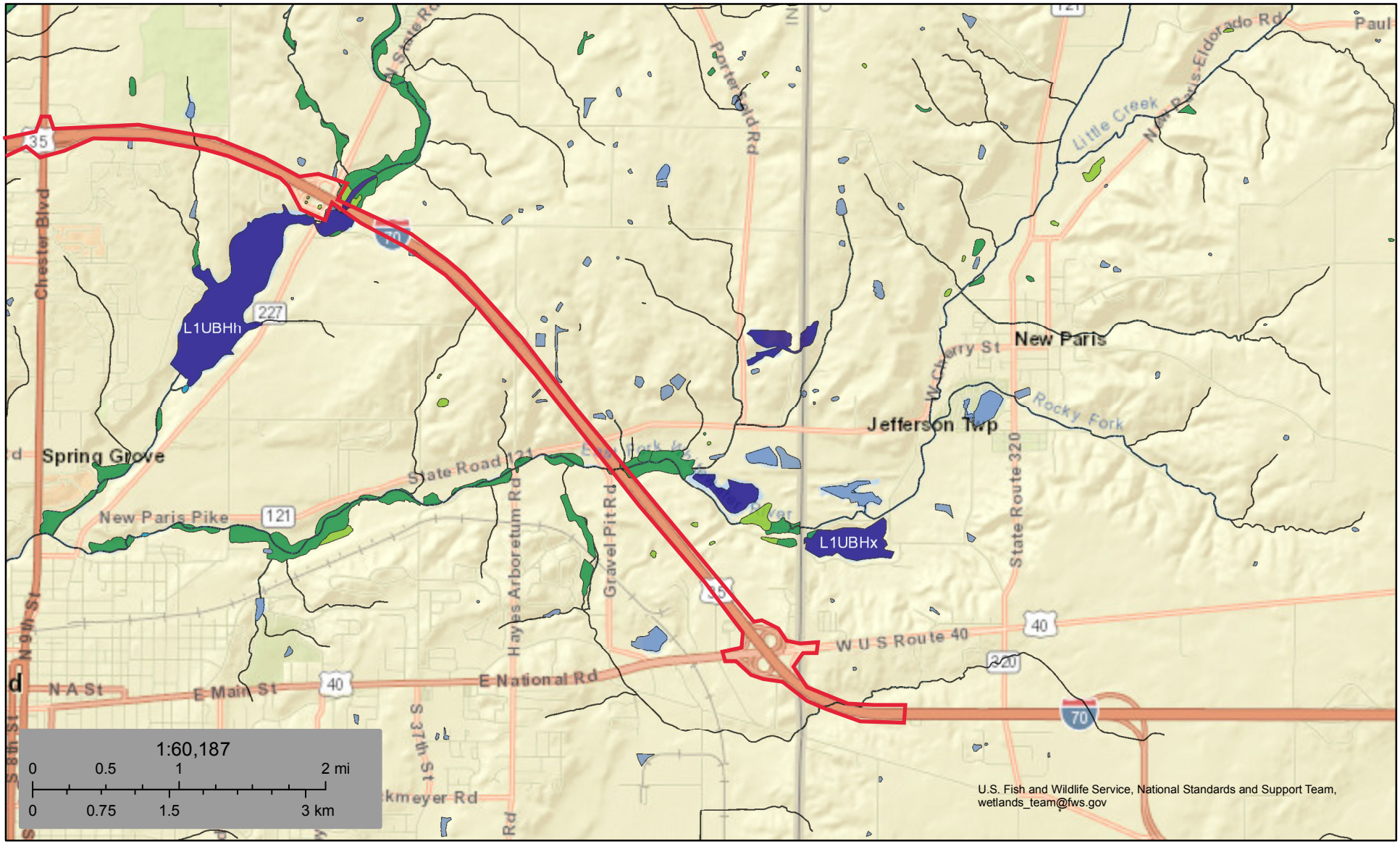
Study Area

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

U.S. Fish and Wildlife Service
National Wetlands Inventory

Sheet 4



August 8, 2022

Wetlands

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
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- Riverine

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Study Area

National Wetlands Inventory (NWI)
This page was produced by the NWI mapper

EXCERPTS

Aidan Geissler
Approved 8.3.23

Waters of the US Report
Revive I-70
Wayne County, Indiana
Des. No. 2002424

Report Completed: January 4, 2023
Revised: February 13 & 22, 2023 and August 1, 2023

I. Introduction

The Indiana Department of Transportation (INDOT), with federal funding from the Federal Highway Administration (FHWA), plans to proceed with a roadway improvement project along a 22-mile section of Interstate 70 (I-70) in Jackson, Harrison, Center, Clay, and Wayne Townships in Wayne County, Indiana. CHA staff conducted a field investigation on June 14-16, 20, 22-24, 27-28, July 6-7, 11-14, 18, and September 14 and 15, 2022. The purpose of this investigation was to identify wetlands and waterways within and adjacent to the study area. A routine wetland determination, per the *1987 Corps of Engineers Wetland Delineation Manual (Y-87-1)* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0) was conducted. This report details the findings of the investigation.

Project Owner	Consultant
Indiana Department of Transportation	CHA Consulting, Inc.
Greenfield District, 32 South Broadway	201 North Illinois Street, Suite 800
Greenfield, IN 46140	Indianapolis, IN 46204
Contact Name: Aidan Geissler	Contact Name: Molly Baughman
Contact Email: ageissler@indot.in.gov	Contact Email: mbaughman@chacompanies.com

The project is located along I-70 from approximately 1.5 miles west of the State Road (SR) 1 interchange to the Indiana/Ohio State Line in Wayne County, Indiana (attached State Location Map). The study area is centered at 39.859854°, -84.977476° with the west boundary at 39.853196°, -85.175554° and the east boundary at 39.828502°, -84.802402°. Specifically, the project is located on the Cambridge City, Jacksonburg, Richmond, and New Paris Indiana 7.5 Minute United States Geological Survey (USGS) Quadrangle Maps within the Section, Township and Range locations provided in Table 1 (attached USGS Project Location Map).

Table 1. Section, Township, and Range Locations

Section	Township	Range
10, 11, 12	16 North	12 East
1, 2, 7, 8, 9, 10, 11, 12	16 North	13 East
2, 3, 4, 5, 6, 7, 8, 9	16 North	14 East
24	14 North	2 West
16, 17, 19, 20, 21, 22, 23, 25, 26, 36	14 North	1 West
31	9 North	1 East
6	8 North	1 East

II. Existing Data

7.5 Minute USGS Quadrangle Maps and Watershed

The USGS map was reviewed to determine the topography and drainage patterns within the study area. The map indicates that the study area and surrounding terrain is characterized by stream valleys with the elevation ranging from approximately 950 to 1200 feet. Eleven blue line perennial streams are mapped within the study area; Whitewater River, Beard Run, Martindale Creek, Dry Branch, Greens Fork, Nolands Fork, Clear Creek, Unnamed Tributary (UNT) to West Fork East Fork Whitewater River, West Fork of East Fork Whitewater River, Middle Fork of East Fork Whitewater River, East Fork of East Fork Whitewater River, and UNT to East Fork Whitewater River. Ten blue line intermittent streams are mapped within the study area; two UNTs to Whitewater River, College Corner Branch, Black Water Branch, Far Run, UNT to Nolands Fork, Lick Creek, two UNT to Clear Creek, UNT to Middle Fork Reservoir.

Drainage basins are divided into hydrologic units by the USGS based on major river systems. The entire study area is within the 8-digit Hydrologic Unit Code (HUC); 05080003, Whitewater Watershed and within the following 12-digit Watersheds listed in Table 2.

Table 2. 12-digit Watershed Summary

12- Digit HUC	Watershed Name
050800030108	Pronghorn Run-Whitewater River
050800030107	Beard Run-Martindale Creek
050800030204	Black Water Branch-Greens Fork
050800030303	Fork Creek-Nolands Fork
050800030706	Clear Creek-Lick Creek
050800030705	West Fork East Fork Whitewater River
050800030703	Mud Creek-Middle Fork East Fork Whitewater River
050800030704	Rocky Fork-East Fork Whitewater River

National Wetland Inventory (NWI) Map

The U.S. Fish and Wildlife Service (USFWS) NWI maps identify potential wetlands based on high-level imagery interpretation. The wetlands are then classified by type utilizing the Cowardin classification system. The classification system provides information on wetland vegetation type, water regime, and any relevant alterations. This level of mapping does not determine regulatory boundaries. The NWI map was evaluated for the presence of potential jurisdictional wetlands within the study area (Attached NWI Wetlands Map). A total of 15 NWIs are mapped within the study area and four NWIs are mapped directly adjacent to the study area (Table 3).

Table 3. NWI Wetlands Summary

Code	System	Class	Subclass	Water Regime	Modifiers	Location	Map Sheet
PSS1A	Palustrine (P)	Scrub-Shrub (SS)	Broad-Leaved Deciduous (1)	Temporary flooded (A)	None	Directly adjacent	7, 8
PFO1A		Forested (FO)	Broad-Leaved Deciduous (1)	Temporary flooded (A)	None	Directly adjacent	10
						Within	10, 19, 25, 27, 34
PUBG		Unconsolidated bottom (UB)	None	Intermittently exposed (G)	None	Directly adjacent	25
PEM1A		Emergent (EM)	Persistent (1)	Temporary flooded (A)	None	Within	30
PUBGh		Unconsolidated bottom (UB)	None	Intermittently exposed (G)	Diked/ Impounded (h)	Directly adjacent	30
PUBGx		Unconsolidated bottom (UB)	None	Intermittently exposed (G)	Excavated (x)	Within	30
PFO1Ah		Forested (FO)	Broad-Leaved Deciduous (1)	Temporary flooded (A)	Diked/ Impounded (h)	Within	30
PEM1Ch		Emergent (EM)	Persistent (1)	Seasonally flooded (C)	Diked/ Impounded (h)	Within	30
PEM1Ah		Emergent (EM)	Persistent (1)	Temporary flooded (A)	Diked/ Impounded (h)	Within	30
L1UBHh	Lacustrine Limnetic (L1)	Unconsolidated bottom (UB)	None	Permanently flooded (H)	Diked/ Impounded (h)	Within	30

County Soil Survey Map

The Natural Resources Conservation Service (NRCS) Web Soil Survey was reviewed to determine soil classification within the study area (Attached NRCS Soils Map). Thirty-eight soil types were identified within the study area (Table 4). Two soil types were identified as fully hydric: Mahalasville silt loam (Ma) and Sloan silty clay loam, occasionally flooded (Sn). Three soil types were identified as predominantly hydric: Sloan silt loam, sandy substratum, 0 to 2 percent slopes, frequently flooded (SnA), Treaty silty clay loam, 0 to 1 percent slopes (Tr), and Westland silty clay loam, 0 to 2 percent slopes (We).

