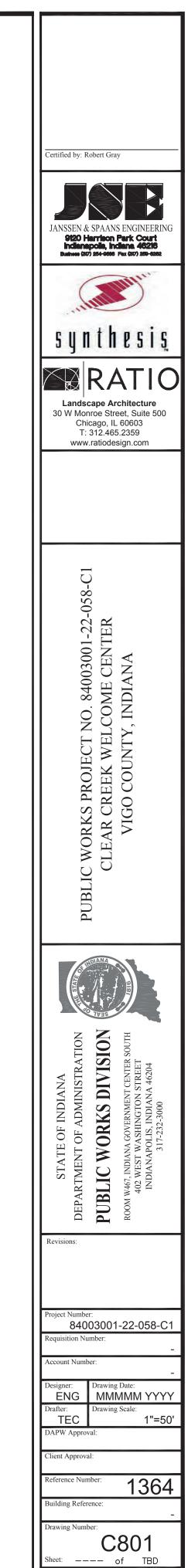




SCALE: 1'' = 50'



 $\bigcirc$ 

78

Appendix G: New Wastewater Pipe Alignment Schematic



TRIBUNE STAR P.O. BOX 149 TERRE HAUTE IN 47808-0149 (812)231-4219 Fax (812)231-4347

ORDER CONFIRMATION

Salesperson: JENNIFER HENSLEY	Printed at 11/09/22 09:59 by pbowe
Acct #: 85875	Ad #: 287874 Status: New
METRIC ENVIRONMENTAL 6958 HILLSDALE COURT INDIANAPOLIS IN 46250	Start: 11/07/2022 Stop: 11/07/2022 Times Ord: 1 Times Run: *** LEG 1.00 X 95.00 Words: 464 Total LEG 95.00 Class: 147 LEGALS
	Rate: 6GLGE Cost: 42.55 # Affidavits: 1
Contact: Phone: (317)400-1633 Fax#:	Ad Descrpt: PUBLIC NOTICE DES. NO. 19 Given by: * P.O. #:
Email: rhondae@metricenv.com Agency:	Created: jhen1 11/02/22 09:24 Last Changed: kwilk 11/02/22 16:13
PUBZONEEDTTPRUNDATESTSPA95S11/07THOLA95S11/07	
PAYMENTS: 11/02/2022 42.55 V ********	***6913 634744[491390655]
AUTTHO	RIZATION

AUTHORIZATION

Under this agreement rates are subject to change with 30 days notice. In the event of a cancellation before schedule completion, I understand that the rate charged will be based upon the rate for the number of insertions used.

Name (print or type)

Name (signature)

(CONTINUED ON NEXT PAGE)

#### TRIBUNE STAR P.O. BOX 149 TERRE HAUTE IN 47808-0149 (812)231-4219 Fax (812)231-4347

#### ORDER CONFIRMATION (CONTINUED)

#### Salesperson: JENNIFER HENSLEY

Printed at 11/09/22 09:59 by phowe

Status: New

Ad #: 287874

#### Acct #: 85875

#### Public Notice Des. No. 1902855

The Indiana Department of Transportation (INDOT) is planning to undertake an interstate 70 (I-70)/Clear Creek Rest Area Project, funded in part by the Federal Highway Administration The Clear Creek Rest Area is on eastbound I-70 at mile marker 2 between the Indiana State Line and Terre Haute, and it encompasses approximately forty-eight acres.

Under the preferred alternative, the undertaking involves demolishing and replacing the existing rest area building and to reconfigure the parking lots to increase truck parking spaces Ancillary work items include new water and sewer line installations, reconstruction of entrance and exit ramps, utility work, and landscaping. Current wastewater treatment at the welcome center is carried out via a small package plant that discharges into a nearby stream. A new wastewater pipe will be installed for the welcome center to connect it to the municipal utility in Terre Haute, a distance of approximately 1.2 miles. The wastewater pipe will begin at the welcome center and travel north and east along Old US 40. A new submersible lift station will be installed along Old US 40, the connection point for the wastewater pipe to tie into the municipal system will be a to Old US 40 and South Gorham Place, and will terminate at the intersection of Old US 40 and South Thorpe Place. Construction of the wastewater pipe will involve horirontal directional drilling along the roads that make up the route. No other permanent or temporary rightof-way will be needed for the undertaking.

of-way will be needed for the undertaking. The proposed action does not impact properies listed in or eligible for the National Register of Historic Places The Indiana Department of Transportation (INDOT), on behalf of the FHWA, has issued a "No Historic Properies Affected" linding for the properties Affected" linding for the properties are present within the Area of Potential Effects (APE). In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d) 800.3(e) and 800.6(a) (4). Pursuant to 36 CFR 800.4(d)(1), the documentation specified in 36 CFR 800.11(d) is available for inspection in Metric Environmental, LLC. Additionally, this documentation can be viewed electronically by accessing INDOT's Section 106 document posting website IN SCOPE at http://erms.indot.in.gov/Section106-Documents. This documentation serves as the basis for the "No Historic Properties Affected" finding. The views of the public on this effect finding are being sought. Please reply with any comments to Candace Hudziak of Metric Environmental, LLC (317-443-4123, candace)-@metricenv.com) no later than 1277/2022

In accordance with the "Americans with Disabilities Act", if you have a disability for which INDOT needs to provide accessibility to the document (s) such as interpreters or readers, please contact Lauren Wilburn, IN-DOT Project Manager, at 317-83-4669 or LWilburn@indot IN.gav. 287874-T/S-1177/2022-hspaxip

## 287874

0 P.O. BOX 149 TERRE HAUTE, IN 47808

I hereby certify that the attached advertisement of PUBLIC NOTI in space of 80.66 lines was published in the TRIBUNE STAR On :

TRIBUNE STAR

11/07/2022

Subscribed and sworn to before me this

9th day of November, 2022

notary public

KIMBERLY S WILKERSON Notary Public Vigo County, State of Indiana Commission Expires April 9, 2023

#### Public Notice Des. No. 1902855

The Indiana Department of Transportation (INDOT) is planning to undertake an Interstate 70 (I-70)/Clear Greek Rest Area Project, funded in part by the Federal Highway Administration. The Clear Creek Rest Area is on eastbound I-70 at mile marker 2 between the Indiana State Line and Terre Haute, and it encompasses approximately forty-eight acres.

Under the preferred alternative, the undertaking involves demolishing and replacing the existing rest area building and to reconfigure the parking lots to increase truck parking spaces. Ancillary work items include new water and sewer line installations, reconstruction of entrance and exit ramps, utility work, and landscaping. Current wastewater treatment at the welcome center is carried out via a small package plant that discharges into a nearby stream. A new wastewater pipe will be installed for the welcome center to connect it to the municipal utility in Terre Haute, a distance of approximately 1.2 miles. The wastewater pipe will begin at the welcome center and travel north and east along Old US 40. A new submersible lift station will be at Old US 40 and South Gorham Place, and will terminate at the intersection of Old US 40 and South Thorpe Place. Construction of the wastewater pipe will lnvolve horizontal directional drilling along the roads that make up the route. No other permanent or temporary rightof-way will be needed for the undertaking.

The proposed action does not impact properties listed in or eligible for the National Register of Historic Places. The Indiana Department of Transportation (INDOT), on behalf of the FHWA, has issued a "No Historic Properties Affected" finding for the properties are present within the Area of Potential Effects (APE). In accordance with the National Historic Preservation Act, the views of the public are being sought regardon the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a) (4). Pursuant to 36 CFR 800.4(d)(1), the documentation specified in 36 CFR 800. 11(d) is available for inspection in Metric Environmental, LLC. Additionally, this documentation can be viewed electronically by accessing INDOT's Section 106 document posting website IN SCOPE at http://erms.indot.in.gov/Section106-Documents. This documentation serves as the basis for the "No Historic Properties Affected" finding. The views of the public on this effect finding are being sought. Please reply with any comments to Candace Hudziak of Metric Environmental, LLC (317-443-4123, candaceh@metricenv.com) no later than 12/7/2022.

In accordance with the "Americans with Disabilities Act", if you have a disability for which INDOT needs to provide accessibility to the document (s) such as interpreters or readers, please contact Lauren Wilburn, IN-DOT Project Manager, at 317-233-4688 or LWIburn Cindot.IN.gov. 287874-T/S-11/7/2022-hspaxip Public Notice Des. No. 1902855

The Indiana Department of Transportation (INDOT) is planning to undertake an Interstate 70 (I-70)/Clear Creek Rest Area Project, funded in part by the Federal Highway Administration. The Clear Creek Rest Area is on eastbound I-70 at mile marker 2 between the Indiana State Line and Terre Haute, and it encompasses approximately forty-eight acres.

Under the preferred alternative, the undertaking involves demolishing and replacing the existing rest area building and to reconfigure the parking lots to increase truck parking spaces. Ancillary work items include new water and sewer line installations, reconstruction of entrance and exit ramps, utility work, and landscaping. Current wastewater treatment at the welcome center is carried out via a small package plant that discharges into a nearby stream. A new wastewater pipe will be installed for the welcome center to connect it to the municipal utility in Terre Haute, a distance of approximately 1.2 miles. The wastewater pipe will begin at the welcome center and travel north and east along Old US 40. A new submersible lift station will be installed along Old US 40; the connection point for the wastewater pipe to tie into the municipal system will be at Old US 40 and South Gorham Place, and will terminate at the intersection of Old US 40 and South Thorpe Place. Construction of the wastewater pipe will involve horizontal directional drilling along the roads that make up the route. No other permanent or temporary right-of-way will be needed for the undertaking.

The proposed action does not impact properties listed in or eligible for the National Register of Historic Places. The Indiana Department of Transportation (INDOT), on behalf of the FHWA, has issued a "No Historic Properties Affected" finding for the project due to the fact that no historic properties are present within the Area of Potential Effects (APE). In accordance with the National Historic Preservation Act, the views of the public are being sought regarding the effect of the proposed project on the historic elements as per 36 CFR 800.2(d), 800.3(e) and 800.6(a)(4). Pursuant to 36 CFR 800.4(d)(1), the documentation specified in 36 CFR 800. 11(d) is available for inspection in Metric Environmental, LLC. Additionally, this documentation can be viewed electronically by accessing INDOT's Section 106 document posting website IN SCOPE at http://erms.indot.in.gov/Section106Documents. This documentation serves as the basis for the "No Historic Properties Affected" finding. The views of the public on this effect finding are being sought. Please reply with any comments to Candace Hudziak of Metric Environmental, LLC (317-443-4123, candaceh@metricenv.com) no later than 12/7/2022.

In accordance with the "Americans with Disabilities Act", if you have a disability for which INDOT needs to provide accessibility to the document(s) such as interpreters or readers, please contact Lauren Wilburn, INDOT Project Manager, at 317-233-4688 or LWilburn@indot.IN.gov. 287874-T/S-11/7/2022-hspaxlp

# APPENDIX E: Red Flag and Hazardous Materials

## **INDIANA DEPARTMENT OF TRANSPORTATION**



100 North Senate Avenue Room N758-ES Indianapolis, Indiana 46204 PHONE: (855) 463-6848 (855) INDOT4U Eric Holcomb, Governor Michael Smith, Commissioner

#### Date: October 7, 2022

- To: Site Assessment & Management (SAM) Environmental Policy Office - Environmental Services Division (ESD) Indiana Department of Transportation (INDOT) 100 N Senate Avenue, Room N758-ES Indianapolis, IN 46204
- From: Colin Keith Metric Environmental, LLC 6958 Hillsdale Court Indianapolis, IN 46250 <u>colink@metricenv.com</u>
- Re: RED FLAG INVESTIGATION DES #1902855, State Project Rest Area Modernization Project I-70 Clear Creek Welcome Center Vigo County, Indiana

#### **PROJECT DESCRIPTION**

Brief Description of Project: The project is located at a welcome center on I-70 in Vigo County southwest of Terre Haute. The welcome center is located at mile marker 1 along the eastbound side of the highway. The welcome center was built in 1992 and is in poor condition. Additionally, the existing parking areas do not provide sufficient capacity for current and projected traffic volumes. The preferred alternative is to demolish and replace the existing welcome center building and reconfigure the parking areas to increase the number of car and truck parking spaces. Current wastewater treatment at the welcome center is carried out via a small package plant that discharges into a nearby stream. A new wastewater pipe will be installed for the welcome center to connect it to the municipal utility in Terre Haute. The wastewater pipe will begin at the welcome center and travel north and east along Old US 40. A new submersible lift station will be installed along Old US 40; the connection point for the wastewater pipe to tie into the municipal system is being evaluated, with the most likely point being a mobile home park on Gorham Place and the alternate point being a lift station at Darwin Road. This RFI includes the route to Darwin Road in case that alternate ends up being selected. Construction of the wastewater pipe will likely be needed along the roads as the apparent existing right-of-way does not extend beyond the edge of pavement. New right-of-way will also need to be purchased from land east of the welcome center to accommodate the parking area expansion. Waterway impacts are expected from the discharge pipe relocation and parking area expansion work.

Bridge Work Included in Project: Yes  $\Box$  No  $\boxtimes$  Structure #(s) \_

Is the bridge Historical? Yes  $\Box$   $\,$  No  $\,$  Select  $\,$  Non-Select  $\,$ 

Red Flag Investigation, DES #1902855

(Note: If the project involves a <u>historical</u> bridge, please include the bridge information in the Recommendations Section of the report).

Culvert Work Included in Project: Yes 🗌 No 🛛 Structure #(s) \_\_\_\_

Proposed right of way: Temporary  $\Box$  #Acres \_\_\_\_\_, Permanent  $\boxtimes$  #Acres \_10, Not Applicable (N/A)  $\Box$ 

Type and proposed depth of excavation: Excavation of up to eight feet below grade is anticipated for the sewer line and lift station installations, building construction, and grading.

Maintenance of traffic (MOT): No road closures are planned. Short-term lane closures may be required to place the boring equipment. In that event, traffic will be maintained with the use of flaggers. No lane closures will be required on I-70. The welcome center will be closed to traffic during construction.

Work in waterway: Yes 🛛 No 🗌 Below ordinary high water mark: Yes 🖄 No 🗌

State Project: 🛛 LPA: 🗌

Any other factors influencing recommendations: N/A

#### **INFRASTRUCTURE TABLE AND SUMMARY**

#### Infrastructure

Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

Religious Facilities	1	1 Recreational Facilities	
Airports <sup>1</sup>	N/A	Pipelines	2
Cemeteries	2	Railroads	N/A
Hospitals	N/A	Trails	1
Schools	4*	Managed Lands	2

<sup>1</sup>In order to complete the required airport review, a review of public-use airports within 3.8 miles (20,000 feet) is required.

Explanation:

<u>Religious Facilities</u>: One (1) religious facility is located within the 0.5 mile search radius. Sugar Creek Baptist Church is approximately 0.07 mile north of the central portion of the project area. No impact is expected.

<u>Cemeteries</u>: Two (2) cemeteries are located within the 0.5 mile search radius. The nearest cemetery is Bennett Cemetery, approximately 0.34 mile northeast of the east end of the project area. No impact is expected.

<u>Schools</u>: Four (4) schools, three (3) mapped and one (1) unmapped, are located within the 0.5 mile search radius. Sugar Creek Consolidated Elementary School is south-adjacent to the central portion of the project area and Big Sprouts Pre-School is north-adjacent to the central portion of the project area. Coordination with Sugar Creek Consolidated Elementary School and Big Sprouts Pre-School will occur.

<u>Recreational Facilities</u>: Two (2) recreational facilities are located within the 0.5 mile search radius. Sugar Creek Consolidated Elementary School is south-adjacent to the central portion of the project area. Coordination with Sugar Creek Consolidated Elementary School will occur.

<u>Pipelines</u>: Two (2) pipeline segments are located within the 0.5 mile search radius. One (1) pipeline segment, Terre Haute Gas Corp., crosses and parallels the central and eastern portions of the project area. One (1) pipeline segment, Amoco Oil Company, is located approximately 0.04 mile from the west end of the exit to the rest area park. Coordination with INDOT Utilities and Railroads will occur.

<u>Trails</u>: One (1) trail segment is located within the 0.5 mile search radius. The West Terre Haute Levee Trail is approximately 0.29 mile northeast of the east end of the project area. No impact is expected.

Managed Lands: Two (2) managed lands are located within the 0.5 mile search radius. The nearest, the Wabashiki Fish and Wildlife Area, is approximately 0.18 mile east of the east end of the project area. No impact is expected.

#### WATER RESOURCES TABLE AND SUMMARY

#### Water Resources

Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

NWI – Points	1	Canal Routes – Historic N/A		
Karst Springs	N/A	NWI – Wetlands	41	
Canal Structures – Historic	N/A	Lakes	16	
NPS NRI Listed	N/A	Floodplain – DFIRM 7		
NWI – Lines	26	Cave Entrance Density N/A		
IDEM 303d Listed Streams and Lakes (Impaired)	2	Sinkhole Areas N/		
Rivers and Streams	21	Sinking-Stream Basins	N/A	

Explanation:

<u>NWI – Points</u>: One (1) NWI point is located within the 0.5 mile search radius. The point is approximately 0.49 mile west/northwest of the west end of the project area. No impact is expected.

<u>NWI – Lines</u>: Twenty-six (26) NWI line segments are located within the 0.5 mile search radius. Four (4) line segments, all representing Clear Creek, flow through the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

<u>IDEM 303d Listed Streams and Lakes (Impaired)</u>: Two (2) 303d listed stream segments are located within the 0.5 mile search radius. Sugar Creek is approximately 0.24 mile northeast of the east end of the project area. Sugar Creek is listed as impaired for Impaired Biotic Communities (IBC). No impact is expected.

<u>Rivers and Streams</u>: Twenty-one (21) stream segments are located within the 0.5 mile search radius. Four (4) stream segments, representing Clear Creek and a potential unnamed tributary (UNT) to Clear Creek, flow through the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

<u>NWI – Wetlands</u>: Forty-one (41) wetland polygons are located within the 0.5 mile search radius. Five (5) wetlands are located within the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

<u>Lakes</u>: Sixteen (16) lakes are located within the 0.5 mile search radius. The nearest lake is approximately 0.01 mile south of the west end of the project area. No impact is expected.

<u>Floodplain – DFIRM</u>: Seven (7) floodplain polygons are located within the 0.5 mile search radius. Portions of the project area are located within two (2) of the polygons. Coordination with INDOT ESD Ecology and Waterway Permitting will occur.

#### MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:					
Petroleum Wells N/A Mineral Resources N/A					
Mines – Surface N/A Mines – Underground 12					

Explanation:

<u>Mines – Underground</u>: Twelve (12) underground mine polygons are located within the 0.5 mile search radius. Four (4) of the polygons, all representing former coal mines that are no longer in operation, are within or adjacent to the project area. Coordination with IDNR Reclamation Division will occur.

#### HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:				
Superfund	N/A	Manufactured Gas Plant Sites	N/A	
RCRA Generator/TSD	N/A	Open Dump Waste Sites	1	
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A	
State Cleanup Sites	N/A	Waste Transfer Stations	N/A	
Septage Waste Sites	N/A	Tire Waste Sites	N/A	
Underground Storage Tank (UST) Sites	N/A	Confined Feeding Operations (CFO)	N/A	
Voluntary Remediation Program	N/A	Brownfields	1	
Construction Demolition Waste	N/A	Institutional Controls	N/A	
Solid Waste Landfill	N/A	NPDES Facilities	7	
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	1	
Leaking Underground Storage (LUST) Sites	N/A	Notice of Contamination Sites	N/A	

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

Explanation:

<u>Unknown Program</u>\*: One (1) site in an unknown program is located within the 0.5 mile search radius. West Side Salvage, 3151 Old US Hwy. 40, Agency Interest (AI) #57857, is adjacent south of the project area on the west side of Darwin Road between 9<sup>th</sup> Drive and Old US 40. The site, an apparent salvage yard, is not listed in the GIS layer and was visually identified from aerial photography. Although the site was assigned an AI number, no files are available in the VFC. If the Darwin Road alternative is selected, a Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

<u>Open Dump Waste Sites</u>: One (1) open dump site is located within the 0.5 mile search radius. Jeffrey Bell Construction & Excavating, 2850 Old US Hwy. 40, AI #57142, is approximately 0.35 mile east/northeast of the east end of the project area. No impact is expected.

<u>Brownfields</u>: One (1) Brownfields site is located within the 0.5 mile search radius. Powers Property, 603 S. Hovey Pl., Al #103663, is approximately 0.05 mile northeast of the east end of the project area. The IDEM Brownfields Program provided an eligibility letter to an economic development agency in December 2011. The eligibility letter noted that although the current use of the site was exclusively residential, a small auto repair business had been operated out of a detached garage from circa 1975 until 1994. No record of contamination, petroleum storage, or on-site disposal from this historic use was found in IDEM's review of information. IDEM determined that the economic development agency was eligible to use Brownfield funding to aid in redevelopment of the property. No action was ever taken. If the Darwin Road alternative is selected, a Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

<u>NPDES Facilities</u>: Seven (7) NPDES facilities are located within the 0.5 mile search radius. Three (3) facilities are within or adjacent to the project area.

- Clear Creek Welcome Center, I-70 MM 1, Permit #IN0056154, is located in the welcome center portion of the project area. The listing is for the package treatment plant at the welcome center, with an effective permit that expires July 31, 2027. Coordination with INDOT will occur.
- INDOT DES #0400537, 0400538, 0400541, 0400542 Bridge Rehabilitations Along 1-70 over Clear Creek, I-70 & Clear Creek, Permit #INR10H250, located immediately north of the welcome center portion of the project area. Construction stormwater permit for bridge rehabilitation projects; permit is terminated, with an expiration date of September 16, 2018. No impact is expected.
- 40 West Mobile Home Park, RR 15 Box 32, Permit #IN0048445, located within the central portion of the project area. IDEM issued a voidance of the permit in a letter on March 3, 1995, when the facility connected to the municipal sewer. No impact is expected.

<u>NPDES Pipe Locations</u>: One (1) NPDES pipe is located within the 0.5 mile search radius. Clear Creek Welcome Center, NPDES #IN0056154, is an outfall pipe to Clear Creek from the package treatment plant at the welcome center. Coordination with INDOT will occur.

### ECOLOGICAL INFORMATION SUMMARY

The Vigo County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high-quality natural communities is provided at <a href="https://www.in.gov/dnr/nature-preserves/files/np\_vigo.pdf">https://www.in.gov/dnr/nature-preserves/files/np\_vigo.pdf</a>. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did not indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

#### **RECOMMENDATIONS SECTION**

Include recommendations from each section. If there are no recommendations, please indicate N/A:

#### INFRASTRUCTURE:

<u>Schools</u>: Sugar Creek Consolidated Elementary School is south-adjacent to the central portion of the project area and Big Sprouts Pre-School is north-adjacent to the central portion of the project area. Coordination with Sugar Creek Consolidated Elementary School and Big Sprouts Pre-School will occur.