Table 4. Soil Summary

Soil Type	Symbol	Drainage Rating	Hydrology	Hydric Rating	Hydric
Crosby silt loam, Southern Ohio Till Plain, 0 to 2 percent slopes	CrA	Somewhat poorly drained	None	5	Predominantly non-hydric
Crosby-Celina silt loams, 2 to 4 percent slopes, eroded	CrB	Somewhat poorly drained	None	8	Predominantly non-hydric
Eel silt loam, gravelly substratum, 0 to 1 percent slopes, occasionally flooded	EeA	Moderately well drained	Occasional flooding	5	Predominantly non-hydric
Eldean clay loam, 2 to 6 percent slopes, severely eroded	ExB3	Well drained	None	3	Predominantly non-hydric
Eldean clay loam, 6 to 18 percent slopes, severely eroded	ExC3	Well drained	None	3	Predominantly non-hydric
Eldean loam, 0 to 2 percent slopes	EoA	Well drained	None	0	Not hydric
Eldean loam, 12 to 18 percent slopes, eroded	EoD2	Well drained	None	0	Not hydric
Eldean loam, 2 to 6 percent slopes, eroded	EoB2	Well drained	None	3	Predominantly non-hydric
Eldean loam, 6 to 12 percent slopes, eroded	EoC2	Well drained	None	3	Predominantly non-hydric
Genesee silt loam, 0 to 2 percent slopes, occasionally flooded	Ge	Well drained	Occasional flooding	6	Predominantly non-hydric
Hennepin loam, 25 to 50 percent slopes	HeF	Well drained	None	0	Not hydric
Losantville clay loam, 6 to 12 percent slopes, severely eroded	LcC3	Moderately well drained	None	3	Predominantly non-hydric
Mahalasville silt loam	Ma	Poorly drained	None	100	Hydric
Miami loam, 12 to 18 percent slopes, eroded	MdD2	Moderately well drained	None	0	Not hydric
Miami loam, 6 to 12 percent slopes, eroded	MdC2	Moderately well drained	None	7	Predominantly non-hydric
Miami silt loam, 2 to 6 percent slopes, eroded	MbB2	Moderately well drained	None	5	Predominantly non-hydric
Miami silt loam, 2 to 6 percent slopes, eroded	MnB2	Moderately well drained	None	5	Predominantly non-hydric
Miami silt loam, 6 to 12 percent slopes, eroded	MnC2	Moderately well drained	None	5	Predominantly non-hydric
Miami silt loam, gravelly substratum, 0 to 2 percent slopes	MrA	Well drained	None	5	Predominantly non-hydric
Miami silt loam, gravelly substratum, 2 to 6 percent slopes, eroded	MrB2	Well drained	None	3	Predominantly non-hydric
Miami silt loam, gravelly substratum, 6 to 12 percent slopes, eroded	MrC2	Well drained	None	5	Predominantly non-hydric
Miami silt loam, well drained, 12 to 18 percent slopes, eroded	MnD2	Well drained	None	3	Predominantly non-hydric

Soil Type	Symbol	Drainage Rating	Hydrology	Hydric Rating	Hydric
Miami-Crosby silt loams, 2 to 5 percent slopes, eroded	MwB2	Moderately well drained	None	3	Predominantly non-hydric
Miami-Kendallville silt loams, 18 to 25 percent slopes, eroded	McE2	Moderately well drained	None	0	Not hydric
Ockley silt loam, 0 to 2 percent slopes	OcA	Well drained	None	3	Predominantly non-hydric
Ockley silt loam, 2 to 6 percent slopes, eroded	OcB2	Well drained	None	5	Predominantly non-hydric
Orthents, loamy	Or	Well drained	None	3	Predominantly non-hydric
Rodman gravelly loam, 25 to 50 percent slopes	RmF	Excessively drained	None	0	Not hydric
Shoals silt loam, occasionally flooded	Sh	Somewhat poorly drained	Occasional flooding	3	Predominantly non-hydric
Sleeth silt loam, 0 to 2 percent slopes	Sk	Somewhat poorly drained	None	3	Predominantly non-hydric
Sloan silt loam, sandy substratum, 0 to 2 percent slopes, frequently flooded	SnA	Very poorly drained	Frequent flooding and ponding	85	Predominantly Hydric
Sloan silty clay loam, occasionally flooded	Sn	Very poorly drained	Occasional flooding	100	Hydric
Stonelick loam, occasionally flooded	St	Well drained	Occasional flooding	3	Predominantly non-hydric
Strawn clay loam, 12 to 18 percent slopes, severely eroded	SuD3	Well drained	None	3	Predominantly non-hydric
Strawn clay loam, 6 to 12 percent slopes, severely eroded	SuC3	Moderately well drained	None	3	Predominantly non-hydric
Treaty silty clay loam, 0 to 1 percent slopes	Tr	Poorly drained	Frequent ponding	95	Predominantly Hydric
Urban land-Miami complex, 2 to 6 percent slopes	UmB		None	0	Not hydric
Westland silty clay loam, 0 to 2 percent slopes	We	Poorly drained	Frequent ponding	94	Predominantly Hydric

Flood and NHD Streams Map

The Flood Insurance Rate Maps (FIRM) and Indiana Department of Natural Resources (IDNR) Best Available Floodzone Mapping for the study area were reviewed for the presence of Special Flood Hazard Areas (Attached IDNR Floodzones & NHD Streams Map). As described by the Federal Emergency Management Agency (FEMA) and IDNR, the project is located within 11 floodplains identified as either Zone A or AE along the following streams; Whitewater River, Beard Run, Martindale Creek, Dry Branch, Greens Fork, Nolands Fork, Lick Creek, Clear Creek, West Fork of East Fork Whitewater River, Middle Fork of East Fork Whitewater River, and East Fork of East Fork Whitewater River. These zones are defined by the FEMA as an area subject to inundation by the 1-percent-annual-chance flood event with Base Flood Elevations (BFEs) or flood depths shown for Zone AE.

The USGS National Hydrography Dataset (NHD) was reviewed for the presence of features such as rivers, streams, and lakes. A total of 23 NHD streams are mapped within the study area including all the streams listed above with floodplains and College Corner Branch, Black Water Branch, Far Run, and nine unnamed tributaries.

III. Methodology

Waters of the U.S.

Streams that may be considered Waters of the U.S. are documented with supporting evidence of potential jurisdiction. If a stream contains an ordinary high water mark (OHWM), typically defined as a defined bed and bank, then additional characterization is completed. Identified streams are listed by the name provided on the USGS map, or if not named, is listed as a UNT. Connections to the nearest Traditional Navigable Waterway (TNW) are then identified. Jurisdiction will be determined using the current procedures outlined by the USACE.

Wetland Delineation

The study area was analyzed using methods outlined in the *1987 Corps of Engineers Wetland Delineation Manual (Y-81-1)* and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (Version 2.0). These manuals require wetland boundaries to be delineated using a three-parameter approach: hydrophytic vegetation, hydric soils, and wetland hydrology. Hydrophytic vegetation is met by the dominance of wetland species; plants identified with an indicator status of OBL, FACW, and FAC. Hydric soil is caused by anaerobic conditions and is observed by the presence of field indicators including gray or dark brown color, mottling, gleying, muck and/or peat, hydrogen sulfide odor, or iron-manganese masses. Lastly, wetland hydrology is met by the presence of water for more than 5 percent of the growing season; one primary indicator or two secondary indicators must be observed.

IV. Field Reconnaissance

CHA staff conducted a field investigation on June 14-16, 20, 22-24, 27-28, July 6-7, 11-14, 18, and September 14 and 15, 2022 to determine the presence of wetlands, Waters of the U.S., and Waters of the State within the study area. Locations of data points, wetlands and streams are provided on the attached Water Resources Map. Photographs, Wetland Determination Data Forms, and Stream Stats Reports are attached. The following provides a brief description of the findings of the field investigation.

Roadside Drainage Features

Many roadside drainage features were identified within the project area. These features were designed along with the interstate and roadways to convey storm water. The majority of these features were excavated within upland areas, drain upland waters, and did not display a defined bed, bank, or OHWM. Some roadside ditches were identified within the study area that contained a non-continuous OHWM, non-continuous wetland vegetation or a combination of both. These features are likely considered non-jurisdictional and are not likely considered Waters of the U.S. or Waters of the State. Due to the size of the report, further information on the roadside ditches is not included within the report, maps, or photos.

Streams

A total of 38 streams were identified within the study area: 9 ephemeral, 16 intermittent, and 13 perennial. Table 5 provides a stream summary. The upstream drainage area for most of the streams was retrieved from Stream Stats, reports are attached. For the streams not mapped in Stream Stats, the upstream drainage area was estimated by measuring around IndianaMap classified and unclassified drainage flow lines.

No signs of bats were observed in or under the structures. Bird nests were observed at the structures over Greens Fork, Nolands Fork, and Middle Fork East Fork Whitewater River. Signs of nesting birds were observed at the structures over the Whitewater River and the Whitewater River Overflow.

Table 5. Stream Summary

Stream Name	Photo Point(s)	OHWM Latitude/ Longitude	OHWM Width/ Depth	USGS Blue Line?	Pools/ Riffles?	Substrate	Stream Quality	Drainage Area (sq. mi)	Steam Type	Linear feet	Waters of the US?	Flows to**
UNT 1 to Whitewater River	3, 4	39.852907, -85.172101	14'/1'	Yes	Yes	Gravel, cobble	Average	0.2	Perennial	236	Yes	Whitewater River
Whitewater River	7 - 11	39.853226, -85.168487	75'/4'	Yes	Yes	unknown	Good	62.6	Perennial	328	Yes	Great Miami River
Beard Run	14 - 17	39.852710, -85.148370	4/'0.5'	Yes	No	Gravel, silt	Poor	1.2	Intermittent	355	Yes	Martindale Creek
Martindale Creek	29 - 32	39.852851, -85.134758	60'/3'	Yes	Yes	unknown	Good	55.2	Perennial	217	Yes	Whitewater River
Dry Branch/ Plum Creek	38 - 41	39.854371, -85.09841	13'/1.5'	Yes	No	Sand, gravel	Poor/ Average	3.0	Perennial	271	Yes	Martindale Creek
UNT 1 to Greens Fork	43, 44	39.85354, -85.073844	6'/0.5'	No	No	Silt, sand	Very Poor	0.02*	Ephemeral	595	Yes	Greens Fork
Greens Fork	45 - 48	39.853208, -85.073091	110'/6'	Yes	Yes	Cobble, gravel	Good	73.4	Perennial	381	Yes	Whitewater River
UNT 2 to Greens Fork	51 & 52	39.854387, -85.060759	4'/1'	No	No	Silt, riprap	Poor	0.1	Intermittent	388	Yes	Greens Fork
College Corner Branch	54 & 55	39.855829, -85.053653	4'/1.5'	Yes	No	Silt/sand	Poor	0.2	Intermittent	256	Yes	Greens Fork
Black Water Branch	58 & 59	39.859083, -85.036939	2.5'/1'	Yes	No	Silt/sand	Poor	0.2	Intermittent	289	Yes	Greens Fork
Far Run	63 & 64	39.859120, -85.018320	4'/0.5'	Yes	No	Cobble, gravel, silt	Poor	0.1	Intermittent	396	Yes	Nolands Fork
Nolands Fork	66 - 69	39.859531, -84.99953	64'/3'	Yes	Yes	Gravel, sand	Good	49.3	Perennial	283	Yes	Whitewater River
UNT 1 to Nolands Fork	71 & 72	39.859368, -84.990112	10'/1'	Yes	Yes	Gravel, silt/sand	Average	1.2	Perennial	250	Yes	Nolands Fork
Lick Creek	75 & 76	39.862593, -84.955839	7'/1.5'	Yes	Yes	Silt, riprap	Average	1.0	Intermittent	213	Yes	East Fork Whitewater River
Clear Creek (two crossings)	84 - 86, 100 - 103	39.866657, -84.933820	4'/1'	Yes	Yes	Gravel, silt	Average	1.6	Perennial	441 (two crossings)	Yes	Lick Creek
UNT 1 to Clear Creek	88	39.866406, -84.931367	2'/1'	No	No	Silt, gravel	Poor	0.03*	Ephemeral	211	Yes	Clear Creek
UNT 2 to Clear Creek	104 & 105	39.870622, -84.930815	2'/1'	No	No	Gravel, silt/sand	Very Poor	0.04	Ephemeral	509	Yes	Clear Creek

Stream Name	Photo Point(s)	OHWM Latitude/ Longitude	OHWM Width/ Depth	USGS Blue Line?	Pools/ Riffles?	Substrate	Stream Quality	Drainage Area (sq. mi)	Steam Type	Linear feet	Waters of the US?	Flows to**
UNT 1 to West Fork East Fork Whitewater River	107 & 108	39.869412, -84.914404	5'/0.5'	No	No	Silt/sand, gravel	Poor	0.12	Intermittent	248	Yes	West Fork East Fork Whitewater River
UNT 2 to West Fork East Fork Whitewater River	111 & 112	39.869644, -84.912501	3'/1'	Yes	No	Gravel, silt/sand	Average	0.3	Intermittent	331	Yes	West Fork East Fork Whitewater River
West Fork East Fork Whitewater River	115 - 118	39.871385, -84.896853	26'/3'	Yes	Yes	unknown	Good	17.8	Perennial	354	Yes	Whitewater River
UNT 3 to West Fork East Fork Whitewater River	119 - 121	39.8712610, -84.895261	2'/0.5'	No	No	Riprap	Very Poor	0.01*	Intermittent	499	Yes	West Fork East Fork Whitewater River
UNT 1 to Middle Fork East Fork Whitewater River	124 & 125	39.872889, -84.877956	3'/0.7'	No	No	Silt, gravel	Average	0.08	Intermittent	229	Yes	Middle Fork East Fork Whitewater River
UNT 2 to Middle Fork East Fork Whitewater River	126 & 127	39.872623, -84.875942	1.5'/1'	No	No	Silt/sand	Poor	0.01*	Intermittent	250	Yes	Middle Fork East Fork Whitewater River
UNT 3 to Middle Fork East Fork Whitewater River	129	39.872352, -84.873497	3'/0.5'	No	Yes	Silt, gravel	Poor/ Average	0.2	Perennial	314	Yes	Middle Fork East Fork Whitewater River
UNT 4 to Middle Fork East Fork Whitewater River	130 & 131	39.869191, -84.864823	6'/0.5'	No	No	Gravel	Poor	0.01*	Ephemeral	16	Yes	Middle Fork East Fork Whitewater River
Middle Fork East Fork Whitewater River	132 - 135	39.866973, -84.858663	44'/3'	Yes	Yes	unknown	Good	45.4	Perennial	274	Yes	Whitewater River
UNT 5 to Middle Fork East Fork Whitewater River	137 & 138	39.864256, -84.851483	1'/0.5'	No	No	Silt, gravel	Poor	0.01*	Ephemeral	474	Yes	Middle Fork East Fork Whitewater River
UNT 6 to Middle Fork East Fork Whitewater River	139 & 140	39.862764, -84.849853	3'/1'	No	No	Concrete, silt/sand	Very Poor	0.01*	Ephemeral	64	Yes	Middle Fork East Fork Whitewater River
UNT 1 to East Fork Whitewater River	141	39.859724, -84.845495	3'/0.25'	No	No	Concrete, silt/sand	Very Poor	0.01*	Ephemeral	102	Yes	East Fork Whitewater River
UNT 2 to East Fork Whitewater River	143 & 144	39.859809, -84.844506	2.5'/0.7'	Yes	No	Gravel, silt	Average	0.07	Intermittent	271	Yes	East Fork Whitewater River
UNT 3 to East Fork Whitewater River	145 & 146	39.858940, -84.843600	3'/1'	No	No	Gravel, sand/silt	Average	0.04	Intermittent	241	Yes	East Fork Whitewater River
UNT 4 to East Fork Whitewater River	147 & 148	39.857879, -84.842548	3'/0.5'	No	No	Silt/sand, gravel	Poor	0.05	Intermittent	214	Yes	East Fork Whitewater River

Stream Name	Photo Point(s)	OHWM Latitude/ Longitude	OHWM Width/ Depth	USGS Blue Line?	Pools/ Riffles?	Substrate	Stream Quality	Drainage Area (sq. mi)	Steam Type	Linear feet	Waters of the US?	Flows to**
UNT 5 to East Fork Whitewater River	152 & 153	39.851169, -84.835437	1.5'/0.5'	No	No	Silt/sand, riprap	Very Poor	0.08	Ephemeral	399	Yes	East Fork Whitewater River
UNT 6 to East Fork Whitewater River	155 - 157	39.847706, -84.831561	3'/0.5'	No	No	Silt/sand, gravel	Poor	0.35	Intermittent	426	Yes	East Fork Whitewater River
East Fork of East Fork Whitewater River	158 - 160	39.847386, -84.831937	42'/3'	Yes	Yes	unknown	Good	40.7	Perennial	415	Yes	Whitewater River
UNT 7 to East Fork Whitewater River	161	39.847338, -84.832368	2'/0.5'	No	No	Silt/sand	Very Poor	0.01*	Ephemeral	84	Yes	East Fork Whitewater River
UNT 8 to East Fork Whitewater River	169 & 170	39.829581, -84.810093	15'/2'	Yes	Yes	Concrete, silt/sand	Good	2.4	Perennial	342	Yes	East Fork Whitewater River
UNT 9 to East Fork Whitewater River	171	39.829011, -84.810671	2'/0.25'	No	Yes	Sand/silt	Average	0.13	Intermittent	242	Yes	East Fork Whitewater River
									Total linear feet within study area	11,408		

Unknown = No substrate information was collected due to high water at the time of the stream investigation.
*Drainage area was estimated by measuring around IndianaMap classified and unclassified drainage flow lines
**Relatively Permanent Water

Wetlands

A total of 83 wetlands were identified within the study area. Table 6 provides a wetland summary. The Wetland Determination Data Forms with corresponding data point photographs are attached. On the data sheets, gravel is noted where digging was difficult or inhibited within upland soil pits. Due to the size of the report, non-wetland data sheets were omitted from the report.

Most of the wetlands identified within the Study Area are Palustrine Emergent (PEM) wetlands that occur within or along roadside ditches. Dominant vegetation commonly found in the emergent wetlands included *Typha* spp. (cattails, OBL), *Phalaris arundinacea* (reed canary grass, FACW), and *Juncus* spp. (rush species). Five of the wetlands identified within the study area are Palustrine Scrub-Shrub (PSS) wetlands or contain a portion of PSS wetland; Wetland 6, Wetland 56, Wetland 57, Wetland 58, and Wetland 59. Dominant species found in the scrub-shrub wetlands included *Salix interior* (sandbar willow, OBL) and *Phalaris arundinacea*. Three of the wetlands identified within the study area are Palustrine Forested (PFO) wetlands or contain a portion of PFO wetland; Wetland 5, Wetland 10, Wetland 24, and Wetland 66. Dominant tree species found in the forested wetlands included *Populus deltoides* (Eastern cottonwood, FAC), *Fraxinus pennsylvanica* (green ash, FACW) and *Platanus occidentalis* (American sycamore, FACW).

The identified wetlands had a predominance of hydrophytic vegetation, soils that exhibited reducing conditions, and observed hydrological characteristics. The main sources of hydrology are precipitation and surface water from roadside drainage and adjacent streams. Hydrology indicators

observed within wetlands included: surface water (A1), high water table (A2), saturation (A3), sediment deposits (B2), drift deposits (B3), algal mat or crust (B4), surface soil cracks (B6), sparsely vegetated concave surface (B8), water-stained leaves (B9), drainage patterns (B10), hydrogen sulfide odor (C1), oxidized rhizospheres on living roots (C3), geomorphic position (D2), and FAC-neutral test (D5). Hydric soil indicators that were observed within wetland areas included: depleted below dark surface (A11), loamy mucky mineral (F1), depleted matrix (F3), redox dark surface (F6) and other problematic fluvial sediments within a floodplain.

Table 6. Wetland Summary

Wetland	Photo(s)	Latitude/ Longitude	Type	Acres	Linear Feet	Quality	Data Points	Dominant Vegetation	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Waters of the US?	Stream Connection
Wetland 1	PP-1	39.853464, -85.173864	PEM	0.348	971	poor	1, 2 (Wetland 3)	*Phalaris arundinacea*	F3	A3, D2, D5	yes	UNT1 Whitewater River
Wetland 2	PP-2	39.852930, -85.172269	PEM	0.066	86	poor					yes	UNT1 Whitewater River
Wetland 3	PP-5, DP-1	39.85292, -85.170354	PEM	0.492	848	poor					yes	Whitewater River
Wetland 4	PP-6	39.853490, -85.17004	PEM	0.439	1043	poor					yes	Whitewater River
Wetland 5 (Whitewater River Overflow)	PP-12, DP-3	39.853271, -85.165683	PEM	1.302	738	poor	3, 4	*Phalaris arundinacea*	F6	C3, D2, D5	yes	Whitewater River
			PFO	0.449								
Wetland 6	PP-13, DP-5	39.852647, -85.147864	PSS	0.175	387	poor	5, 6	*Salix interior, Morus alba, Typha x glauca*	F3	C3, D2, D5	yes	Beard Run
			PEM	0.052								
Wetland 7	PP-18, DP-7	39.853664, -85.14731	PEM	0.095	433	poor	7, 8	*Phalaris arundinacea*	F3	B6, D2, D5	yes	Beard Run
Wetland 8	PP-19	39.852723, -85.146623	PEM	0.018	70	poor	9, 10 (Wetland 9)	*Panicum virgatum, Typha x glauca, Juncus torreyi*	F3	C3, B6, D5	no	n/a
Wetland 9	PP-21, DP-9	39.852424, -85.145059	PEM	0.899	n/a	poor					no	n/a
Wetland 10	PP-20, DP-11	39.851737, -85.145378	PFO	0.093	265	average	11, 12	*Populus deltoides, Fraxinus pennsylvanica, Symphyotrichum lanceolatum*	F3	A3, D2, D5	yes	Beard Run
Wetland 11	PP-23, DP-13	39.853764, -85.14531	PEM	0.413	n/a	poor	13, 14 (Wetland 11)	*Typha x glauca*	F3	B4, B8, B6, D2, D5	no	n/a