<u>Recreational Facilities</u>: Sugar Creek Consolidated Elementary School is south-adjacent to the central portion of the project area. Coordination with Sugar Creek Consolidated Elementary School will occur.

<u>Pipelines</u>: One (1) pipeline segment, Terre Haute Gas Corp., crosses and parallels the central and eastern portions of the project area. One (1) pipeline segment, Amoco Oil Company, is located approximately 0.04 mile from the west end of the exit to the rest area park. Coordination with INDOT Utilities and Railroads will occur.

#### WATER RESOURCES:

A Waters of the US Report is recommended based on the presence of mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur for the following features:

- Four (4) NWI line segments, all representing Clear Creek, flow through the project area.
- Four (4) stream segments, representing Clear Creek and a potential UNT to Clear Creek, flow through the project area.
- Five (5) NWI wetland polygons are located within the project area.
- Portions of the project area are located within two (2) floodplain polygons (coordination only).

#### MINING/MINERAL EXPLORATION:

<u>Mines – Underground</u>: Four (4) underground mine polygons, all representing former coal mines that are no longer in operation, are within or adjacent to the project area. Coordination with IDNR Reclamation Division will occur.

#### HAZARDOUS MATERIAL CONCERNS:

<u>Unknown Program</u>: West Side Salvage, 3151 Old US Hwy. 40, AI #57857, is adjacent south of the project area on the west side of Darwin Road between 9<sup>th</sup> Drive and Old US 40. The site, an apparent salvage yard, is not listed in the GIS layer and was visually identified from aerial photography. Although the site was assigned an AI number, no files are available in the VFC. If the Darwin Road alternative is selected, a Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

<u>Brownfields</u>: Powers Property, 603 S. Hovey Pl., AI #103663, is approximately 0.05 mile northeast of the east end of the project area. The IDEM Brownfields Program provided an eligibility letter to an economic development agency in December 2011. The eligibility letter noted that although the current use of the site was exclusively residential, a small auto repair business had been operated out of a detached garage from circa 1975 until 1994. No record of contamination, petroleum storage, or on-site disposal from this historic use was found in IDEM's review of information. IDEM determined that the economic development agency was eligible to use Brownfield funding to aid in the redevelopment of the property. No action was ever taken. If the Darwin Road alternative is selected, a Phase II Environmental Site Assessment is recommended to occur before RFC. Prior to any investigation activities, a scope of work plan will be prepared and submitted to INDOT SAM for review and approval.

<u>NPDES Facilities</u>: Clear Creek Welcome Center, I-70 MM 1, Permit #IN0056154, is located in the welcome center portion of the project area. The listing is for the package treatment plant at the welcome center, with an effective permit that expires July 31, 2027. Coordination with INDOT will occur.

<u>NPDES Pipe Locations</u>: Clear Creek Welcome Center, NPDES #IN0056154, is an outfall pipe to Clear Creek from the package treatment plant at the welcome center. Coordination with INDOT will occur.

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

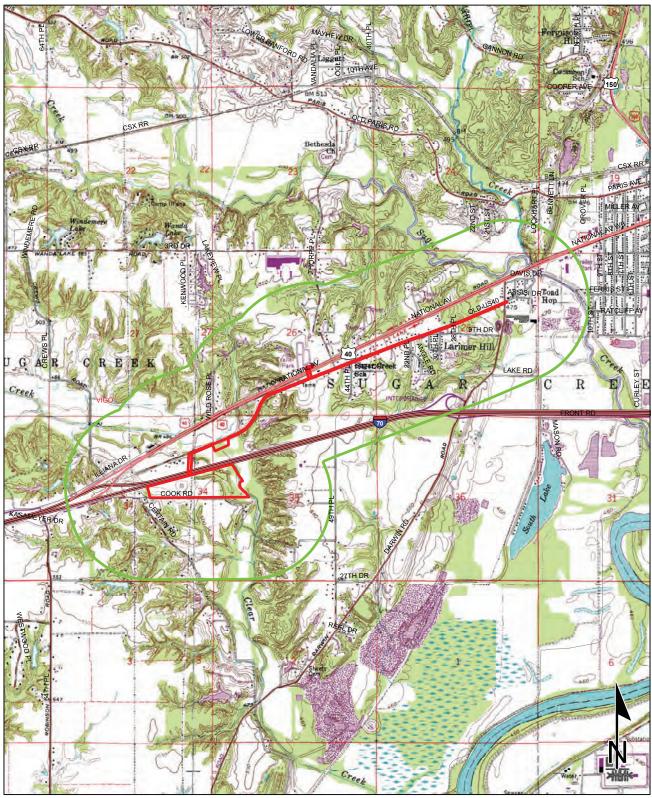
	Chad Pitcher	Digitally signed by Chad Pitcher, CHMM	
INDOT ESD concurrence:	CHMM	Date: 2022.10.07 13:45:35 -04'00'	(Signature)

Prepared by: Colin Keith Project Scientist Metric Environmental, LLC

#### Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached. If there is not a section map included, please change the YES to N/A:

SITE LOCATION: YES INFRASTRUCTURE: YES WATER RESOURCES: YES MINING/MINERAL EXPLORATION: YES HAZARDOUS MATERIAL CONCERNS: YES Red Flag Investigation - Site Location I-70 Clear Creek Welcome Center Des. No. 1902855, Rest Area Modernization Vigo County, Indiana



 Sources:
 0.5
 0.25
 0
 0.5

 Non Orthophotography
 Image: Constraint of the state of Indiana Geographical Information Office Library
 Miles

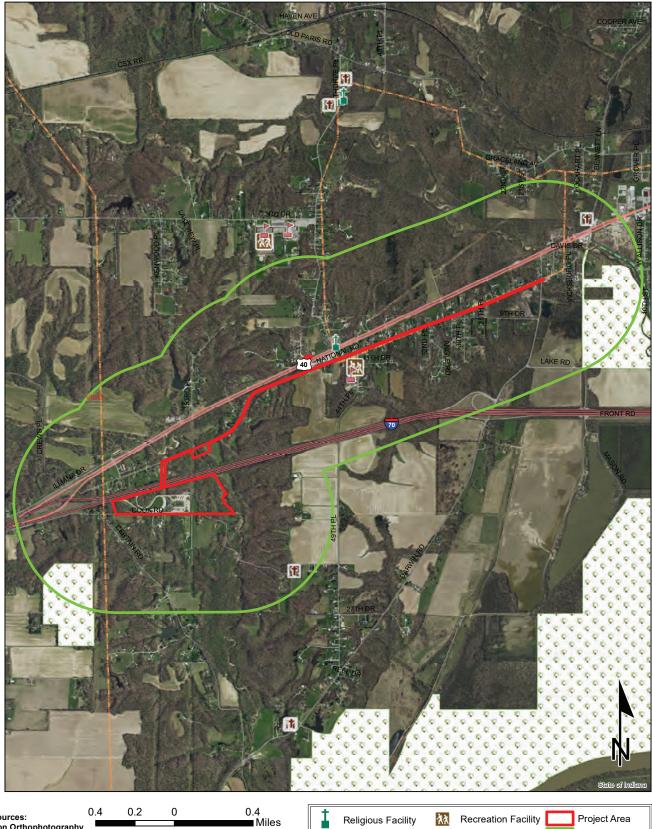
 Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
 Orthophotography - Notained from Indiana Map Framework Data

 Map Projection:
 UTM Zone 16 N
 Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

TERRE HAUTE AND DENNISON QUADRANGLES INDIANA 7.5 MINUTE SERIES (TOPOGRAPHIC)

Red Flag Investigation - Infrastructure I-70 Clear Creek Welcome Center Des. No. 1902855, Rest Area Modernization Vigo County, Indiana



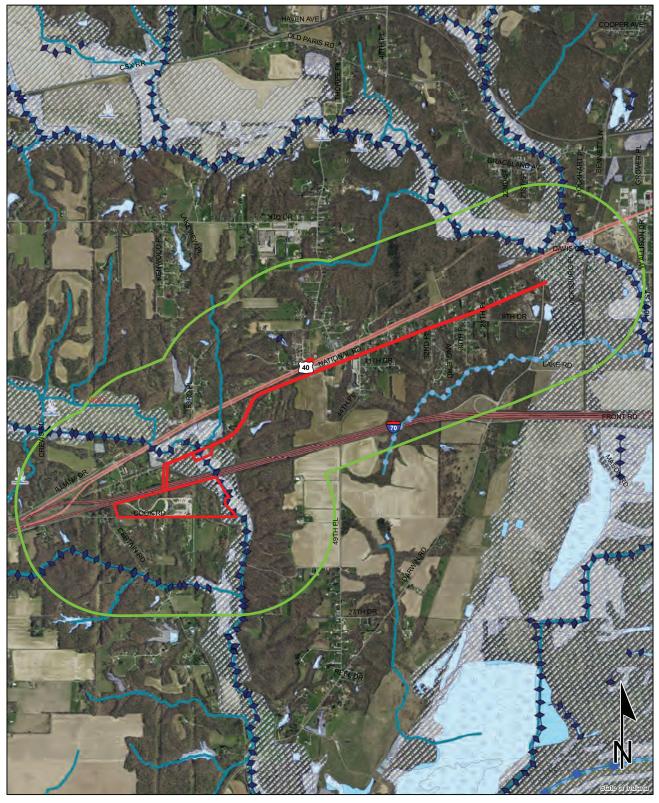
Sources: 0.4 0.2 0 Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org) Map Bratemic State 15 N Map Datum; NAD83

Map Projection: UTM Zone 16 N Map Datum: NAD83

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

1	Religious Facility	👯 Recreation Facility	Project Area
+	Airport	Pipeline	Half Mile Radius
	•	-++- Railroad	Toll
T.	Cemeteries	Trails	Interstate
H	Hospital	💦 Managed Lands	State Route
Þ	School	County Boundary	US Route
			Local Road

Red Flag Investigation - Water Resources I-70 Clear Creek Welcome Center Des. No. 1902855, Rest Area Modernization Vigo County, Indiana



0.2 Sources: Sources: <u>Non Orthophotography</u> <u>Data</u> - Obtained from the State of Indiana Geographical Information Office Library <u>Orthophotography</u> - Obtained from Indiana Map Framework Data (www.indianamap.org) <u>Map Projection</u>: UTM Zone 16 N <u>Map Datum</u>: NAD83

0

0.4

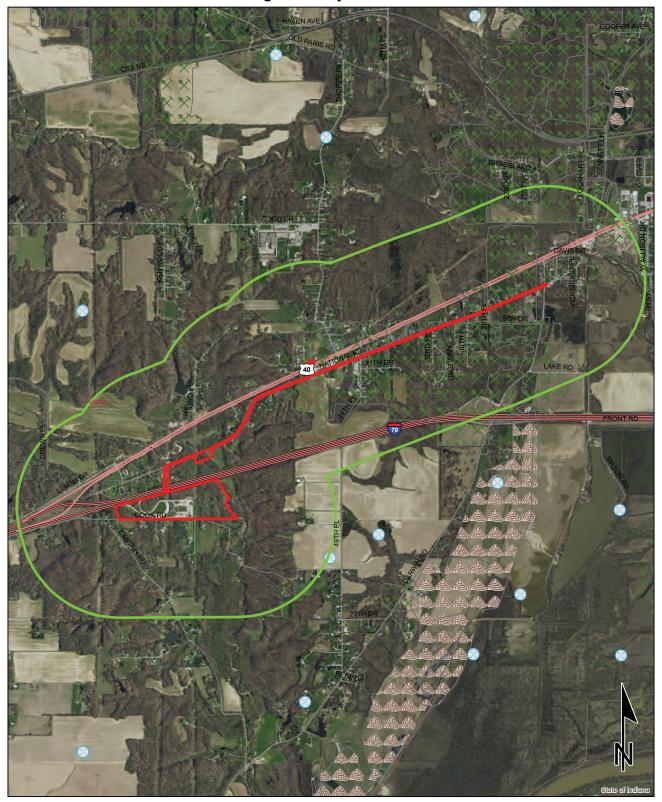
. Miles

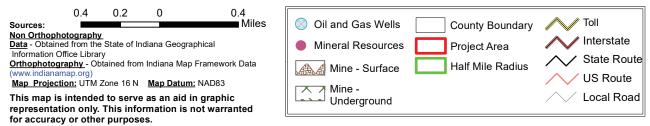
0.4

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

¥	NWI - Point	Wetlands	Project Area
$\ast$	Karst Spring	Lake	Half Mile Radius
♦-♦-	- NWI- Line	Floodplain - DFIRM	Toll
• •	Impaired_Stream_Lake	Cave Entrance Density	Interstate
	- NPS NRI listed	Sinkhole Area	State Route
	River	Sinking-Stream Basin	US Route
₩.	Canal Structure - Historic		
	Canal Route - Historic	County Boundary	Local Road

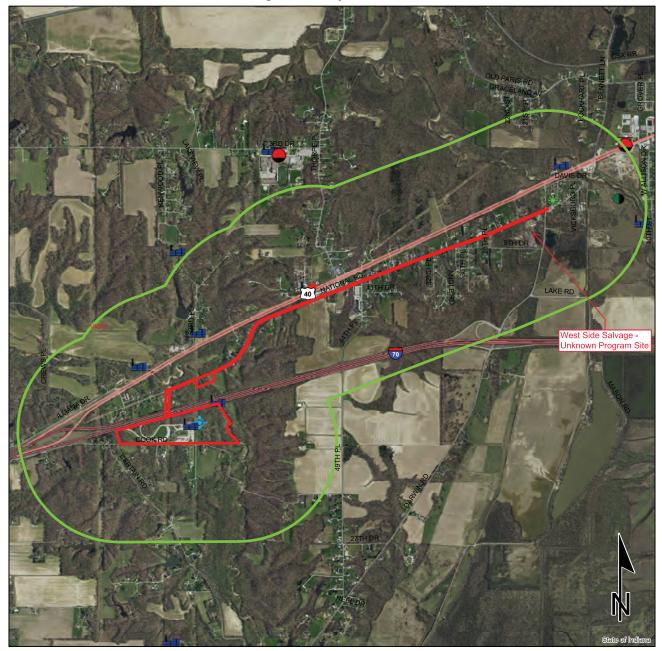
Red Flag Investigation - Mining and Mineral Exploration I-70 Clear Creek Welcome Center Des. No. 1902855, Rest Area Modernization Vigo County, Indiana





E-11

Red Flag Investigation - Hazardous Material Concerns I-70 Clear Creek Welcome Center Des. No. 1902855, Rest Area Modernization Vigo County, Indiana



 $\diamond$ 

lacksquare

 $(\star)$ 

 $\bigcirc$ 

E-12

#### Brownfield

- RCRA Corrective Action Sites
   Confined Feeding Operation Notice\_Of\_Contamination
   Construction/Demolition Site
   Infectious/Medical Waste Site
   Leaking Underground Storage Tank
   Manufactured Gas Plant
   NPDES Facilites
   NPDES Pipe Locations
   Open Dump Waste Site
- **RCRA** Generator/TSD Institutional Controls **Restricted Waste Site County Boundary** Septage Waste Site Project Area Solid Waste Landfill Half Mile Radius State Cleanup Site Superfund Toll Tire Waste Site Interstate Underground Storage Tank State Route Voluntary Remediation Program US Route Waste Transfer Station Local Road

This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

0.4

Miles

0.2

0.4

Sources: <u>Non Orthophotography</u> <u>Data</u> - Obtained from the State of Indiana Geographical Information Office Library <u>Orthophotography</u> - Obtained from Indiana Map Framework Data (www.indianamap.org) <u>Map Projection:</u> UTM Zone 16 N <u>Map Datum:</u> NAD83 Page 1 of 3 02/25/2022

#### Indiana County Endangered, Threatened and Rare Species List

County: Vigo



Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Crustacean: Malacostraca</b> Caecidotea dunlaporum	Dunlap's groundwater isopod			GNR	SNR
Mollusk: Bivalvia (Mussels)					_
Cyprogenia stegaria	Eastern Fanshell Pearlymussel	E	SE	G1	<mark>S1</mark>
Epioblasma flexuosa	Leafshell		SX	GX	SX
Epioblasma propinqua	Tennessee Riffleshell		SX	GX	SX
Epioblasma rangiana	northern riffleshell	Е	SE	G1	<mark>S1</mark>
Epioblasma sampsonii	Wabash Riffleshell		SX	GX	SX
Epioblasma torulosa	Tubercled Blossom	DL	SX	GX	SX
Fusconaia subrotunda	Longsolid	РТ	SX	G3	SX
Lampsilis abrupta	pink mucket	Е	SX	G1G2	SX
Lampsilis ovata	pocketbook		SSC	G5	S2
Leptodea leptodon	Scaleshell	Е	SX	G1G2	SX
Ligumia recta	black sandshell		SSC	G4G5	S2
Obovaria retusa	Ring Pink	E	SX	G1	SX
Obovaria subrotunda	round hickorynut	PT	SE	G4	<mark>S1</mark>
Plethobasus cicatricosus	White Wartyback	Е	SX	G1	SX
Plethobasus cyphyus	Sheepnose	E	SE	G3	<mark>S1</mark>
Pleurobema clava	Clubshell	E	SE	G1G2	<mark>S1</mark>
Pleurobema cordatum	Ohio Pigtoe		SSC	G4	S2
Pleurobema plenum	Rough Pigtoe	E	SE	G1	<mark>S1</mark>
Pleurobema rubrum	Pyramid Pigtoe		SX	G2G3	SX
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
Theliderma cylindrica	Rabbitsfoot	Т	SE	G3G4	<mark>S1</mark>
Insect: Hymenoptera Bombus affinis	Rusty-patched Bumble Bee	E	SE	G2	<mark>(S1</mark> )
Fish					_
Acipenser fulvescens	Lake Sturgeon		SE	G3G4	S1
Moxostoma valenciennesi	Greater Redhorse		SE	G4	<u>S2</u>
Amphibian					
Acris blanchardi	Blanchard's cricket frog		SSC	G5	S4
Cryptobranchus alleganiensis alleganiensis	hellbender	С	SE	G3T2	<mark>S1</mark>
Lithobates areolatus circulosus	northern crawfish frog		SE	G4T4	<mark></mark>
Lithobates blairi	plains leopard frog		SE	G5	<mark></mark>
Necturus maculosus	common mudpuppy		SSC	G5	S3
Reptile					
Clonophis kirtlandii	Kirtland's snake		SE	G2	S3
Kinosternon subrubrum	eastern mud turtle		SE	G5T5	<mark>S1</mark>
Terrapene carolina carolina	woodland box turtle		SSC	G5T5	S3

Fed: E = Endangered; T = Threatened; C = candidate; PDL = proposed for delisting

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant

Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.

Indiana Natural Heritage Data Center

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; S4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked Page 2 of 3 02/25/2022

**Species Name** 

#### Indiana County Endangered, Threatened and Rare Species List

FED

STATE

GRANK

County: Vigo

**Common Name** 



Bird				
Accipiter striatus	Sharp-shinned Hawk	SSC	G5	S2B
Bartramia longicauda	Upland Sandpiper	SE	G5	S3B
Botaurus lentiginosus	American Bittern	SE	G5	S2B
Centronyx henslowii	Henslow's sparrow	SE	G4	S3B
Circus hudsonius	Northern Harrier	SE	G5	<mark></mark>
Cistothorus palustris	marsh wren	SE	G5	S3B
Falco peregrinus	Peregrine Falcon	SSC	G4	S2B
Haliaeetus leucocephalus	bald eagle		G5	S3
Ixobrychus exilis	Least Bittern	SE	G4G5	S3B
Lanius ludovicianus	loggerhead shrike	SE	G4	S2B
Lophodytes cucullatus	Hooded Merganser		G5	S2S3B
Nyctanassa violacea	Yellow-crowned Night-heron	SE	G5	S2B
Tyto alba	Barn Owl	SE	G5	<mark></mark>
Mammal				
Lasiurus borealis	Eastern red bat	SSC	G3G4	S4
Mustela nivalis	Least Weasel	SSC	G5	S2?
Myotis lucifugus	little brown myotis		G3G4	S2
Myotis septentrionalis	-	Г SE	G2G3	<b>S2S3</b>
Myotis sodalis	Indiana Bat		G2	<mark>S1</mark>
Nycticeius humeralis	Evening Bat	SE	G5	<b>S1</b>
Perimyotis subflavus	Tricolored Bat	SE	G3G4	<b>S2S3</b>
Taxidea taxus	American Badger	SSC	G5	S2
Vascular Plant Anemone caroliniana	Carolina anemone	SX	G5	SX
Carex conoidea	prairie gray sedge	ST	G5 G5	S2
Carex gravida	heavy sedge	SE	G5	S1
Cuscuta cuspidata	cusp dodder	SE	G5	S1
Didiplis diandra	water-purslane	SE	G5 G5	S1
Echinodorus berteroi	tall bur-head	SE	G5	S1
Gaura filipes	slender-stalked gaura	SE	G5	S2
Hymenopappus scabiosaeus	Carolina woollywhite	SE	G4G5	S1
Liatris pycnostachya	cattail gay-feather	SE	G5	S1
Lithospermum incisum		SE	G5	S1
Lithospermum parviflorum	narrow-leaved puccoon shaggy false-gromwell	SE	G4G5T4	S1
Rorippa aquatica		SE	G40514 G4?	S1
Sanguisorba canadensis	lake cress Canada burnet	SE	G5	S1
Silene regia		SE	G3	S1
Trautvetteria caroliniensis	royal catchfly		G5	SX
Trifolium reflexum var. glabrum	Carolina tassel-rue	SX SE	G3 G3G4T2T4Q	SA S1

Fed: E = Endangered; T = Threatened; C = candidate; PDL = proposed for delisting

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern;

SX = state extirpated; SG = state significant

Division of Nature Preserves Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.

Indiana Natural Heritage Data Center

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; S4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked Page 3 of 3 02/25/2022

## Indiana County Endangered, Threatened and Rare Species List

County: Vigo



Species Name	Common Name	FED	STATE	GRANK	SRANK
High Quality Natural Community					
Barrens - sand	Sand Barrens		SG	G3	S2
Forest - floodplain wet	Wet Floodplain Forest		SG	G3?	S3
Forest - upland dry-mesic Southwestern Lowlands	Southwestern Lowlands		SG	GNR	S1
	Dry-mesic Upland Forest				
Forest - upland mesic Southwestern Lowlands	Southwestern Lowlands Mesic		SG	GNR	<b>S</b> 1
	Upland Forest				
Wetland - marsh	Marsh		SG	GU	S4
Wetland - swamp forest	Forested Swamp		SG	G2?	S2
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2
Other Significant Feature					
Freshwater Mussel Concentration Area	Mussel Bed		SG	G3	SNR

Indiana Natural Heritage Data Center Division of Nature Preserves

Indiana Department of Natural Resources This data is not the result of comprehensive county surveys.

GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank

SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; S4 = widespread and abundant in state but with long-term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Fed: E = Endangered; T = Threatened; C = candidate; PDL = proposed for delisting

State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant

# APPENDIX F: Water Resources

APPROVED

## WATERS OF THE U.S. DETERMINATION REPORT I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Des. No. 1902855 Prepared By: April Pape, Metric Environmental, LLC August 31, 2022

#### Date of Waters Field Investigation: April 25, 2022

#### Location:

12-Digit HUC Watershed: 051201110902, (South Lake – Clear Creek) (**Exhibit 1**) Sections 34 & 35; Township 12 North; Range 10 West Terre Haute & Dennison, IN 7.5 minute USGS Topographic Quadrangles (**Exhibit 2**) Sugar Creek Township, Vigo County, Indiana Latitude: 39.44221 Longitude: -87.50011

#### **Project Description:**

The proposed project (Des. 1902855) includes reconfiguration and reconstruction of the Clear Creek Welcome Center along eastbound I-70 in Sugar Creek Township, Vigo County, Indiana. The investigated area (IA) was developed based on the proposed improvements and the boundaries of the legal parcel. In addition to the IA developed for the Welcome Center, a corridor was created to run utilities to the updated Welcome Center. Since delineated features within this corridor are intended to be avoided, full waters documentation was not required. However, a brief memo and maps of these features have been provided as **Appendix A**.

## FEMA Flood Insurance Rate Map (FIRM) and Indiana Department of Natural Resources (IDNR) Floodway:

One mapped floodplain is located within the IA. This floodplain was identified as Zone A, an area subject to inundation by the 1 percent annual chance of flood. This floodplain was associated with Clear Creek. The FIRM map for this area is provided as **Exhibit 3**. According to the *IDNR Floodway Information Portal* on May 4, 2022, an Indiana Dept. of Natural Resources (IDNR) Floodway was also present within the IA. This floodway was associated with Clear Creek. The IDNR floodway map for this area is provided as **Exhibit 3**.

#### National Wetlands Inventory (NWI) Information:

One mapped NWI polygon is located within the IA, listed in **Table 1** below. This PFO1A wetland continues east outside the IA. The NWI map is provided as **Exhibit 4**.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **1** of **13** 

#### Table 1: NWI Summary Table

Symbol	Wetland Type	Location Within IA	Corresponding Feature
PFO1A	Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded	Northeast	Wetland A

#### Karst Feature Information:

No mapped karst features were found within 0.5 mi. of the IA during the desktop review.

#### USGS National Hydrography Dataset (NHD) Information:

Three mapped NHD flowlines are located within the IA, listed by occurrence from west to east within the IA in **Table 2** below. The NHD map is provided in **Exhibit 5**.

Corresponding Feature (field verified)	NHD Flowline Classification (FCode)	Photo Nos.	USGS Blue-line
CV 1, CV 4, CV 6	Stream/River (46000)	17, 33, 35, 41	No
UNT 1 to Clear Creek	Canal/Ditch (33600)	44-51	No
UNT 3 to Clear Creek	Stream/River (46000)	67-69	No

#### Table 2: NHD Summary Table

#### Soils:

According to the Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Vigo County, Indiana, the IA contained nine mapped soil units, listed in **Table 3** below. The NRCS soil survey map is provided as **Exhibit 4**.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page 2 of 13

Soil Unit Symbol	Soil Unit Name	Hydric Soil Category	SSURGO Hydric Rating
AIC2	Alford silt loam, 5 to 10 percent slopes, eroded	Nonhydric	0%
Вр	Borrow pits	Nonhydric	0%
CaB	Camden silt loam, 2 to 6 percent slopes Nonhydric		0%
Ee	Eel silt loam, 0 to 2 percent slopes, frequently flooded	Predominantly Nonhydric	5%
Ge	Genesee silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	Nonhydric	0%
HkF	Hickory loam, 25 to 40 percent slopes	Nonhydric	0%
MuB2	Muren silt loam, 2 to 6 percent slopes, eroded	Predominantly Nonhydric	3%
PaD2	Parke silt loam, 12 to 18 percent slopes, eroded	Nonhydric	0%
Wx	Whitaker loam	Predominantly Nonhydric	3%

#### Table 3: NRCS Soil Summary Table

#### **Attached Documents:**

Maps of the investigated area (**Exhibits 1-5**) Photo Location Map (**Exhibit 6**) Site Photographs Wetland Determination Data Form(s) Preliminary Jurisdictional Determination Form Delineated features within Utility Corridor – no impacts expected (**Appendix A**)

### Field Reconnaissance:

The wetland determination field visit was conducted on April 25, 2022 by Zachary Root, April Pape, and Kristina Zuniga of Metric Environmental, LLC. The IA consists of the area that has the potential to be impacted, based on the provided design scenario. This area was evaluated for the presence of wetlands and Waters of the United States. This investigation was conducted in accordance with the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the August 2010 Midwest Regional Supplement (Version 2.0) Manual.

A Location Map showing the investigated area location is provided as **Exhibit 1**. The proposed project is located in the western portion of Vigo County, Indiana, on I-70 approximately 1.4 mi. from the Illinois border. The IA includes the rest area and welcome center parcel, as well an a parcel adjoining it to the east, for a total of approximately 42 acres. An aerial map of sampling points and water features is provided as **Exhibit 5**. A photo location map is provided as **Exhibit 6** and site photographs are attached.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **3** of **13** 

#### Streams:

Six streams were observed within the IA during the field reconnaissance. Descriptions of the streams are provided in **Table 4** below.

Stream Name	Photos	Lat/Long	OHWM Width ft.	OHWM Depth ft.	USGS Blue- line	Riffles or Pools	Dominant Substrate	Quality	Stream Length within IA ft.	Likely Water of the U.S.
UNT 1 to Clear Creek	44-51	39.443145 -87.499327	7.5	0.67	No (Intermittent)	No	Sand, Silt	Poor	2006	Yes
UNT 2 to Clear Creek	58-62	39.443176 -87.496453	5	0.25	No (Ephemeral)	No	Sand, Silt	Poor	412	Yes
UNT 3 to Clear Creek	67-69	39.442166 -87.495885	1.5	0.17	No (Ephemeral)	No	Silt	Poor	52	Yes
UNT 4 to Clear Creek	68, 70- 73, 75	39.442903 -87.497851	3.33	0.25	No (Intermittent)	Riffles & Pools	Sand, Gravel	Average	1650	Yes
UNT 5 to Clear Creek	82-85	39.441118 -87.496703	2.25	0.17	No (Ephemeral)	No	Sand, silt	Poor	227	Yes
UNT 6 to Clear Creek	21-23	39.441344 -87.503231	2	0.17	No (Ephemeral)	No	Sand, silt	Poor	315	Yes

**Table 4: Stream Summary Table** 

### UNT 1 to Clear Creek (2006 LFT)

UNT 1 to Clear Creek flows southwest to northeast through the IA and extends outside the limits to the east. UNT 1 to Clear Creek is approximately 2006 linear feet (LFT) (0.345 ac.) long within the IA. UNT 1 to Clear Creek is not associated with a blue line on the USGS topographic map, indicating that it is likely ephemeral. However, the high level of flow and the presence of cut banks indicate that the stream is likely intermittent. UNT 1 to Clear Creek was not classified by the NWI, but it can be classified as Riverine, Intermittent, Streambed, Seasonally Flooded (R4SBC). The ordinary high water mark (OHWM) was 7.5 ft. wide and 0.67 ft. (8 in.) deep within the investigated area. Measurements of the OHWM were taken at 39.442901, -87.050355. The dominant stream substrate was sand and silt. No functional riffles or pools were observed within the stream. Limited amounts of instream cover were observed and included undercut banks. Low sinuosity and moderate current velocity were observed. Streambanks exhibited severe erosion and the riparian area was composed of deciduous forest south of the stream and roadside ROW north of the stream. No wildlife was observed within the stream during the field reconnaissance.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **4** of **13** 

Vegetation observed along the streambanks included amur honeysuckle (*Lonicera maackii*, UPL) and tall false rye grass (*Schedonorus arundinaceus*, FACU). According to USGS *Indiana StreamStats* on May 11, 2022, no line was associated with this stream, so the drainage area upstream of the IA is estimated to be less than 0.1 square mile. Qualities of the stream listed above contribute to UNT 1 to Clear Creek being classified as poor quality. UNT 1 to Clear Creek Creek flows northeast to Clear Creek, which flows into Wabash River, a traditionally navigable waterway (TNW). Therefore, UNT 1 to Clear Creek should be considered a jurisdictional Water of the U.S.

### UNT 2 to Clear Creek (412 LFT)

UNT 2 to Clear Creek flows southwest to northeast through the IA and extends outside the limits to the east. UNT 2 to Clear Creek is approximately 412 LFT (0.047 ac.) long within the IA. UNT 2 to Clear Creek is not associated with a blue line on the USGS topographic map, indicating that it is likely ephemeral. This is supported by the low volume of flow during the site visit. UNT 2 to Clear Creek was not classified by the NWI, but it can be classified as a Riverine, Ephemeral stream, Corps designation R6. The ordinary high water mark (OHWM) was 5 ft. wide and 0.25 ft. (3 in.) deep within the investigated area. Measurements of the OHWM were taken at 39.443293, -87.496011. The dominant stream substrate was sand and silt. No functional riffles or pools were observed within the stream. Limited amounts of instream cover were observed and included undercut banks. Moderate sinuosity and moderate current velocity were observed. Streambanks exhibited little erosion and the riparian area was composed of deciduous forest on both sides of the stream. No wildlife was observed within the stream during the field reconnaissance. Vegetation observed along the streambanks included creeping buttercup (Ranunculus repens, FAC) and Ohio buckeye (Aesculus glabra, FAC). According to USGS Indiana StreamStats on May 11, 2022, no line was associated with this stream, so the drainage area upstream of the IA is estimated to be less than 0.1 square mile. Qualities of the stream listed above contribute to UNT 2 to Clear Creek being classified as poor quality. UNT 2 to Clear Creek Creek flows east to Clear Creek, which flows into Wabash River, a traditionally navigable waterway (TNW). Therefore, UNT 2 to Clear Creek should be considered a jurisdictional Water of the U.S.

#### UNT 3 to Clear Creek (52 LFT)

UNT 3 to Clear Creek flows southwest to northeast through the IA and extends outside the limits to the east. UNT 3 to Clear Creek is approximately 52 LFT (0.002 ac.) long within the IA. UNT 3 to Clear Creek is not associated with a blue line on the USGS topographic map, indicating that it is likely ephemeral. This is supported by the low volume of flow during the site visit UNT 3 to Clear Creek was not classified by the NWI, but it can be classified as a Riverine, Ephemeral stream, Corps designation R6. The ordinary high water mark (OHWM) was 1.5 ft. wide and 0.17 ft. (2 in.) deep within the investigated area. Measurements of the OHWM were taken at 39.442166, -87.495887. The dominant stream substrate was silt. No functional riffles or pools were observed

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **5** of **13** 

within the stream. Limited amounts of instream cover were observed and included woody debris. Low sinuosity and low current velocity were observed. Streambanks exhibited little erosion and the riparian area was composed of deciduous forest on both sides of the stream. No wildlife was observed within the stream during the field reconnaissance. Vegetation observed along the streambanks included amur honeysuckle (*Lonicera maackii*, UPL) and creeping buttercup (*Ranunculus repens*, FAC). According to USGS *Indiana StreamStats* on May 11, 2022, no line was associated with this stream, so the drainage area upstream of the IA is estimated to be less than 0.1 square mile. Qualities of the stream listed above contribute to UNT 3 to Clear Creek being classified as poor quality. UNT 3 to Clear Creek Creek flows east to Clear Creek, which flows into Wabash River, a traditionally navigable waterway (TNW). Therefore, UNT 3 to Clear Creek should be considered a jurisdictional Water of the U.S.

### UNT 4 to Clear Creek (1650 LFT)

UNT 4 to Clear Creek flows west to east through the IA and extends outside the limits to the east. UNT 4 to Clear Creek is approximately 1650 LFT (0.126 ac.) long within the IA. UNT 4 to Clear Creek is not associated with a blue line on the USGS topographic map, indicating that it is likely ephemeral. However, the level of flow and the presence of cut banks indicate that the stream is likely intermittent. UNT 4 to Clear Creek was not classified by the NWI, but it can be classified as an R4SBC stream. The ordinary high water mark (OHWM) was 3.33 ft. wide and 0.25 ft. (3 in.) deep within the investigated area. Measurements of the OHWM were taken at 39.442887, -87.497585. The dominant stream substrate was sand and gravel. Functional riffles and pools were observed within the stream. Moderate amounts of instream cover were observed and included undercut banks and woody debris. High sinuosity and moderate current velocity were observed. Streambanks exhibited severe erosion and the riparian area was composed of deciduous forest on both sides of the stream. No wildlife was observed within the stream during the field reconnaissance. Vegetation observed along the streambanks included amur honeysuckle (Lonicera maackii, UPL) and May-apple (Podophyllum peltatum, FACU). According to USGS Indiana StreamStats on May 11, 2022, no line was associated with this stream, so the drainage area upstream of the IA is estimated to be less than 0.1 square mile. Qualities of the stream listed above contribute to UNT 4 to Clear Creek being classified as average quality. UNT 4 to Clear Creek Creek flows east to Clear Creek, which flows into Wabash River, a traditionally navigable waterway (TNW). Therefore, UNT 4 to Clear Creek should be considered a jurisdictional Water of the U.S.

### UNT 5 to Clear Creek (227 LFT)

UNT 5 to Clear Creek flows southwest to northeast through the IA and likely extends outside the IA into the floodplain of Clear Creek to the east. UNT 5 to Clear Creek is approximately 227 LFT (0.012 ac.) long within the IA. UNT 5 to Clear Creek is not associated with a blue line on the USGS topographic map, indicating that it is likely ephemeral. This is supported by the low volume of

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **6** of **13** 

flow during the site visit. UNT 5 to Clear Creek was not classified by the NWI, but it can be classified as a Riverine, Ephemeral stream, Corps designation R6. The ordinary high water mark (OHWM) was 2.25 ft. wide and 0.17 ft. (2 in.) deep within the investigated area. Measurements of the OHWM were taken at 39.441096, -87.496924. The dominant stream substrate was sand and silt. No functional riffles or pools were observed within the stream. Limited amounts of instream cover were observed and included woody debris. Moderate sinuosity and moderate current velocity were observed. Streambanks exhibited little erosion and the riparian area was composed of deciduous forest on both sides of the stream. No wildlife was observed within the stream during the field reconnaissance. Vegetation observed along the streambanks included amur honeysuckle (Lonicera maackii, UPL) and poison ivy (Toxicodendron radicans, FAC). Vegatation located northeast of the stream disapation included black cherry (Prunus serotina, FACU), amur honeysuckle (Lonicera maackii, UPL), and common chickweed (Stellaria media, FACU) in photos 88 and 89. According to USGS Indiana StreamStats on May 11, 2022, no line was associated with this stream, so the drainage area upstream of the IA is estimated to be less than 0.1 square mile. Qualities of the stream listed above contribute to UNT 5 to Clear Creek being classified as poor quality. UNT 5 to Clear Creek Creek flows east outside the IA into the floodplain of Clear Creek, which flows into Wabash River, a traditionally navigable waterway (TNW). Therefore, UNT 5 to Clear Creek should be considered a jurisdictional Water of the U.S.

#### UNT 6 to Clear Creek (315 LFT)

UNT 6 to Clear Creek flows south to northwest through the IA and extends outside the limits to the south. UNT 6 to Clear Creek is approximately 315 LFT (0.014 ac.) long within the IA. UNT 6 to Clear Creek is not associated with a blue line on the USGS topographic map, indicating that it is likely ephemeral. This is supported by the low volume of flow during the site visit. UNT 6 to Clear Creek was not classified by the NWI, but it can be classified as a Riverine, Ephemeral stream, Corps designation R6. The ordinary high water mark (OHWM) was 2 ft. wide and 0.17 ft. (2 in.) deep within the investigated area. Measurements of the OHWM were taken at 39.441178, -87.503355. The dominant stream substrate was sand and silt. No functional riffles or pools were observed within the stream. Moderate amounts of instream cover were observed and included woody debris. Moderate sinuosity and moderate current velocity were observed. Streambanks exhibited little erosion and the riparian area was composed of deciduous forest and roadside ROW. No wildlife was observed within the stream during the field reconnaissance. Vegetation observed along the streambanks included amur honeysuckle (Lonicera maackii, UPL) and American elm (Ulmus americana, FACW). According to USGS Indiana StreamStats on May 11, 2022, no line was associated with this stream, so the drainage area upstream of the IA is estimated to be less than 0.1 square mile. Qualities of the stream listed above contribute to UNT 6 to Clear Creek being classified as poor quality. UNT 6 to Clear Creek Creek flows east to Clear Creek via Wetland B, RSD 1, and UNT 1 to Clear Creek, which flows into Wabash River, a

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **7** of **13** 

traditionally navigable waterway (TNW). Therefore, UNT 6 to Clear Creek should be considered a jurisdictional Water of the U.S.

### Wetlands:

The site was investigated for evidence of hydrophytic vegetation, hydric soil, and wetland hydrology to determine if the project impacts wetlands and other Waters of U.S. The sampling point locations were chosen in possible wetland areas within the IA. The upland areas located within the AI consisted of mowed lawn, roadside ROW, and deciduous forest. Upland areas where sampling points were not taken, were investigated and determined to be upland due to upward sloping topography and presence of dominant upland vegetation. Dominant upland species observed within mowed areas and ROW included tall false rye grass (*Schedonorus arundinaceus*, FACU) and red fescue (*Festuca rubra*, FACU). Dominant species in forested areas included sugar maple (*Acer saccharum*, FACU), black walnut (*Juglans nigra*, FACU), eastern false rue-anemone (*Enemion biternatum*, FAC), and May-apple (*Podophyllum peltatum*, FACU). Five sampling points were taken and are identified as A1, A2, B1, B2, and UP1. The sampling points, recorded on the USACE Wetland Determination Data Forms and shown on **Exhibit 5**, provided the following information (**Table 5**):

Plot #	Photo #s	Lat/Long	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within Wetland
A1	4-6	39.442656 -87.495892	Yes	Yes	Yes	Yes, Wetland A
A2	7-9	39.442629 -87.496024	No	Yes	No	No
B1	10-12	39.441641 -87.503815	Yes	Yes	Yes	Yes, Wetland B
B2	13-15	39.441635 -87.503882	No	Yes	No	No
UP1	1-3	39.443644 -87.495959	No	No	No	No

|--|

Two wetlands were observed within the IA. Descriptions of the wetlands and corresponding sampling points are provided in **Table 6** below.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **8** of **13** 

Wetland Name	Photo #s	Lat/Long	Cowardin Class	Total Area	Quality	Likely Water of
Name			Class	ac.		the U.S.?
Wetland A	63-67	39.442584 -87.495887	PFO1A	0.163	Average	Yes
Wetland B	19-20, 24, 28	39.441649 -87.50381	PEM1A	0.025	Poor	Yes

**Table 6: Wetland Summary Table** 

### Wetland A (0.163 ac.) – PFO1A

Wetland A was classified as a Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A) wetland. This wetland is located within the floodplain of Clear Creek, south of UNT 2 to Clear Creek and north of UNT 4 to Clear Creek. Approximately 0.163 ac. of Wetland A was contained within the IA, and the wetland continued east beyond the IA. The boundaries of Wetland A were delineated by lack of wetland vegetation and increased elevation. Due to its location within a floodplain, Wetland A likely receives flood waters on a consistent basis during rain events. The wetland was not associated with an NWI polygon and was formed within the Bp and Ge mapped soil units, which are listed as 0 percent hydric (nonhydric). The wetland is located adjacent to Clear Creek and deciduous forest. The wetland exhibited good plant species diversity, was forested, and extended over a large area beyond the IA. These factors contribute to the conclusion the wetland can support an average amount of wildlife or aquatic habitat and therefore should be considered to be of average quality. Wetland A directly abuts Clear Creek outside of the IA, which flows into the Wabash River, a Section 10 TNW. Because Wetland A directly abuts a TNW, it should be considered a jurisdictional Water of the U.S.

### Sampling Point A1 (A1) – Wetland A

A1 was located within the floodplain of Clear Creek, in the eastern portion of the IA. The dominant vegetation at this sampling point was ash-leaf maple (*Acer negundo*, FAC) and American elm (*Ulmus americana*, FACW) in the tree stratum, amur honeysuckle (*Lonicera maackii*, UPL) and American elm (*Ulmus americana*, FACW) in the sapling/shrub stratum, and creeping Jenny (*Lysimachia nummularia*, FACW) and fall sneezeweed (*Helenium autumnale*, FACW) in the herb stratum. This passed the hydrophytic vegetation indicators of dominance test and prevalence index. The soil in the test pit met the hydric soil indicator of redox dark surface (F6). Indicators of wetland hydrology observed included surface water (A1), high water table (A2), saturation (A3), water-stained leaves (B9), geomorphic position (D2), and FAC-neutral test (D5). Since all three required wetland criteria were met, this area qualified as a wetland.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **9** of **13** 

### Sampling Point A2 (A2) – Wetland A Upland

A2 was located on a hillslope west of Wetland A. The dominant vegetation at this sampling point was eastern cottonwood (*Populus deltoides*, FAC), sugar maple (*Acer saccharum*, FACU), and black walnut (*Juglans nigra*, FACU) in the tree stratum; amur honeysuckle (*Lonicera maackii*, UPL) in the sapling/shrub stratum; and eastern false rue-anemone (*Enemion biternatum*, FAC) and stinging nettle (*Urtica dioica*, FACW) in the herb stratum. This did not meet any of the hydrophytic vegetation indicators. The soil in the test pit met the hydric soil indicator of redox dark surface (F6). No indicators of wetland hydrology were observed. Since only one of the three required wetland criteria were met, this area did not qualify as a wetland.

#### Wetland B (0.025 ac.) – PEM1A

Wetland B was classified as a Palustrine, Emergent, Persistent, Temporarily Flooded (PEM1A) wetland. This wetland is located in a ditch north south of the I-70 exit ramp. The boundaries of Wetland B were delineated by lack of wetland vegetation and increased elevation. The wetland was not associated with an NWI polygon and was formed within the Wx mapped soil unit, which is listed as 3 percent (predominantly) nonhydric. Due to its location within a ditch, Wetland B likely receives drainage on a consistent basis during rain events. The wetland is located adjacent to I-70 and the rest area parking and likely receives run-off from the adjacent sources. The wetland exhibited poor plant species diversity. These factors contribute to the conclusion that Wetland B can support a limited amount of wildlife or aquatic habitat and therefore should be considered to be of poor quality. Based on topography, it can be deduced that water drains into Clear Creek via RSD 1 and UNT 1 to Clear Creek, which flows into the Wabash River, a Section 10 TNW. Because Wetland A contributes flow to a TNW, it should be considered a jurisdictional Water of the U.S.