Wetland	Photo(s)	Latitude/ Longitude	Type	Acres	Linear Feet	Quality	Data Points	Dominant Vegetation	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Waters of the US?	Stream Connection
Wetland 12	PP-22	39.853305, -85.145482	PEM	0.008	83	poor					no	n/a
Wetland 13	PP-24, DP-15	39.854884, -85.144247	PEM	0.199	1824	poor	15, 16	*Typha x glauca, Phalaris arundinacea*	F3	A3, D5	no	n/a
Wetland 14	PP-26, DP-17	39.852282, -85.14308	PEM	0.153	1127	poor	17, 18	*Typha x glauca, Eleocharis palustris*	F3	D2, D5	no	n/a
Wetland 15	PP-25, DP-19	39.853687, -85.142582	PEM	0.041	159	poor	19, 20	*Typha x glauca, Juncus tenuis*	F3	B4, D2, D5	no	n/a
Wetland 16	PP-28, DP-21	39.852590, -85.135839	PEM	0.011	170	poor	21, 22 (Wetland 16)	*Agrostis gigantea, Phalaris arundinacea*	F3	C3, D2, D5	no	n/a
Wetland 17	PP-27	39.853140, -85.13573	PEM	0.044	245	poor					no	n/a
Wetland 18	PP-33	39.852551, -85.133517	PEM	0.033	596	poor					no	n/a
Wetland 19	PP-34, DP-23	39.853096, -85.133811	PEM	0.037	230	poor	23, 24	*Symphyotrichum lanceolatum, Impatiens capensis*	F6	C3, D2, D5	no	n/a
Wetland 20	PP-35	39.853811, -85.099726	PEM	0.082	539	poor	25, 26 (Wetland 21A)	*Phalaris arundinacea*	F3	B2, B3, D2, D5	yes	Dry Branch
Wetland 21A*	PP-37, DP-25	39.854193, -85.098612	PEM	0.119	n/a	poor					yes	Dry Branch
Wetland 21B*		39.854318, -85.099408	PEM	0.042	402	poor					no	Dry Branch
Wetland 22	PP-36	39.853819, -85.098159	PEM	0.042	384	poor					yes	Dry Branch
Wetland 23	PP-42, DP-27	39.853630, -85.077436	PEM	0.329	1347	poor	27, 28	*Typha x glauca, Phalaris arundinacea*	F6	C3, D2, D5	yes	UNT 1 to Greens Fork

*Wetland 21 was revised to separate the linear roadside ditch portion (21B) from the area abutting Dry Branch (21A).

Wetland	Photo(s)	Latitude/ Longitude	Type	Acres	Linear Feet	Quality	Data Points	Dominant Vegetation	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Waters of the US?	Stream Connection
Wetland 24	PP-49, DP-29	39.852872, -85.073567	PFO	0.238	n/a	average	29, 30	*Populus deltoides, Celtis occidentalis, Robinia pseudoacacia, Platanus occidentalis, Solidago gigantea, Silphium perfoliatum, Phalaris arundinacea*	Other - Problematic fluvial	B10, D2, D5	yes	Greens Fork
Wetland 25	PP-50, DP-31	39.854567, -85.062424	PEM	0.056	553	poor	31, 32	*Typha x glauca*	F3	A2, A3, D2, D5	no	n/a
Wetland 26	PP-53, DP-33	39.8551560, -85.060034	PEM	0.058	155	poor	33, 34	*Phalaris arundinacea*	F6	B6, D2, D5	yes	UNT 2 to Greens Fork
Wetland 27	PP-56, DP-35	39.856804, -85.049268	PEM	0.259	1588	poor	35, 36	*Phalaris arundinacea*	F3	D2, D5	no	n/a
Wetland 28	PP-57, DP-37	39.858893, -85.038344	PEM	0.042	385	poor	37, 38	*Juncus torreyi, Agrostis gigantea*	F3	C3, B6, D2, D5	no	n/a
Wetland 29	PP-61, DP-39	39.859222, -85.033628	PEM	0.286	1990	poor	39, 40	*Typha x glauca*	F3	C3, D2, D5	yes	Black Water Branch
Wetland 30	PP-60, DP-41	39.859840, -85.032353	PEM	0.350	2254	poor	41, 42 (Wetland 30)	*Typha x glauca*	F3	C3, D2, D5	no	n/a
Wetland 31	PP-62	39.859813, -85.020525	PEM	0.153	671	average					yes	Far Run
Wetland 32	PP-65, DP-43	39.859249, -85.002199	PEM	0.062	696	poor	43, 44	*Phalaris arundinacea*	F3	C3, D2, D5	no	n/a
Wetland 33	PP-70, DP-45	39.859909, -84.994936	PEM	0.101	358	poor	45, 46	*Juncus torreyi, Scirpus pendulus*	F3	B8, B6, B10, D2, D5	no	n/a
Wetland 34	PP-73, DP-47	39.860203, -84.976741	PEM	0.109	n/a	average	47, 48	*Leersia oryzoides, Typha x glauca, Carex frankii*	F3	B9, B6, D2, D5	no	n/a
Wetland 35	PP-74, DP-49	39.862353, -84.956886	PEM	0.198	551	poor	49, 50	*Leersia oryzoides*	F6	C3, D2, D5	yes	Lick Creek

Wetland	Photo(s)	Latitude/ Longitude	Type	Acres	Linear Feet	Quality	Data Points	Dominant Vegetation	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Waters of the US?	Stream Connection
Wetland 36A*	PP-77, DP-51	39.862353, -84.956886	PEM	0.442	2560	poor	51, 52 (Wetland 36B)	*Typha x glauca*	F1	A1, A2, A3, B4, D5	yes	Lick Creek
Wetland 36B*		39.863593, -84.953107	PEM	0.182	590	poor					no	Lick Creek
Wetland 37	PP-78, DP-53	39.864204, -84.945904	PEM	0.121	769	poor	53, 54 (Wetland 37)	*Typha x glauca, Cyperus esculentus*	F3	C3, D2, D5	no	n/a
Wetland 38	PP-79	39.864627, -84.942703	PEM	0.177	841	poor					no	n/a
Wetland 39	PP-80	39.865338, -84.94267	PEM	0.075	618	poor	55, 56 (Wetland 40)	*Juncus compressus*	F6	B6, D2, D5	no	n/a
Wetland 40	PP-81, DP-55	39.865688, -84.940298	PEM	0.138	417	poor					no	n/a
Wetland 41	PP-82, DP-57	39.865658, -84.936954	PEM	0.126	899	poor	57, 58	*Echinochloa crus-galli, Typha x glauca, Juncus tenuis, Juncus torreyi, Agrostis gigantea*	F3	C3, B6, D2, D5	no	n/a
Wetland 42	PP-83, DP-59	39.866203, -84.936615	PEM	0.281	1354	poor	59, 60	*Typha x glauca, Eleocharis palustris*	A11	A2, A3, B4	yes	Clear Creek
Wetland 43	PP-87, DP-61	39.866269, -84.93218	PEM	0.053	158	poor	61, 62 (Wetland 44)	*Typha x glauca*	F3	A2, A3, D2, D5	no	n/a
Wetland 44	PP-89	39.866378, -84.928954	PEM	0.181	873	poor					no	n/a
Wetland 45	PP-90, DP-63	39.866765, -84.927719	PEM	0.789	1621	poor	63, 64 (Wetland 45)	*Typha x glauca, Eleocharis palustris*	F3	A2, A3, C3, D5	no	n/a
Wetland 46	PP-91	39.866887, -84.92634	PEM	0.403	1325	poor					no	n/a
Wetland 47	PP-92	39.866786, -84.924516	PEM	0.259	1406	poor					no	n/a
Wetland 48	PP-93, DP-65	39.867066, -84.923089	PEM	0.109	734	poor	65, 66	*Typha x glauca, Juncus tenuis*	F6	B4, D2, D5	no	n/a

*Wetland 36 was revised to separate the linear roadside ditch portion (36B) from the area abutting Lick Creek (36A).

Wetland	Photo(s)	Latitude/ Longitude	Type	Acres	Linear Feet	Quality	Data Points	Dominant Vegetation	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Waters of the US?	Stream Connection
Wetland 49	PP-94, DP-67	39.867402, -84.922469	PEM	0.030	249	poor	67, 68	*Typha x glauca, Juncus tenuis*	F3	B6, D2, D5	no	n/a
Wetland 50	PP-95, DP-69	39.866350, -84.921835	PEM	0.272	1952	poor	69, 70	*Typha x glauca*	F3	A2, A3, D2, D5	no	n/a
Wetland 51	PP-96	39.867498, -84.930271	PEM	0.178	1008	poor	71, 72 (Wetland 53)	*Phalaris arundinacea*	F3	A2, A3, D2, D5	yes	UNT 1 to Clear Creek
Wetland 52	PP-97	39.867533, -84.928357	PEM	0.144	846	poor					no	n/a
Wetland 53	PP-98, DP-71	39.868115, -84.926196	PEM	0.219	1439	poor					no	n/a
Wetland 54	DP-73	39.868696, -84.922104	PEM	0.571	2515	poor	73, 74	*Typha x glauca*	F6	A2, A3, D2, D5	no	n/a
Wetland 55	PP-99, DP-75	39.870296, -84.931005	PEM	0.019	n/a	poor	75, 76	*Phalaris arundinacea*	Other - Problematic fluvial	C3, D2, D5	yes	Clear Creek
Wetland 56	PP-107 & 109, DP-77	39.868933, -84.913457	PEM	0.207	515	poor	77, 78 (Wetland 56)	*Phalaris arundinacea*	F6	A2, A3, D5	yes	UNT 2 to West Fork East Fork Whitewater River
			PSS	0.165								
Wetland 57	PP-110	39.869694, -84.912823	PSS	0.05	59	poor					yes	UNT 2 to West Fork East Fork Whitewater River
Wetland 58	PP-113	39.869071, -84.912384	PSS	0.051	n/a	poor	79, 80 (Wetland 59)	*Salix interior, Fraxinus pennsylvanica, Phalaris arundinacea*	F3	A2, A3, D5	yes	UNT 2 to West Fork East Fork Whitewater River
Wetland 59	PP-114, DP-79	39.869857, -84.912025	PSS	0.059	204	poor					yes	UNT 2 to West Fork East Fork Whitewater River
Wetland 60	PP-122, DP-81	39.871925, -84.894107	PEM	0.224	1244	poor	81, 82	*Echinochloa crus-galli, Typha x glauca*	F6	A1, A3, C2, D2, D5	no	n/a
Wetland 61	PP-123, DP-83	39.871358, -84.887127	PEM	1.319	n/a	poor	83, 84	*Juncus tenuis, Typha x glauca*	F6	A1, A2, A3, C3, D5	no	n/a

Wetland	Photo(s)	Latitude/ Longitude	Type	Acres	Linear Feet	Quality	Data Points	Dominant Vegetation	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Waters of the US?	Stream Connection
Wetland 62	PP-128, DP-85	39.871989, -84.87478	PEM	0.045	574	poor	85, 86	*Typha x glauca, Poa palustris*	F3	B6, D2, D5	yes	UNT 3 to Middle Fork East Fork Whitewater River
Wetland 63	DP-87	39.867259, -84.861304	PEM	0.116	458	poor	87, 88	*Leersia oryzoides, Eleocharis palustris, Juncus torreyi*	F3	A2, A3, B10, D5	no	n/a
Wetland 64	DP-89	39.868174, -84.860562	PEM	0.145	370	poor	89, 90	*Juncus torreyi, Eleocharis palustris*	F3	B6, B10, D2	no	n/a
Wetland 65	DP-91	39.868845, -84.860278	PEM	0.026	223	poor	91, 92	*Typha x glauca, Juncus torreyi*	F3	C3, B6, B10, D5	no	n/a
Wetland 66	PP-136, DP-93	39.866908, -84.858525	PFO	0.585	n/a	average	93, 94	*Platanus occidentalis, Fraxinus pennsylvanica, Lonicera maackii, Ulmus americana, Pilea pumila, Fallopia scandens, Impatiens capensis, Persicaria longiseta*	Other - Problematic fluvial	B10, D2, D5	yes	Middle Fork East Fork Whitewater River
Wetland 67	PP-142, DP-95	39.8599860, -84.844802	PEM	0.025	180	poor	95, 96	*Typha x glauca, Leersia oryzoides, Glyceria striata, Carex vulpinoidea, Scirpus atrovirens*	F6	C3, D2, D5	yes	UNT 2 to East Fork Whitewater River
Wetland 68	PP-149, DP-97	39.857843, -84.842441	PEM	0.019	38	average	97, 98 (Wetland 68)	*Impatiens capensis, Carex lurida, Eleocharis palustris, Typha x glauca*	F6	C3, D2, D5	yes	UNT 4 to East Fork Whitewater River
Wetland 69	PP-150	39.857249, -84.841959	PEM	0.027	210	poor					no	n/a

Wetland	Photo(s)	Latitude/ Longitude	Type	Acres	Linear Feet	Quality	Data Points	Dominant Vegetation	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Waters of the US?	Stream Connection
Wetland 70	PP-151, DP-99	39.851792, -84.83595	PEM	0.194	130	average	99, 100	*Typha x glauca, Carex vulpinoidea*	F6	C3, D2, D5	yes	UNT 5 to East Fork Whitewater River
Wetland 71	PP-154, DP-101	39.850204, -84.835325	PEM	0.100	n/a	poor	101, 102	*Echinochloa crus-galli*	F6	A1, A2, A3, D2, D5	yes	UNT 5 to East Fork Whitewater River
Wetland 72	PP-162, DP-103	39.846927, -84.832141	PEM	0.031	157	poor	103, 104	*Glyceria striata, Phalaris arundinacea*	F6	A2, A3, C3, D2, D5	no	n/a
Wetland 73	PP-163, DP-105	39.833565, -84.818221	PEM	0.139	n/a	poor	105, 106	*Typha x glauca*	F3	B6, D2, D5	no	n/a
Wetland 74	DP-107	39.832836, -84.818496	PEM	0.029	68	poor	107, 108	*Typha x glauca*	A11	A1, A2, A3, D2, D5	no	n/a
Wetland 75	PP-164, DP-109	39.832855, -84.817643	PEM	0.064	225	poor	109, 110 (Wetland 75)	*Typha x glauca*	A11	A1, A2, A3, D5	no	n/a
Wetland 76	PP-165	39.833825, -84.816283	PEM	0.011	44	poor					no	n/a
Wetland 77	PP-166, DP-111	39.832242, -84.81509	PEM	0.392	548	poor	111, 112	*Typha x glauca, Schoenoplectus tabernaemontani*	F6	C3, D2, D5	no	n/a
Wetland 78	DP-113	39.832207, -84.814427	PEM	0.061	195	poor	113, 114	*Typha x glauca*	F6	A2, A3, D2, D5	no	n/a
Wetland 79	PP-167	39.834193, -84.815805	PEM	0.046	342	poor	115, 116 (Wetland 80)	*Scirpus atrovirens, Juncus tenuis, Scirpus pendulus, Juncus torreyi*	F3	B4, B8, B6, D2, D5	no	n/a
Wetland 80	PP-117, DP-115	39.833967, -84.815042	PEM	0.084	n/a	poor					no	n/a
Wetland 81	DP-117	39.834360, -84.814987	PEM	0.166	554	poor	117, 118	*Typha x glauca*	F3	A2, A3, D2, D5	no	n/a
Total acres within study area				17.042								

Latitude/Longitude = center coordinates for each wetland. Data Point coordinates are included on the attached data forms.

V. Conclusion

A total of 38 streams and 83 wetlands were identified within the study area. All 38 streams and 31 wetlands were identified as Waters of the U.S. and will likely be under the jurisdiction of the USACE. A total of 52 wetlands were identified as isolated and are likely considered Waters of the State under jurisdiction of the IDEM.

Every effort should be taken to avoid and minimize impacts to these water resources. If impacts are necessary, then mitigation may be required. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgment based on the guidelines set forth by the USACE.

VI. Acknowledgement

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience, and professional judgement in conformance with the 1987 Corps of Engineers Wetland Delineation Manual, the appropriate regional supplement, and other appropriate agency guidelines.

Report Prepared By:

8/1/2023

Molly Baughman
Environmental Scientist
CHA Consulting, Inc.

Date

Report Reviewed By:

8/1/2023

Summer Elmore, PWS
Principal Scientist
CHA Consulting, Inc.

Date

VII. References

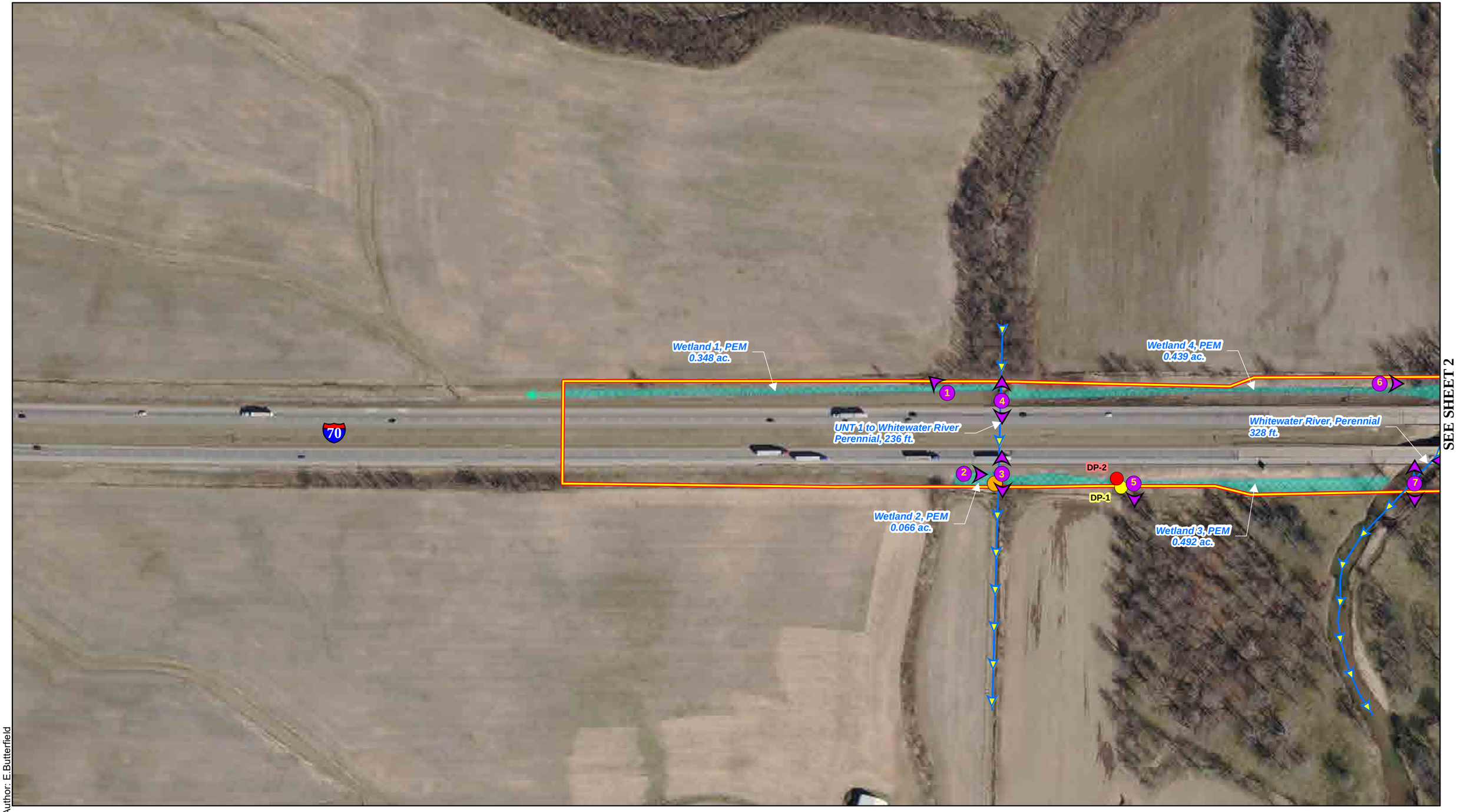
U.S. Army Corps of Engineers 2020. National Wetland Plant List, version 3.5. http://wetland-plants.usace.army.mil/ U.S. Army Corps of Engineers Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH

U.S. Army Corps of Engineers. 2010. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0)*, ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-10-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

VIII. List of Attachments

- Project Location and Water Resource Maps
- Water Resource Photographs
- Wetland Determination Data Forms and Data Point Photographs
- Stream Stats Reports

In order to reduce the number of pages in the NEPA document, the following items were omitted from the Waters of the US Report: project location, NWI wetlands, NRCS soils, IDNR flood zones & NHD stream maps, photographs, data forms, and StreamStats reports.