### Sampling Point B1 (B1) – Wetland B

B1 was located in a ditch south of I-70 in the western portion of the IA. The dominant vegetation at this sampling point was sandbar willow (*Salix interior*, FACW) in the sapling/shrub stratum and red fescue (*Festuca rubra*, FACU) and Gray's sedge (*Carex grayi*, FACW) in the herb stratum. This passed the hydrophytic vegetation indicators of dominance test and prevalence index. The soils in the test pit met the hydric soil indicator of depleted below dark surface (A11), depleted matrix (F3), and redox dark surface (F6). Indicators of wetland hydrology observed included high water table (A2), saturation (A3), oxidized rhizospheres on living roots (C3), geomorphic position (D2), and FAC-neutral test (D5). Since all three required wetland criteria were met, this area qualified as a wetland.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **10** of **13** 

### Sampling Point B2 (B2) – Wetland B upland

B2 was located at the toe of a slope southwest of Wetland B. The dominant vegetation at this sampling point was ash-leaf maple (*Acer negundo*, FAC) and sandbar willow (*Salix interior*, FACW) in the sapling/shrub stratum and red fescue (*Festuca rubra*, FACU) in the herb stratum. This did not meet any indicators of hydrophytic vegetation. The soil in the test pit met the hydric soil indicators of depleted below dark surface (A11) and depleted matrix (F3). No indicators of wetland hydrology were observed. Since only one of the three required wetland criteria were met, this area did not qualify as a wetland.

#### Additional Sampling Point(s):

An additional sampling point was taken in an area where a wetland was suspected but did not meet the three required wetland criteria. A description of this sampling point is included below.

#### Sampling Point 1 (UP1)

UP1 was located within the floodplain of Clear Creek, in a PFO1A NWI polygon. The dominant vegetation at this sampling point was common hackberry (*Celtis occidentalis*, FAC), eastern cottonwood (*Populus deltoides*, FAC), and American elm (*Ulmus americana*, FACW) in the tree stratum; amur honeysuckle (*Lonicera maackii*, UPL) in the sapling/shrub stratum; and sticky-willy (*Galium aparine*, FACU), sweet vernal grass (*Anthoxanthum odoratum*, FACU), hairy Solomon's seal (*Polygonatum pubescens*, FACU), and stinging nettle (*Urtica dioica*, FACW) in the herb stratum. This did not meet any indicators of hydrophytic vegetation. The soil in the test pit did not meet any of the hydric soil indicators. No indicators of wetland hydrology were observed. Since none of the three required wetland criteria were met, this area did not qualify as a wetland.

#### **Open Water:**

No open water areas were observed in the investigated area.

#### **Roadside Ditches:**

Three roadside ditches (RSD) were identified within the IA. RSD 1 was located in the western portion of the IA, northwest of Wetland B, and ran parallel to the I-70 exit ramp for 267 ft. within the IA. RSD 2 was located southeast of Wetland B, and was 319 ft. long within the IA. RSD 3 was located south of the welcome center exit ramp and was 652 ft. long within the IA. These ditches were constructed in uplands to convey stormwater drainage from the surrounding areas. These features consisted of upland vegetation such as red fescue (*Festuca rubra*, FACU). These features also lacked a continuous bed and bank and/or OHWM and should not be considered jurisdictional Waters of the U.S.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **11** of **13** 

#### **Culverts and Drains:**

Fifteen culverts and two storm drain were identified within the IA as shown in **Table 7**. The culverts were made of either concrete, corrugated metal pipe (CMP), or high density polyethylene (HDPE). These culverts and storm drains served to aid in roadside drainage and stormwater conveyance. The culverts did not carry jurisdictional waters due to a lack of an OHWM and bed and bank characteristics. Locations of these culverts are shown on **Exhibit 5**, **Exhibit 6**, and attached photosheet.

Culvert and Drain Number	Туре	Purpose				
CV 2, CV 3, CV 4, CV 5, CV 6, CV 10, CV 11, CV 13	Concrete	Stormwater Drainage				
CV 1, CV 7, CV 14, CV 15	СМР	Stormwater Drainage				
CV 8, CV 9, CV 12	HDPE	Stormwater Drainage				
SD 1, SD 2	Metal grate	Stormwater Drainage				

 Table 7: Culverts and Drains Summary Table

#### **Conclusion:**

One PEM1A wetland (0.025 ac.); one PFO1A (0.163 ac.) wetland; and six streams (UNT 1 to Clear Creek, UNT 2 to Clear Creek, UNT 3 to Clear Creek, UNT 4 to Clear Creek, UNT 5 to Clear Creek, and UNT 6 to Clear Creek), totaling 4,662 LFT, were identified within the IA during the field reconnaissance. These waterways are likely Waters of the U.S. Every effort should be taken to avoid and minimize impacts to these waterways and wetland. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the Corps.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **12** of **13** 

#### Acknowledgements:

This waters determination has been prepared based on the best available information, interpreted in light of the investigator's training, experience and professional judgement in conformance with the 1987 *Corps of Engineers Wetlands Delineation Manual*, the appropriate regional supplement, the USACE *Jurisdictional Determination Form Instructional Guidebook*, and other appropriate agency guidelines. See **Table 8** for a list of the associated Metric investigators.

Metric Environmental Staff	Position	Contributing Effort	Signature/Date
Amy Noel Smith	Senior Project Manager	QAQC	Any Noclesmith 8/31/22
Alex Gray	Project Scientist 2	QAQC	Alex M. Gray 8/31/22
Zachary Root	Project Scientist 1	Field Data Collection, QAQC	B/31/22
April Pape	Staff Scientist 1	Field Data Collection, Report Preparation	April Pape 8/31/22
Kristina Zuniga	Staff Scientist 1	Field Data Collection	Kristina Juniga
			8/31/22

**Table 8: Acknowledgement Summary Table** 

Duplicate attachments were intentionally removed. Please refer to Appendix B in the CE document.

Des. No. 1902855 I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Metric Project No. 21-0049-3



Page **13** of **13** 

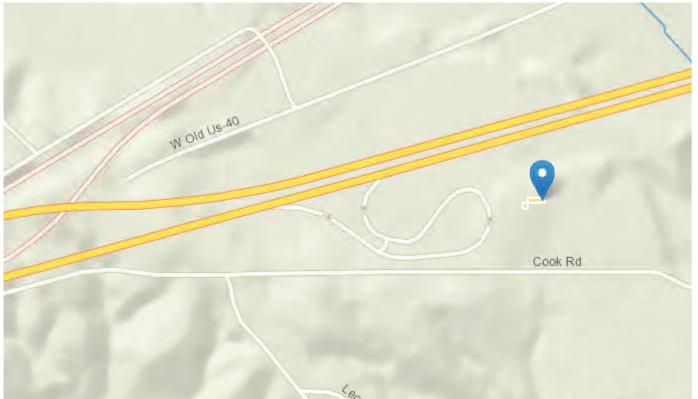
#### I-70 Clear Creek Welcome Center

 Region ID:
 IN

 Workspace ID:
 IN20220713161657449000

 Clicked Point (Latitude, Longitude):
 39.44206, -87.49932

 Time:
 2022-07-13 12:17:18 -0400



No line associated with field-identified streams.

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

#### StreamStats

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.10.0 StreamStats Services Version: 1.2.22 NSS Services Version: 2.2.1





Sh PFOIG PFOIG	
R2UBH R4SBC	
Ge Ce Ce Ce Ce Ce Ce Ce Ce Ce C	HkF
REBEREILAND CONTRACTOR CONTR	Sh
Ge CPEOLA	
W OLDUS 40 PRODECT	
	HkF
Wx 1=70	
PFOL	
	<b>PFO1A</b> Clear Greats
Clear Creek Welcome Center and Rest Area	
Alc2 CaB W 21st Rd	
WXX COA	ав
MuB2         Symbol         Map Unit Name	Hydric Rating
	Ionhydric (0%) Ionhydric (0%)
CaB Camden silt loam, 2 to 6 percent slopes N	Ionhydric (0%)
	nantley nonhydric (5%) Ionhydric (0%)
	1 1
	lonhydric (0%)
	nantley nonhydric (3%)
PaD2 Parke silt loam, 12 to 18 percent slopes, eroded N	
PaD2 Parke silt loam, 12 to 18 percent slopes, eroded N	nantley nonhydric (3%) Ionhydric (0%)
PaD2       Parke silt loam, 12 to 18 percent slopes, eroded       N         PEO1A       Wa       Whitaker loam       Predomin         Investigated Area (IA)       NWI Wetland       NRCS Soil Survey	nantley nonhydric (3%) Ionhydric (0%)
PaD2       Parke silt loam, 12 to 18 percent slopes, eroded       N         PEO1A       Wa       Whitaker loam       Predomin         Investigated Area (IA)       NWI Wetland       Predomin         NHD Flowline       NRCS Soil Survey         Exhibit 4 - NWI, NHD, Soil Survey Map       All locations approximate         I-70 Clear Creek Welcome Center       Source: Indiana Spatial Data Portal (2018)	nantley nonhydric (3%) Ionhydric (0%)
PaD2       PaD2       Parke silt loam, 12 to 18 percent slopes, eroded       N         PEO1A       Wa       Wx       Whitaker loam       Predomin         Investigated Area (IA)       NWI Wetland       NRCS Soil Survey         NHD Flowline       NRCS Soil Survey         Exhibit 4 - NWI, NHD, Soil Survey Map       All locations approximate         I-70 Clear Creek Welcome Center       Source: Indiana Spatial Data Portal (2018)	nantley nonhydric (3%) Ionhydric (0%)
PaD2       Parke silt loam, 12 to 18 percent slopes, eroded       N         PECO1A       Wa       Wx       Whitaker loam       Predomin         Investigated Area (IA)       NWI Wetland       Predomin       Predomin         NHD Flowline       NRCS Soil Survey       All locations approximate       Source: Indiana Spatial Data Portal (2018)         Sugar CreekTownship, Vigo County, IN       Des. No.1902855       Nu       Nu	nantley nonhydric (3%) Ionhydric (0%)
PaD2       Parke silt loam, 12 to 18 percent slopes, eroded       N         PECO1A       Wa       Wx       Whitaker loam       Predomin         Investigated Area (IA)       NWI Wetland       NRCS Soil Survey       Predomin         NHD Flowline       NRCS Soil Survey       All locations approximate       Source: Indiana Spatial Data Portal (2018)         Sugar CreekTownship, Vigo County, IN       Source: Indiana Spatial Data Portal (2018)       Image: CreekTownship Survey Napping Source	nantley nonhydric (3%) Ionhydric (0%)



#### Page

Investigated Area (IA)

Exhibit 5 Reference Map I-70 Clear Creek Welcome Center Rest Area Modernization Sugar CreekTownship, Vigo County, IN Des. No.1902855 Metric Project No.21-0049-3 Map Date: 3/21/2022 Map Author: Kristina Zuniga

All loca	ations ap	proximate			
Source	e: Indiana	a Spatial Da	ata Portal (201	8)	
N					ENVIRONMENTAL
	0	250	500	1,000	
Fi 🔨 Fi	eet				Exh. 5 Reference Map







#### UP1

**UNT 2 to Clear Creek** (412 LFT)

CV 10

UNT 4 to Clear Creek (1650 LFT)

CV8CV9

UNT 1 to Clear Creek (2006 LFT)

UNT 4 to Clear Creek OHWM 3.33 ft. wide, 0.25 ft. deep

39.442887, -87.497585

UNT 2 to Clear Creek OHWM 5 ft. wide, 0.25 ft. deep 39.443293, -87.496011

Wetland A (PFO1A) (0.163 ac.)

A2 A1

UNT 3 to Clear Creek OHWM 1.5 ft. wide, 0.17 ft. deep 39.442166, -87.495887

UNT 3 to Clear Creek (52 LFT)





21st St

**UNT 5 to Clear Creek** (227 LFT)

Investigated Area (IA) Delineated Wetland Continues Beyond IA OHWM Measurement

O Point

CONTRACTOR OF ME

Culvert

-Stream

Roadside Ditch

Wetland Sampling Point -

NHD Flowline

Exhibit 5 - Waters Delineation Map I-70 Clear Creek Welcome Center Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Des. No. 1902855 Metric Project No. 21-0049-3 Map Date: 5/12/2022 Map Author: April Pape

All locations approximate Source: Indiana Spatial Data Portal (2018) Ν 50 100 200

a Office Woo

l frie of



rmation Technology, Indiana University Spatial Data

#### WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	I-70	Clear C	reek Re	st Area (Des	s. 19028	55)	City/Count	ty:	Terre Haute/Vigo C	ounty	Sampling Date:	4/25/2022
Applicant/Owner:					INC	OT	_		State	: IN	Sampling Point:	A1
Investigator(s):		Zachar	ry Root,	April Pape,	Kristina Z	luniga	Se	ection, Townsh	nip, Range: S 35, T	12 N, R 10 W	_	
Landform (hillslope, terra	ice, etc.):	[	Depressi	ion		-		Local	relief (concave, cor	nvex, none): Co	oncave	
Slope (%): 0	%	Lat:		39.	442656		Long:	-	-87.495892		Datum: NAD83	
Soil Map Unit Name:		-			Borrow	pits (Bp) - No	nhydric (0%)			NWI classifica	ation: None	
Are climatic / hydrologic o	conditions on	the site t	typical fo	r this time c	of year?		Yes	S X No	(If no, expla	in in Remarks.)		
Are Vegetation	No ,	Soil	No	, or Hydrolc	ogy No	significantl	y disturbed?	Are "N	lormal Circumstanc	es" present?	Yes X No	o
Are Vegetation	No ,	Soil	No	, or Hydrolc	ogy No	naturally p	roblematic?	(If nee	ded, explain any an	swers in Rema	rks.)	
SUMMARY OF FIN	DINGS A	Attach	site m	ap show	ing san	npling poi	nt locations	, transects	, important fea	tures, etc.		
Hydrophytic Vegetation F	Present?			Yes	Х	No	ls th	e Sampled Ar	rea			
Hydric Soil Present?				Yes	Х	No		in a Wetland?		Yes X	No	
Wetland Hydrology Prese	ent?			Yes	Х	No	_					
Remarks: Wetland A (PF					orning.							
VEGETATION Us	se scientifi	c nam	es of p	plants.					-1			
Tree Stratum (Plot size:	-	0' rodiu	<b>c</b>	`		Absolut % Cove			Dominance Tes	t workshoot		
1. Acer negundo		30' radiu:	5	)		20%	r Species? Yes	Status FAC	Dominance res	at worksheet:		
2. Ulmus americana						10%	Yes	FACW	Number of Dom	inant Species		
3.							_		That Are OBL, F	ACW, or FAC:	5	(A)
4												
5						200/	= Total Cove		Total Number of		0	
						30%		1	Species Across	All Strata.	6	(B)
Sapling/Shrub Stratum (	Plot size:		15' radiu	s)					Percent of Domi	nant Species		
1. Lonicera maackii						10%	Yes	UPL	That Are OBL, F	ACW, or FAC:	83%	(A/B)
2. Ulmus americana						10%	Yes	FACW				
3												
4									Prevalence Inde	x worksheet:		
J						20%	= Total Cove	r	Total % 0	Cover of:	Multiply by:	
Herb Stratum (Plot size:	Ę	5' radius		)			_		OBL species		x1 =	
1. Lysimachia nummula	aria					20%	Yes	FACW	FACW species	60%	x2 =	1.2
2. Helenium autumnale						20%	Yes	FACW	FAC species	30%		0.9
3. Toxicodendron radic	ans					5%	No	FAC	FACU species	400/	x4 =	0.5
4. <u>Viola sororia</u> 5.						5%	No	FAC	UPL species Column Totals:	<u> </u>		0.5 2.6 (B)
6.									Column rotais.	1.00	_(()	2.0 (D)
7.									Prevale	nce Index = B/A	A =2.60	)
8.												
9												
10 11.									Hydrophytic Ve	getation Indica	ators:	
12.									1-Rapio	I Test for Hvdro	phytic Vegetation	
13.										nance Test is >		
14.							_			lence Index is :		
15											ations <sup>1</sup> (Provide su	
16											a separate sheet) tic Vegetation <sup>1</sup> (Ex	
17 18										паце пушорпу	tic vegetation (Ex	piain)
19.									<sup>1</sup> Indicators of hyd	dric soil and we	tland hydrology mu	ıst
20.						_	_		be present, unle	ss disturbed or	problematic.	
						50%	= Total Cove	r				
Woody Vine Stratum (Pl 1.	lot size:	<u>.</u>	30' radiu	<u>s</u> )					Hydrophytic Vegetation			
2.									Present?	Yes	X No	
						0%	= Total Cove	r				
Remarks: (Include photo	numbere bo		a senar	ate sheet )					1			
		.5 51 011	~ oopard	onoet.j								