SEE SHEET 2

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

Indiana Department of Transportation

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Image Courtesy of the IndianaMap
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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 1 of 38

N

DES No. 2002424

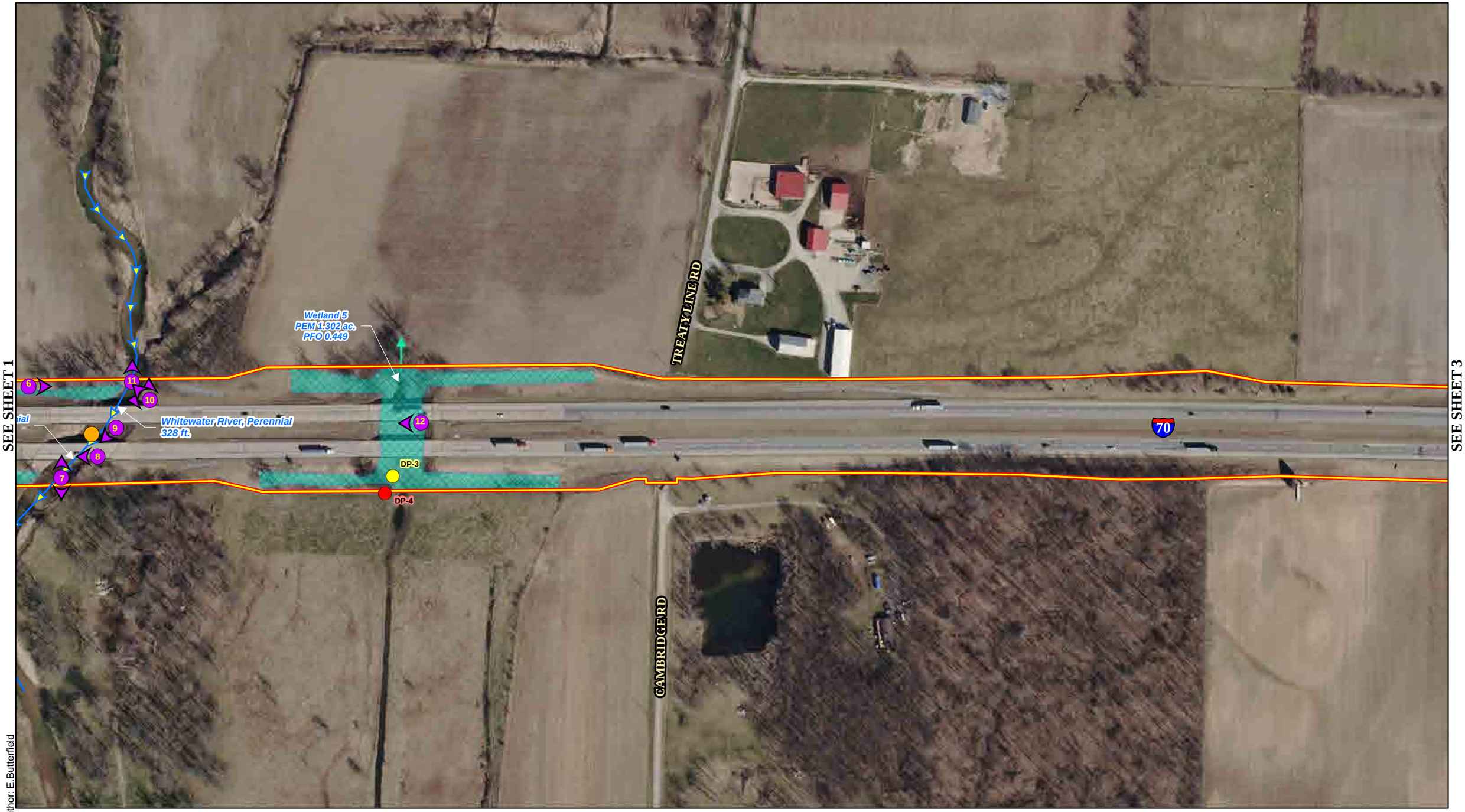
Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 1

SEE SHEET 3



Legend

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- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

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Wayne County, Indiana

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Sheet 2 of 38

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SEE SHEET 2

SEE SHEET 4

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

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Wayne County, Indiana

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Sheet 3 of 38

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1 inch = 200 feet

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SEE SHEET 3

SEE SHEET 5

DP-15 24 DP-16

Wetland 11, PEM
0.413 ac.

DP-13 23 DP-14

DP-20 25 DP-19

Wetland 13, PEM
0.199 ac.

Wetland 15, PEM
0.041 ac.

Wetland 17, PEM
0.044 ac.

27 32

Martindale Creek, Perennial
217 ft.

22

Wetland 12, PEM
0.008 ac.

70

31

Wetland 9, PEM
0.899 ac.

30 DP-22 28 29 DP-21

FRONTAGE RD

Wetland 16, PEM
0.011 ac.

DP-9 21

DP-10

DP-17 DP-18

26

DP-12 20 DP-11

Wetland 14, PEM
0.153 ac.

N STATE RD 1

N GERMANTOWN RD

Wetland 10, PFO
0.093 ac.

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Legend

- Study Area
- Delineated Wetland
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- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 4 of 38

N

DES No. 2002424

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0 100 200 Feet

1 inch = 200 feet

SEE SHEET 4

SEE SHEET 6

N DE HAYS RD

KINSINGER RD

FRONTAGE RD

70

Martindale Creek

Wetland 19, PEM
0.037 ac.

Wetland 18, PEM
0.033 ac.

34

33

DP-23

DP-24

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

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Wayne County, Indiana

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SEE SHEET 5

SEE SHEET 7

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 6 of 38

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SEE SHEET 6

SEE SHEET 8

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 7 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 7

SEE SHEET 9

Wetland 21B, PEM
0.042 ac.

Wetland 21A, PEM
0.119 ac.

DP-26

41

37

40

DP-25

Dry Branch/Plum Creek
Perennial
271 ft.

39

35

36

38

Wetland 20, PEM
0.082 ac.

Wetland 22, PEM
0.042 ac.

70

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

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Wayne County, Indiana

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Sheet 8 of 38

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0 100 200 Feet

1 inch = 218 feet

SEE SHEET 8

SEE SHEET 10

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Legend

- Study Area
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- Wetland Extends Off-Site
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- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 9 of 38

N

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0 100 200 Feet

1 inch = 200 feet

SEE SHEET 9

SEE SHEET 11

NWASHINGTONRD

70

Wetland 23, PEM
0.329 ac.

UNT 1 to Greens Fork
Ephemeral, 595 ft.

Greens Fork, Perennial
381 ft.

Wetland 24, PFO
0.238 ac.

DP-27
DP-28
DP-28
DP-29
DP-30

43
44
48
47
49
45
46

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

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Wayne County, Indiana

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Sheet 10 of 38

N

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0 100 200 Feet

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SEE SHEET 10

SEE SHEET 12

Wetland 25, PEM
0.056 ac.

DP-32

50

DP-31

DP-33

53

52

DP-34

Wetland 26, PEM
0.058 ac.

UNT 2 to Greens Fork
Intermittent, 388 ft.

51

70

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

Indiana Department of Transportation

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Water Resources Map

Revive I-70
Wayne County, Indiana

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Sheet 11 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 11

SEE SHEET 13

GARRETT RD

55

70

College Corner Branch, Intermittent
256 ft.

54

DP-36

56

DP-35

Wetland 27, PEM
0.259 ac.

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 12 of 38

N

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0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 12

SEE SHEET 14

GARRETT RD

GARRETT RD

N MINERAL SPRINGS RD

N MINERAL SPRINGS RD

70

70

Black Water Branch, Intermittent
289 ft.

DP-38

DP-37

57

Wetland 28, PEM
0.042 ac.

58

59

60

Wetland 30, PEM
0.350 ac.

DP-40

61

DP-39

Wetland 29, PEM
0.286 ac.

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

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Wayne County, Indiana

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Sheet 13 of 38

N

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0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 13

SEE SHEET 15

DP-42

DP-41

Wetland 30, PEM
0.3 ac.

Wetland 29, PEM
0.286 ac.

70

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Legend

- Study Area
- Delineated Wetland
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- Upland DP
- Wetland DP
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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 14 of 38

N

DES No. 2002424

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0 100 200 Feet

1 inch = 200 feet

SEE SHEET 14

SEE SHEET 16

SOWERS RD

MEANS RD

WEST GROVE RD

Wetland 31, PEM
0.153 ac.

62

63

Far Run, Intermittent
396 ft.

64

70

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
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- Wetland DP
- OHWM Measurement
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Water Resources Map

Revive I-70
Wayne County, Indiana

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Sheet 15 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 15

SEE SHEET 17

MEANS RD

70

DP-44

65

DP-43

Wetland 32, PEM
0.062 ac.

Nolands Fork

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
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- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 16 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 16

SEE SHEET 18

MEANS RD

N CENTERVILLE RD

DP-45

DP-46

66 67 68 69 70 71 72

Nolands Fork, Perennial
283 ft.

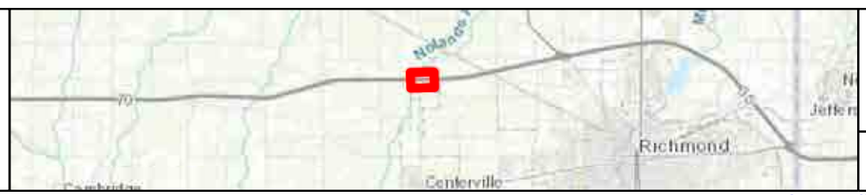
Wetland 33, PEM
0.101 ac.

UNT 1 to Nolands Fork
Perennial, 250 ft.

70

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point



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Wayne County, Indiana

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Sheet 17 of 38

N

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Date : July 2023

0 100 200 Feet

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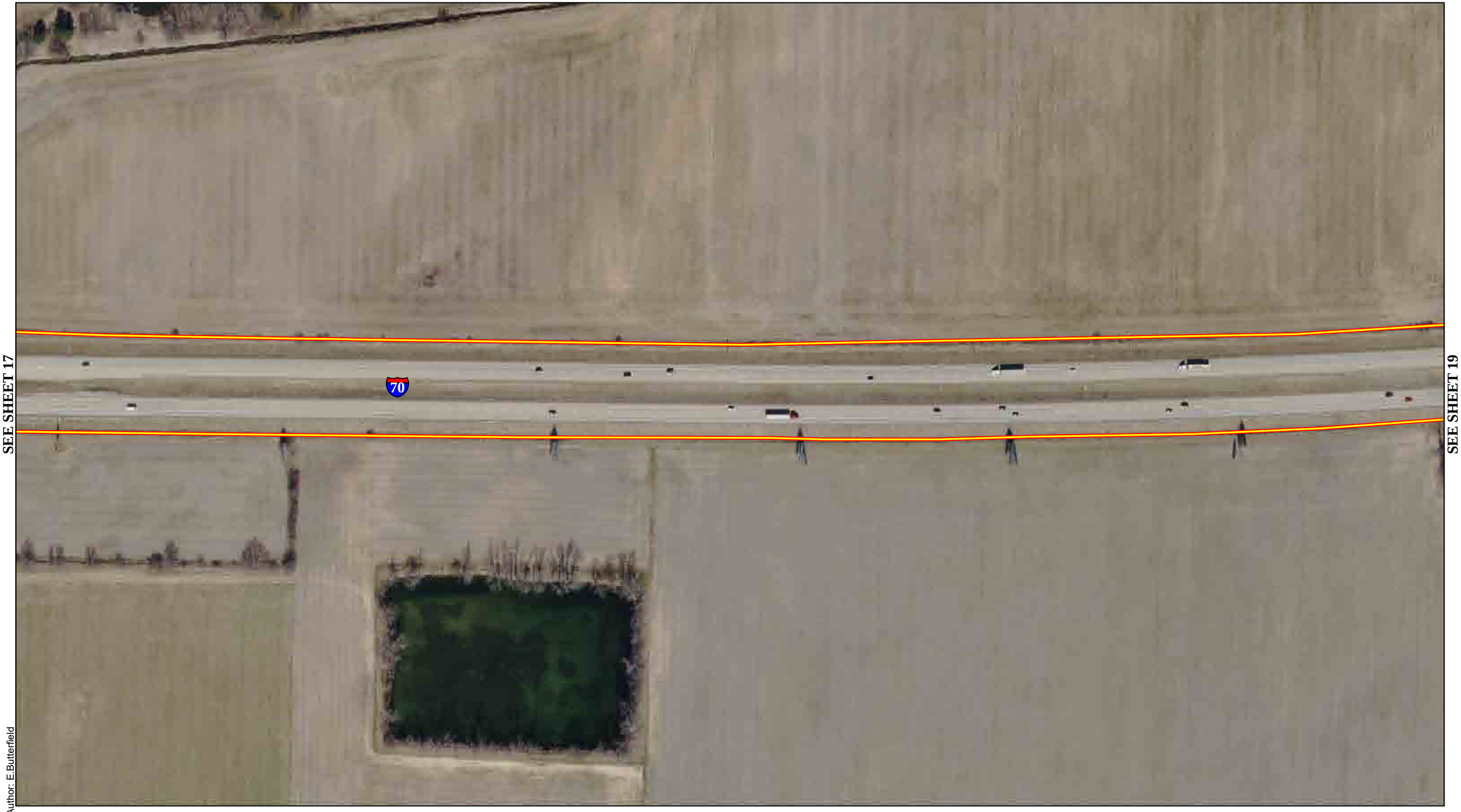
SEE SHEET 17