#### SOIL

7:20       10YR 5/6       80       10YR 3/2       20       C       M       SL       Prominent Redox Concentrations <sup>1</sup> Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.       Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         "Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         "Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         "Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup> Location: PL=Pore Lining, M=Matrix.         "Histic Epipedion (A2)       Sandy Redox (S5)       Indicators for Problematic Hydric Solls":         Histic Epipedion (A2)       Sandy Redox (S5)       Dark Surface (F12)         Stratified Layers (A5)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (F7)         Stratified Layers (A5)       Loamy Gleved Matrix (F2)       Other (Explain in Remarks)         Depleted Matrix (F3)       Depleted Dark Surface (F6)       Thick Dark Surface (A11)       X Redox Dark Surface (F6)         Type:       Depleted Dark Surface (F6)       Thick Dark Surface (S3)       wetland hydrology must be present, unless disturbed or problematic.	0.7       10YR 3/2       95       6YR 3/4       5       C       M       SL       Prominent Redox Concentrations         720       10YR 5/6       80       10YR 3/2       20       C       M       SL       Prominent Redox Concentrations         ype:       C       C       M       SL       Prominent Redox Concentrations         ype:       C       C       M       SL       Prominent Redox Concentrations         ype:       C       C       M       SL       Prominent Redox Cat(5)         Histor (A)       Sandy Gleyed Matrix (St)       Indicators for Problemask Masses (F12)       Indicators for Problemask Masses (F12)         Black Hists (A3)       Simpled Matrix (St)       Dary Gleyed Matrix (F2)       Other (Explain in Remarks)         2 on Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)       Other (Explain in Remarks)         2 on Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)       Other (Explain in Remarks)         3 cm duv Parser (A5)       Huber of Part (St)       Indicators (F12)       Other (Explain in Remarks)         2 on Muck (A10)       X       Redox Dark Surface (F2)       No       Indicators (F12)         3 cm duv Parser (A5)       Huber of Part (St)       Unleas disturbed of part (part bas					dox Features				
7.20       10YR 5/6       80       10YR 3/2       20       C       M       SL       Prominent Redox Concentrations         7.20       10YR 5/6       80       10YR 3/2       20       C       M       SL       Prominent Redox Concentrations         7.20       10YR 5/6       80       10YR 3/2       20       C       M       SL       Prominent Redox Concentrations         7.20       10YR 5/6       80       10YR 5/6	Z-20       10YR 5/6       80       10YR 3/2       20       C       M       SL       Prominent Redox Concentrations.         Ype:       Concentration, D=Dopteton, RM=Roduced Matrix, CS=Covared or Coated Sand Grains.       *Location: PL=Pore Lining, M=Matrix.       Mideators for Problematic Hydric Solis*:         Histor Epideon (A2)       Sandy Riday Matrix (S4)       Indicators for Problematic Hydric Solis*:       Indicators for Problematic Hydric Solis*:         Histor Epideon (A2)       Sandy Riday Matrix (S6)       Dark Surface (TF12)       Other Capsian in Remarks)         Black Husic (A1)       Learny Mucky Minetal (F1)       Very Shallow Dark Surface (TF12)       Other Capsian in Remarks)         2 cm Muck (A10)       Learny Glogod Matrix (F3)       Depideet Bark Surface (F6)       *         3 cm Mucky Minetal (S1)       Redox Depisesions (F8)       unless disturbed or problematic.         5 cm Mucky Plant or Poat (S3)       mulces disturbed or problematic.       *         Type:	nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
ype: C-Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.       *Location: PL=Pero Lining, M=Matrix.         ype: C-Concentration, D=Deptetion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.       *Location: PL=Pero Lining, M=Matrix.         ype: C-Concentration, D=Deptetion, RM=Reduced Matrix, (S4)	ype: C-Concentration, Da-Depletion, RM-Reduced Matrix, CB-Covered of Coated Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         ype: C-Concentration, Da-Depletion, RM-Reduced Matrix, CB-Covered of Coated Sand Grains.       *Location: PL=Pore Lining, M=Matrix.         indicators tor Problematic Matrix (S4)       Sandy Gleyed Matrix (S4)       Indicators for Problematic Matrix (S1)         Back Histic (CA3)       Stripped Matrix (S6)       Unro-Manganee Masses (F12)         Back Histic (A3)       Carry Gleyed Matrix (F2)       Other (Explain In Remarks)         2 on Muck (A10)       Depleted Matrix (F3)       Other (Explain In Remarks)         3 cm Muck (A11)       X Rodo Dark Sturface (F7)       *Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed of problematic.         3 cm Muck (Matrix CB3)       Depleted Dark Surface (F7)       *Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed of problematic.         3 cm Muck (Matrix Table (A2)       Agautafic Tarana (B13)       Secondary Indicators (minimum of two required Surface (F7)         *Indicators (R1)       X Water-Stained Leaves (B9)       Surface Soil Cracks (B6)       Dariana (B13)         3 sturation (A3)       Thue Aquatic Planna (B13)       Surface Soil Cracks (B6)       Dariana (B13)         3 Surface Matrix (R3)       Presence of Reduced from (C4)       Surface Soils (Cases (B6)       Dareare Matrix (B10)	0-7	10YR 3/2	95	5YR 3/4	5	С	М	SL	Prominent Redox Concentrations
dric Soil Indicators:       Indicators for Public Region Matrix (S4)       Indicators for Public Region Matrix (S4)         Histosol (A1)       Sandy Gleyed Matrix (S4)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S8)       Dark Surface (S7)         Phytrogen Sufface (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (F12)         2 cm Muck (A10)       Depleted Batrix (F3)       Depleted Matrix (F3)         0 Depleted Batrix (F3)       Depleted Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and welland hydrology must be present, unless disturbed or problematic.         3 Strictive Layer (If observed):       Type:       Pupt       Pupt         Depth (Inches):       Hydric Soil Present?       Yes X       No         anary Miccators (Inimum of one is required: check all that apply)       Secondary Indicators (minimum of two require single Arabic (C2)       Surface Soil Cracks (B6)         Surface Water (A1)       X       Water-Stained Lawes (B3)       Surface Soil Cracks (B6)       Dirinage Patterns (B10)         Surface Water (A1)       X       Water-Stained Lawes (B3)       Surface Soil Cracks (B6)       Dirinage Patterns (B10)       Dividead Private Patter (B10)       Dividead Patter (B10)       Surface Soil Cracks (B6)       Dividead Patter (B10)       Surface (C2)       Caralis Haurows (C8)       Surface Soil Cracks (C6)       Surface (C2)	dric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosol (A1)	7-20	10YR 5/6	80	10YR 3/2	20	C	М	SL	Prominent Redox Concentrations
afr 6 Soll Indicators:       Indicators for Public Region (A2)       Sandy Gleyed Matrix (S4)       Indicators for Public Region (A2)         Black Histic K(A)       Sandy Rodox (S5)       Dark Surface (S7)         Black Histic (A3)       Stripped Matrix (S8)       Dark Surface (S7)         Verty Shaldw Dark Surface (A1)       Loamy Mukey Mineral (F1)       Very Shaldw Dark Surface (F7)         2 cm Muck (A10)       Depleted Betwy Mineral (F1)       Very Shaldw Dark Surface (F7)         3 andy Mucky Mineral (S1)       Redox Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and weland hydrology must be present, unless disturbed or problematic.         3 strictive Layer (If observed):       Type:       Pupt       Pupt         Depth (mohes):       Hydric Soil Present?       Yes       No         andr Mucky Water Table (A2)       Aquate Fauna (B13)       Surface Soil Cracks (B6)       Surface Soil Cracks (B6)         Surface Water (A1)       X       Water-Stained Lawes (B9)       Surface Soil Cracks (B6)       Dorsange Patterns (B10)         Surface Water (A1)       X       Water-Stained Lawes (B9)       Surface Soil Cracks (B6)       Dorsange Patterns (B10)         Surface Water (A1)       Hydrogen Surface (C7)       Surface Soil Cracks (B6)       Dorsange Patterns (B10)       Surface Soil Cracks (B6)       Dorsange Patterns (B10)       Surface Soil Cracks (B6)	aric Soil Indicators:       Indicators for Problematic Hydric Soils <sup>1</sup> :         Histosoi (A1)								· ·	
dris Sol Indicators:       Indicators for Problematic Hydris SoliP:         Histosol (A1)	drig Soft Indicators:       Indicators for Problematic Hydric Solls*:         Histosof (A1)								· ·	
Histic Epipedon (A2)       Sandy Gleyed Matrix (S4)       Coast Prairie Redox (A16)         Histic Epipedon (A2)       Sandy Redox (S5)       Iton-Manganese Masses (F12)         Black Histic (A3)       Charmy Mucky Mineral (F1)       Other (Explain in Remarks)         2 em Muck (A10)       Depleted Matrix (S6)       Other (Explain in Remarks)         2 em Muck (A10)       Depleted Matrix (F3)       Other (Explain in Remarks)         2 em Muck (A10)       Depleted Matrix (F3)       Other (Explain in Remarks)         2 em Muck (A10)       Depleted Dark Surface (F7) <sup>3</sup> Indicators of hydrophylic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Strictive Layer (If observed):       Type:	Histic Epipedon (A2) Sandy Regard Matrix (S4) Cast Prairie Redax (A16) Histic Epipedon (A2) Sandy Regard Matrix (S4) Dark Surface (F12) Black Histic (A3) Dark Surface (S5) Dark Surface (S7) Hydrogen Suffide (A4) Learny Mucky Mineral (F1) Very Shallow Dark Surface (TF12) Stratified Leaver (S4) Depleted Matrix (S8) Depleted Matrix (F3) Depleted Below Dark Surface (A11) X Redax Dark Surface (F7) and Leaver (F6) Trick Dark Surface (A12) Depleted Dark Surface (F7) unless disturbed or problematic. strictive Layer (If observed): Type:		· · · · · ·	ion, RM=Reduce	d Matrix, CS=Covere	d or Coated S	and Grains.			<b>0</b> .
Histic Epipedon (A2)       Sandy Redox (S5)       Iron-Manganese Masses (F12)         Black Histic (A3)       Stripped Matrix (S6)       Data Surface (S7)         Hydrogen Sulfide (A4)       Loamy Kucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy Kucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Depleted Below Dark Surface (A11)       X Redox Dark Surface (F6)       Depleted Dark Surface (F7)         Sandy Mucky Mineral (S1)       Redox Dark Surface (F7) <sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Serm Mucky Peat or Peat (S3)       unless disturbed or problematic.       term marks:         YDROLOGY       Ethand Hydrology Indicators: firminum of one is required: check all that apply)       Secondary Indicators (inininum of two require marks:         YDROLOGY       X Surface Value (A12)       Aquatic Fauna (B13)       Drainage Patterns (B10)         X Surface Water (A1)       X Vater-Stained Lawes (B4)       Drainage Patterns (B10)       Surface Soil Cracks (B6)         X Surface Water (A13)       True Aquatic Flanus (B13)       Drainage Patterns (B10)       Surface Soil Cracks (C3)         X Surface Water (A1)       Hydrogen Suffie Color (C1)       Dry-Seesson Water Table (C2)       Cracks (B6)         X Surface (A3)       Presence of Reduced Iron (C4)       Sturta	Histic Explandon (A2)       Sandy Redox (S5)       Individual constraints of the surface of				Sandy Glev	ed Matrix (S4)				
Black Histic (A3)       Stripped Matrix (S6)       Dark Surface (S7)         Hydrogen Suffield (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A5)       Loamy (Seyed Matrix (F2))       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       X Redox Dark Surface (F6)       Depleted Matrix (F3)         Depleted Below Dark Surface (A12)       Depleted Dark Surface (F7)       *Indicators of hydrophylic vegetation and wetland hydrology must be present, s of molecular Surface (F7)         Sorn Mucky Mineral (S1)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         estrictive Layer (if Observed):       Type:	Black Histic (A3)       Stripped Matrix (S6)       Dark Surface (TF12)         Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Urey Shallow Dark Surface (TF12)         Stratified Layers (A5)       Depleted Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       X Redox Dark Surface (F6)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         Strictive Layer (If observed):       Type:									
Hydriogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (F12)         Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       Depleted Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       X       Redox Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         S cm Mucky Peat or Peat (S3)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         estrictive Layer (if observed):       Type:	Hydrogen Sulfide (A4)       Loamy Mucky Mineral (F1)       Very Shallow Dark Surface (TF12)         Stratified Layers (A6)       Loamy Gived Matrix (F2)       Other (Explain in Remarks)         Depleted Below Dark Surface (A11)       X       Redox Dark Surface (F6)         Depleted Below Dark Surface (A11)       X       Redox Dark Surface (F7)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7) <sup>1</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         strictive Layer (if observed):       Type:					. ,				
stratified Layers (A5) Loamy Gleyed Matrix (F2) Other (Explain in Remarks)   2 cm Muck (A10) Depleted Matrix (F3)   Depleted Below Dark Surface (A11) Redox Dark Surface (F6)   Trick Dark Surface (S1) Redox Depressions (F8)   sandy Mucky Mineral (S1) Redox Depressions (F8)   estrictive Layer (If observed): Type:   Type:	Stratified Layers (A5)       Loamy Gleyed Matrix (F2)       Other (Explain in Remarks)         2 cm Muck (A10)       Depleted Bdark Surface (F6)       Indicators of hydrophytic vegetation and wetand hydrophytic vegetation and wetand hydrology must be present, unless disturbed or problematic.         Strictive Layer (if observed):       Tryp:						)			
	2 cm Muck (A10)       Depleted Matrix (F3)         Depleted Below Dark Surface (A11)       X       Redox Dark Surface (F7)         Sandy Mucky Mineral (S1)       Depleted Dark Surface (F7)       *Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         strictive Layer (if observed):       Type:									
Depleted Below Dark Surface (A11)       X       Redox Dark Surface (F6)         Thick Dark Surface (A12)       Depleted Dark Surface (F7)       Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         S orm Mucky Peat or Peat (S3)       Redox Depressions (F8)       unless disturbed or problematic.         Type:	Pepteted Balow Dark Surface (A11)     Thick Dark Surface (A12)     Depleted Dark Surface (F6)     Depleted Dark Surface (F7)     "indicators of hydrophytic vegetation and     wetland hydrology must be present,     unless disturbed or problematic.     strictive Layer (If observed):         Type:									
Trick Dark Surface (A12)       Depleted Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.         S orn Mucky Peat or	Trick Dark Surface (A12)       Depleted Dark Surface (F7) <sup>3</sup> Indicators of hydrophytic vegetation and wettand hydrology must be present, unless disturbed or problematic.         Som Mucky Mineral (S1)       Redox Depressions (F8)       wettand hydrology must be present, unless disturbed or problematic.         Strictive Layer (if observed):		. ,	A11)						
Sandy Mucky Mineral (S1)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         testrictive Layer (if observed):       Type:	Sandy Mucky Mineral (S1)       Redox Depressions (F8)       wetland hydrology must be present, unless disturbed or problematic.         strictive Layer (if observed):       Type:						7)		<sup>3</sup> Indicators o	f hydrophytic vegetation and
							,			
Type:	Type:					()				
Depth (inches):       Hydric Soil Present?       Yes       X       No         emarks:	Depth (inches):       Hydric Soil Present?       Yes       X       No         marks:	estrictive La	yer (if observed):							
amarks:         YDROLOGY         fettand Hydrology Indicators:         >rimary Indicators (minimum of one is required: check all that apply)       Surfaces Vater (A1)       Surface Soil Cracks (B6)         X       Surface Water (A1)       X       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         X       High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         X       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9         Ordized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9       Saturation Visible on Aerial Imagery (C9         Inno Deposits (B3)       Presence of Reduced Iron (C4)       Stunde or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Inno Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Saturation Present?       Yes X       No         Saturation Present?       Yes X       No       Depth (	marks:         /DROLOGY         estland Hydrology Indicators:         imary. Indicators (minimum of one is required: check all that apply)       Secondary Indicators (minimum of two required:         Surface Water (A1)       X         Yater Table (A2)       Aquatic Fauna (B13)         High Water Table (A2)       Aquatic Plants (B14)         Saturation (A3)       True Aquatic Plants (B14)         Dift Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)         Sediment Deposits (B3)       Presence of Reduced Iron (C4)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)         Joint Deposits (B3)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Ved Observations:       Inface Water Present?       Yes         utaration Present?       Yes       No         Depth (inches):       3       Wetland Hydrology Present?       Yes         Ves       No       Depth (inches):       4         exercible Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Yes       X									
YDROLOGY         /etland Hydrology Indicators:         Yimmary Indicators (minimum of one is required: check all that apply)       Surface Water (A1)       Surface Soil Cracks (B6)         X       Surface Water (A1)       X       Aquatic Fauna (B13)       Drainage Patterns (B10)         X       Saturation (A3)       True Aquatic Plants (B14)       Dry Season Water Table (C2)         Water Marks (B1)       Hydr Ydorgen Sulfide Odor (C1)       Crarkish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Orit Deposits (B3)       Presence of Reduced fron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent fron Reduction in Tilled Soils (C6)       X       Geomorphic Positin (D2)         Inno Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Innudation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Saturation Present?       Yes X       No         Saturator Present?       Yes X       No       Depth (inches): 3       Metral Hydrology Present?       Yes X       No         Saturation Present?       Yes X       No       Depth (inches): 3       Metral Hydrology Present?       Yes X       No         Saturation Present?       Yes X	Algal Mator Crust (B4)       Yes X No       Depth (inches): 3         Inductors (B5)       Thin Nuck Surface (B6)       Staturation Visible on Aerial Imagery (B7)         Secondary Indicators (minimum of two required: check all that apply)       Surface Soil Cracks (B6)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)       Craylish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Diff Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X Geomorphic Position (D2)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       X FAC-Neutral Test (D5)         Staturation Present?       Yes X No       Depth (inches): 3       Wetland Hydrology Present?       Yes X No         Indicator Freemer?       Yes X No       Depth (inches): 10       Wetland Hydrology Present?       Yes X No       Mo         Secondary Inference       Berondary Indicators       Berondary Inches)       Berondary Inches       Mo         ater Table Present?       Yes X No       Depth (inches): 10       Wetland Hydrology Present?       Yes X No       Mo         Berorded Data (stream gauge, mon	Depth (ind	ches):					Hydric	Soil Present?	Yes X No
X       Surface Water (A1)       X       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         X       High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         X       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Sturate or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       X       FAC-Neutral Test (D5)         Surface Water Present?       Yes       X       No       Depth (inches):       3         Vater Table Present?       Yes       X       No       Depth (inches):       3         Saturation Present?       Yes       X       No       Depth (inches):       8         Water Table Present?       Yes       X       No       Depth (inches):       8	Surface Water (A1)       X       Water-Stained Leaves (B9)       Surface Soil Cracks (B6)         High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         eld Observations:       Yes       X       No       Depth (inches):       3         urface Water Present?       Yes       X       No       Depth (inches):       3         ucludes capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:       Surface Soil Cracks (B6)       Surface Soil Cracks (C3) </th <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>									
X       High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         X       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C3)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Steld Observations:       Surface Water Present?       Yes       X       No         Depth (inches):       10       Depth (inches):       3       No         Saturation Present?       Yes       X       No       Depth (inches):       4         Depth (inches):       8       Depth (inches):       8       No       Depth (inches):       5         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       No <t< td=""><td>C       High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         C       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Inon Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Hid Observations:       urface Water Present?       Yes       X       No       Depth (inches):       3         ucludes capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       available:</td><td>Vetland Hydro</td><td>ology Indicators:</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	C       High Water Table (A2)       Aquatic Fauna (B13)       Drainage Patterns (B10)         C       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Inon Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Hid Observations:       urface Water Present?       Yes       X       No       Depth (inches):       3         ucludes capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       available:	Vetland Hydro	ology Indicators:							
X       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X         I ron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         I nundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         Surface Water Present?       Yes       X       No       Depth (inches): <u>3</u> Water Table Present?       Yes       X       No       Depth (inches): <u>10</u> Saturation Present?       Yes       X       No       Depth (inches): <u>10</u> Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	C       Saturation (A3)       True Aquatic Plants (B14)       Dry-Season Water Table (C2)         Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       X       Geomorphic Position (D2)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Inon Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Wetland Hydrology Present?       Yes       X       No         etartable Present?       Yes       X       No       Depth (inches):       3       0       10         etartable Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         ecudes capillary fringe)       escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       emarks:	<b>Vetland Hydro</b> Primary Indica	ology Indicators: tors (minimum of one	is required: chec	11.27					• • •
Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:       Surface Water Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       3         Water Table Present?       Yes       X       No       Depth (inches):       10         Saturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:       Stauration Present P	Water Marks (B1)       Hydrogen Sulfide Odor (C1)       Crayfish Burrows (C8)         Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)         Other (Explain in Remarks)       Other (Explain in Remarks)       Wetland Hydrology Present?       Yes       X       No         eld Observations:       Tater Table Present?       Yes       X       No       Depth (inches): <u>10</u> Wetland Hydrology Present?       Yes       X       No         icludes capillary fringe)       secribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       marks:        Yes       X       No	Vetland Hydro Primary Indica X Surface V	ology Indicators: tors (minimum of one Water (A1)	is required: chec	X Water-Stain		))			Surface Soil Cracks (B6)
Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       X       FAC-Neutral Test (D5)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)       Wetland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       3       Vater Table Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         <	Sediment Deposits (B2)       Oxidized Rhizospheres on Living Roots (C3)       Saturation Visible on Aerial Imagery (C9)         Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inudation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       X       FAC-Neutral Test (D5)         Setd Observations:       urface Water Present?       Yes       X       No         urface Water Present?       Yes       X       No       Depth (inches):       3         atturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         cludes capillary fringe)       escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       emarks:	Vetland Hydro Primary Indica X Surface V X High Wat	ology Indicators: tors (minimum of one Water (A1) ter Table (A2)	is required: chec	X Water-Stain Aquatic Fau	ina (B13)				Surface Soil Cracks (B6) Drainage Patterns (B10)
Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:       Sturface Water Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       3         Vater Table Present?       Yes       X       No       Depth (inches):       10         Saturation Present?       Yes       X       No       Depth (inches):       8         Wetland Hydrology Present?       Yes       X       No       Depth (inches):       8         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	Drift Deposits (B3)       Presence of Reduced Iron (C4)       Stunted or Stressed Plants (D1)         Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       Sauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         eld Observations:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3)	is required: chec	X Water-Stain Aquatic Fau True Aquati	ina (B13) c Plants (B14)				Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:       Other (Explain in Remarks)       Depth (inches): 3       Algal Mat or Crust (M4)       Ves X       No         Surface Water Present?       Yes X       No       Depth (inches): 10       Ves X       No       Depth (inches): 2       No         Saturation Present?       Yes X       No       Depth (inches): 8       Wetland Hydrology Present?       Yes X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	Algal Mat or Crust (B4)       Recent Iron Reduction in Tilled Soils (C6)       X       Geomorphic Position (D2)         Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         etd Observations:       J       J         urface Water Present?       Yes       X         Yes       X       No       Depth (inches):         ater Table Present?       Yes       X         Yes       X       No       Depth (inches):         icitudes capillary fringe)       Becorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	X     Surface       X     Surface       X     High Wat       X     Saturatio       Water Mater     Water Mater	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1)	is required: chec	X Water-Stain Aquatic Fau True Aquati Hydrogen S	na (B13) c Plants (B14) ulfide Odor (C	1)	(00)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:       Surface Water Present?       Yes         Surface Water Present?       Yes       X       No         Depth (inches):       10       Metland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       10       Metland Hydrology Present?       Yes       X       No         Saturation Present?       Yes       X       No       Depth (inches):       8       Metland Hydrology Present?       Yes       X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	Iron Deposits (B5)       Thin Muck Surface (C7)       X       FAC-Neutral Test (D5)         Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)       Other (Explain in Remarks)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         eld Observations:       Intrace Water Present?       Yes         urface Water Present?       Yes       X       No         Depth (inches):       10       Intrace Water Present?       Yes         Aturation Present?       Yes       X       No       Depth (inches):         Includes capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         emarks:       Exercise Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Emarks:       Emarks:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2)	is required: chec	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rt	na (B13) c Plants (B14) ulfide Odor (C nizospheres on	1) I Living Roots	s (C3)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:	Inundation Visible on Aerial Imagery (B7)       Gauge or Well Data (D9)         Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         eld Observations:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3)	is required: chec	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron	1) Living Roots (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         ield Observations:       Surface Water Present?       Yes X       No       Depth (inches):       3         Surface Water Present?       Yes X       No       Depth (inches):       10         Vater Table Present?       Yes X       No       Depth (inches):       10         Saturation Present?       Yes X       No       Depth (inches):       8         Wetland Hydrology Present?       Yes X       No         Saturation Present?       Yes X       No       Depth (inches):       8         Observations capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	Sparsely Vegetated Concave Surface (B8)       Other (Explain in Remarks)         eld Observations:       urface Water Present?       Yes X       No       Depth (inches):       3         ater Table Present?       Yes X       No       Depth (inches):       10       Wetland Hydrology Present?       Yes X       No         aturation Present?       Yes X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes X       No         ecludes capillary fringe)       escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       emarks:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mat	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4)	is required: chec	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron	na (B13) c Plants (B14) ulfide Odor (C nizospheres on Reduced Iron Reduction in	1) Living Roots (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Surface Water Present?       Yes       X       No       Depth (inches):       3         Vater Table Present?       Yes       X       No       Depth (inches):       10         Saturation Present?       Yes       X       No       Depth (inches):       10         Saturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         includes capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	urface Water Present?       Yes       X       No       Depth (inches):       3         ater Table Present?       Yes       X       No       Depth (inches):       10         aturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         aturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         acturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         acturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         acturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         acturation Present?       Yes       X       No       No       No       No       No         escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Persenters       Persenters       Persenters       Persenters       Persenters       Persenters<	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5)		X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S	na (B13) c Plants (B14) ulfide Odor (C nizospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7)	1) Living Roots (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vater Table Present?       Yes       X       No       Depth (inches):       10         Saturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         Includes capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	ater Table Present?       Yes       X       No       Depth (inches):       10         aturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         includes capillary fringe)       escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Wetland Hydrology Present?       Yes       X       No	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima	agery (B7)	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C nizospheres on Reduced Iron Reduction in Surface (C7) Yell Data (D9)	1) I Living Roots (C4) Filled Soils (C			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Saturation Present?       Yes X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes X       No         includes capillary fringe)       Depth (inches):       8       Wetland Hydrology Present?       Yes X       No         Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       Remarks:       Remarks:	Atturation Present?       Yes       X       No       Depth (inches):       8       Wetland Hydrology Present?       Yes       X       No         includes capillary fringe)       escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:       emarks:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima Vegetated Concave S	agery (B7)	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C nizospheres on Reduced Iron Reduction in Surface (C7) Yell Data (D9)	1) I Living Roots (C4) Filled Soils (C			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
includes capillary fringe) Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: Remarks:	acludes capillary fringe) escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: emarks:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) n (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) n Visible on Aerial Ima Vegetated Concave S	agery (B7) Surface (B8)	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C iizospheres on Reduced Iron Reduction in Surface (C7) 'ell Data (D9) ain in Remarks	1) I Living Roots (C4) Filled Soils (C			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	escribe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Inundatio Sparsely	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima Vegetated Concave S tions: r Present?	agery (B7) Surface (B8) Yes <u>X</u> No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rł Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C iizospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7) 'ell Data (D9) ain in Remarks	1) I Living Roots (C4) Filled Soils (C			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Remarks:	emarks:	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Inundatio Sparsely ield Observa Surface Water Vater Table P	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima Vegetated Concave S tions: r Present?	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C iizospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7) 'ell Data (D9) ain in Remarks s): <u>3</u>	1) Living Roots (C4) Filled Soils (C	26)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
		Vetland Hydro Primary Indica X Surface V X High Waf X Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depo Inundatio Sparsely ield Observa Surface Water Vater Table P Saturation Pre includes capil	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima Vegetated Concave S tions: r Present? Present? Issent? lary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No Yes <u>X</u> No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rf Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) fell Data (D9) ain in Remarks s): <u>3</u> s): <u>10</u> s): <u>8</u>	1) I Living Roots (C4) Filled Soils (C	C6) Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
		Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Inundatio Sparsely ield Observa Surface Water Vater Table P Saturation Pre includes capil	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima Vegetated Concave S tions: r Present? Present? Issent? lary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No Yes <u>X</u> No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rf Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) fell Data (D9) ain in Remarks s): <u>3</u> s): <u>10</u> s): <u>8</u>	1) I Living Roots (C4) Filled Soils (C	C6) Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
ocated in a depression with concave local relief (D2).	ated in a depression with concave local relief (D2).	Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mat Iron Depo Inundatio Sparsely Field Observa Surface Water Water Table P Saturation Pre (includes capil	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) on Visible on Aerial Ima Vegetated Concave S tions: r Present? Present? Issent? lary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No Yes <u>X</u> No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rf Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) fell Data (D9) ain in Remarks s): <u>3</u> s): <u>10</u> s): <u>8</u>	1) I Living Roots (C4) Filled Soils (C	C6) Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
		Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depo Inundatio Sparsely Field Observa Surface Water Vater Table P Saturation Pre Cincludes capil Describe Reco	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Ima Vegetated Concave S tions: r Present? resent? lary fringe) orded Data (stream ga	agery (B7) Surface (B8) Yes X No Yes X No Yes X No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rf Presence of Recent Iron Thin Muck S Gauge or W Other (Expla Depth (inches Depth (inches Depth (inches	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) fell Data (D9) ain in Remarks s): <u>3</u> s): <u>10</u> s): <u>8</u>	1) I Living Roots (C4) Filled Soils (C	C6) Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
		Vetland Hydro Primary Indica X Surface V X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Mar Iron Depo Inundatio Sparsely Field Observa Surface Water Vater Table P Saturation Pre Cincludes capil Describe Reco	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Ima Vegetated Concave S tions: r Present? resent? lary fringe) orded Data (stream ga	agery (B7) Surface (B8) Yes X No Yes X No Yes X No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rf Presence of Recent Iron Thin Muck S Gauge or W Other (Expla Depth (inches Depth (inches Depth (inches	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) fell Data (D9) ain in Remarks s): <u>3</u> s): <u>10</u> s): <u>8</u>	1) I Living Roots (C4) Filled Soils (C	C6) Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
		Vetland Hydro Primary Indica X Surface N X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely ield Observa Surface Water Vater Table P Saturation Pre includes capil Describe Reco	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Ima Vegetated Concave S tions: r Present? resent? lary fringe) orded Data (stream ga	agery (B7) Surface (B8) Yes X No Yes X No Yes X No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rf Presence of Recent Iron Thin Muck S Gauge or W Other (Expla Depth (inches Depth (inches Depth (inches	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) fell Data (D9) ain in Remarks s): <u>3</u> s): <u>10</u> s): <u>8</u>	1) I Living Roots (C4) Filled Soils (C	C6) Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
		Vetland Hydro Primary Indica X Surface N X High Wat X Saturatio Water Ma Sedimen Drift Dep Algal Ma Iron Depo Inundatio Sparsely ield Observa Surface Water Vater Table P Saturation Pre includes capil Describe Reco	ology Indicators: tors (minimum of one Water (A1) ter Table (A2) in (A3) arks (B1) t Deposits (B2) osits (B3) t or Crust (B4) osits (B5) in Visible on Aerial Ima Vegetated Concave S tions: r Present? resent? lary fringe) orded Data (stream ga	agery (B7) Surface (B8) Yes X No Yes X No Yes X No	X Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rf Presence of Recent Iron Thin Muck S Gauge or W Other (Expla Depth (inches Depth (inches Depth (inches	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in Surface (C7) fell Data (D9) ain in Remarks s): <u>3</u> s): <u>10</u> s): <u>8</u>	1) I Living Roots (C4) Filled Soils (C	C6) Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)