SEE SHEET 19



Legend

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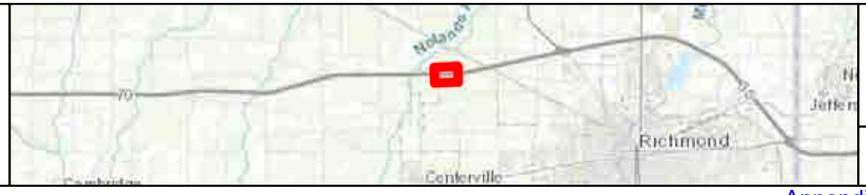
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point



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Sheet 18 of 38

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0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 18

SEE SHEET 20

Wetland 34, PEM
0.109 ac.

DP-47

73

DP-48

70

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 19 of 38

N

DES No. 2002424

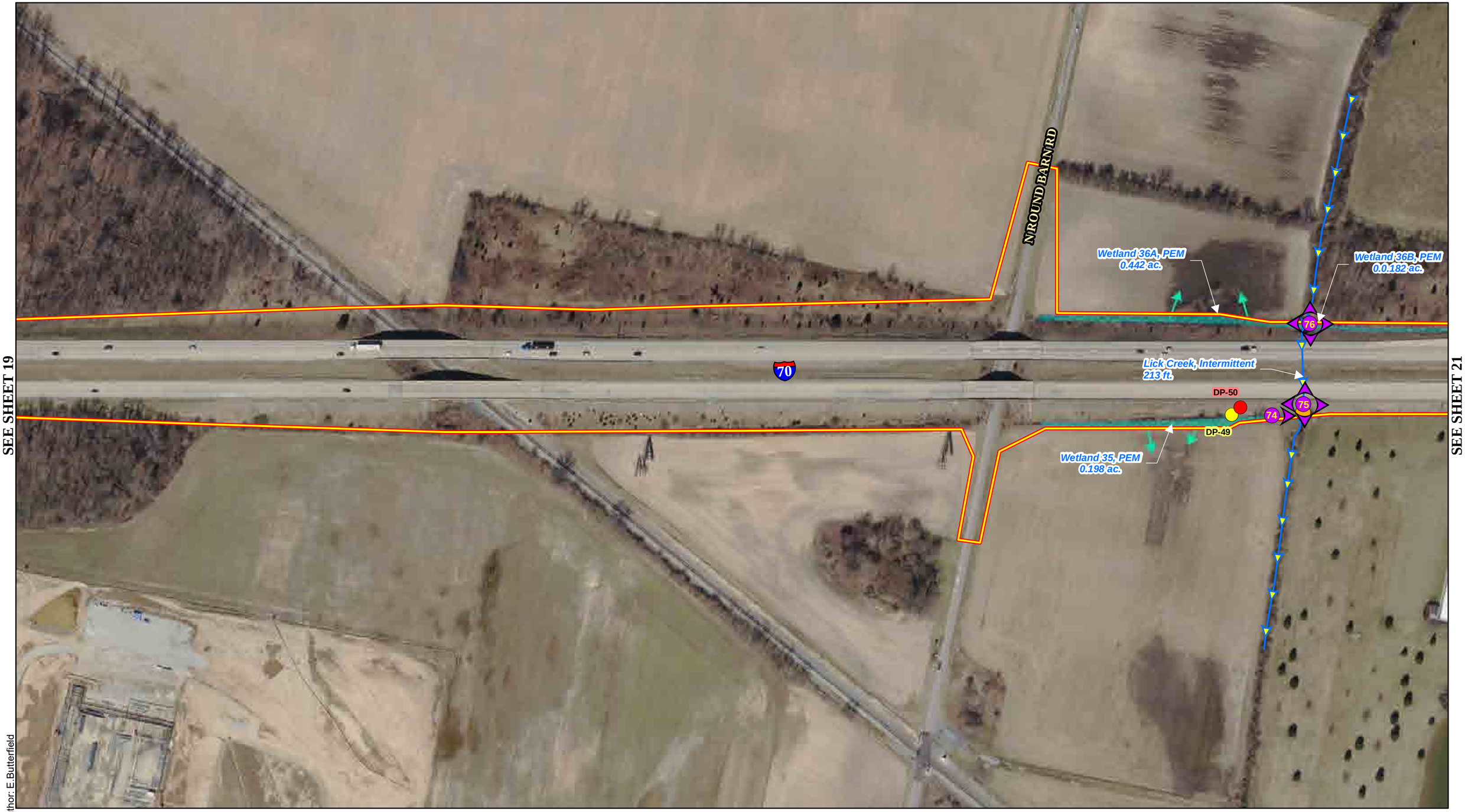
Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 19

SEE SHEET 21



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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 20 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 20

SEE SHEET 22

Wetland 36B, PEM
0.182 ac.

DP-52

77

DP-51

70

Wetland 37, PEM
0.121 ac.

78

DP-53

DP-54

79

Wetland 38, PEM
0.177 ac.

W INDUSTRIES RD

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
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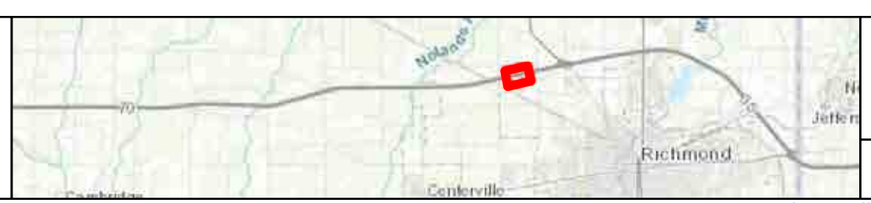
- Wetland DP
- OHWM Measurement
- Photo Point



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Sheet 21 of 38

N

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Date : July 2023

0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 21

SEE SHEET 23/24

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

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Sheet 22 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 24

SEE SHEET 22

SEE SHEET 25

Wetland 51, PEM
0.178 ac.

Wetland 52, PEM
0.144 ac.

Wetland 53, PEM
0.219 ac.

Wetland 54, PEM
0.571 ac.

UNT 1 to Clear Creek
Ephemeral, 211 ft.

N US HWY 35

Wetland 47, PEM
0.259 ac.

Wetland 49, PEM
0.03 ac.

Wetland 43, PEM
0.053 ac.

Wetland 45, PEM
0.789 ac.

Wetland 46, PEM
0.403 ac.

Wetland 44, PEM
0.181 ac.

WILLIAMSBURG PIKE

Wetland 48, PEM
0.109 ac.

Wetland 50, PEM
0.272 ac.

Clear Creek

INDUSTRIES RD

FLATLEY RD

DP-61 DP-62 DP-63 DP-64 DP-65 DP-66 DP-67 DP-68 DP-69 DP-70 DP-71 DP-72

87 88 89 90 91 92 93 94 95 96 97 98

70

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

Noblesville
Richmond
Centerville
Cambridge

Indiana Department of Transportation

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Water Resources Map

Revive I-70
Wayne County, Indiana

Sheet 23 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 22

SEE SHEET 25

UNT 2 to Clear Creek
Ephemeral, 509 ft.

105
104
103
102
100
101
99
DP-76
DP-75

Wetland 55 , PEM
0.019 ac.

FLATLEY RD

Clear Creek

96
97

Wetland 51, PEM
0.178 ac.

Wetland 52, PEM
0.144 ac.

98
DP-72
DP-71

Wetland 53, PEM
0.219 ac.

Wetland 54, PEM
0.571 ac.

US HWY 35

70

UNT 1 to Clear Creek
Ephemeral, 211 ft.

SEE SHEET 23

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

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Water Resources Map

Revive I-70
Wayne County, Indiana

Image Courtesy of the IndianaMap
Photo Date: 2018

Sheet 24 of 38

N

DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 23/24

SEE SHEET 26

Wetland 54, PEM
0.571 ac.

Wetland 57, PSS
0.05 ac.

Wetland 59, PSS
0.059 ac.

DP-73

DP-74

106

108

110

112

DP-79

114

DP-80

70

UNT 1 to West Fork East Fork Whitewater River
Intermittent, 248 ft.

UNT 2 to West Fork
East Fork Whitewater River
Intermittent, 331 ft.

107

DP-77

109

DP-78

111

113

Wetland 50, PEM
0.272 ac.

Wetland 56, PEM
0.207 ac.

Wetland 56
PSS (scrub/shrub)
0.165 ac.

Wetland 58, PSS
0.051 ac.

ROSE CITY BLVD

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

Indiana Department of Transportation

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Water Resources Map

Revive I-70
Wayne County, Indiana

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Sheet 25 of 38

N

DES No. 2002424

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0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 25

SEE SHEET 27

Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

Indiana Department of Transportation

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Water Resources Map

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Wayne County, Indiana

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Sheet 26 of 38

N

DES No. 2002424

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0 100 200 Feet

1 inch = 200 feet

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SEE SHEET 26

SEE SHEET 28

Wetland 60, PEM
0.224 ac.

DP-82

DP-81

122

118

117

116

West Fork East Fork Whitewater River, Perennial
354 ft.

115

120

121

119

UNT 3 to West Fork East Fork Whitewater River
Intermittent, 713 ft.

Wetland 61, PEM
1.319 ac.

70

MENDELSON DR

CHESTER BLVD

CHESTER BLVD

CATALPA DR

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Legend

- Study Area
- Delineated Wetland
- Wetland Extends Off-Site
- Stream/UNT
- Upland DP
- Wetland DP
- OHWM Measurement
- Photo Point

Indiana Department of Transportation

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Water Resources Map

Revive I-70
Wayne County, Indiana

Image Courtesy of the IndianaMap
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DES No. 2002424

Date : July 2023

0 100 200 Feet

1 inch = 200 feet

SEE SHEET 27

SEE SHEET 29

HIGHLAND SCHOOL DR

HIGHLAND RD

70

WEST CART RD

Wetland 61, PEM
1.319 ac.

123

DP-83

DP-84

125

124

UNT 1 to Middle Fork East Fork Whitewater River
Intermittent, 229 ft.

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Legend

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Wetland 65, PEM
0.026 ac.

DP-91

DP-92

Wetland 64, PEM
0.145 ac.

DP-90

DP-89

70

UNT 4 to Middle Fork East Fork Whitewater River
Ephemeral, 16 ft.

130

131

N STATE RD 227

136

135

Wetland 66, PFO
0.585 ac.

134

133

132

DP-93

DP-94

DP-88

Wetland 63, PEM
0.116 ac.

DP-87

Middle Fork East Fork Whitewater River, Perennial
274 ft.

Legend

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0 100 200 Feet

1 inch = 218 feet

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SEE SHEET 30

SEE SHEET 32

Legend

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SEE SHEET 31

SEE SHEET 33

Wetland 67, PEM
0.025 ac.

DP-95

142

DP-96

144

UNT 2 to East Fork Whitewater River
Intermittent, 271 ft.

UNT 3 to East Fork
Whitewater River
Intermittent, 241 ft.

146

UNT 4 to East Fork
Whitewater River
Intermittent, 214 ft.

Wetland 68, PEM
0.019 ac.

DP-97

148

149

DP-98

Wetland 69, PEM
0.027 ac.

150

70

141

143

UNT 1 to East Fork Whitewater River
Ephemeral, 102 ft.

145

147

WEISS RD

RESERVOIR RD

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Water Resources Map

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SEE SHEET 32

SEE SHEET 34

Wetland 70, PEM
0.194 ac.

DP-100

DP-99

151

153

UNT 5 to East Fork Whitewater River
Ephemeral, 399 ft.

70

DP-102

152

154

DP-101

Wetland 71, PEM
0.1 ac.

GRAVEL PIT RD

STATE RD 121

RESERVOIR RD

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STATE RD 121

GRAVEL PIT RD

70

155 156 157 158 159 160 161 162

DP-103

DP-104

UNT 6 to East Fork Whitewater River
Intermittent, 426 ft.

East Fork of East Fork Whitewater River, Perennial
415 ft.

Wetland 72, PEM
0.031 ac.

UNT 7 to East Fork Whitewater River
Ephemeral, 84 ft.

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SEE SHEET 36/37

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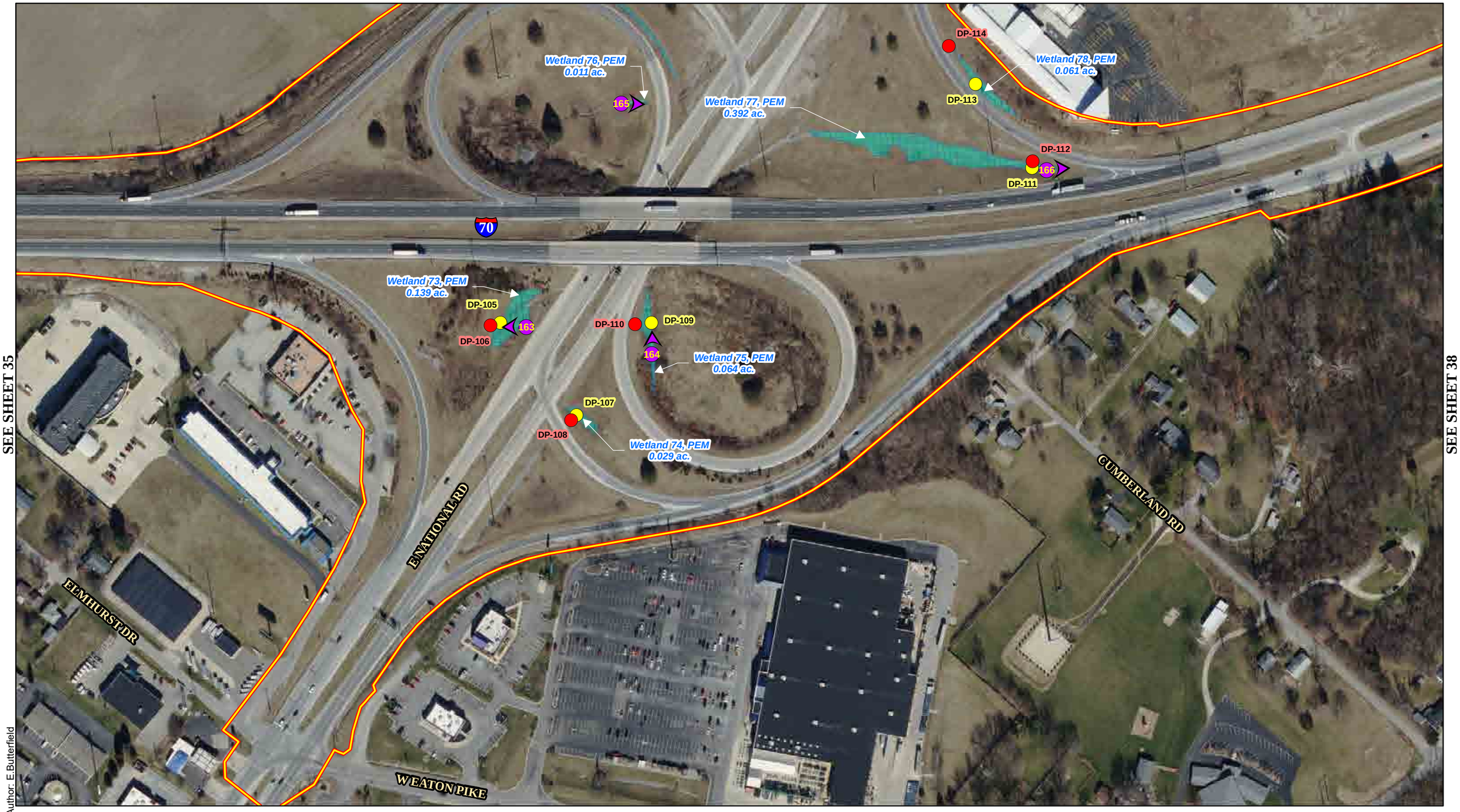
SEE SHEET 37

SEE SHEET 35

SEE SHEET 38



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SEE SHEET 35

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Wetland 81, PEM
0.166 ac.

DP-118

168

DP-117

DP-116

Wetland 80, PEM
0.084 ac.

DP-115

Wetland 79, PEM
0.046 ac.

167

ENATIONAL RD

DP-114

SEE SHEET 36

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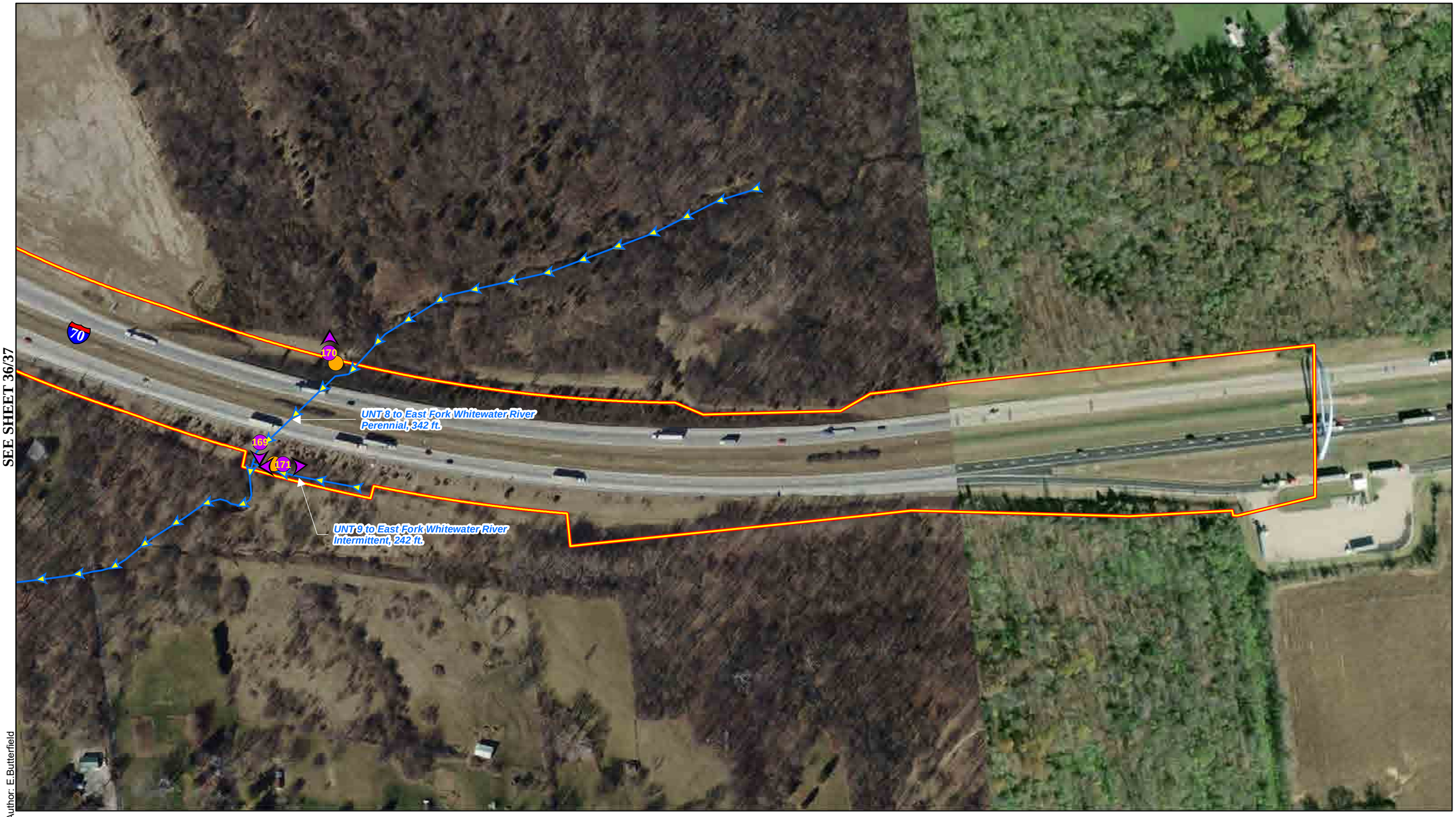

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