I

#### WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	1-7	'0 Clear	Creek Re	est Area (Des.	1902855)		City/County:	т	erre Haute/Vigo Co	ounty	Sampling Dat	e: 4/25/2	2022
Applicant/Owner:					INDOT				State:	IN IN	Sampling Poir	nt: A2	.2
Investigator(s):		Zach	ary Root	, April Pape, Kri	stina Zunio	ja	Sec	tion, Townshi	o, Range: S 35, T	12 N, R 10 W	_		
Landform (hillslope, terra	ace, etc.):		Hillslope	e				Local re	elief (concave, con	vex, none): Co	nvex		
Slope (%): 2	2%	Lat:		39.442	2629		Long:	-	87.496024		Datum: NAD8	3	
Soil Map Unit Name:				В	orrow pits	(Bp) - Nonh	ydric (0%)			NWI classifica	ation: None		
Are climatic / hydrologic	conditions o	n the site	typical f	or this time of y	ear?		Yes	X No	(If no, explai	n in Remarks.)			
Are Vegetation	No	, Soil	No	, or Hydrology	No s	ignificantly d	listurbed?	Are "No	rmal Circumstance	es" present?	Yes X	No	_
Are Vegetation	No	, Soil	No	, or Hydrology	No n	aturally prob	plematic?	(If need	ed, explain any ans	swers in Rema	rks.)		
SUMMARY OF FIN	IDINGS	Attach	ı site n	nap showing	g sampl	ing point	locations,	transects,	important feat	tures, etc.			
Hydrophytic Vegetation	Present?			Yes		Х	Is the	Sampled Are	a				
Hydric Soil Present?					No		within	a Wetland?		Yes	No	Х	_
Wetland Hydrology Pres	ent?			Yes	No	Х							
Remarks: Wetland A Up													
						Absolute	Dominant	Indicator					
Tree Stratum (Plot size:		30' radi	us	)		% Cover	Species?	Status	Dominance Tes	t worksheet:			
1. Populus deltoides						20% 20%	Yes Yes	FAC FACU	Number of Domin	aant Spacias			
2. Acer saccharum 3. Juglans nigra						10%	Yes	FACU	That Are OBL, F/	•		3	(A)
4.						1070							_(''')
5.									Total Number of	Dominant			
						50%	= Total Cover		Species Across A	All Strata:	(	6	(B)
Canling/Chruh Ctrature			4 <i>5</i> 1 ve di						Demonst of Demin				
Sapling/Shrub Stratum 1. Lonicera maackii	(Plot size:		15' radi	us)		25%	Yes	UPL	Percent of Domir That Are OBL, F/		50	)%	(A/B)
2.						2070	103	OIL	mat Aic ODE, 17	1011, 011740.		70	_(/\D)
3.													
4.									Prevalence Index	x worksheet:			
5						050/			<b>T</b> ( 10) 0	. ,			
Herb Stratum (Plot size:		5' radiu	<b>c</b>	)		25%	= Total Cover		Total % C OBL species	over of:	Multiply by: x1 =		-
1. Enemion biternatum		J Taulu	5	_/		20%	Yes	FAC	FACW species	10%	x2 =	0.2	-
2. Urtica dioica						10%	Yes	FACW	FAC species	40%	x3 =	1.2	_
3. Delphinium tricorne						5%	No	UPL	FACU species	30%	x4 =	1.2	_
4									UPL species	30%	x5 =	1.5	-
5 6									Column Totals:	1.10	(A)	4.1	(B)
7.									Prevaler	nce Index = B/A	A = 3	.73	
8.													-
9.													
10									Hydrophytic Ve	getation Indica	ators:		
11 12.									1-Rapid	Test for Hydro	phytic Vegetatic	n	
13.										ance Test is >			
14.										lence Index is ≤			
15.									4-Morph	ological Adapta	ations <sup>1</sup> (Provide	supporting	
16.											a separate she	,	
17									Problen	natic Hydrophy	tic Vegetation <sup>1</sup> (	Explain)	
18 19.									<sup>1</sup> Indicators of hyd	Iric soil and wet	land hydrology	must	
20.									be present, unles			nusi	
						35%	= Total Cover		bo procont, amor		problemate.		
Woody Vine Stratum (P	lot size:		30' radi	ius)			·		Hydrophytic Vegetation Brocont2	Voc	No X		
2						0%	= Total Cover		Present?	Yes	<u>No X</u>		
						070							
Remarks: (Include phot	o numbers h	ere or or	ı a separ	rate sheet.)									

#### SOIL

	Matrix		Re	dox Features				
Depth (inches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-9	10YR 2/1	100		70	1300	LUC	SCL	Remarks
9-20	10YR 3/2	75	7.5YR 5/6	15	С	М	SCL	Prominent Redox Concentrations
			10YR 2/1	10	D	М	SCL	Faint Redox Depletions
							· ·	
<sup>1</sup> Type: C=C	Concentration, D=Depletic	on, RM=Redu	ced Matrix, CS=Covere	ed or Coated S	and Grains.	<sup>2</sup> Locatio	on: PL=Pore Li	ning, M=Matrix.
ydric Soil I	ndicators:					Indica	ators for Probl	ematic Hydric Soils <sup>3</sup> :
Histoso	ol (A1)		Sandy Gley	ed Matrix (S4)			Coast	Prairie Redox (A16)
Histic E	Epipedon (A2)		Sandy Rede	ox (S5)			Iron-M	anganese Masses (F12)
Black H	Histic (A3)		Stripped Ma	atrix (S6)				urface (S7)
Hydrog	en Sulfide (A4)			ky Mineral (F1			Very S	hallow Dark Surface (TF12)
	ed Layers (A5)		Loamy Gley	ed Matrix (F2)			Other	(Explain in Remarks)
2 cm M	luck (A10)		Depleted M	atrix (F3)				
Deplete	ed Below Dark Surface (A	A11)	X Redox Dark	Surface (F6)				
Thick D	Dark Surface (A12)			ark Surface (F	7)			f hydrophytic vegetation and
	Mucky Mineral (S1)		Redox Dep	ressions (F8)				ydrology must be present,
5 cm M	lucky Peat or Peat (S3)						unless	disturbed or problematic.
estrictive L	_ayer (if observed):							
Туре:								
Depth (i	inches):					Hvdric	Soil Present?	Yes X No
marks:								
IYDROL								
Vetland Hyd	OGY drology Indicators: cators (minimum of one is	s required: ch	eck all that apply)				Second	dary Indicators (minimum of two required)
letland Hyd Primary Indic	drology Indicators:	s required: ch		ned Leaves (B	9)			dary Indicators (minimum of two required) Surface Soil Cracks (B6)
Primary Indic	drology Indicators: cators (minimum of one is	s required: ch			9)		5	
Vetland Hyd Primary Indic Surface High W	drology Indicators: cators (minimum of one is e Water (A1)	s required: ch	Water-Stair Aquatic Fau				s	Surface Soil Cracks (B6)
Primary India Surface High W Saturat	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2)	s required: ch	Water-Stair Aquatic Fau True Aquati	ına (B13)				Surface Soil Cracks (B6) Drainage Patterns (B10)
Primary Indic Surface High W Saturat Water N	drology Indicators: cators (minimum of one is e Water (A1) dater Table (A2) tion (A3)	s required: ch	Water-Stair Aquatic Fau True Aquati Hydrogen S	ına (B13) c Plants (B14)	1)	ts (C3)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Vetland Hyd Primary India Surface High W Saturat Water I Sedime	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) tion (A3) Marks (B1)	s required: ch	Water-Stair Aquatic Fau True Aquati Hydrogen S Oxidized RI	ina (B13) c Plants (B14) sulfide Odor (C	1) n Living Roo	ts (C3)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Drayfish Burrows (C8)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2)	s required: ch	Water-Stair Aquatic Fau True Aquati Hydrogen S Oxidized RI Presence o	ina (B13) c Plants (B14) sulfide Odor (C nizospheres or	1) n Living Roo n (C4)	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3)	s required: ch	Water-Stair Aquatic Fau True Aquati Hydrogen S Oxidized Rł Presence o Recent Iron	ina (B13) c Plants (B14) sulfide Odor (C hizospheres or f Reduced Iror	1) n Living Roo n (C4)	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4)	į	Water-Stair Aquatic Fau True Aquati Hydrogen S Oxidized Rł Presence o Recent Iron Thin Muck S	na (B13) c Plants (B14) iulfide Odor (C nizospheres or f Reduced Iror Reduction in	1) n Living Roo n (C4)	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hyd Primary Indic Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5)	igery (B7)	Water-Stair Aquatic Fau True Aquati Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Gauge or W	ina (B13) c Plants (B14) iulfide Odor (C hizospheres or f Reduced Iror Reduction in Surface (C7)	1) h Living Roo h (C4) Tilled Soils (	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	drology Indicators: cators (minimum of one is a Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) aposits (B3) flat or Crust (B4) eposits (B5) tion Visible on Aerial Ima ly Vegetated Concave Su	igery (B7)	Water-Stair Aquatic Fau True Aquati Hydrogen S Oxidized RI Presence o Recent Iron Thin Muck S Gauge or W	ana (B13) c Plants (B14) sulfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9)	1) h Living Roo h (C4) Tilled Soils (	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse	drology Indicators: cators (minimum of one is a Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) aposits (B3) fat or Crust (B4) eposits (B5) tion Visible on Aerial Ima ly Vegetated Concave So vations:	igery (B7) urface (B8)	Water-Stair Aquatic Fau True Aquati Hydrogen S Oxidized Ri Presence o Recent Iron Thin Muck S Gauge or W Other (Expl	ina (B13) c Plants (B14) sulfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks	1) h Living Roo h (C4) Tilled Soils (	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hyd Primary Indic Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse	drology Indicators: cators (minimum of one is a Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) aposits (B3) fat or Crust (B4) aposits (B5) tion Visible on Aerial Ima ly Vegetated Concave So vations: er Present?	igery (B7) urface (B8) Yes No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X       Depth (inchest	Ina (B13) c Plants (B14) sulfide Odor (C hizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks	1) h Living Roo h (C4) Tilled Soils (	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hyd Primary Indic Surface High W Saturat Water N Sedime Drift De Algal M Iron De Inundat Sparse ield Observ Surface Wate	drology Indicators: cators (minimum of one is a Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) aposits (B3) fat or Crust (B4) aposits (B5) tion Visible on Aerial Ima ly Vegetated Concave Su vations: er Present?	ngery (B7) urface (B8) Yes <u>No</u>	X       Depth (inchest         X       Depth (inchest	Ina (B13) c Plants (B14) sulfide Odor (C hizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s):	1) n Living Roo n (C4) Tilled Soils (	C6)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Surface Wat Vater Table Gaturation P	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5) tion Visible on Aerial Ima ly Vegetated Concave St vations: rer Present?	igery (B7) urface (B8) Yes No	X       Water-Stair         Aquatic Fau         True Aquatic         Hydrogen S         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X       Depth (inchest	Ina (B13) c Plants (B14) sulfide Odor (C hizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s):	1) n Living Roo n (C4) Tilled Soils (	C6)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Seld Observ Surface Wat Vater Table Baturation P ncludes cap	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) flat or Crust (B4) flat or	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Seld Observ Surface Wat Vater Table Baturation P ncludes cap	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) tion (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5) tion Visible on Aerial Ima ly Vegetated Concave St vations: rer Present?	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse ield Observ Surface Wat Vater Table Saturation P includes cap	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) flat or Crust (B4) flat or	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary Indic Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Field Observ Surface Wat Water Table Saturation P (includes cap	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) flat or Crust (B4) flat or	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary Indid Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Field Observ Surface Wat Water Table Saturation P (includes cap Describe Re	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) flat or Crust (B4) flat or	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary India Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Sield Observ Surface Wat Nater Table Saturation P jincludes cap Describe Re	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) flat or Crust (B4) flat or	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary India Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Sield Observ Surface Wat Nater Table Saturation P includes cap Describe Re	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) flat or Crust (B4) eposits (B5) flat or Crust (B4) flat or	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd rimary India Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Seld Observ Surface Wat Vater Table Saturation P ncludes cap Describe Re	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5) fition Visible on Aerial Ima ly Vegetated Concave Si vations: ver Present? Present?	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd rimary India Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Seld Observ Surface Wat Vater Table Saturation P ncludes cap Describe Re	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5) fition Visible on Aerial Ima ly Vegetated Concave Si vations: ver Present? Present?	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hyd Primary India Surface High W Saturat Water I Sedime Drift De Algal M Iron De Inundat Sparse Seld Observ Surface Wat Vater Table Saturation P includes cap Describe Re	drology Indicators: cators (minimum of one is e Water (A1) /ater Table (A2) ition (A3) Marks (B1) ent Deposits (B2) eposits (B3) fat or Crust (B4) eposits (B5) fition Visible on Aerial Ima ly Vegetated Concave Si vations: ver Present? Present?	igery (B7) urface (B8) Yes No Yes No Yes No	X       Depth (inche:         X       Depth (inche:	ana (B13) c Plants (B14) culfide Odor (C nizospheres or f Reduced Iror Reduction in Surface (C7) /ell Data (D9) ain in Remarks s): s): s):	1) n Living Roo n (C4) Tilled Soils ( s) Wetlan	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)

#### WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	-70 Clear Creek R	est Area (Des. 19028	355)	City/County:	٦	Terre Haute/Vigo County	Sampling Date:	4/25/2022
Applicant/Owner:			DOT		1	State: IN	Sampling Point:	B1
Investigator(s):	Zachary Root	, April Pape, Kristina	Zuniga	Sect	tion, Townshi	ip, Range: S 34, T 12 N, R 10 V		
Landform (hillslope, terrace, etc.):	Ditch					relief (concave, convex, none):		
Slope (%): 0%	Lat:	39.441641		Long:		-87.503815	Datum: NAD83	
Soil Map Unit Name:		Whitaker loam (	Wx) - Predomina			NWI classi	fication: None	
Are climatic / hydrologic conditions	on the site typical f	for this time of year?		Yes	X No	(If no, explain in Remark	s.)	
Are Vegetation No	, Soil No	, or Hydrology N	lo significantly d	isturbed?	Are "No	ormal Circumstances" present?	Yes X No	
Are Vegetation No	, Soil No	, or Hydrology N	lo naturally prob	lematic?	(If need	ded, explain any answers in Rer		
SUMMARY OF FINDINGS -	- Attach site r	nap showing sa	mplina point	locations.	transects.	. important features, etc		
Hydrophytic Vegetation Present?		Yes X	No		Sampled Ar			
Hydric Soil Present?		Yes X	No		a Wetland?		K No	
Wetland Hydrology Present?		Yes X	No					
Remarks: Wetland B (PEM1A) Sam	pling Point. Light	rain in the morning.						
VEGETATION Use scient	tific names of	plants.						
			Absolute	Dominant	Indicator			
Tree Stratum (Plot size: 1.	30' radius	_)	% Cover	Species?	Status	Dominance Test workshee	12	
2.						Number of Dominant Species	5	
3.						That Are OBL, FACW, or FA		(A)
4.								
5						Total Number of Dominant		
			0%	= Total Cover		Species Across All Strata:	3	(B)
Sapling/Shrub Stratum (Plot size:	15' radi	ius )				Percent of Dominant Species	5	
1. ali interior	-10 100	<u></u> )	30%	Yes	FACW	That Are OBL, FACW, or FA		(A/B)
2.								
3.								
4						Prevalence Index workshee	t:	
D			30%	= Total Cover		Total % Cover of:	Multiply by:	
Herb Stratum (Plot size:	5' radius	)	0070			OBL species	x1 =	
1. estuca rubra		-	30%	Yes	FACU	FACW species 70%	x2 = 1.4	4
2. are gra i			30%	Yes	FACW	FAC species	x3 =	
3. mpatiens capensis			10%	No	FACW	FACU species 30%	x4 =1.:	2
4 5.						UPL species Column Totals: 1.00	x5 = (A) 2.0	.6 (B)
6.							(A)2.	<u> </u>
7.						Prevalence Index =	B/A = 2.60	
8.								
9								
10						Hydrophytic Vegetation Inc	licators:	
11 12.						1-Rapid Test for Hyd	drophytic Vegetation	
13.						X 2-Dominance Test is		
14.						X 3-Prevalence Index	is ≤3.0 <sup>1</sup>	
15							aptations <sup>1</sup> (Provide supp	porting
16							on a separate sheet)	
17 18.						Problematic Hydrop	ohytic Vegetation <sup>1</sup> (Expl	ain)
19.						<sup>1</sup> Indicators of hydric soil and v	wetland hydrology mus	t
20.						be present, unless disturbed		
			70%	= Total Cover			-	
Woody Vine Stratum (Plot size:	_30' radi	<u>us</u> )				Hydrophytic Vegetation	Y N-	
2			0%	= Total Cover		Present? Yes	X No	
			0,0					
Remarks: (Include photo numbers	here or on a sepa	rate sheet.)				-		

#### SOIL

Depth	Matrix		Re	dox Features				
ches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
0-6	10YR 3/2	95	7.5YR 4/4	5	С	M, PL	CL	Distinct Redox Concentrations
6-20	10YR 5/2	60	7.5YR 4/6	40	С	М	CL	Prominent Redox Concentratio
							·	
						2.		
ype: C=Cc dric Soil In		tion, RM=Reduc	ced Matrix, CS=Covere	ed or Coated S	and Grains.			ining, M=Matrix. Iematic Hydric Soils <sup>3</sup> :
Histosol	(A1)		Sandy Gley	ed Matrix (S4)			Coast	Prairie Redox (A16)
Histic Ep	pipedon (A2)		Sandy Rede	ox (S5)			Iron-M	anganese Masses (F12)
Black Hi	istic (A3)		Stripped Ma	atrix (S6)			Dark S	urface (S7)
Hydroge	en Sulfide (A4)		Loamy Muc	ky Mineral (F1)	)		Very S	hallow Dark Surface (TF12)
Stratified	d Layers (A5)		Loamy Gley	ed Matrix (F2)			Other	(Explain in Remarks)
2 cm Mu	uck (A10)		X Depleted M	atrix (F3)				
X Depleted	d Below Dark Surface	(A11)	X Redox Dark	Surface (F6)				
Thick Da	ark Surface (A12)		Depleted D	ark Surface (F7	7)		<sup>3</sup> Indicators o	f hydrophytic vegetation and
Sandy N	/lucky Mineral (S1)		Redox Dep	ressions (F8)			wetland h	hydrology must be present,
-	ucky Peat or Peat (S3)	)						disturbed or problematic.
	ayer (if observed):							
Type: Depth (in	vahaa):					Ludria (	Soil Present?	Yes X No
Deptii (ii						Tiyune	Soli Fresent:	Yes <u>X</u> No
YDROLO	DGY							
	DGY rology Indicators:							
<b>/etland Hydi</b> Primary Indica	rology Indicators: ators (minimum of one	e is required: che						dary Indicators (minimum of two requi
Primary Indica Surface	rology Indicators: ators (minimum of one Water (A1)	is required: che	Water-Stair	ied Leaves (BS	))			Surface Soil Cracks (B6)
Vetland Hydr Primary Indica Surface X High Wa	rology Indicators: ators (minimum of one Water (A1) ater Table (A2)	is required: che	Water-Stair Aquatic Fau	ina (B13)	-			Surface Soil Cracks (B6) Drainage Patterns (B10)
Primary Indica Surface X High Wa X Saturatio	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3)	e is required: che	Water-Stair Aquatic Fau True Aquati	ina (B13) c Plants (B14)	-			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
Vetland Hydr Primary Indica Surface X High Wa X Saturatio Water M	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1)	e is required: che	Water-Stair Aquatic Fau True Aquati Hydrogen S	ina (B13) c Plants (B14) ulfide Odor (C	1)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
Vetland Hydr Primary Indica Surface X High Wa X Saturatio Water M Sedimer	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2)	e is required: che	Water-Stair Aquatic Fau True Aquati Hydrogen S X Oxidized R	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on	1) Living Roc	ts (C3)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C
Vetland Hydri Primary Indica Surface X High Wa X Saturatic Water M Sedimer Drift Dep	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) flarks (B1) nt Deposits (B2) posits (B3)	is required: che	Water-Stair Aquatic Fau True Aquati Hydrogen S X Oxidized RI Presence o	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron	1) Living Roc (C4)	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1)
Vetland Hydri Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	is required: che	Water-Stair Aquatic Fau True Aquati Hydrogen S X Oxidized RI Presence o Recent Iron	na (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T	1) Living Roc (C4)	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hydri Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		Water-Stair Aquatic Fau True Aquati Hydrogen S X Oxidized RI Presence o Recent Iron Thin Muck S	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7)	1) Living Roc (C4)	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1)
Vetland Hydri Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im	nagery (B7)	Water-Stair Aquatic Fau True Aquati Hydrogen S X Oxidized RI Presence o Recent Iron Thin Muck S Gauge or W	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7) Yell Data (D9)	1) Living Roc (C4) Filled Soils	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hydr Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave	nagery (B7)	Water-Stair Aquatic Fau True Aquati Hydrogen S X Oxidized RI Presence o Recent Iron Thin Muck S Gauge or W	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7)	1) Living Roc (C4) Filled Soils	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hydr Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave	nagery (B7) Surface (B8)	Water-Stair Aquatic Fau True Aquati Hydrogen S X Oxidized RI Presence o Recent Iron Thin Muck S Gauge or W Other (Expl	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7) /ell Data (D9) ain in Remarks	1) Living Roc (C4) Filled Soils	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hydri Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatii Sparsely	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave a ations: er Present?	nagery (B7) Surface (B8) Yes No _	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inchest)	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7) /ell Data (D9) ain in Remarks	1) Living Roc (C4) Filled Soils	. ,		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hydri rimary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatii Sparsely Sedi Observa Surface Water Table I	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave of ations: er Present? Present?	nagery (B7) Surface (B8) Yes <u>No</u>	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X       Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inchest         Depth (inchest	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7) /ell Data (D9) ain in Remarks s):6	1) Living Roc (C4) Filled Soils	(C6)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydri Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatii Sparsely ield Observa Surface Wate F Saturation Pro	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave a ations: er Present? Present?	nagery (B7) Surface (B8) Yes No _	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inchest)	ina (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in T Surface (C7) /ell Data (D9) ain in Remarks s):6	1) Living Roc (C4) Filled Soils	(C6)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2)
Vetland Hydri       rrimary Indica       Surface       X       High Wa       X       Saturation       Water M       Sedimer       Drift Dep       Algal Ma       Iron Dep       Inundatii       Sparsely       eld Observation       vater Table F       aturation Pre-       ncludes cap	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? esent? illary fringe)	hagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydri Irimary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatii Sparsely Vater Table F Saturation Prr ncludes cap	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? esent? illary fringe)	hagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X       Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inchest         Depth (inchest	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydr Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatii Sparsely ield Observa Surface Wate Vater Table I Saturation Prr includes cap	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? esent? illary fringe)	hagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydri Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely ield Observa Surface Water Vater Table I Saturation Pro- includes capi Describe Rec	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? Present? esent? illary fringe) corded Data (stream ge	nagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydr Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Vater Table I Saturation Pro- includes capi Describe Reco	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? esent? illary fringe)	nagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Primary Indica Surface X High Wa X Saturatic Water M Sedimer Drift Dep Algal Ma Iron Dep Inundati Sparsely ield Observa Surface Water Vater Table I Saturation Pro includes capi Describe Rec	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? Present? esent? illary fringe) corded Data (stream ge	nagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydri Primary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Surface Water Vater Table I Saturation Pro- ncludes capi Describe Rec	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? Present? esent? illary fringe) corded Data (stream ge	nagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydri Irimary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Seld Observa Surface Water Vater Table I Saturation Pre- ncludes capi Describe Reco	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? Present? esent? illary fringe) corded Data (stream ge	nagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
Vetland Hydri rrimary Indica Surface X High Wa X Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely Vater Table I aturation Pro- ncludes cap Describe Rec	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? Present? esent? illary fringe) corded Data (stream ge	nagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
etland Hydri imary Indica Surface High Wa Saturatio Water M Sedimer Drift Dep Algal Ma Iron Dep Inundatio Sparsely etld Observa urface Water faturation Pro- ncludes capi escribe Reco	rology Indicators: ators (minimum of one Water (A1) ater Table (A2) on (A3) farks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) on Visible on Aerial Im y Vegetated Concave ations: er Present? Present? Present? esent? illary fringe) corded Data (stream ge	nagery (B7) Surface (B8) Yes <u>No</u> Yes <u>X</u> No Yes <u>X</u> No	Water-Stair         Aquatic Fau         True Aquati         Hydrogen S         X         Oxidized RI         Presence o         Recent Iron         Thin Muck S         Gauge or W         Other (Expl         X         Depth (inches)         Depth (inches)         Depth (inches)	ana (B13) c Plants (B14) ulfide Odor (C nizospheres on f Reduced Iron Reduction in ∃ Surface (C7) /ell Data (D9) ain in Remarks s):	1) Living Roc (C4) Filled Soils	(C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery ( Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)

#### WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	-70 Clear Cree	ek Rest Area (Des. 190	2855)		City/County:	Т	erre Haute/Vigo Co	ounty	Sampling Date:	4/25/2022
Applicant/Owner:			NDOT			1	State:	: IN	Sampling Point:	B2
Investigator(s):	Zachary F	Root, April Pape, Kristin	a Zuniga		Sect	tion, Townshi	o, Range: S 34, T	12 N, R 10 W		
Landform (hillslope, terrace, etc.):	Toe	e of slope					elief (concave, con		one	
Slope (%): 0%	Lat:	39.44163	5		Long:	-	87.503882		Datum: NAD83	
Soil Map Unit Name:		Whitaker loam	(Wx) - F	redominar				NWI classifica	ation: None	
Are climatic / hydrologic conditions	on the site typi	ical for this time of year	?		Yes	X No	(If no, explai	– n in Remarks.)		
Are Vegetation No	, Soil N	No , or Hydrology	No sigi	nificantly di	isturbed?	Are "No	rmal Circumstance	es" present?	Yes X No	
Are Vegetation No	, Soil N	No , or Hydrology	No nat	urally prob	lematic?	(If need	ed, explain any ans	swers in Rema	rks.)	
SUMMARY OF FINDINGS -	- Attach sit	te map showing s	amplin	g point	locations, t	transects,	important feat	tures, etc.		
Hydrophytic Vegetation Present?		Yes				Sampled Are				
Hydric Soil Present?		Yes X	No			a Wetland?		Yes	No X	
Wetland Hydrology Present?		Yes		Х						
Remarks: Wetland B Upland Samp	ling Point. Ligh	nt rain in the morning.								
		<u> </u>								
VEGETATION Use scien	tific names	of plants.		Absolute	Dominant	Indiaator	1			
Tree Stratum (Plot size:	30' radius	)		% Cover	Dominant Species?	Indicator Status	Dominance Tes	t worksheet:		
1.	00 100100	/	_	/0 00101	000000	olalao				
2.							Number of Domin	nant Species		
3.							That Are OBL, FA	ACW, or FAC:	2	(A)
4							Total Number of	Dominant		
				0%	= Total Cover		Species Across A		4	(B)
										( /
Sapling/Shrub Stratum (Plot size:	15'	radius )					Percent of Domir	nant Species		
1. Acer negundo				10%	Yes	FAC	That Are OBL, FA	ACW, or FAC:	50%	(A/B)
2. ali interior 3.				10%	Yes	FACW				
4.							Prevalence Index	x worksheet:		
5.										
			_	20% =	= Total Cover		Total % C	Cover of:	Multiply by:	
Herb Stratum (Plot size:	5' radius	)		700/		FAOL	OBL species		_ x1 =	
1. estuca rubra 2. ecurigera aria				70% 25%	Yes	FACU UPL	FACW species FAC species	10% 10%	$x^2 = 0.2$ $x^3 = 0.3$	
3. irsium ar ense				10%	No	FACU	FACU species	80%	x4 = 3.2	
4. Euon mus ortunei				10%	No	UPL	UPL species	35%	x5 = 1.7	5
5.							Column Totals:	1.35	(A) 5.4	5 (B)
6										
7							Prevaler	nce Index = B/A	A = 4.04	
9.										
10.							Hydrophytic Ve	getation Indica	ators:	
11.										
12									phytic Vegetation	
13 14.								nance Test is >ł lence Index is ≤		
15.									ations <sup>1</sup> (Provide supp	orting
16.									a separate sheet)	Ū
17							Problen	natic Hydrophy	tic Vegetation <sup>1</sup> (Expla	ain)
18							1 mation to an of head			
19 20.							be present, unles		tland hydrology must	
20				115% =	= Total Cover		be present, unles		problematic.	
Woody Vine Stratum (Plot size:	30'	radius )	_				Hydrophytic			
12.		/					Vegetation Present?	Yes	NoX	
				0% :	= Total Cover					
Remarks: (Include photo numbers	here or on a s	eparate sheet.)								

l

nches) 0-6	<b>O</b> - Le (1 (1 - 1 - 1))			edox Features	,			
0-6	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture	Remarks
	10YR 3/2	100					CL	
6-20	10YR 4/1	85	5YR 3/3	15	С	Μ	CL	Prominent Redox Concentrations
·								
·								
·							·	
	oncentration, D=Depleti	on, RM=Reduce	ed Matrix, CS=Cover	ed or Coated Sa	and Grains.			ining, M=Matrix.
	ndicators:		Sandy Clar	yed Matrix (S4)		Indica		lematic Hydric Soils <sup>3</sup> :
Histosol	pipedon (A2)		Sandy Gle					Prairie Redox (A16) Ianganese Masses (F12)
-	istic (A3)		Stripped M					Surface (S7)
-	en Sulfide (A4)			cky Mineral (F1)				hallow Dark Surface (TF12)
	d Layers (A5)			yed Matrix (F1)				(Explain in Remarks)
-	uck (A10)		X Depleted N					(Explain in Kellarks)
-	d Below Dark Surface (	Δ11)		k Surface (F6)				
-	ark Surface (A12)			ark Sunace (F6)	<sup>()</sup>		<sup>3</sup> Indicators	of hydrophytic vegetation and
-	AIX Surface (A12) Aucky Mineral (S1)			pressions (F8)	,			hydrology must be present,
	ucky Peat or Peat (S3)							disturbed or problematic.
	ayer (if observed):							
Type: Depth (ir						- ایرانی دارا	Call Dress (C	Veo V Ne
Deptri (ii	iches).					пуалс	Soil Present?	Yes X No
YDROLO	rology Indicators:							
imary Indic	ators (minimum of one							
0	$M_{-1} = (AA)$	is required: chec			<u>`</u>			· · · ·
-	Water (A1)	is required: chec	Water-Stai	ned Leaves (B9	)			Surface Soil Cracks (B6)
High Wa	ater Table (A2)	is required: chec	Water-Stai	una (B13)	)			Surface Soil Cracks (B6) Drainage Patterns (B10)
High Wa Saturati	ater Table (A2) on (A3)	is required: chec	Water-Stai Aquatic Fa True Aqua	iuna (B13) tic Plants (B14)				Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2)
High Wa Saturati Water M	ater Table (A2) on (A3) /arks (B1)	is requirea: cnea	Water-Stai Aquatic Fa True Aqua Hydrogen	una (B13) tic Plants (B14) Sulfide Odor (C1	)	er (C2)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8)
High Wa Saturati Water M Sedime	ater Table (A2) on (A3) /arks (B1) nt Deposits (B2)	is requirea: cned	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R	tiuna (B13) tic Plants (B14) Sulfide Odor (C1 Rhizospheres on	) Living Root	is (C3)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9)
High Wa Saturati Water M Sedime Drift De	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3)	is required: chec	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence o	una (B13) tic Plants (B14) Sulfide Odor (C <sup>1</sup> Rhizospheres on of Reduced Iron	) Living Root (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
High Wa Saturati Water M Sedime Drift De Algal Ma	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4)	is required: chec	Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence o Recent Iron	una (B13) tic Plants (B14) Sulfide Odor (C1 Rhizospheres on of Reduced Iron n Reduction in T	) Living Root (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
High Wa Saturati Water M Sedime Drift Dej Algal Ma Iron Dep	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		Water-Stai Aquatic Fa True Aqua Hydrogen Oxidized R Presence o Recent Iron Thin Muck	una (B13) tic Plants (B14) Sulfide Odor (C1 thizospheres on of Reduced Iron n Reduction in T Surface (C7)	) Living Root (C4)			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1)
High Wa Saturati Water M Sedimer Drift De Algal Ma Iron Dep Inundati	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima	agery (B7)	Water-Stai Aquatic Fa True Aqua Hydrogen S Oxidized R Presence o Recent Iron Thin Muck Gauge or N	una (B13) tic Plants (B14) Sulfide Odor (C thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9)	) Living Root (C4) ïilled Soils (			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave S	agery (B7)	Water-Stai Aquatic Fa True Aqua Hydrogen S Oxidized R Presence o Recent Iron Thin Muck Gauge or N	una (B13) tic Plants (B14) Sulfide Odor (C1 thizospheres on of Reduced Iron n Reduction in T Surface (C7)	) Living Root (C4) ïilled Soils (			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations:	agery (B7) Surface (B8)	Water-Stai Aquatic Fa True Aqua Hydrogen 3 Oxidized R Presence o Recent Iron Thin Muck Gauge or V Other (Exp	una (B13) tic Plants (B14) Sulfide Odor (C thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Ilain in Remarks	) Living Root (C4) ïilled Soils (			Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observ	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present?	agery (B7) Surface (B8) Yes No	Water-Stai         Aquatic Fa         True Aqua         Hydrogen 3         Oxidized R         Presence a         Recent Iron         Thin Muck         Gauge or V         Other (Exp         X       Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Ilain in Remarks	) Living Root (C4) ïilled Soils (			Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2)
High Wa Saturati Water M Sedime Algal Ma Iron Dep Inundati Sparsel Id Observ rface Wate	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present?	agery (B7) aurface (B8) Yes <u>No</u>	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or \     Other (Exp      X	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Ilain in Remarks es):	) Living Root (C4) ïilled Soils ( <sup>i</sup>	C6)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Algal Ma Iron Dep Inundati Sparsel Id Observ rface Wate ater Table turation Pr	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present?	agery (B7) Surface (B8) Yes No	Water-Stai         Aquatic Fa         True Aqua         Hydrogen 3         Oxidized R         Presence a         Recent Iron         Thin Muck         Gauge or V         Other (Exp         X       Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Ilain in Remarks es):	) Living Root (C4) ïilled Soils ( <sup>i</sup>	C6)		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Id Observ rface Wate ater Table turation Pr cludes cap	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Id Observ rface Wate ater Table turation Pr cludes cap	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present?	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Id Observ Inface Wate ater Table Inuration Pr cludes cap escribe Rec	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observ urface Wate ater Table aturation Pr cludes cap escribe Rec	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observ urface Wate dater Table aturation Pr ncludes cap	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observ urface Wate fater Table aturation Pr ncludes cap escribe Rec	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel eld Observ urface Wate fater Table aturation Pr ncludes cap escribe Rec	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Id Observ Inface Wate ater Table aturation Pr cludes cap escribe Rec	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)
High Wa Saturati Water M Sedime Drift De Algal Ma Iron Dep Inundati Sparsel Id Observ rface Wate ater Table turation Pr cludes cap	ater Table (A2) on (A3) Marks (B1) nt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) fon Visible on Aerial Ima y Vegetated Concave S ations: er Present? Present? esent? iillary fringe)	agery (B7) Surface (B8) Yes <u>X</u> No Yes <u>X</u> No	Water-Stai     Aquatic Fa     True Aqua     Hydrogen 3     Oxidized R     Presence 0     Recent Iron     Thin Muck     Gauge or N     Other (Exp  X Depth (inche     Depth (inche	una (B13) tic Plants (B14) Sulfide Odor (C <sup>4</sup> thizospheres on of Reduced Iron n Reduction in T Surface (C7) Well Data (D9) Jain in Remarks es):	I) Living Root (C4) Tilled Soils (f	C6) d Hydrolog		Surface Soil Cracks (B6) Drainage Patterns (B10) Dry-Season Water Table (C2) Crayfish Burrows (C8) Saturation Visible on Aerial Imagery (C9) Stunted or Stressed Plants (D1) Geomorphic Position (D2) FAC-Neutral Test (D5)

#### WETLAND DETERMINATION DATA FORM -- Midwest Region

Project/Site:	I-70	Clear Cr	reek Rest /	Area (Des. 19	902855)		City/County:	т	erre Haute/Vigo C	ounty	Sampling Date	e: 4/25/2022
Applicant/Owner:					INDOT				State	: IN	Sampling Point	t: UP1
Investigator(s):		Zachar	y Root, Ap	ril Pape, Krist	ina Zunig	a	Sec	tion, Townshi	o, Range: S 35, T	12 N, R 10 W		
Landform (hillslope, terra	ace, etc.):	F	loodplain					Local re	elief (concave, con	vex, none): No	ne	
Slope (%): 0	0%	Lat:	i	39.443	644		Long:		87.495959		Datum: NAD83	3
Soil Map Unit Name:	Ge	enesee s	ilt loam, 0	to 2 percent	slopes, fr	equently floo	-		onhydric (0%)	NWI classifica		
Are climatic / hydrologic	-								(If no, explai	_		
Are Vegetation	No ,	Soil	No , o	r Hydrology	No si	gnificantly d	-		rmal Circumstance		Yes	No
Are Vegetation		Soil		r Hydrology				(If need	ed, explain any an	swers in Rema		
SUMMARY OF FIN		-							important fea	tures, etc.	,	
Hydrophytic Vegetation					No							
Hydric Soil Present?	Fiesent?			Yes Yes	No	X X		Sampled Are a Wetland?	a	Yes	No	Х
Wetland Hydrology Pres	sent?			Yes				u monanu.				
Remarks: Upland Samp		oht rain ir										
VEGETATION U												
VECENATION 0	Se Solentin	o name	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>			Absolute	Dominant	Indicator				
Tree Stratum (Plot size:	: 3	0' radius	; )			% Cover	Species?	Status	Dominance Tes	st worksheet:		
1. eltis occidentalis						40%	Yes	FAC				
2. Populus deltoides						15%	Yes	FAC	Number of Domi	inant Species		
3. Ulmus americana						15%	Yes	FACW	That Are OBL, F.	ACW, or FAC:	4	(A)
4. <u>Juglans nigra</u>						5%	No	FACU	TetelNisshered	Densinent		
5						75%	= Total Cover		Total Number of Species Across		8	(B)
						1370			Opecies Acioss	All Ollala.	0	(D)
Sapling/Shrub Stratum	(Plot size:	1	5' radius	)					Percent of Domi	nant Species		
1. Lonicera maackii	•					30%	Yes	UPL	That Are OBL, F	ACW, or FAC:	50%	% (A/B)
2. Aesculus glabra						5%	No	FAC				
3												
4.					•				Prevalence Inde	x worksheet:		
5						35%	= Total Cover		Total % C	Cover of:	Multiply by:	
Herb Stratum (Plot size:	: 5	i' radius	)		•	0070			OBL species	50701 01.	x1 =	
1. alium aparine	-					15%	Yes	FACU	FACW species	25%	x2 =	0.5
2. Antho anthum odor	atum					15%	Yes	FACU	FAC species	60%	x3 =	1.8
3. Pol gonatum pubes	scens					10%	Yes	FACU	FACU species	45%	x4 =	1.8
4. Urtica dioica						10%	Yes	FACW	UPL species	30%	x5 =	1.5
5 6.					·				Column Totals:	1.60	(A)	5.6 (B)
7.									Prevale	nce Index = B/A	.= 3.5	50
8.												
9.												
10									Hydrophytic Ve	getation Indica	ators:	
11												
12 13.										I lest for Hydroj nance Test is >{	ohytic Vegetation	1
14.										lence Index is ≤		
15.											ations <sup>1</sup> (Provide s	supporting
16.											a separate shee	
17.									Probler	matic Hydrophyt	tic Vegetation <sup>1</sup> (E	Explain)
18									1			
19									<sup>1</sup> Indicators of hyd			nust
20						50%	= Total Cover		be present, unles	ss disturbed or	problematic.	
						5078						
Woody Vine Stratum (P	Plot size:	3	0' radius	)					Hydrophytic			
1									Vegetation			
2.					:				Present?	Yes	No X	
						0%	= Total Cover					
Remarks: (Include phot	o numbers b	0.01.07	COPORT	choct )								
include phot			separate	Sileet.)								

epth	Matrix		Re								
nches)	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>	Texture		Rema	irks	
0-4	10YR 3/2	100					LS				
4-20	10YR 4/3	100					LS				
4 20	1011( 4/0	100									
		. <u> </u>									
				-							
vpe: C=C	oncentration, D=Depletio	on, RM=Reduce	d Matrix, CS=Covere	d or Coated S	and Grains.	<sup>2</sup> Locatio	on: PL=Pore	Lining, M=	Matrix.		
•	ndicators:					Indica	ators for Pro	blematic I	-Tydric Soils <sup>3</sup> :		
Histoso	I (A1)		Sandy Gleye	ed Matrix (S4)			Coa	st Prairie R	edox (A16)		
Histic E	pipedon (A2)		Sandy Redo	ox (S5)			Iron-	Manganes	e Masses (F12	)	
Black H	listic (A3)		Stripped Ma	trix (S6)			Dark	Surface (S	67)		
Hydroge	en Sulfide (A4)			ky Mineral (F1	)				ark Surface (TF	12)	
	d Layers (A5)			ed Matrix (F2)	-				in Remarks)	,	
	uck (A10)		Depleted Ma						- /		
-	ed Below Dark Surface (A	A11)		Surface (F6)							
	ark Surface (A12)	,		ark Surface (F	7)		<sup>3</sup> Indicators	of hydroph	nytic vegetation	and	
-	Mucky Mineral (S1)			essions (F8)	,				must be prese		
	ucky Peat or Peat (S3)								l or problematic		
-							350		1		
	ayer (if observed):										
Type:						I had also	0	•	N <sub>e</sub> -	Ν	V
Depth (i	ncnes):					Hydric	Soil Present	17	Yes	No	Х
	OGY										
DROL											
<b>DROL</b> (	DGY Irology Indicators: ators (minimum of one is	s required: chec	k all that apply)				Seco	ndary Indic	cators (minimur	n of two rec	quired)
DROLO	rology Indicators:	s required: chec		ed Leaves (BS	9)		Seco		cators (minimur		quired)
<b>DROL</b> etland Hyd imary Indic Surface	Irology Indicators: cators (minimum of one is Water (A1)	s required: chec	Water-Stain	(	9)		Seco	Surface S	oil Cracks (B6)		quired
<b>DROL(</b> etland Hyd imary Indic Surface High W	rology Indicators: ators (minimum of one is Water (A1) ater Table (A2)	s required: chec	Water-Stain Aquatic Fau	na (B13)	,		Seco	Surface S Drainage	oil Cracks (B6) Patterns (B10)		quired
<b>DROL(</b> tiland Hyd imary Indic Surface High W Saturati	rology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3)	s required: chec	Water-Stain Aquatic Fau True Aquati	na (B13) c Plants (B14)	,		Seco	Surface S Drainage Dry-Sease	oil Cracks (B6)		quired
<b>DROLO</b> tland Hyd mary Indic Surface High W Saturati Water N	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1)	s required: chec	Water-Stain Aquatic Fau True Aquati Hydrogen S	na (B13) c Plants (B14) ulfide Odor (C	1)	s (C3)	Seco	Surface S Drainage Dry-Sease Crayfish E	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8)	e (C2)	
<b>DROLO</b> etland Hyd mary Indic Surface High W Saturati Water N Sedime	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) ent Deposits (B2)	s required: chec	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh	na (B13) c Plants (B14) ulfide Odor (C izospheres on	1) 1 Living Root	s (C3)	<u>Seco</u>	Surface S Drainage Dry-Sease Crayfish E Saturation	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aer	e (C2) rial Imagery	
<b>DROLO</b> etland Hyd imary Indic Surface High W Saturati Water N Sedime Drift De	rology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3)	s required: chec	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of	na (B13) c Plants (B14) ulfide Odor (C izospheres on c Reduced Iron	1) n Living Root n (C4)	. ,	Seco	Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o	coil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar	e (C2) rial Imagery nts (D1)	
<b>DROLO</b> etland Hyd imary Indic Surface High W Saturati Water M Sedime Drift De Algal M	rology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4)	s required: chec	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in <sup>-</sup>	1) n Living Root n (C4)	. ,	Seco	Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar hic Position (D2	e (C2) rial Imagery nts (D1)	
<b>DROLO</b> tiland Hyd imary Indic Surface High W Saturati Water N Sedime Drift De Algal M Iron De	rology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) ont Deposits (B2) posits (B3) at or Crust (B4) posits (B5)		Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S	na (B13) c Plants (B14) ulfide Odor (C iizospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7)	1) n Living Root n (C4)	. ,	Seco	Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	coil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar	e (C2) rial Imagery nts (D1)	
<b>DROLO</b> tland Hyd mary Indic Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat	rology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) ant Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima	igery (B7)	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C iizospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9)	1) h Living Root n (C4) Tilled Soils (f	. ,		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar hic Position (D2	e (C2) rial Imagery nts (D1)	
<b>DROLO</b> tland Hyd mary Indic Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel	Irology Indicators: eators (minimum of one is water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si	igery (B7)	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W	na (B13) c Plants (B14) ulfide Odor (C iizospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7)	1) h Living Root n (C4) Tilled Soils (f	. ,	Seco	Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar hic Position (D2	e (C2) rial Imagery nts (D1)	
DROLO      tland Hyd      imary Indic      Surface      High W      Saturati      Water N      Sedime      Drift De      Algal M      Iron De      Inundat      Sparsel      dobserv	rology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) ont Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave So rations:	igery (B7)	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) 'ell Data (D9) ain in Remarks	1) h Living Root n (C4) Tilled Soils (f	. ,		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar hic Position (D2	e (C2) rial Imagery nts (D1)	
DROL(      etland Hyd      imary Indic      Surface      High W      Saturati      Water N      Sedime      Drift De      Algal M      Iron De      Inundat      Sparsel      eld Observ	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) Marks (B1) at or Crust (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave So rations: er Present?	ıgery (B7) urface (B8) Yes No>	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) 'ell Data (D9) ain in Remarks	1) h Living Root n (C4) Tilled Soils (f	. ,		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar hic Position (D2	e (C2) rial Imagery nts (D1)	
DROL(      thand Hyd      imary Indic      Surface      High W      Saturati      Water N      Sedime      Drift De      Algal M      Iron De      Inundat      Sparsel      startate      the observ      attrace Wate      at	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave So Vations: er Present?	igery (B7) urface (B8)	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7) 'ell Data (D9) ain in Remarks s):	1) h Living Root n (C4) Tilled Soils (f	. ,		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar hic Position (D2	e (C2) rial Imagery nts (D1)	
DROLO     tland Hyd     mary Indic     Surface     High W     Saturati     Water N     Sedime     Drift De     Algal M     Iron De     Inundat     Sparsel     Id Observ     rface Wate     ater Table	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave So Vations: er Present?	ngery (B7) urface (B8) Yes No>	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7) 'ell Data (D9) ain in Remarks s):	1) h Living Root n (C4) Tilled Soils (f	26)	Seco 	Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aei r Stressed Plar hic Position (D2	e (C2) rial Imagery nts (D1)	/ (C9)
DROLO      trand Hyd      imary Indic      Surface      High W     Saturati      Water N     Sedime     Drift De     Algal M     Iron De     Inundat     Sparsel      Id Observ      wrface Wate     ater Table	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima y Vegetated Concave So Vations: er Present?	ngery (B7) urface (B8) Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in <sup>-</sup> Surface (C7) 'ell Data (D9) ain in Remarks s):	1) h Living Root n (C4) Tilled Soils (f	26)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	
DROLO tland Hyd mary Indic Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel Id Observ rface Wate ater Table turation Pr cludes cap	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) Int Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present?	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)
DROL(     Dtand Hyd     imary Indic     Surface     High W     Saturati     Water N     Sedime     Drift De     Algal M     Iron De     Inundat     Sparsel     Irdace Wate     ater Table     aturation Pr     cludes cap	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present? Present? poillary fringe)	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)
imary Indic Surface High W Saturati Water M Sedime Drift De Algal M Iron De Inundat Sparsel eld Observ urface Wate dater Table aturation Pr ncludes cap	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present? Present? poillary fringe)	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)
PROLO     Inundat     Surface     High W     Saturati     Water N     Sedime     Drift De     Algal M     Iron De     Inundat     Sparsel     Inundat     Sparsel     Irface Wate     aturation Pr     acludes cap	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present? Present? poillary fringe)	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)
DROLO      Etland Hyd      imary Indic      Surface      High W     Saturati      Water N     Sedime     Drift De     Algal M     Iron De     Inundat     Sparsel      etd Observ  urface Wate     aturation Pr     includes cap escribe Rei	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present? Present? poillary fringe)	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)
DROLO      Interpretation     The second secon	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present? Present? poillary fringe)	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)
DROLO tland Hyd mary Indic Surface High W Saturati Water N Sedime Drift De Algal M Iron De Inundat Sparsel Id Observ rface Wate ater Table turation Pr cludes cap escribe Red	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present? Present? poillary fringe)	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)
DROLO      Etland Hyd      imary Indic      Surface      High W     Saturati      Water N     Sedime     Drift De     Algal M     Iron De     Inundat     Sparsel      etd Observ  urface Wate     aturation Pr     includes cap escribe Rei	Irology Indicators: ators (minimum of one is Water (A1) ater Table (A2) ion (A3) Marks (B1) mt Deposits (B2) posits (B3) at or Crust (B4) posits (B5) ion Visible on Aerial Ima by Vegetated Concave Si <b>rations:</b> er Present? Present? poillary fringe)	igery (B7) urface (B8) Yes No Yes No Yes No	Water-Stain Aquatic Fau True Aquati Hydrogen S Oxidized Rh Presence of Recent Iron Thin Muck S Gauge or W Other (Expla	na (B13) c Plants (B14) ulfide Odor (C izospheres on Reduced Iron Reduction in Surface (C7) ell Data (D9) ain in Remarks s): 	1) Living Root (C4) Tilled Soils ( s) Wetland	C6)		Surface S Drainage Dry-Sease Crayfish E Saturation Stunted o Geomorph	oil Cracks (B6) Patterns (B10) on Water Table Burrows (C8) n Visible on Aeu r Stressed Plar hic Position (D2 tral Test (D5)	e (C2) rial Imagery nts (D1) 2)	/ (C9)

#### Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

#### **BACKGROUND INFORMATION**

#### A. REPORT COMPLETION DATE FOR PJD: August 31, 2022

#### B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

April Pape Metric Environmental, LLC 6958 Hillsdale Court Indianapolis, IN 46250 317-608-2762 aprilp@metricenv.com

#### C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

#### D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

The proposed project (Des. 1902855) includes reconfiguration and reconstruction of the Clear Creek Welcome Center along eastbound I-70 in Sugar Creek Township, Vigo County, Indiana. The IA was developed based on the proposed improvements and the boundaries of the legal parcel. In addition to the IA developed for the Welcome Center, a corridor was created to run utilities to the updated Welcome Center. Since delineated features within this corridor are intended to be avoided, full waters documentation was not required. However, a brief memo and maps of these features have been provided as **Appendix A**.

## (USE THE TABLE BELOW TO DOCUMENT MULTIPLE AQUATIC RESOURCES AND/OR AQUATIC RESOURCES AT DIFFERENT SITES)

State: IN County/parish/borough: Vigo County City: Terre Haute Center coordinates of site (lat/long in degree decimal format): Lat.: 39.44221° Long: -87.50011° Universal Transverse Mercator: 16 S 456965.34 E 4365970.29 N Name of Nearest Waterbody: Clear Creek

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

Office (Desk) Determination. Date:

□ Field Determination. Date(s):

### TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH "MAY BE" SUBJECT TO REGULATORY JURISDICTION.

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non- wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Wetland A	39.442584	-87.495887	0.163 ac.	Wetland	Section 404
Wetland B	39.441649	-87.50381	0.025 ac.	Wetland	Section 404
UNT 1 to Clear Creek	39.443145	-87.499327	2006 LFT (0.345 ac.)	Non-Wetland Waters	Section 404
UNT 2 to Clear Creek	39.443176	-87.496453	412 LFT (0.047 ac.)	Non-Wetland Waters	Section 404
UNT 3 to Clear Creek	39.442166	-87.495885	52 LFT (0.002 ac.)	Non-Wetland Waters	Section 404
UNT 4 to Clear Creek	39.442903	-87.497851	1650 LFT (0.126 ac.)	Non-Wetland Waters	Section 404
UNT 5 to Clear Creek	39.441118	-87.496703	227 LFT (0.012 ac.)	Non-Wetland Waters	Section 404
UNT 6 to Clear Creek	39.441344	-87.503231	315 LFT (0.014 ac.)	Non-Wetland Waters	Section 404

- The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.
- 2) In any circumstance where a permit applicant obtains an individual permit, or a Nationwide General Permit (NWP) or other general permit verification requiring "preconstruction notification" (PCN), or requests verification for a non-reporting NWP or other general permit, and the permit applicant has not requested an AJD for the activity, the permit applicant is hereby made aware that: (1) the permit applicant has elected to seek a permit authorization based on a PJD, which does not make an official determination of jurisdictional aquatic resources; (2) the applicant has the option to request an AJD before accepting the terms and conditions of the permit authorization, and that basing a permit authorization on an AJD could possibly result in less compensatory mitigation being required or different special conditions; (3) the applicant has the right to request an individual permit rather than accepting the terms and conditions of the NWP or other general permit authorization; (4) the applicant can accept a permit authorization and thereby agree to comply with all the terms and conditions of that permit, including whatever mitigation requirements the Corps has determined to be necessary; (5) undertaking any activity in reliance upon the subject permit authorization without requesting an AJD constitutes the applicant's acceptance of the use of the PJD; (6) accepting a permit authorization (e.g., signing a proffered individual permit) or undertaking any activity in reliance on any form of Corps permit authorization based on a PJD constitutes agreement that all aguatic resources in the review area affected in any way by that activity will be treated as jurisdictional, and waives any challenge to such jurisdiction in any administrative or judicial compliance or enforcement action, or in any administrative appeal or in any Federal court; and (7) whether the applicant elects to use either an AJD or a PJD, the JD will be processed as soon as practicable. Further, an AJD, a proffered individual permit (and all terms and conditions contained therein), or individual permit denial can be administratively appealed pursuant to 33 C.F.R. Part 331. If, during an administrative appeal, it becomes appropriate to make an official determination whether geographic jurisdiction exists over aquatic resources in the review area, or to provide an official delineation of jurisdictional aquatic resources in the review area, the Corps will provide an AJD to accomplish that result, as soon as is practicable. This PJD finds that there ma be waters of the U.S. and/or that there ma be navigable waters of the U.S. on the subject review area, and identifies all aquatic features in the review area that could be affected by the proposed activity, based on the following information:

#### SUPPORTING DATA. Data reviewed for PJD (check all that apply)

Checked items should be included in subject file. Appropriately reference sources below where indicated for all checked items:

<ul> <li>Maps, plans, plots or plat submitted by or on behalf of the PJD requestor: Map: <u>Dated 4/25/2022</u></li> <li>Data sheets prepared/submitted by or on behalf of the PJD requestor.</li> <li>Office concurs with data sheets/delineation report.</li> <li>Office does not concur with data sheets/delineation report. Rationale:</li> </ul>
Data sheets prepared by the Corps:
Corps navigable waters' study:
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: <u>Terre Haute &amp; Dennison IN 7.5 min,</u>
1996
Natural Resources Conservation Service Soil Survey. Citation: SSURGO Vigo County
<ul> <li>National wetlands inventory map(s). Cite name: <a href="http://www.fws.gov/wetlands/">http://www.fws.gov/wetlands/</a>.</li> <li>State/local wetland inventory map(s):</li> <li>FEMA/FIRM maps: Effective 2018</li> </ul>
100-year Floodplain Elevation is:(National Geodetic Vertical Datum of 1929)
Photographs: Acrial (Name & Date): Indiana Aerial Photograph, 2018
or Other (Name & Date): Site Photographs, 4/25/2022
Previous determination(s). File no. and date of response letter:
Other information (please specify):
IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.

Signature and date of Regulatory staff member completing PJD

April Pape

8/31/2022

Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)<sup>1</sup>

<sup>1</sup> Districts may establish timeframes for requestor to return signed PJD forms. If the requestor does not respond within the established time frame, the district may presume concurrence and no additional follow up is necessary prior to finalizing an action.



#### **APPENDIX A: UTILITY CORRIDOR – NO IMPACTS EXPECTED**

August 31, 2022

#### RE: WATERS DETERMINATION FOR AVOIDANCE I-70 CLEAR CREEK WELCOME CENTER UTILITY CORRIDOR FOR REST AREA MODERNIZATION VIGO COUNTY, INDIANA

The intention of this utility corridor is to provide a sanitation line to the Clear Creek Welcome Center. The investigated corridor runs primarily through wooded section with interspersed agricultural fields. This sanitation line is approximately 4.8 miles in length and runs along country roads.

An environmental field investigation associated with the utility corridor project located in the Vincennes District was conducted on June 28<sup>th</sup>, 2022, by April Pape and Jaci Scherb with Metric Environmental, LLC to determine if any future work would result in impacts to environmentally sensitive areas including wetlands and Waters of the United States (U.S.). This investigation was conducted in accordance with the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual* and the *August 2010 Midwest Regional Supplement (version 2.0) Manual*.

#### Waters of the U.S. Investigation Methodology:

The site was investigated for evidence of hydrophytic vegetation, hydric soil, and wetland hydrology to determine if any wetlands and other Waters of the U.S. are present within the project area. Features were assumed waters based off dominant wetland vegetation and/or OHWM observed at the time of the site visit. The areas investigated consisted mainly of country road embankment and wooded sections. No wetlands were observed within the project study area. The main vegetation found within the upland area consisted of amur honeysuckle (*Lonicera maackii*, UPL), black walnut (*Juglans nigra*, FACU), honey locust (*Gleditsia triacanthos*, FACU), and sugar maple (*Acer saccharum*, FACU). Approximately two streams, totaling 364 linear feet, were observed within the project study areas. It is our determination that 2 suspected regulated Waters of the U.S. were found within the project study areas. Please note that the final determination of jurisdictional waters is ultimately made by the USACE, and regulation of isolated waters is regulated by the Indiana Department of Environmental Management (IDEM). This investigation is our best judgment based on the guidelines set forth by the USACE.

Appendix A: Utility Corridor – No Impacts Expected I-70 Clear Creek Welcome Center Vigo County, Indiana

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Flow Regime
Clear Creek	39.445563	-87.497314	258 LFT	Non-Wetland Waters	Perennial
UNT 1 to Clear Creek	38.442851	-87.500637	106 LFT	Non-Wetland Waters	Intermittent

#### Conclusion:

Based on the field investigation, it appears that there are no impacts expected to wetlands or other Waters of the U.S. within the project study area. Shapefiles of waters features were collected in the field and are provided to be overlayed on plan sheets and used in the planning process. Shapefiles are projected in the NAD\_1983\_2011\_InGCS\_Vigo\_(ftUS) coordinate system. Please note that ultimate regulatory authority resides with the USACE and IDEM. We recommend that coordination with these agencies be conducted for confirmation that no impacts will occur. Please contact us at 769-203-9314 if we can be of any further assistance.

Sincerely,

alex m. Gray

Alex Gray

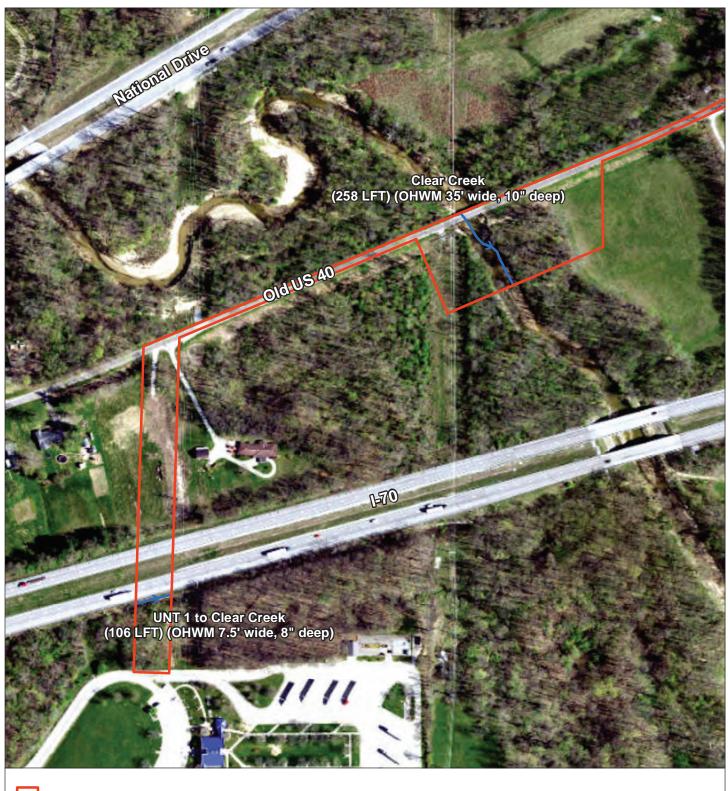
Natural Resources Project Scientist

Uny Vol Smith

Amy Noel Smith

Natural Resources Senior Project Scientist

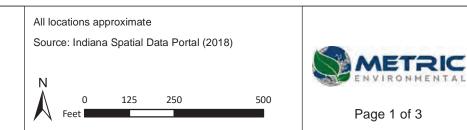
Metric Project No. 21-0049-3





- Stream

Waters Delineation Map I-70 Clear Creek Welcome Center - Utilities Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Des. No. 1902855 Metric Project No. 21-0049-3b Map Date: 6/29/2022 Map Author: April Pape

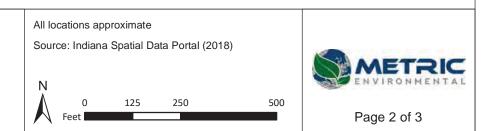




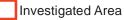


- Stream

Waters Delineation Map I-70 Clear Creek Welcome Center - Utilities Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Des. No. 1902855 Metric Project No. 21-0049-3b Map Date: 6/29/2022 Map Author: April Pape

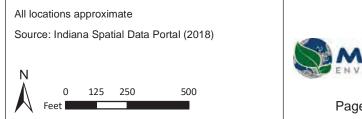






- Stream

Waters Delineation Map I-70 Clear Creek Welcome Center - Utilities Rest Area Modernization Sugar Creek Township, Vigo County, Indiana Des. No. 1902855 Metric Project No. 21-0049-3b Map Date: 6/29/2022 Map Author: April Pape

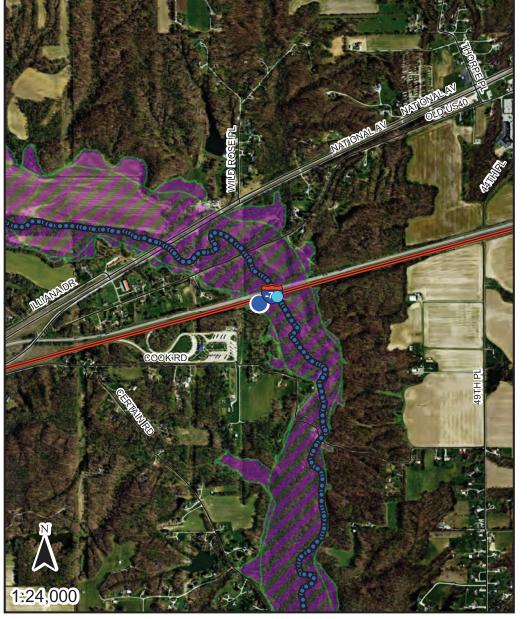




Page 3 of 3



# Floodplain Analysis & Regulatory Assessment (FARA)



Point of Interest

Base Flood Elevation Point

#### **Flood Elevation Points**

• STUDIED STREAM

# Rivers and Streams at least 1 square mile

#### Drainage Area (sq. miles)

10 - 100

DNR Approximate Floodway

DNR Approximate Fringe

Point of Interest Coordinates (WGS84) Long: **-87.4967506794** Lat: **39.4436126665** 

# The information provided below is based on the point of interest shown in the map above. County: Vigo Approximate Ground Elevation: 476.4 feet (NAVD88) Stream Name: Base Flood Elevation: 479.5 feet (NAVD88) Clear Creek Drainage Area: Not available Best Available Flood Hazard Zone: DNR Approximate Floodway National Flood Hazard Zone: FEMA Zone A Is a Flood Control Act permit from the DNR needed for this location? yes Is a flood control Act permit from the DNR needed for this location?

Is a local floodplain permit needed for this location? yes-

Floodplain Administrator: Sydney Shahar, Assistant Director of Vigo County Area Planning Community Jurisdiction: Vigo County, County proper Phone: (812) 462-3354 Email: sydney.shahar@vigocounty.in.gov

US Army Corps of Engineers District: Louisville F-42

Date Generated: 10/3/2022